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The communication of counselor empathy, respect and genuineness through verbal and non-verbal channels.

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THE COMMUNICATION OF COUNSELOR EMPATHY,
RESPECT AND GENUINENESS THROUGH VERBAL AND NON-VERBAL CHANNELS

A Dissertation Presented

By

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THE COMMUNICATION OF COUNSELOR EMPATHY,
RESPECT AND GENUINENESS THROUGH VERBAL AND NON-VERBAL CHANNELS

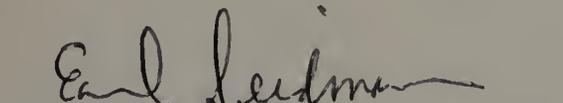
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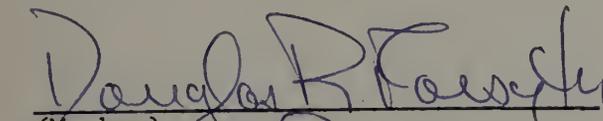
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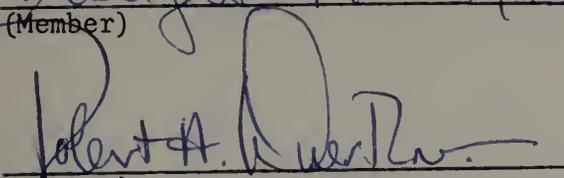
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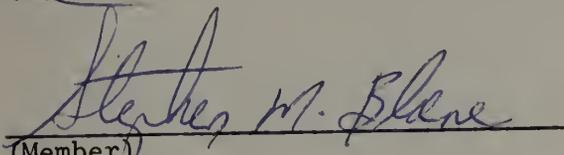
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A B S T R A C T

THE COMMUNICATION OF COUNSELOR EMPATHY, RESPECT
AND GENUINENESS THROUGH VERBAL AND NON-VERBAL CHANNELS

This study investigates the communicational significance of verbal and selected non-verbal cues in the perception of the specific counselor attitudes of empathy, respect and genuineness. The four channels of verbal, vocal, facial and body communication were studied with the purpose of understanding how each channel contributes to the transmission of these counselor attitudes.

An experimental procedure was used which allowed for the simultaneous presentation of both verbal and non-verbal cues of attitudinal communication for rating by both experienced counselors and actual clients. A videotape stimulus was specially designed which consisted of thirty-two role played interactions between an actor-counselor and an actor-client. The counselor response contained the thirty-two possible combinations of a forward-backward trunk lean, direct-averted eye gaze, concerned-indifferent vocal intonation, concerned-indifferent facial expression and a high-low verbal message. All subjects rated all thirty-two interactions on all three counselor attitudes of empathy, respect and genuineness along a five point scale.

The data was analyzed for each of the three dependent measures of empathy, respect and genuineness by three separate $2 \times 2 \times 2 \times 2 \times 2 \times 2$ factorial analyses of variance with repeated measures on the five independent factors. The results indicated that higher levels of all three counselor attitudes were communicated when the counselor was in a forward trunk lean position, maintained direct eye contact, spoke in a con-

cerned vocal intonation and showed a concerned facial expression. The verbal message factor was a significant determinant for higher levels of empathy and respect, but did not reach significance for the genuineness dimension.

Counselors and clients did not differ significantly in their responses except when specific interactions between the independent factors were examined. In general, the interaction effects were more important in the communication of genuineness, but for all three attitudes, the interaction effects suggested a compensatory and additive function when the communication cues were transmitted simultaneously.

A strength of association procedure was utilized in order to quantify the contributions of each effect to the differential judgments of all three attitudes. Overall, the non-verbal effects explained from two to nine times the amount of variability in judgment as was explained by the verbal factor. The general conclusion was reached that non-verbal cues are extremely important factors in the communication of counselor empathy, respect and genuineness. Implications of these findings were discussed as they relate to the counseling or psychotherapeutic interview.

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T A B L E O F C O N T E N T S

	page
ACKNOWLEDGEMENTS.....	ii
ABSTRACT.....	iv
LIST OF TABLES.....	viii
LIST OF FIGURES.....	ix
CHAPTER I - Introduction.....	1
CHAPTER II - Review of Literature.....	8
Trunk Lean.....	11
Body Orientation.....	17
Distance.....	18
Eye Contact.....	22
Vocal Intonation.....	30
Facial Expression.....	34
Quantitative Comparisons.....	43
Summary.....	46
Purpose and Hypotheses.....	48
CHAPTER III - Methodology.....	50
Subjects.....	50
Stimulus Materials.....	51
Procedure.....	57
Design.....	58
CHAPTER IV - Results.....	61
Empathy.....	61
Respect.....	75

Genuineness.....	90
Groups.....	102
Trunk Lean.....	104
Eye Contact.....	104
Vocal Intonation.....	105
Facial Expression.....	105
Total Non-verbal Effects.....	106
Verbal Message.....	107
Interactions.....	108
CHAPTER V - Discussion.....	110
Trunk Lean.....	112
Eye Contact.....	114
Vocal Intonation.....	115
Facial Expression.....	117
Counselor Empathy.....	118
Counselor Respect.....	119
Counselor Genuineness.....	120
Interactions.....	122
Implications of Findings.....	133
Limitations and Suggestions.....	136
General Summary.....	139
REFERENCES.....	142
APPENDIX A.....	151
APPENDIX B.....	158
APPENDIX C.....	160
APPENDIX D.....	162

LIST OF TABLES

table	page
1 Analysis of Variance of Judged Empathy for Two Groups of Subjects Responding to Two Levels in Each Factor of Trunk Lean, Eye Contact, Vocal Intonation, Facial Expression and Verbal Message.....	62
2 Percentage of Variability Accounted for by Main Effects and Selected Interactions (Empathy).....	66
3 Main Effect Cell Means (Empathy).....	67
4 Analysis of Variance of Judged Respect for Two Groups of Subjects Responding to Two Levels in Each Factor of Trunk Lean, Eye Contact, Vocal Intonation, Facial Expression and Verbal Message.....	76
5 Percentage of Variability Accounted for by Main Effects and Selected Interactions (Respect).....	79
6 Main Effect Cell Means (Respect).....	80
7 Analysis of Variance of Judged Genuineness for Two Groups of Subjects Responding to Two Levels in Each Factor of Trunk Lean, Eye Contact, Vocal Intonation, Facial Expression and Verbal Message.....	91
8 Percentage of Variability Accounted for by Main Effects and Selected Interactions (Genuineness).....	94
9 Main Effect Cell Means (Genuineness).....	95
10 Percentage of Total Variability Accounted for by Each Factor for the Dependent Measures of Empathy, Respect and Genuineness.....	103

LIST OF FIGURES

figure	page
1 Graphic representation of the six factor ANOVA design with two levels in each independent variable.....	60
<p>Figures 2-6b are for the dependent measure of counselor empathy</p>	
2 Groups X eye contact interaction.....	69
3 Trunk lean X facial expression interaction.....	69
4 Vocal intonation X facial expression interaction.....	71
5a Groups X vocal intonation X facial expression interaction for counselors.....	72
5b Groups X vocal intonation X facial expression interaction for clients.....	72
6a Groups X facial expression X verbal message interaction for counselors.....	74
6b Groups X facial expression X verbal message interaction for clients.....	74
<p>Figures 7-13b are for the dependent measure of counselor respect</p>	
7 Trunk lean X facial expression interaction.....	82
8 Eye contact X facial expression interaction.....	83
9 Vocal intonation X facial expression interaction.....	83
10 Facial expression X verbal message interaction.....	84
11a Groups X facial expression X verbal message interaction with the high verbal message.....	86
11b Groups X facial expression X verbal message interaction with the low verbal message.....	86
12a Eye contact X vocal intonation X verbal message interaction with the high verbal message.....	87
12b Eye contact X vocal intonation X verbal message interaction with the low verbal message.....	87

figure	page
13a Vocal intonation X facial expression X verbal message interaction with the high verbal message.....	89
13b Vocal intonation X facial expression X verbal message interaction with the low verbal message.....	89
<p>Figures 14-17b are for the dependent measure of counselor genuineness</p>	
14 Groups X verbal message interaction.....	97
15 Facial expression X verbal message interaction.....	97
16a Groups X facial expression X verbal message interaction for counselors.....	99
16b Groups X facial expression X verbal message interaction for clients.....	99
17a Groups X eye contact X vocal intonation interaction for counselors.....	101
17b Groups X eye contact X vocal intonation interaction for clients.....	101

CHAPTER I

THE COMMUNICATION OF COUNSELOR EMPATHY, RESPECT
AND GENUINENESS THROUGH VERBAL AND NON-VERBAL CHANNELS

Introduction

Counselors and psychotherapists have long entered into a helping relationship with their clients in order to facilitate positive personal growth. Many differing theories of approach, strategy and treatment have been advanced, but few theorists would argue the importance of maintaining a good interpersonal relationship between the client and the therapist. This relationship develops and deepens as communication between client and therapist brings each member closer to the center of the client's world.

Rogers (1957) wrote that in order for a facilitative relationship to exist, the therapist must experience and communicate to the client three counselor attitudes. These were labeled by him: (1) congruence or genuineness, (2) positive regard or unconditional acceptance and (3) empathic understanding. These were his "necessary and sufficient conditions of therapeutic personality change" which are the cornerstones for his now famous client-centered therapy (Rogers, 1951).

Truax and Carkhuff (1967) subjected these three counselor attitudes to experimental validation and objectified their measurement according to a nine point scale for empathy and a five point scale for genuineness and non-possessive warmth (positive regard). Carkhuff and Berenson (1967) call them "core conditions" and refer to them as

dimensions of human nourishment which facilitate or retard all interactive human processes. Much of their work expands the importance of counselor attitude in therapy and cites evidence of positive client change when they are in the presence of a counselor displaying maximum levels of the core conditions.

The core conditions identified by Truax and Carkhuff are basically the same ones discussed by Rogers, sometimes however, referred to by different names. The first counselor attitude, empathy, is defined by Truax and Carkhuff (1967) as one which "involves both the therapist's sensitivity to current feelings and his verbal facility to communicate this understanding in a language attuned to the client's current feelings (p. 46)." It is an ability to feel the client's fears, disappointments and anger, etc., as if it were the counselor's own and the ability to convey this understanding to the client in a way that helps him see it with more clarity. An empathic individual sees the other person's world as that person sees it.

Another of the counselor core conditions necessary in a helping relationship is called unconditional positive regard, respect or non-possessive warmth. Rogers (1961) calls this attitude "an acceptance of and a caring for the client as a separate person, with permission for him to have his own feelings and experiences, and to find his own meaning in them (p. 283)." It is a nonpossessive and unconditional caring for the client as a unique human being. It is nonjudgmental and respectful of the client's right to live his own life and make his decisions.

The third "necessary and sufficient" condition for positive psycho-

therapy is called genuineness or congruence. Genuineness is defined by Truax and Carkhuff (1967) as "beginning at a very low level where the therapist presents a facade or defends and denies feelings, and continuing to a high level of self-congruence where the therapist is freely and deeply himself (p. 68)." A counselor who communicates genuineness is being real, not phoney. His verbalizations are supported, not contradicted, by other cues which indicate what he is feeling at that moment.

That counselor attitude is important in the therapeutic relationship and that Rogers' three conditions lead to more or less effective psychotherapy is well substantiated (Truax and Mitchell, 1971). After an exhaustive review of the research literature relating psychotherapy outcome with the core conditions, Truax and Mitchell (1971) concluded that "these studies taken together suggest that therapists or counselors who are accurately empathic, nonpossessively warm in attitude and genuine, are indeed effective (p. 310)." They go on to say that the findings "hold for a wide variety of therapists and counselors, regardless of their training or theoretical orientation and with a wide variety of clients and patients (p. 310)." Aspy (1970) writes that "there seems to be a rather general agreement as to the major components of a facilitative human relationship, namely, empathy (understanding), congruence (genuineness) and positive regard (respect) (p. 637)."

A counselor's having or "owning" these three attitudes is not enough, however, for personal growth to take place. As stated by Rogers (1967), "...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 (p. 78)." The counselor must not only feel empathic, be respectful and warm, and be genuine, but must accurately communicate this to his client.

The attitude held by the counselor, and in particular those attitudes of empathy, respect and genuineness, has been shown to be important in determining the nature and intensity of the therapeutic relationship. Bergin and Strupp (1972) make a case for coordinated research in psychotherapy and cite the therapist characteristics of empathy, warmth and congruence as variables which "...appear to have considerable potency and are subject to reasonably adequate measurement." They go on to say that these variables "...could well be the subject of a series of inquiries, including comparative studies which use factorial designs (p. 65)."

There is also little argument that the verbal aspect of the client-counselor interchange is a major factor in the communication of counselor attitude as established through the verbal dialog. The impact of non-verbal attitudinal communications, however, have been either taken for granted or conclusions reached without adequate empirical foundation. The focus of this research, therefore, will be on the process by which counselor attitudes are communicated to the client with special emphasis on the non-verbal mode. The overall goal will be to understand better the impact of counselor non-verbal behaviors as they influence the communication of counselor attitude.

Most observers of human communication would agree that a person

receiving a spoken message decodes the meaning by using a combination of verbal and non-verbal cues. Counselors, psychotherapists and people in general all have an intuitive "sense" of the communicative meaning of the non-verbal cues which always accompany any verbal message. Unless this intuitive sense is subjected to empirical validation, however, the difficulties in passing on this "sense" and in fully understanding its complexities will never be overcome. As Davitz (1964) observed, "...beyond demonstrating the fundamental fact that feelings can be conveyed effectively in non-verbal modes, we know relatively little about the particular cues which communicate these meanings (p. 28)."

Ekman and Friesen (1968) cite five assumptions which make the study of non-verbal communications in psychotherapy important. They suggest that nonverbal behavior is (1) a relationship language, (2) that it is the primary means of expressing emotion, (3) that body language expresses unconscious attitudes, (4) that it qualifies verbal behavior, and (5) that it is less censored than verbal behavior.

Each of Ekman and Friesen's five points relate to the importance of non-verbal cues in the communication of counselor attitudes of empathy, respect and genuineness. In labeling non-verbal behavior as "a relationship language," Ekman and Friesen are identifying a very potent influence in the establishing of a relationship between therapist and client.

That it expresses emotion and unconscious attitudes is an important point to remember when we think of the communication of counselor attitude. That it "qualifies verbal behavior" (and remembering that in

face-to-face communication, verbal behavior is always accompanied by non-verbal behavior) is important to note when investigating the impact of verbalization on the client. And finally, "that it is less censored than verbal behavior" indicates that even though a counselor may be fooling the client with his words, he may not be with his non-verbal expressions.

In presenting these assumptions, the authors were developing an argument for the importance of client non-verbal cues as a communicative channel to the therapist. Since therapeutic communication is two way, the same assumptions should be applied to the importance of therapist non-verbal behavior in the delivery of his communication. As Shapiro (1968b) cautions, "therapists who wish to be perceived as offering high levels of therapeutic conditions must be aware of their non-verbal behavior as well as their speech (p. 239)."

Comments from two practitioners in the field of psychotherapy speak to the importance of knowing more about the role and impact of non-verbal cues. Wolberg (1967) articulately states the importance of non-verbal communication in therapy:

Non-verbal communications during interviewing reveal aspects of the self that evade verbal expression. The patient is as much aware of the therapist's moods through the latter's non-verbal behavior 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. 409).

The dilemma of teaching counseling students is stated by Davitz and Davitz (1961) who noted that:

While supervising students in a psychological practicum...inexperienced counselors, although having little difficulty hearing the verbal content of their client's speech, frequently missed the emotional meanings by non-verbal cues (p. 81).

Although the importance of non-verbal communications have been recognized for some time, very little research evidence is available about it (Meltzoff and Kornreich, 1970). Most of the research reviewed dealt with the social interaction context and research found within the counseling context was focused mostly on identifying the client's emotional state. An inordinate emphasis upon the verbal content of counselor-client exchanges has relegated non-verbal communications to the role of modifying, clarifying, accenting, etc. Recent renewed interest in the communicational process, along with technological advances have thrown a new light on the power and importance of non-verbal cues in the sending and receiving of a communicational message.

It is the purpose of this research to investigate the relationship between the verbal and non-verbal channels of communication to client perception of Rogers' "necessary and sufficient conditions." The assumption is made that the "core conditions" of empathy, respect and genuineness have been shown to be powerful determinants of the therapeutic relationship and the focus of this study will turn to how these attitudes are communicated to the client. The four channels of verbal, vocal, facial and body communication will be studied with the purpose of understanding how each channel contributes to the perception of counselor empathy, positive regard (respect) and genuineness.

C H A P T E R I I

REVIEW OF LITERATURE

For some time, those interested in interpersonal communication have had a strong intuitive sense of the importance of non-verbal cues in the communication process (Darwin, 1872; James, 1932; Sullivan, 1951). It was not until the 1950's, however, that studies began to appear which led to a greater empirical understanding of the role that non-verbal cues play in the communication of a spoken or silent message. Perhaps because of the technological advances of videotape and stop-action cameras, research has begun to appear which codifies and delineates the many types of non-verbal informational cues.

Duncan (1969) suggests a list of non-verbal communication modalities which either could be or have been studied. One is body motion, or kinesic behavior, which includes gestures, facial expression, eye movement and postural movements. Another is paralanguage, which includes laughing, yawning and grunting, as well as the many voice qualities such as pitch, rate, volume, timing and vocal variations. A third is proxemics, a term which refers to "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 (Hall, 1963, p. 1003)."

Some writers include under the heading of proxemics, eye contact (eye position as opposed to eye movement), postural configuration and body orientation. Other non-verbal modalities include olfaction, skin sensitivity to touch and temperature and the use of artifacts such as

dress and cosmetics.

Of this list, the three receiving the most attention (perhaps because they are the easiest to measure and define) have been body motion, paralanguage and proxemics.

The names of three men are outstanding in the literature of non-verbal communication for their pioneering work in establishing its importance and setting strategy for further research. Each was primarily interested in the structural aspects of communication and each contributed a major component within the non-verbal or nonlinguistic communicational phenomenon.

Birdwhistell (1952) opened up the whole area of body motion or kinesics as a mode of communication to systematic study. As defined by Birdwhistell (1963), kinesics is "...the systematic study of those patterned and learned aspects of body motion which can be demonstrated to have definite communicational value (p. 125)." Birdwhistell has studied the internal structure of communication units as might be emitted by a communicant, whereas a colleague, Scheflen (1967) has been more interested in the interpersonal structure of communication.

Birdwhistell and Scheflen agree, however, that "communication is a social, not a psychological phenomenon" and that "...psychological reductionism serves only to obscure the central issues involved in the investigation of human interaction (Birdwhistell, 1970, p. 72)." Their work has been added to by Ekman (1965), Ekman and Friesen (1967, 1968), Dittman (1962), Dittman, Parloff and Boomer (1965) and Fretz (1966), and suggests that the posture, position and movement of the body indeed

has communicational significance.

The second pioneer was George Trager (1958) who with others worked to define and differentiate those vocal behaviors now labeled paralanguage. Paralanguage, according to Trager, has the two principle components of vocalizations and voice qualities. Vocalizations include the acoustical qualities of intensity (volume), pitch level and extent, behaviors such as laughing, crying, belching and the vocal symbols such as uh-uh for negation, uh-huh for affirmation and uh for hesitation. Vocalizations, according to him, included pitch range, resonance, articulation control and vocal lip control. Others have drawn on and added to his findings and further developed an understanding of voice type and quality as it affects the communication process (Davitz and Davitz, 1961, 1964; Soskin and Kaufman, 1961; Starkweather, 1961; Kramer, 1963, 1964; Mehrabian and Wiener, 1967).

Hall (1959) has coined the word "proxemics" and begun an entire area of investigation with regard to the social and communicational effect of the distance between interacting people. Distance is not just physical distance, but includes psychological distance--a phenomenon which is controlled by eye contact, trunk lean and body orientation (Schefflen, 1967). Research in the area of proxemics has been added to by Sommer (1969), Haase (1970), Haase and DiMattia (1970), Pierce (1970), Kelly (1971) and has the beginnings of a strong theoretical framework which explains the interrelationship between man and his space.

Research in the field of non-verbal behaviors has been divided in-

to two basic orientations (Duncan, 1969). One is called the structural approach which has as its goal the explication of the specific rules and building blocks of information needed in forming a theoretical construct within the science of communication. Those involved in this type of research are interested in determining the structural interrelatedness of molecular variables inherent in the communication process.

An opposing orientation is what Duncan (1969) calls the external variable approach. In this method, the researcher relates "the rate of occurrence of specified non-verbal behaviors to a variety of external variables, such as the interaction situation, the personality characteristics of the interactions or the reactions of judges to the interaction (p. 121)." This approach and its findings are more relevant to the present study and the research cited will usually be of this type.

The emphasis in this literature review will be on the communicational meaning of several general non-verbal behaviors and their relationships to the communication of counselor or therapist attitude. The behaviors of central importance to the study of non-verbal communication and to this research include body posture (trunk lean), interactive distance, body orientation, eye contact, vocal intonation and facial expression. In the sections of this review which follow, these will be examined with regard to their significance in the communication of gross affect and attitude.

Trunk Lean

It has been well documented that the position and posture of the

body is a major factor in the communication of emotional or attitudinal messages. In an early study, James (1932) systematically varied the positions of a model's head, trunk, feet, knees and arms in photographs which were shown to subjects for judgment of communicated attitude. He found that the head and the trunk were the most important indications of the four basic attitude categories judged. Of these, one was labeled approach, an attentive posture communicated by a forward lean of the body and another was withdrawal, a negative, refusing or repulsing posture communicated by drawing back or turning away. In short, he found that a forward lean communicated positive affect and a backward lean communicated a negative affect.

Mehrabian (1968a) studied the attitude communicating significance of a number of communicator postural, orientation and distance cues. In three decoding experiments, the subjects were given photographic stimuli in which the stimulus encoder was seated in various combinations of posture, distance and orientation. In judging the degree to which the decoder liked or disliked the encoder, it was found that "...a forward lean of trunk toward one's addressee, and a smaller distance to the addressee communicate a more positive attitude to the addressee than a backward lean of posture and a larger distance (p. 307)."

Kelly (1971) followed the same basic methodology as Mehrabian, but investigated the communicational significance of five therapist non-verbal behaviors. Photographs were made depicting all possible combinations of three positions of trunk lean, three interactive distances, two conditions of eye contact, two positions of posture (open-closed)

and two positions of body orientation. These were shown to six groups of subjects who were instructed to indicate on a 5 point Likert type scale, the degree to which the "psychologist likes you." Kelly concluded that:

...closer distances to the client, presence of counselor eye contact, a slightly forward trunk lean and a direct body orientation comprise non-verbal 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 (p. 179).

Mehrabian and Friar (1969) conducted a study in which the subjects were encoders of communicational cues rather than decoders. In encoding studies, the subject is asked to convey a feeling, emotion or attitude and judges rate the dependent measures (trunk lean, eye contact, etc.) according to what they observe. The subjects were instructed to sit in the way in which they would if they were actually interacting with different kinds of addressees (male-female, high-low status). Their findings suggest that one of the most important variables for the communication of positive attitude is the position of the torso. They concluded that the more negative the attitudinal set of the encoder, the further backward he tended to lean.

Reece and Whitman (1962) investigated the relationship between expressive movements, warmth and verbal reinforcement. Noting Krasner's (1955) observation that warmth and acceptance by the therapist can be considered in terms of cues indicative of intense, undivided attention, they systematically manipulated the trunk lean, hand movements, facial expression and verbal utterances of an experimenter (therapist) who was

attempting to communicate both a "warm" and a "cold" attitude to a subject (client). When communicating a warm attitude, the experimenter was leaning forward, looking directly at the subject while smiling, and keeping his hands still. When the experimenter was expressing a "cold" attitude, he was leaning backward, looking away and not smiling, and drumming his fingers. Verbal reinforcement for half of the subjects consisted of "mm-hmm" for the appropriate spoken words. Reece and Whitman (1962) found that the expressive movements successfully conveyed the impression of the experimenter's attitude of coldness or warmth. They go on to say that "leaning toward the subject, smiling and looking directly at him enabled the subject to judge the experimenter as warm (p. 235)." With regard to the reinforcement effect, verbal reinforcement alone did not produce a significant influence on the total number of words spoken but expressive movements did.

The influence of head and body cues on the judgment of emotion has been investigated by Ekman (1965) and Ekman and Friesen (1967). They differentiated between gross affect (attitudes) and specific affect (emotion) and found that body acts (movements) are more likely to communicate specific emotions, whereas body positions or postures are more likely to communicate gross affect of attitudes. A stationary facial expression or a position of the body, therefore, is more likely to express an attitude, whereas a slight movement of the head or body will communicate the nature of an emotion.

Ekman (1965) earlier had found that the head is more informative about the nature of an emotion, while the body is more informative about

the intensity of an emotion. Later, Ekman and Friesen (1967) indicate more specifically that "the face is an affect display system while the body shows the person's adaptive efforts regarding affect (p. 723)."

The research relating the effects of non-verbal cues to the communication of affect within a counseling or therapeutic setting is not very abundant. Pierce (1970) showed a group of subjects a series of slide photographs which depicted individuals interacting at different distances and in three trunk lean positions. The subjects were asked to think of themselves as one of the two interactants (the client) and to judge how he felt about the interaction conditions. He found that within the counseling dyadic interaction, the upright and forward postures were more preferable than the backward posture. With regard to distance, he found that there was an optimal distance preferred for the counseling interaction (39 and 48 inches) and that when the distance between interactants became greater, the forward lean became more appropriate. Thus, the apparent effect of the forward trunk lean was to reduce the distance between interactants.

A study by Haase and Tepper (1972) examined the effect of various counselor proxemic and verbal conditions in the communication of the specific counselor attitude of empathy. They produced a videotape stimulus which depicted a counselor responding to a client while positioned in all combinations of forward-backward trunk lean, direct-averted eye contact, close-far distance, direct-rotated orientation, while speaking a low-medium-high verbal message. The subject judges were both counselors and counselors in training, and they judged each interaction for

its level of communicated empathy.

The results indicated that a greater level of communicated empathy occurred when the counselor was leaning forward, maintaining eye contact, was closer to the client and uttering a medium or high level message. These findings within the counseling context corroborate those of Kelly (1971) and Pierce (1970).

Fretz (1965) did an in vivo factor analytic study of the body movements of both clients and counselors in an interview setting. He found that "for clients, leaning forward and back was the only significant positive indicator of a good relationship as measured by the [Barrett-Lennard Relationship] inventory (p. 342)."

The effect of consistency or inconsistency among all of the postural body cues is demonstrated by Charney (1966). He found that postural congruence is a sign of rapport in psychotherapy. His research shows that positive, interpersonal, specific and present bound verbalizations were associated with the speaker being posturally congruent. On the other hand, incongruent postures were associated with self-oriented, negational, nonspecific, selfcontradictory and nonreferenced verbal material.

In summary, the research literature shows that when subjects are asked to judge how they feel about a communicator, they consistently say that a forward trunk lean communicates positive affect (James, 1932; Mehrabian, 1968a). In encoding studies, Mehrabian and Friar (1969) have shown that the subject will sit forward when he wants to express positive affect to his addressee. Reece and Whitman (1962) earlier had found that one dimension of the communication of warmth is a forward

lean of the torso. Within the counseling situation, Pierce (1970), Kelly (1971) and Fretz (1965) found that a forward lean communicates positive affect and that a backward lean usually signifies a negative feeling. The study by Haase and Tepper (1972) demonstrated that higher levels of communicated empathy were obtained when the stimulus counselor was leaning forward. The evidence, therefore, with regard to trunk lean, from both encoding and decoding studies, in both social and counseling settings is clear: a forward lean of the body is a communicational cue signifying positive affect, whereas a backward lean signifies a negative affect.

Body Orientation

Body orientation or the degree to which the communicator is facing the addressee has not consistently been found to be a significant influence in the communication of attitude.

Mehrabian (1967) investigated the communication of affect intensity toward others (i.e., attitudes) via head and body cues within the context of a verbal communication situation. He wrote that choice of body orientation behaviors will communicate both positive and negative attitudes and labeled them along an immediacy dimension. Immediacy as defined by Mehrabian is generally defined as "the degree of directness and intensity of interaction between two entities, such as two people (p. 325)." The directness of interaction was measured by the angle of head or body orientation (direct to 90° angle) and the intensity was measured by the direction of the assumed posture during the inter-

action. In his study an experimenter faced a pair of subjects and varied combinations of head and body rotations (direct versus rotated) while talking about the general topic of attitudes. He found that the subjects perceived a greater positive attitude on the part of the experimenter when his head was directed toward the subject (greater immediacy) than when it was rotated away. Body orientation differences failed, however, to show significant results. A later study (Mehrabian, 1968a) also did not find support for a relationship between open versus closed posture or orientation directions and communicated attitude.

Kelly (1971) did find that a direct orientation communicated a positive attitude and that a rotated orientation seemed to communicate a less favorable attitude. Haase and Tepper (1972) did not find a significant difference in the perception of communicated empathy between a direct and rotated orientation.

In summation, it has not been demonstrated that body orientation has a significant effect on the communication of attitude.

Distance

The anthropologist, E.T. Hall (1959, 1963, 1966) has outlined the social significance of the distance between interacting people. That particular interactive distance which is close enough to be effective, yet far enough to be comfortable, is governed by cultural heritage, social mores and situational and personal differences. Basic to the understanding of spacing and interactive distance is the concept that each individual is surrounded by "...a sense of bubbles or irregularly

shaped balloons that serve to insure proper spacing between individuals (Hall, 1963, p. 10)." An interesting review of the social consequences of proxemics and distance as it involves everyday behavior can be found in Sommer (1969) and Hall (1966).

Several researchers, however, have investigated the effect of interpersonal distance on the communication of affect. It has consistently been found that interactive distance as a communicative cue is a determinant of the way the listener feels about the communicator.

Little (1965) found that the interaction distances in a dyad are markedly influenced by whether the two persons are friends, acquaintances or strangers. He found that friends will interact at a significantly closer distance than acquaintances and that with strangers there is the greatest amount of physical separation.

Mehrabian (1968a, 1968b, 1970) has demonstrated conclusively that distance is a potent stimulus cue in the conveyance of attitudes and affect. Mehrabian (1968a) designed a study which would test the hypothesis that a smaller distance to the addressee would be associated with a more positive communicative attitude toward his addressee. In one part of the study (decoding) the 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 the other part of the same experiment, the subjects were asked to imagine addressees that they either liked or disliked and to assume a standing position which characterized their own interactions with such people. The results indicated that a more positive attitude was both inferred and communicated when the com-

municator was standing close to the addressee. Close was defined as 3 as opposed to 7 feet.

In another study Mehrabian (1968b) investigated the functional relationships of a communications posture, orientation and distance from his addressee to his attitude toward that addressee. The findings were that distance (and other factors) was a significant index of the subject's liking for the addressee. Specifically, the distance decreased as the attitude toward the other person increased.

Mehrabian and Williams (1969) demonstrated that smaller distances from the addressee enhanced perceived persuasiveness. Mehrabian (1970) showed that interactive distance relates to positive evaluation dimension and has corroborated the finding of Little (1965) that smaller distances between a communicator and addressee is associated with more positive attitudes and that greater distances are usually associated with more negative attitudes.

Several studies have been done which relate distance to the communication of affect within the counseling or therapeutic setting. Haase (1970) investigated the relationship of sex and specific instructional set for counseling (personal or informational) with reference to their reaction to five interpersonal interaction distances in a dyadic encounter. He found that the most preferred distances for counseling interaction appear to be those of 30, 39 and 50 inches, while the distances of 66 and 88 inches are perceived as increasingly less preferable. Haase concludes that according to preferences for interaction distances in his study, that "interaction as conceived of in the counseling interaction is quite permissible (perhaps preferable) at the

closer distances (p. 5)."

Pierce (1970) investigated differences in interaction distance preference for groups of counselors, clients and administrators using four experimental distances (30, 39, 48 and 60 inches). He found no differences between the groups and that the distances of 35 and 48 inches as opposed to the closer distance of 30 inches and the further distance of 60 inches, was preferable in the counseling situation.

Kelly (1971), in a study described earlier, assessed the communicational significance of distance as well as other cues. He found that the 39 inch interactive distance was seen as more preferable and is associated with a positive attitude. The 80 inch distance emerged as a strong negative discriminative therapist stimulus "possibly communicating to the client disapproval, reproach, rejection, etc. (p. 147)." The 55 inch interactive distance appeared to have a neutral communicational valence.

With regard to the effect of interactive distance on the communication of therapist attitude, Kelly (1971) concludes that:

...the present results indicate that the 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 (p. 148).

Haase and Tepper (1972) investigated the effect of several proxemic conditions (trunk lean, distance, eye contact and body orientation) on the communication of the specific counselor attitude of empathy. In their study, two levels of interactive distance (36 and 72 inches)

were included in a five factor repeated measures design in order to test for both the independent effect of each factor and the interaction effect. It was found that distance was a significant factor in the differential judgment of communicated empathy, and the closer distance communicated a higher level of judged empathy.

In summary, research has demonstrated that there is a direct relationship between the distance at which interactants position themselves and their feelings about one another. Within reasonable limits of a normal dyadic encounter, and focusing on the encoder, expressor or communicator, the research shows that the closer you sit to a person, the more you are communicating that you like him; the further away you sit the more negative your feeling is toward him. Specific to the communication of counselor attitude, it has been demonstrated that a closer distance is a non-verbal cue indicating greater empathy.

Eye Contact

The non-verbal behavior termed eye contact by Argyle and Dean (1965), line of regard by Lambert and Lambert (1964) and visual interaction by Exline (1963) has come to have several communicational significances.

Kendon (1967) distinguished between two major functions served by eye contact in the communication of attitudes. He called one the regulatory function and explained that this served to regulate or signal the initiation and termination of verbal interchanges. By looking at the other person the listener is indicating his attentiveness to what is being said; turning away or averting the eye gaze, on the other hand, is

a signal that the listener is no longer interested in hearing the speaker. Argyle and Dean (1965) suggest that eye contact is a request for feedback during a social interaction together with that of signaling that the channel is open. They also postulated that the presence or absence of eye contact maintained a condition of psychological proximity equilibrium, a condition in which the interactants are kept at an appropriate distance.

The other major function of eye gaze, according to Kendon (1967) is the expressive function whereby a varying degree of eye contact is associated with the expression of a feeling or attitude. Neilson (1964), in discussing his experiments, gives some examples of expressive eye behavior:

Looking away during listening indicated dissatisfaction with and qualifications of (the other person's) speech. Looking away during speaking indicated uncertainty with statement or a modification of it. Looking at during listening indicated agreement, or sheer attention. (my emphasis)
Looking at during speaking indicated an interest in seeing the effect of the remark and certainty (p. 155).

Since the focus of this research is on the communication of counselor affect, the review of literature dealing with eye contact will be limited to its expressive function. Our interest will be in relating the eye contact behavior to the meaning it conveys to the second member of the dyad.

Many studies have shown that there is a direct positive relationship between the amount of eye contact maintained by a communicator and the positive attitude felt by an addressee.

Mehrabian (1968b, 1969, 1970) has compiled extensive findings relating to the attitude communicating importance of eye contact in a two person interactive setting. In one study Mehrabian (1968b) found that there is more eye contact with liked than with disliked addressees. In his encoding study, the subjects played the role of a communicator to a hypothetical addressee with instructions to imagine themselves talking with an addressee whom they had various degrees of like or dislike. Five attitudinal sets were established for the encoder in which the addressee was intensely disliked, moderately disliked, neutral, moderately liked and intensely liked. Contrary to his stated hypothesis of a completely linear relationship, he found that eye contact was a parabolic function of the attitude toward the addressee and was lowest for intensely disliked addressees increased to a maximum value for neutral addressees, and decreased to a moderately high value for intensely liked addressees. He explains this result by stating that the amount of eye contact is an increasing function of familiarity with an addressee and a decreasing one for level of dislike for the addressee. The combination of the two attitudinal sets account for the nonlinear relationship if one assumes that liked and disliked persons are usually more familiar than a person toward whom neutral feelings are held.

In another study, Mehrabian and Friar (1969) had subjects imagine themselves in situations involving addressees of different sex and status and to sit as though they were interacting with them. They found that the amount of eye contact maintained in the interaction can serve as indexes of attitude and status toward the addressee. When the ad-

dressee is viewed with a more positive attitude, more eye contact is maintained by the communicator. These findings are consistent with those of Exline, Gray and Schuette (1965) and Exline and Winters (1965) which indicate that eye contact generally increases with more positive attitude toward an addressee.

Exline and Winters (1965) examined the hypothesis that "differential affection will be directly paralleled by differential looking behavior (p. 335)." They found that when a subject was interviewed by two experimenters at the same time, they tended to have more eye contact with the experimenter whom they preferred. They found that the development of positive affect toward the addressee creates changes in the use of eye contact such that as the attitude becomes more positive, the amount of eye contact increases. It was also found that eye contact was greater when the interviewer gave positive treatment to the subject than when the interviewer's behavior produced feelings of dislike.

The results of experiments by Exline and Winters (1965) have shown that the amount of eye gaze is often a function of a person's commitment to get involved with another person. As they say:

Affiliative or affectionate persons, who might be expected to seek involvement with others in contexts whose affective modality is positive or neutral, do indeed engage in more shared glances than those who might be expected to resist becoming personally involved in such situations (p. 321).

They concluded that those persons who desired to engage in warm interpersonal relationships were more willing to engage in mutual glances.

Machotka (1965) had judges infer social relationships by viewing

drawings of groups of people. He noted that openness of arms indicates warmth and that maintained eye contact indicates concern for the addressee.

Exline (1963) and Exline and Winters (1965) have shown that the amount of mutual gaze a person engages in varies principally with the degree to which one person is drawn to the person he is interacting with. Kendon (1967) goes on to state that:

The amount of mutual gaze in an encounter will increase in proportion to the degree to which (the two people) are directly relating to one another, and that the amount of mutual gaze will decline in direct proportion as the individuals want to avoid or withdraw from this relationship (p. 48).

The maintenance or avoidance of eye contact by a communicator may be a non-verbal cue or desire to avoid a deeper relationship. Exline, Gray and Schuette (1965) conducted a study which was designed to test the effect of embarrassment on subjects' willingness to engage in mutual glances with the experimenter. They found that the subjects looked less at the interviewer when answering embarrassing questions and concluded that:

Individuals whose composure is threatened by the nature of their interaction with another, may, perhaps unconsciously, signal a desire to maintain psychological distance from the other by avoiding eye contact with him (p. 209).

This can easily be interpreted to mean that greater degrees of eye contact are associated with more positive attitudes toward an interviewer.

The maintenance of eye contact can serve to add affective meaning to a verbal statement. Exline and Eldridge (1967) showed that when

more eye contact was associated with a given verbal communication, it was decoded as being more favorable than when it was associated with less eye contact.

Argyle and Dean (1965) researched the relationship between the amount of eye contact and the distance between interactants. They postulated that "eye contact is liked to affiliative motivation, and that approach and avoidance forces produces an equilibrium level of physical proximity, eye contact and other aspects of intimacy (p. 289)." They found that there was less eye contact between pairs and the glances were shorter when the distance between the subjects was less. Evidently, at far distances, more eye contact brings the interactants closer together in a psychological sense, and maintains an equilibrium in which the affiliative process can be maintained.

Differences have been found in the eye contact behavior between men and women when communicating attitudes. In a series of decoding and encoding experiments, Mehrabian (1968a) investigated the significance of a number of postural, orientation, eye contact and distance cues in the communication of attitude and status. He found that male communicators (encoders) have significantly more eye contact with liked addressees than with disliked addressees, whereas females do not differ in their eye contact behavior as a function of how well they like the addressee. These findings are corroborated by Mehrabian and Williams (1969).

The extent to which people engage in eye contact behavior is sometimes a function of the situation in which the interaction occurs.

Exline (1963) has observed that "groups composed of persons more disposed toward relationships of communion than control engage in more mutual visual interaction than groups not so disposed (p. 4)." This finding is consistent with evidence showing that an interaction which involves a status relationship will yield less eye contact between the interactants (Mehrabian and Friar, 1969) and interactions which seek affiliation between the two parties will yield more eye contact (Exline and Winters, 1965).

Mehrabian and Williams (1969) showed a positive correlation between eye contact and perceived persuasiveness of communication. Their study investigated the relationship between distance, eye contact, postural orientation, facial movement and vocal behaviors and the perceived persuasiveness by an addressee. Since communication of attitudes is in a sense a persuasive action by a communicator toward an addressee, this study has relevance for attitude communication.

In the encoding experiment, they found that a greater level of intended persuasiveness was communicated by more direct and increasing degrees of eye contact. That is, when the encoder wanted to be persuasive, he used more eye contact. Looking at the other party in the communication, the listener perceived higher levels of persuasiveness when he observed a greater degree of eye contact. Mehrabian and Williams (1969) have shown that intended persuasiveness and perceived persuasiveness are correlated and it appears that eye contact is a mutually agreed communicational cue which signifies the same psychological meaning to both the speaker and the listener.

Experimental research investigating the role of eye contact or visual interaction within the counseling context is virtually nonexistent.

Kelly (1971) used two levels of eye contact (direct-averted gaze) in a factorial design investigating the effect of selected proxemic conditions on the communication of counselor affect. Subjects were asked to rate "how much the psychologist likes you" after viewing pictures representing all possible combinations of variables, including eye contact. Kelly (1971) found that the counselor or therapist eye contact was a cogent communicator of attitude and that a direct gaze toward the client signified a more positive attitude by the therapist. The averted gaze or the absence of eye contact was seen as a negative affective communication.

Haase and Tepper (1972) investigated the effect of several non-verbal cues on the communication of counselor empathy and found 31.91% of the known variability in judged empathy was accounted for by eye contact alone. Of interest is the fact that the verbal message studied simultaneously accounted for 22% of the total variance, or less than eye contact.

In summary, the literature shows that eye contact is used for both regulating the verbal exchanges and also for expressing a feeling or attitude (Kendon, 1967). As an expressive mode, eye contact has been found to be greater with liked versus disliked addressees (Exline, Gray and Schuette, 1965; Mehrabian, 1968b; Mehrabian and Friar, 1969) and increases when the communicator develops a more positive attitude toward the addressee (Exline and Winters, 1965). There is more eye

contact when the communicator wants to become more involved with the addressee (Exline and Winters, 1965) and when he feels concern and warmth for the addressee (Machotka, 1965). There is less eye contact when the communicator wants to avoid a relationship (Exline, Gray and Schuette, 1965) and when there is a discrepancy in status between the interactants (Mehrabian and Friar (1969).

Within the counseling context it has been demonstrated that a direct eye contact toward the client yields more positive perceptions of the therapist's attitude (Kelly, 1971) and that more eye contact apparently communicates greater levels of counselor empathy (Haase and Tepper, 1972). Work relating eye contact to the communication of other counselor attitudes is lacking in the literature.

Vocal Intonation

The research literature dealing with the expression of emotional or attitudinal meaning via the channel of vocal intonation is sparse but relatively consistent. Three major research techniques have been used to determine the effects of intonation on the conveyance of an emotional message. One method has been to use meaningless verbal symbols, such as reciting the alphabet, while varying tonal qualities (Davitz and Davitz, 1959). A second method has utilized emotionally neutral verbal content (such as the word maybe (Mehrabian and Ferris, 1967) and a third method has utilized recent technological advances and created electronically filtered speech sequences which cancel out the intelligence found in the words (Soskin and Kauffman, 1961; Starkweather, 1961).

Each technique has contributed to a better understanding and each has its particular advantage, but as Davitz (1964) reports, "regardless of the technique used, all studies of adults thus far reported in the literature agree that emotional meaning can be communicated accurately by vocal expression (p. 23)."

In an early study Davitz and Davitz (1959) asked judges to identify from a list of ten feelings the emotional meaning conveyed by speakers who recited meaningless verbal symbols (the alphabet) while expressing various emotions. They found that feelings could be communicated at a level much greater than chance, but that there were individual differences among listeners' ability to recognize a specific emotion and differences among expressors in having their emotion recognized.

Kramer (1964) corroborated these findings and demonstrated that judges were able to respond to vocal information in order to correctly label acted emotions using content standard unedited speech, filtered speech or Japanese. He first chose a common set of words which could be read to represent any of five chosen emotions (anger, contempt, grief, indifference and love). Five scripts, each incorporating the common set of words were then read by actors who were told to portray the given emotion. Each of three methods of judging the emotions was used: (1) constant verbal content in which only the common words were heard by the judges, (2) filtered speech--a case of electronically making unintelligible the verbal content, and (3) foreign language method in which the words were translated into Japanese. Kramer (1964) found that (1) not all the actors were equally successful in portraying the emotion,

but that (2) all the emotions were judged most frequently as the actor (encoder) intended them to be, and (3) the constant content method was found to be the most reliable.

Exemplary of the electronically filtered speech method of determining the independent effect of intonation is a study by Soskin and Kauffman (1961). They discuss an experiment in which an audio filter made a communication unintelligible by allowing only certain frequencies to be heard. It was found that judges were able to identify the emotional state of the speaker when the frequencies of transmission were reduced to between 100-550 cycles per second and concluded that a speaker's emotional state could be identified by use of vocal cues extant in the lower frequencies of uttered tone.

Soskin and Kauffman describe speech as consisting of two sets of cues, verbal and vocal, with one (verbal) carrying semantic information and the other (vocal) conveying affective information. They call the focal channel the "carrier" upon which articulated sounds are imposed and suggest that "it is this 'carrier' that major cues to emotional disposition may reside (p. 73)."

Levy (1964) used content standard speech to examine the relationship between the ability to express and to perceive vocal communications of feeling. She found that these aspects of the vocal communications process shared a significant amount of variance, and concluded that "it no longer seemed sufficient to consider them only as separate discrete abilities (p. 51)." Her findings demonstrated a significant correlation between the ability to encode and decode vocal communications.

Mehrabian and Wiener (1967) were concerned about the lack of research dealing with multicomponent inconsistent communication of attitude. They examined the effects of combining positive verbal messages with negative vocal messages (and all other combinations of three levels of each) in an attempt to determine not only the independent effect of each, but also the interactive effect. They found that when subjects were asked to respond to verbal cues only, they were able to discriminate consistently. When the subjects were asked to attend only to the tonal component, they also were able to discriminate, and in fact, their responses indicated a stronger and more consistent set of discriminations due to tone than to content. When they were asked to respond to both tone and content, the variability of response was found to be determined by variations in tone alone. Mehrabian and Weiner reached the overall conclusion that "judgments of attitude from inconsistent messages involving single words spoken with intonation are primarily based on the attitude carried in the tonal component (p. 113)."

In summary, several techniques have been used to study the abilities of judges to decode emotional meaning from spoken sound. The research consistently points out that subjects can differentiate communicated emotion by way of vocal expression, but that individual differences in this ability are found. It has also been found that the ability to decode and to encode vocal communications is correlated (Levy, 1964).

Many studies which investigated the effect of vocal intonation on the communication of attitude were done in conjunction with an examination of facial expression effects. The following discussion will first

turn to literature dealing with the effect of facial expression alone and then follow with studies which combine the facial and vocal communicative channels.

Facial Expression

Many studies have been done which relate to facial expression as a communicative mode for the conveyance of emotional or attitudinal set. Early experiments by Langfield (1918), Landis (1924) and Frois-Wittman (1930) demonstrated that observers could reliably and consistently predict the emotional feeling held by the expressor by viewing photographic stimuli depicting their facial expressions. More recent research in the communication of emotional or attitudinal feeling has consistently found that affect can reliably be communicated via facial expression (Mehrabian and Ferris, 1967; Shapiro, 1966, 1968a, 1968b; Zaidel and Mehrabian, 1969).

The communication process involves both the sending of a message by an expressor or encoder and the receiving of a message by a listener or decoder. Zaidel and Mehrabian (1969) state that:

An individual's encoding ability is defined in terms of the discriminability of cues emitted by him for communicating different ideas or feelings. Decoding involves the ability to discriminate among different cues. In this sense, a good encoder emits clearly discriminable cues corresponding to different feelings, and a good decoder can discriminate different feelings among heterogeneous cues (p. 233).

Several writers have demonstrated that attitudes and emotions can be accurately encoded or expressed through acting (Thompson and Meltzer,

1964; Levitt, 1962, 1964; Williams and Tolch, 1965; Williams and Sundene, 1965; Zaidel and Mehrabian, 1969). For example, Thompson and Meltzer (1964) tried to ascertain the extent to which college students (expressors) can convey to other students (judges) via facial expressions alone their emotional intent. As each expressor tried to communicate to the judge some selected emotion, a score was kept as the criterion measure indicating how accurately the expressor was able to convey the given emotion. They found that all of the expressors were able to communicate some of their emotional intentions by their facial expressions, but that there were considerable individual differences in this ability.

Studies demonstrating the decoding of attitudes as communicated through facial channels show that facial expression as an independent factor is a powerful determinant of judged feeling. Mehrabian (1971a) has empirically developed a formula which quantifies the contribution of each of three channels of communication to the total message: $\text{Total Impact} + .07 \text{ Verbal} + .38 \text{ Vocal} + .55 \text{ Facial}$. His findings indicate that over half of the variability of judgment is determined by the message contained in the facial expression. Although some disagree with his quantifications (Shapiro, 1968a), little argument is found against the importance of the communicational significance of facial expression.

Most recent researchers of communication have used the multichannel approach to understanding emotional messages. That is, instead of isolating facial expression alone as a communicative mode, they examined the effects of facial plus vocal, verbal, body cues and combinations of all these. Through statistical techniques, the independent effects

of each plus the effect of combinations of two or more can be understood.

One such investigator (Levitt, 1962) used sound motion picture recordings of 50 subjects portraying six emotions through both their facial and vocal expressions. Judges rated the portrayals using audio only (vocal), picture only (facial), or a combination of both (audio-visual). With regard to encoding ability, he found that a significant correlation was found between vocal and facial emotional expressive ability. As for the decoding, it was found that feelings were more effectively decoded facially than vocally. A later report by Levitt (1964) corroborated that vocal-facial communication, while superior to vocal communications, was no more effective than facial communication alone. This finding is supportive of Mehrabian's quantifications of facial expression being most important, followed by vocal intonation and finally, least important of the trio, verbal information.

Williams and Tolch (1965) criticized previous research as only dealing with the specification of emotions and were interested in facial expression as a communication phenomenon. Drawing on the developments of Schlosberg (1954), they developed a technique for defining particular dimensions of expression and tested them for their generality to both encoding and decoding behavior. (A dimension of expression can be thought of as an attitude which can in turn be thought of as gross affect [Ekman and Friesen, 1968] as opposed to specific affect as communicated by emotions such as anger, love, fear, etc.).

The results of Williams and Tolch's (1965) study showed that the perception of simulated facial expressions involved at least two basic

dimensions of judgment. One was general evaluation and paralleled Schosberg's pleasantness-unpleasantness dimension. The other was dynamism and indicated a kind of activism (i.e., active versus passive, fast versus slow, etc.). Another finding was that the dimension of general evaluation is a general factor shared for facial expression in both encoding and decoding behavior. That is, the message that the subjects were sending was judged the same as the other subjects were hearing, and judged so in terms of evaluation and activity.

Williams and Sundene (1965) provide support for the ability of facial expressions to transmit messages:

Of conceptual importance to communication research is the fact that observers do employ definable dimensions of recognition in perception of what might be characterized as "messages" encoded in the "language" of facial expression. An important point also is the fact that these "messages" seem to convey information regarding an emotional state--a state also manifested in the oral code (p. 45).

Williams and Sundene (1965) tried to determine whether dimensions of recognition could be reliably judged via vocally and facially expressed emotions. They presented to observers, portrayals of twelve emotional states by way of three experimental conditions: (1) photographic slides of facial expression, (2) tape recordings of vocal expression, and (3) a combination of visual and vocal stimuli. They concluded that "dimensions of recognition appear applicable to emotional states, no matter whether such states are depicted in a visual, vocal or combined visual-vocal mode of presentation (p. 50)."

Mehrabian and Ferris (1967) investigated the decoding of inconsistent and consistent communications of attitude in facial and vocal

channels. Three levels of facial components (positive, neutral and negative) were combined with three levels of vocal components and communicated simultaneously via a neutral word. Drawing on Mehrabian and Weiner's (1967) finding that the overall judgment of attitude would be that communicated by the dominant channel (facial), Mehrabian and Ferris hypothesized that there would be no effect due to variations in the vocal component or its interaction with the facial component. The hypothesis was only partially supported in that even though the facial component had a stronger effect than the vocal effect, the vocal component was also a significant determinant of judgment. They concluded that the ratio between the effect of facial over vocal was three to two. Combining these results with those of Mehrabian and Weiner (1967), the suggestion is made that "the combined effect of simultaneous verbal, vocal and facial attitude communications is a weighted sum of their independent effects--with the coefficients of .07, .38 and .55 respectively (p. 252).

In similar fashion, Shapiro (1966) stressed the independence of nonlinguistic (vocal and facial) communication of affect through his finding that visual and verbal cues of pleasantness are apparently not related. He had four groups of judges rate a "counseling" interaction for the degree of affect (pleasantness-unpleasantness) communicated by the "client." The four groups were: (1) audio only (tape recording), (2) transcript only, (3) video only (sound turned off) and (4) combinations of audio and visual. His results showed that although the judgments of affect via both the two verbal modes (audio and transcript)

and the video mode were in agreement with judgments based on the total (audio-visual), the non-verbal modes were not in agreement with either of the verbal modes.

No attempt was made in this study to separate out the effect of vocal intonation from the verbal. Of his study, Shapiro (1966) writes that "there are two separate sources of information available to judges using the audio-visual mode...one source is verbal, including vocal and linguistic messages,...and the other is non-verbal, which in this study was primarily facial (p. 537)."

Since audio taped speech was more closely related to the whole than transcribed speech, it seems obvious that vocal variations were accounting for much of the variability. Three conclusions can be made from his important study: (1) nonlinguistic cues contribute significantly to the communication of affect, (2) vocal intonation accounts for variability of judgment, and (3) visual cues (facial expression) correlate even higher than verbal and vocal in forming impressions of a person's emotional state.

In a further study, Shapiro (1968a) investigated the responses of judges to incongruent facial expression and linguistic message cues of pleasantness. His findings lend support to those of Thompson and Meltzer (1964) and Levy (1964) in suggesting that individuals show differential ability in rating linguistic, facial or a combination of cues of emotion. Regardless of the individual differences found, however, he comments that all persons respond to nonlinguistic cues. He questions Mehrabian and Ferris (1967) which suggest a numerical importance for the contribution

of each channel and further criticizes the use of artificially-produced stimuli.

In another study, Shapiro (1968b) has shown that therapist attitudinal conditions can be reliably judged via facial cues. He investigated the relationship between judgments of the therapeutic conditions of empathy, warmth and genuineness as rated through audio, video and audio-video channels. Trained judges in each of the above conditions were exposed to actual interview segments either via audio, visual or both audio and visual means and asked to rate the level of each attitude. He found support for an earlier finding (Shapiro, 1966) that there was more relationship between the whole (audio-visual) and either audio or visual than between the two parts (audio, visual). He found that audio cues were more useful for rating empathy than was visual, but commented that this "might have been expected, since empathy is a more verbally-oriented scale than genuineness or warmth (p. 239)." Since a criticism of his study might be that judges who had only been trained on audio material were used, he suggests that a further study should be made using judges who are "presumably less biased (p. 238)."

Dilley, Lee and Verrill (1971) tried to demonstrate the ability of counselors in communicating empathy over the phone. In trying to make a point in favor of telephone crisis centers, they conducted a study in which the communication of counselor empathy was tested via three communication settings: (1) face-to-face, (2) confessional type situation, and (3) over the telephone. As each interaction between an actor-client and both trained and untrained counselors took place, audio tape recor-

dings were made. These were played to a group of judges who rated the counselor's words for communicated empathy. No significant differences were found between the three situations and the authors state that "this study found counselors to be as empathic in telephone and confessional type situations as they were face-to-face (Dilley, Lee and Verrill, 1971, p. 190)." The validity of this conclusion must be questioned, however, since the raters had no access to the non-verbal cues of empathic communication. The only thing they could say about their results is that the counselors spoke the same words in the same vocal way in the three situations, but there is no way to judge the overall impact of the empathic communication, since the raters did not have visual information.

Strong, Taylor, Bratton and Loper (1971) demonstrated that counselor's non-verbal behavior influences how student observers describe them and that students' descriptions of counselors are affected by how often counselors move. In their study, both videotape and audio tape stimulus interactions between counselor and client were shown to 86 students who rated the counselor on the Adjective Check List. In addition to being exposed to either video and audio or just audio stimuli, the subjects viewed either a "still" counselor or one which used a great deal of leg, arm and body movements.

It was found that (1) when both "still" and active counselors were seen and heard (as opposed to only heard) they were judged as more cold, bored, awkward, critical, persistent, unreasonable, uninterested and vain, and less interested, relaxed, responsive, considerate, etc. It is obvious that the non-verbal cues being emitted by the videotaped coun-

selors were overriding any audible cues of positive affect. A second finding showed that active counselors were more casual, warm, agreeable, energetic, carefree and impulsive with "still" counselors described as more logical, analytic and poised.

Shapiro, Foster and Powell (1968) tested the ability of trained and untrained judges in rating communicated empathy, warmth and genuineness via facial and body cues. Photographs of counselors in a counseling setting were shown to judges who saw either the full person (head and body), only the body or only the head of the counselors. The pictures were rated for the level of each of the communicated counselor attitudes. It was found that judgments of therapist empathy, warmth and genuineness can be reliably made of still photographs of the therapist's whole person, or of facial expressions alone. Perhaps the most important finding was that "the study does illustrate the meaningfulness of non-verbal behavior to untrained judges (and presumably therapy clients), and so confirms (the suggestions of others) that clinicians should be aware of their facial expressions (p. 236)."

In summary, it has been conclusively demonstrated that both facial expression and vocal intonation are nonlinguistic communication cues which transmit affect. It has been shown that subjects can convey emotions by way of facial expression alone (Thompson and Meltzer, 1964), and that subjects can equally decode or interpret accurately the emotional or attitudinal meaning conveyed via the facial expression (Levitt, 1962, 1964; Shapiro, 1968a; Mehrabian, 1971b). In comparisons of facial-vocal channels of communication, it has been demonstrated that facial

cues are more powerful than vocal cues, but that vocal cues are an important determinant of the affective message (Levitt, 1964; Mehrabian and Ferris, 1967; Mehrabian and Weiner, 1967).

Within the counseling setting, it has been shown that therapist attitudinal conditions can be reliably judged through facial cues (Shapiro, 1968b) and that they and other non-verbal cues make a difference in whether clients judge counselors as warm or cold (Strong, Taylor, Brallon and Loper, 1971). Finally, it has been demonstrated that the specific attitudes of empathy, respect and genuineness can be rated through facial and body cues (Shapiro, Foster and Powell, 1968).

Quantitative Comparison of Communicative Channels

Birdwhistell (1970) in his paper entitled, "Redundancy in Communication," discusses the integrational aspect of communication. Communication to him is continuous process made up of multiple behavior patterns expressed via many different channels. In his words, "Communication can be regarded in the broadest sense as a structural system of significant symbols (from all the sensorily based modalities) which permit ordered human interaction (p. 95)." He goes on to say that:

We cannot investigate communication by isolating and measuring one channel...communication is a continuous process utilizing the various channels and the combinations of them as appropriate to the particular situation (p. 70).

Very seldom does a human interaction take place in which there is no communication and in which the communication is via a single channel. The four modalities discussed previously are usually presented to the

decoder simultaneously and the weighted sum (Mehrabian and Weiner, 1967) of all the cues determine the interpretation.

Recently, the importance of non-verbal behaviors in the communication process has been emphasized (Mehrabian, 1968c, 1971a) and some studies have quantified the contribution of non-verbal cues to interpretation of affective messages. Mehrabian (1968c) has synthesized many years of experimental work in the field of communications research and added an impressive amount of empirical information to the understanding of affective communication. A quantification of some of his research points to a relationship between verbal and non-verbal determinants of a message such that $\text{Total Impact} = .07 \text{ Verbal Impact} + .38 \text{ Vocal Impact} + .55 \text{ Facial Impact}$ (Mehrabian, 1968c, p. 53). His conclusions are that 97% of an affective message is carried in non-verbal channels and only 3% is carried in the verbal channel.

Many of the studies which have been reviewed previously examined the effect of two or more channels of communication. Some paired various proxemic conditions, others paired facial with vocal, and still others examined the effects of verbal, vocal and facial. In all the research reviewed, the overriding conclusion must be reached that non-verbal cues of attitudinal or emotional communication are more influential to message decoding than the verbal cues.

A study demonstrating the powerful impact of non-verbal cues was conducted by Argyle, Alkema and Gilmore (1971) who asked subjects to rate video-tapes of a performer reading three verbal messages (friendly, neutral, hostile). Their results suggested that when verbal and non-

verbal cues were presented simultaneously, the non-verbal cues had about six times the effect of verbal cues in communicating friendly-hostile, pleasant-unpleasant or like-dislike attitudes. It was also found that when the verbal and non-verbal cues were inconsistent, this produced rating judgments of insincerity.

Haase and Tepper (1972) combined several proxemic cues (trunk lean, distance, body orientation, eye contact) with three levels of verbal message to test the effect of non-verbal cues on the perception of counselor empathy. A statistical procedure was used which provided for a conservative estimate of the percentage of variability in the dependent measure which was produced by each particular independent effect. It was shown that non-verbal effects (in this case, proxemic and kinesic) accounted for twice the variability than did the verbal message. Unfortunately, only 22% of the total variance was accounted for by the experimental variables, perhaps because of the restriction to only proxemic conditions. The findings do, however, support other studies which relate non-verbal behavior to the communication of affect and extended the findings to the specific attitude of counselor empathy.

The literature which has attempted to quantify the relating contribution of verbal and non-verbal communication modalities suggest ratios of non-verbal to verbal cues ranging from approximately 9:1 to 2:1. Although the variability reflected in this range is due to experimental differences across studies, it seems increasingly clear that non-verbal cues play a role of importance in the communication process which has been heretofore overlooked or relegated to secondary status.

Attempts at quantification of the relative contribution of verbal and non-verbal cues is a central feature of the present study, particularly regarding communication of counselor attitudes.

Summary

Many studies reviewed in this chapter have combined several non-verbal modalities and tested their influence on the communication of affect. Some studies concentrated on the proxemic and kinesic modalities of interactive distance, posture, eye contact and body orientation. The overall results of these studies showed that these factors as both main effects and as interactive effects combined to have predictable communicational meaning. Generally a forward trunk lean, a closer distance and maintained eye contact communicated positive affect. Within the counseling setting, these variables were found to communicate not only positive affect, but also higher levels of specific counselor attitudes.

Another area of research focused on the facial expression and vocal intonation variables and the effect of each, both independently and interactively, on the communication of attitude or emotion. The overall results demonstrated conclusively that facial expression and vocal intonation are strong factors in the differential perception of a person's emotional state; they are independent channels of communication and carry information about the affective state of the communicator.

All studies which have compared the communicative effect of verbal

and non-verbal cues in the transmission of emotion or attitude have stressed the overwhelming importance of non-verbal behaviors. When the verbal message was found to be inconsistent with the non-verbal communication, the non-verbal cue was usually given more weight and the communication interpreted in line with information found in the non-verbal mode.

Very few studies were found which related non-verbal behaviors to specific attitudes. Empathy, warmth and genuineness, however, have been found to be communicated non-verbally and that non-verbal cues account for about two thirds of the variability in judged counselor empathy.

Although many investigations have been made with regard to the relationship between verbal and facial-vocal cues and between various proxemic and kinesic behaviors, the literature was seriously lacking in truly multichannel communication research. No studies were found which combined proxemic, kinesic, facial and vocal channels as independent variables affecting the communication of either general or specific attitude. Mehrabian (1971b) has recognized this need and has made the specific recommendation that:

A more detailed study of the main and interactive effects of various channels is needed and might include the preparation of videotaped stimuli involving four channels of communication: verbal, vocal, facial and immediacy of position (body) cues (p. 140).

It is the purpose of this study to add to information known about affective communication by examining the effect of several channels of verbal and non-verbal cues. In addition, the specific attitudes of counselor empathy, respect and genuineness will be used for the dependent measure.

Purpose of the Study

The present study was undertaken to fill in some of the gaps in information regarding the multichannel communication of affect. The purpose was to investigate the relationship between the verbal and non-verbal communication of the specific counselor attitudes of empathy, respect and genuineness. As such, the non-verbal modalities of selected kinesic behavior (facial expression, body posture, eye contact) and a para-language modality (vocal intonation) were systematically manipulated along with verbal statements which were intended to communicate both high and low facilitative levels of three counselor attitudes.

Three questions were explored in this study:

- (1) What are the relative contributions of selected factors within four channels of communication (facial expression, body position, vocal intonation and verbal message) to the perception of counselor attitude?
- (2) How do these channels interact, detract, compensate and complement one another in "sending" the communication?
- (3) Is there agreement between trained counselors' judgments of level of facilitative conditions and the judgments of actual clients?

Hypotheses

Hypothesis (1). The main effects of trunk lean, eye contact, facial expression, vocal intonation and verbal message contribute significantly to the variability of judgment of counselor (a) empathy, (b) positive regard and (c) genuineness.

Hypothesis (2). The interactions between trunk lean, eye contact,

facial expression, vocal intonation and verbal message contribute to the variability of judgment of counselor (a) empathy, (b) positive regard and (c) genuineness.

Hypothesis (3). There is no significant difference between trained counselors and actual clients in their judgment of communicated counselor (a) empathy, (b) positive regard and (c) genuineness.

CHAPTER III

METHODOLOGY

This chapter will discuss the methodological operations and considerations necessary for the completion of this study. The major sections will include subjects, stimulus materials, procedure and statistical design.

Subjects

Two groups of subjects were selected for this study. One group consisted of fifteen male students who presented themselves for counseling at the University of Massachusetts Counseling Center. Each of the fifteen was arbitrarily chosen and asked if he would be willing to participate in a research study, given the particulars of task and time commitment, and told that there would be a monetary remuneration of \$4.00 for the three twenty-minute sessions. The first fifteen students who were asked to participate did so and all completed the judging sessions. The student clients ranged from age 18 to 25 and represented a variety of counseling "problem" areas.

The second group of subjects consisted of fifteen experienced male counselors and psychotherapists or doctoral level counselors in training. The group was composed of nine practicing counselors or psychotherapists, two counselor educators and four experienced doctoral level counselors in training and represented several theoretical orientations toward psychotherapy. The group was chosen on the basis of availability and the first fifteen professionals who were asked to

participate in the study did so.

It was decided to use two different groups of subject decoders in order to determine if the communication of the three attitudes being examined was related to specialized training, professional experience, and specifically, differential sensitivity to the dependent measures.

Stimulus Materials

A videotape stimulus was specially designed for this study which consisted of thirty-two role played interactions between an actor counselor and an actor client. Both the "counselor" and the "client" were male and relatively unknown to most of the subject-judges. The interactions were recorded on a Sony EV 310 videotape recorder and showed a full view of the "counselor" as seen across the shoulder of the "client." The "client's" shoulder served as a spatial frame of reference from which the subjects judged the counselor's response to the client's statement. Interaction numbers were shown visually and heard audibly just before each of the thirty-two interactions.

The thirty-two stimulus interactions represented all combinations of two levels of trunk lean (forward--backward), two levels of eye contact (direct contact--no contact), two levels of vocal intonation (concerned--indifferent), two levels of facial expression (concerned--indifferent), and two levels of verbal message (high--low).

The operational definitions of trunk lean and eye contact were as follows: in the backward trunk lean condition, the counselor leaned backward in a professional swivel chair with hands on the arms of the

chair while in the forward condition he leaned forward with his arms on his legs. The counselor's body orientation was maintained facing toward the client in all stimulus interactions. In the direct eye contact condition, the counselor looked directly at the client's eyes and in the no eye contact condition looked downward into his own lap.

To operationally define the three independent variables of vocal intonation, facial expression and verbal message, three preliminary operations were performed. The first was to select the high and low level message. Using as a guide verbatim excerpts extracted from Truax and Carkhuff (1967) and Carkhuff and Berenson (1967), thirty interactions were formed which represented varying degrees of counselor communicated core conditions of empathy, respect or positive regard, and genuineness. These excerpts, consisting of one client statement and one counselor response, were mimeographed on four sheets of paper and given in random sequence to a group of counselors and counselors in training for judging. Each judge was given a booklet of statements and a criterion sheet which briefly described the attitude of empathy and positive regard and also the scale point identifications for judging the level (see Appendix A). Each statement was judged according to a modified 5 point Truax scale for its level of empathic understanding and also for its level of positive regard or respect shown for the client. There was at least a one day time separation between the judging of empathy and the judging of positive regard, so as to reduce criterion contamination.

On the strength of a finding by Haase and Tepper (1972) which

found no significant difference between a high and medium level of expressed verbal empathy but a significant difference between these and a low level, only two levels of verbal message were used in this study. The Thurstone Equal Appearing Intervals Technique (Edwards 1957) was used to select the statement which was most consistently judged highest for both empathy and positive regard and also one which was judged lowest in empathy and positive regard. These two statements served as the two levels of the verbal message independent factor. The median values of the high statement selected was 4.04 for empathy ($Q = .94$), and 4.11 for positive regard ($Q = .72$). The median values for the low message were 1.00 for empathy ($Q = .00$) and 1.31 for positive regard ($Q = .55$).

Determining the operational definitions for the vocal intonation and facial expression variables were somewhat more complicated. Most of the research on nonverbal communication has investigated the encoding and decoding of emotions which might typically be thought of as a client's emotional repertoire (sadness, elation, fear, anger, surprise, etc.). Since very little research has been done with regard to counselor nonverbal communication in a counseling setting (Haase and DiMattia 1970; Meltzoff and Kornreich 1970), it was difficult to find literature which led toward a definition of appropriate counselor nonverbal response to a given communicated emotion.

In this study the client stimulus statement was one which indicated a client state of depression. The emotion depression was chosen because of its frequency of occurrence in a counseling setting and be-

cause of its generally universal recognition. In keeping with client-centered theory, the counselor might reflect this feeling of depression. He would not look depressed himself, but rather would communicate an understanding of the client's depressive feelings and a concern for his state of depression. The counselor's facial and intonational cues should therefore communicate not depression, but concern. Concern was chosen because of its presence in a good counseling relationship and because of its direct relationship with positive regard or respect.

For the purpose of this study, therefore, an appropriate nonverbal intonational and facial response to a client utterance signifying depression was defined as that which conveys an understanding of and a concern for perceived client depression. The polar opposite of concern was defined as indifference, and these two ends of the continuum defined the two levels of vocal intonation and facial expression.

Determining the two levels of intonation was accomplished in the following manner. After the high and low verbal message statements were selected, the actor-counselor recited both the high and the low level message fifteen times into a tape recorder. He was instructed to vary his intonational pattern (rate, pitch, volume, etc.) while attempting to convey varying levels of concern and indifference for the depression stated by the client. These coded excerpts were then transferred onto two cassette tapes (to provide for more random presentation) and rated by a group of adults according to a 5 point, Likert type scale along an indifference-concern continuum for level of communicated concern. The judges were instructed to make their ratings

on the basis of intonation only. The instructions and scale point identifications can be found in Appendix B. Thurstone's Equal Appearing Intervals Technique (Edwards 1957) was then used to select four statements for use in the study. Two statements were selected from the high verbal statement group (one with concerned intonation and one with indifferent intonation) and two statements from the low verbal statement group (one concerned and one indifferent). The median values for concerned intonation were 4.30 ($Q = 1.08$) for the high message and 3.40 ($Q = 1.12$) for the low message. For the indifferent intonation, the median values were 1.50 ($Q = 1.33$) for the high message and 1.13 ($Q = .63$) for the low message. These selected combinations of verbal message and vocal intonation were then retrieved from the coded master tape for later use in preparation of the stimulus videotape.

The operational definition of concerned and indifferent facial expression was determined as follows. Photographs were taken of the actor-counselor's face as he was asked to portray concern to a person who had just shared his depression with him. He varied his facial expression for each of the thirty-six photographs while attempting to convey feelings from indifference to concern. An effort was made to vary the furrow of the brow, the pitch of the eyebrow and the position of the cheekbone, since these facial features were believed through experience to convey concern. The photographs were then coded and judged by a group of adults for the emotion or attitude being expressed by the psychologist. They were first given several different emotions or attitudes to choose from (indifference, surprise, wonder, disbelief,

concern and other). Only photographs which were judged to have communicated either indifference or concern eighty percent of the time were then selected for judging along the "concern" continuum. These nine photographs were randomly presented to a group of adults who rated them according to a 5 point Likert scale for communicated concern. The scale point identifications and instructions to the judges are found in Appendix C. The Thurstone Equal Appearing Intervals Technique (Edwards, 1957) was used to select a concerned (Mdn. = 4.43; Q = 1.15) and an indifferent (MDN. = 1.51; Q = 1.43) facial expression which was then duplicated in the stimulus videotape.

Having determined the operational definitions for the two levels of each of the five independent variables, the stimulus tape was made. The actor-counselor was seated in a swivel, tilt, arm chair opposite the actor-client at a distance of fifty-five inches. Fifty-five inches was chosen for two reasons: first, Kelly (1971) concluded that "closer distances (36") communicate positive counselor regard, while middle (55") and far (72") interactional distances tend to convey neutral and negative evaluative counselor feelings respectively (p. 148)." In order not to bias the stimulus communications, the "neutral" distance of 55 inches was chosen. Secondly, because of the technical difficulties of synchronizing lip movement with dubbed sound, too close a distance might amplify any poor synchronizing and create an unnatural and distorted cue. Too far a distance, on the other hand, might reduce the effect of the facial expression cue.

For each of the 32 interaction conditions a card was made which in-

licated the combination of independent variables for that particular interaction. The cards were shuffled so as to insure random order, and the actor-counselor instructed to position himself according to the designated conditions listed on the reference card. For example, the instructions on card number four were for the actor-counselor to lean forward (B_1), maintain eye contact (C_1), speak a low level message (F_2), using an indifferent intonation (D_2), while showing a concerned facial expression (E_1). Before each counselor-client interaction was taped, a number was videotape recorded and announced verbally for identification of the interaction. The master audio tape recorder holding the appropriate verbal message--vocal intonation combinations (described earlier)--was then started simultaneously with the videotape recorder. The actor-counselor timed his lip response to coincide with the audio portion which was dubbed directly onto the videotape. In this way, only the four audio segments which were previously judged to be concerned or indifferent intonation and high and low statements were recorded onto the stimulus tape. The 32 interactions were recorded onto four tapes of eight interactions each to provide for random presentation to the subject judges.

Procedure

Each of the thirty subject judges were shown the stimulus videotape either alone or with one other subject in a small room which was free from distractions. The subjects were seated behind a small desk about four feet away from a 23 inch television monitor and provided

with pencils, and answer sheet and the appropriate instruction sheet for the dependent measure being judged. The four "blocks" of eight interactions each were then randomly presented to the subjects who made their ratings directly on a Digitek answer sheet. Each subject rated all thirty-two interactions on all three dependent measures (empathy, respect and genuineness) one attitude at a time with at least one and not more than seven days between each rating. The order of rating the attitudes was randomized for each subject.

All subjects were given instructions to make their judgements according to a modified five point scale taken from Carkhuff (1969) on the basis of brief descriptions of empathy, positive regard and genuineness adapted from Carkhuff and Berenson (1967). The descriptions were written so that persons without previous knowledge of the technical terms would be able to make judgements easily. They were instructed to make the ratings according to their feeling about the attitude communicated by the "counselor." The brief descriptions of the three dimensions, the instructions and the scale point identifications can be found in Appendix D.

Design

Each of the three dependent variables of judged empathy, respect and genuineness were evaluated by a $2 \times 2 \times 2 \times 2 \times 2 \times 2$ analysis of variance design with repeated measures on five factors. This design had one between subjects factor (A) with two levels (counselors and clients) and five within subjects factors. The within subjects fac-

tors all had two levels and consisted of trunk lean (forward--backward), eye contact (direct contact--no contact), vocal intonation (concerned--indifferent), facial expression (concerned--indifferent), and verbal message (high--low). A graphic representation of this design can be found in Figure 1.

Since none of the factors had more than two levels, post hoc comparisons could be made by direct reference to cell means. Significant interactions were interpreted by graphs. In order to make comparisons, variance components were calculated following a procedure outlined by Haase (1971). This procedure gives a conservative underestimate of the strength of association between the independent variables and the dependent measures because of the unusually large number of error terms included.

The data was analyzed according to a $2 \times 2 \times 2 \times 2 \times 2 \times 2$ factorial analysis of variance with repeated measures on each factor (Winer 1962). Three separate computer operations were made for the three dependent measures of empathy, respect and genuineness. A Biomedical 08V program was run on a CDC 3800 computer.

CHAPTER IV

RESULTS

This chapter will be divided into four sections. In the first three sections the three dependent measures of judged empathy, respect and genuineness will be discussed individually with regard to the main and interaction effects for that dimension. The fourth will compare and contrast the six independent measures of group, trunk lean, eye contact, vocal intonation, facial expression and verbal message, and their significance in the communication of the three dependent measures of empathy, respect and genuineness. A mixed design analysis of variance with repeated measures on five independent factors was used to analyze the data which was run on a Biomedical computer program BMD 08V. Third, fourth and fifth order interactions were not interpreted and only the first and second order interactions which contributed to more than .75% of the total variance were discussed.

Empathy

Hypothesis One (a). The main effects of trunk lean, eye contact, facial expression, vocal intonation and verbal message contribute significantly to the variability of judged counselor empathy.

The results of the analysis of variance for the dependent measure of judged empathy are presented in Table 1. In addition to the usual SS, MS and F ratio found in a source table, the variance components (θ^2) and the percentage of total variance (% Var.) accounted for by

Table 1

Analysis of Variance of Judged Empathy for Two Groups of
Subjects Responding to Two Levels in Each Factor of
Trunk Lean, Eye Contact, Vocal Intonation,
Facial Expression and Verbal Message

Source of Variance	df	SS	MS	F	θ^2	% Var.
<u>Between Subjects</u>						
Groups (A)	1	10.42	10.42	2.14	.012	.44
Subjects (S) within groups (error a)	28	136.69	4.88		.069	
<u>Within Subjects</u>						
Trunk Lean (B)	1	41.67	41.67	63.14***	.084	3.14
BS (error b)	28	18.44	.66		.006	
Eye Contact (C)	1	79.35	79.35	79.35***	.163	6.03
CS (error c)	28	28.13	1.00		.017	
Vocal Intonation (D)	1	6.34	6.34	21.13***	.013	.48
DS (error d)	28	8.50	.30		.000	
Facial Expression (E)	1	340.82	340.82	96.55***	.703	26.01
ES (error e)	28	98.92	3.53		.096	
Verbal Message (F)	1	222.34	222.34	86.18***	.458	16.94
FS (error f)	28	72.13	2.58		.066	
AB	1	.70	.70	1.06	.000	.00
BS (error b)	28	18.44	.66		.006	
AC	1	6.34	6.34	6.34*	.022	.81
CS (error c)	28	28.13	1.00		.017	
AD	1	1.35	1.35	4.50*	.004	.15
DS (error d)	28	8.50	.30		.000	
AE	1	2.20	2.20	.62	.000	.00
ES (error e)	28	98.92	3.53		.096	
AF	1	9.60	9.60	3.72	.029	1.07
FS (error f)	28	72.13	2.58		.066	
BC	1	3.50	3.50	4.55*	.011	.41
ABC	1	.02	.02	.03	.000	.00
BCS (error bc)	28	21.54	.77		.019	
BD	1	2.40	2.40	6.00*	.008	.30
ABD	1	.70	.70	1.75	.003	.11
BDS (error bd)	28	11.08	.40		.000	
BE	1	7.70	7.70	18.78***	.030	1.11
ABE	1	.02	.02	.05	.000	.00
BES (error be)	28	11.47	.41		.000	
BF	1	1.67	1.67	2.88	.005	.18
ABF	1	.20	.20	.34	.000	.00
BFS (error bf)	28	16.19	.58		.008	

Table 1 (cont.)

Source of Variance	df	SS	MS	F	θ^2	% Var.
CD	1	.27	.27	.61	.000	.00
ACD	1	.00	.00	.00	.000	.00
CDS (error cd)	28	12.42	.44		.000	
CE	1	5.10	5.10	11.33**	.019	.07
ACE	1	.82	.82	1.82	.003	.11
CES (error ce)	28	12.52	.45		.000	
CF	1	2.82	2.82	5.13*	.009	.33
ACF	1	.34	.34	.62	.000	.00
CFS (error cf)	28	15.41	.55		.006	
DE	1	5.40	5.40	17.42***	.021	.78
ADE	1	4.54	4.54	14.65***	.035	1.28
DES (error de)	28	8.63	.31		.000	
DF	1	2.20	2.20	8.46**	.008	.30
ADF	1	.02	.02	.08	.000	.00
DFS (error df)	28	7.22	.26		.000	
EF	1	.07	.07	.09	.000	.00
AEF	1	4.54	4.54	5.97*	.032	1.18
EFS (error ef)	28	21.33	.76		.019	
BCD	1	.94	.94	1.38	.002	.07
ABCD	1	.07	.07	.10	.000	
BCDS (error bcd)	28	18.93	.68		.028	
BCE	1	1.67	1.67	2.69	.009	.33
ABCE	1	.34	.34	.55	.000	.00
BCES (error bce)	28	17.43	.62		.020	
BCF	1	.50	.50	1.22	.001	.04
ABCF	1	2.40	2.40	5.85*	.033	1.22
BCFS (error bcf)	28	11.41	.41		.000	
BDE	1	.94	.94	2.14	.004	.15
ABDE	1	.60	.60	1.36	.003	.11
BDES (error bde)	28	12.28	.44		.000	
BDF	1	1.35	1.35	3.75	.008	.30
ABDF	1	.50	.50	1.39	.002	.07
BDFS (error bdf)	28	10.08	.36		.000	
BEF	1	.70	.70	1.32	.001	.04
ABEF	1	.15	.15	.28	.000	.00
BEFS (error bef)	28	14.83	.53		.009	
CDE	1	2.60	2.60	11.82**	.020	.74
ACDE	1	.42	.42	1.91	.003	.11
CDES (error cde)	28	6.04	.22		.000	
CDF	1	.15	.15	.27	.000	.00
ACDF	1	.10	.10	.18	.000	.00
CDFS (error cdf)	28	15.68	.56		.013	
CEF	1	.34	.34	.79	.000	.00
ACEF	1	.02	.02	.05	.000	.00
CEFS (error cef)	28	12.08	.43		.000	

Table 1 (cont.)

Source of Variance	df	SS	MS	F	θ^2	% Var.
DEF	1	.60	.60	1.15	.001	.04
ADEF	1	.94	.94	1.81	.007	.26
DEFS (error def)	28	14.53	.52		.008	
BCDE	1	.60	.60	1.25	.002	.07
ABCDE	1	.94	.94	1.96	.015	.55
BCDES (error bcde)	28	13.53	.48		.005	
BCDF	1	3.50	3.50	18.42***	.055	.18
ABCDF	1	.27	.27	1.42	.003	.11
BCDFS (error bcdf)	28	5.42	.19		.000	
BCEF	1	.15	.15	.79	.000	.00
ABCEF	1	.00	.00	.00	.000	.00
BCEFS (error bcef)	28	5.28	.19		.000	
BDEF	1	1.20	1.20	3.00	.013	.48
ABDEF	1	.82	.82	2.05	.014	.52
BDEFS (error bdef)	28	11.29	.40		.000	
CDEF	1	1.20	1.20	4.14	.015	.55
ACDEF	1	.60	.60	2.07	.010	.37
CDEFS (error cdef)	28	8.26	.29		.000	
BCDEF	1	.60	.60	1.30	.005	.18
ABCDEF	1	.10	.10	.22	.000	.00
ABCDEFS (error bcdef)	28	12.86	.46		.230	

each effect have been shown. Throughout the following discussion, % Var. will indicate that amount of the total variance in the dependent variable which is attributed to the main effect or interaction effect being discussed. Inspection of Table 1 reveals that each of the within subject main effects was significant beyond the .001 level of confidence. By transposing analysis of variance information into variance components (θ^2), the relative magnitude of the independent effects (both main and interaction) have been computed. For the dependent variable of empathy, 67.72% of the variability in judgment was accounted for. Within this known variability, .44% of the total is accounted for by counselor-client differences, 35.66% by non-verbal effects, 16.94% by the verbal

message and 14.68% by the interactions. Table 2 lists the specific percentage of variance for the main effects and some selected interactions which account for a significant amount of variance.

The trunk lean effect (B) was a significant factor in the variability of judged counselor empathy ($F = 63.14$, $df = 1/28$, $p < .001$, % Var. = 3.14%). Comparison of cell mean differences in Table 3 show that the forward trunk lean position elicited higher judgments of communicated empathy than the backward lean.

Eye contact (C) was also shown to be an important determinant of judgment at a highly significant level ($F = 79.35$, $df = 1/28$, $p < .001$, % Var. = 6.03%). Cell mean comparisons show that direct eye contact yields higher judgments of empathic communication than the no eye contact condition.

Vocal intonation (D) emerged as a significant effect ($F = 21.13$, $df = 1/28$, $p < .001$, % Var. = .48%). Cell mean inspection reveals that the more concerned intonational pattern results in higher judgments of communicated empathy than an indifferent vocal intonation.

The most powerful effect was the facial expression (E) factor ($F = 96.55$, $df = 1/28$, $p < .001$, % Var. = 26.01%). Facial expression alone accounted for 26.01% of the variability of judgment. Cell mean inspection indicates that the concerned facial expression elicited higher levels of judged empathic communication than an indifferent facial expression.

The verbal message (F) component also produced significant differences ($F = 86.18$, $df = 1/28$, $p < .001$, % Var. = 16.94%). Examina-

Table 2

Percentage of Variability Accounted for by
Main Effects and Selected Interactions (Empathy)

Source	% of Total Variability
Groups (A)	.44
Non-verbal Main Effects	
trunk lean (B)	3.14
eye contact (C)	6.03
vocal intonation (D)	0.48
facial expression (E)	<u>26.01</u>
Total Non-verbal	35.66
Verbal Main Effect	16.94
Interactions	
group X eye contact (AC)	.81
trunk lean X facial expression (BE)	1.11
vocal intonation X facial expression (DE)	.78
group X intonation X facial (ADE)	1.28
group X facial X verbal message (AEF)	1.18
all other interactions	<u>9.52</u>
Total Interactions	14.68
Error or unaccounted for variance	<u>32.28</u>
Total Variability	100.00

Table 3
Main Effect Cell Means (Empathy)

Source	Mean
Counselor Group (A ₁)	2.42
Client Group (A ₂)	2.63
Forward Trunk Lean (B ₁)	2.74
Backward Trunk Lean (B ₂)	2.32
Direct Eye Contact (C ₁)	2.81
No Eye Contact (C ₂)	2.24
Concerned Vocal Intonation (D ₁)	2.61
Indifferent Vocal Intonation (D ₂)	2.45
Concerned Facial Expression (E ₁)	3.12
Indifferent Facial Expression (E ₂)	1.93
High Level Verbal Message (F ₁)	3.01
Low Level Verbal Message (F ₂)	2.05

tion of the means for each factor level confirm that the high level message yields higher levels of judged empathy than a low level message.

Hypothesis Two (a). The interactions between trunk lean, eye contact, vocal intonation, facial expression and verbal message contribute to the variability of judged counselor empathy.

Inspection of Table 1 reveals that fourteen interactions were significant beyond the .05 level of confidence. Of these, nine were first order interactions, three were second order and two were third order. Only those significant first and second order interactions which contributed to the more than .75% of the total variance will be discussed. The value of .75% was selected arbitrarily as a minimum amount of variance which could practically be thought to influence conclusions.

Figure 2 presents the group X eye contact interaction (AC) ($F = 6.34$, $df = 1/28$, $p < .05$, % Var. = .81%). This graph indicates that counselors' and clients' judgments of communicated empathy were almost the same in the no eye contact situation, but that when direct eye contact was maintained, clients judged the empathic communication much higher than counselors. This interaction effect suggests that eye contact is a more important factor for clients than for counselors when judging communicated empathy.

The trunk lean X facial expression interaction (BE) ($F = 18.78$, $df = 1/28$, $p < .001$, % Var. = 1.11%) is shown in Figure 3. In this case, a concerned facial expression coupled with a forward trunk lean produced the highest level of judged empathy. Conversely, the backward trunk lean coupled with the indifferent expression resulted in the

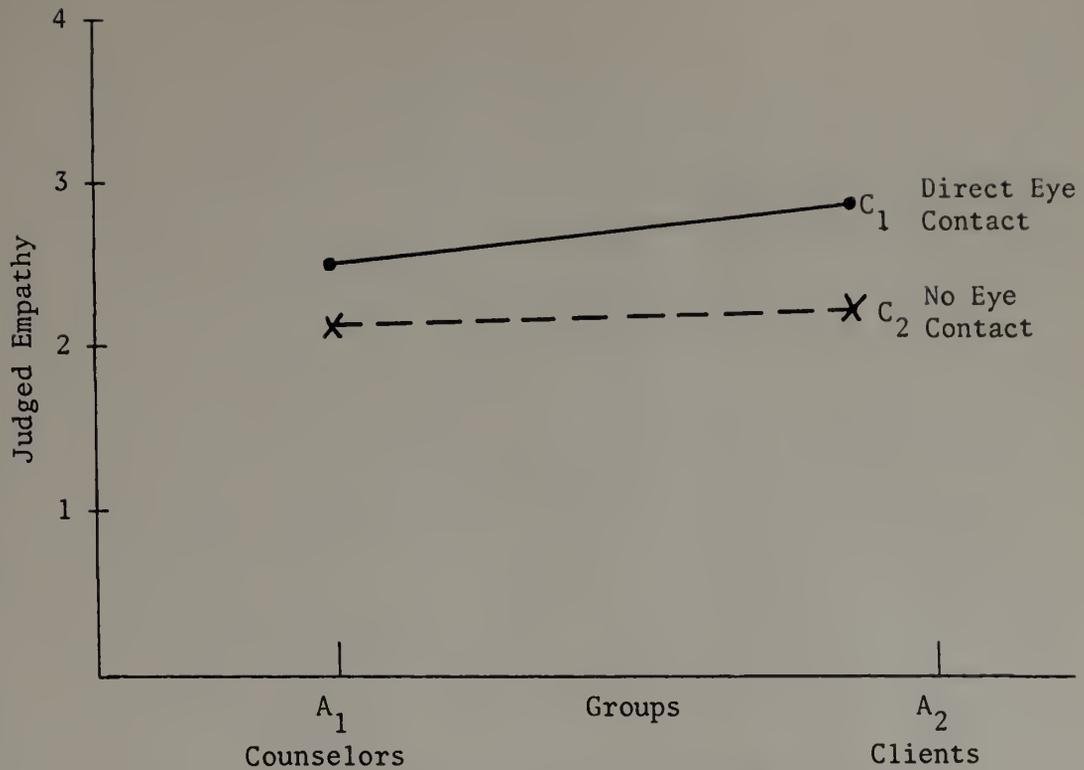


Fig. 2. Group X eye contact (AC)

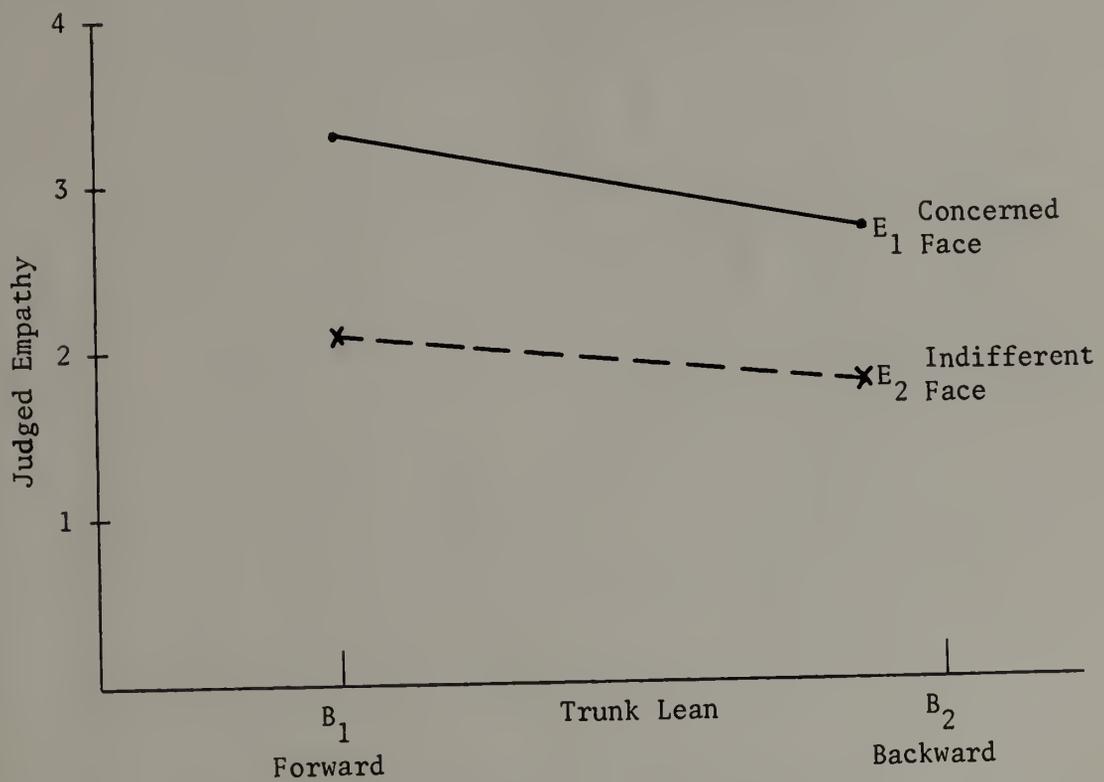


Fig. 3. Trunk lean X facial expression (BE)

lowest judgment. The interaction between these variables, however, is caused by a greater increase in judged empathy by a concerned face while in the forward position as opposed to the backward position.

The vocal intonation X facial expression (DE) interaction ($F = 17.42$, $df = 1/28$, $p < .001$, % Var. = .78%) shown in Figure 4 demonstrates the "additive" nature of two "positive" communication cues. (Throughout the remaining presentation, a positive communication cue will be defined as that end of the bipolar dimension which is expected to communicate a higher level of judgment on the dependent measure. That is, a forward trunk lean, direct eye contact, concerned intonation, concerned facial expression and high verbal message would be considered positive cues and will be given a plus (+) sign notation. A backward trunk lean, on the other hand, would be considered to be a negative communicational cue and will be assigned a minus (-) sign. In all cases of the experimental design the "one" level of each factor (i.e., C_1) indicates the positive end and the "two" level (i.e., C_2) designates the negative end. In the graphic representations, the solid line between dots (●————●) always represents the one or positive level of a faction and the dotted line between X's (X-----X) always depicts the two or negative level.*

Inspection of Figure 4 shows that an indifferent facial expression produced the same level of judged empathy in both the concerned facial expression condition, there is a greater increase in judgment when coupled with a concerned intonation than with indifferent intonation.

*Note: This is true except when the graph depicts differences between the counselor and client group (A).

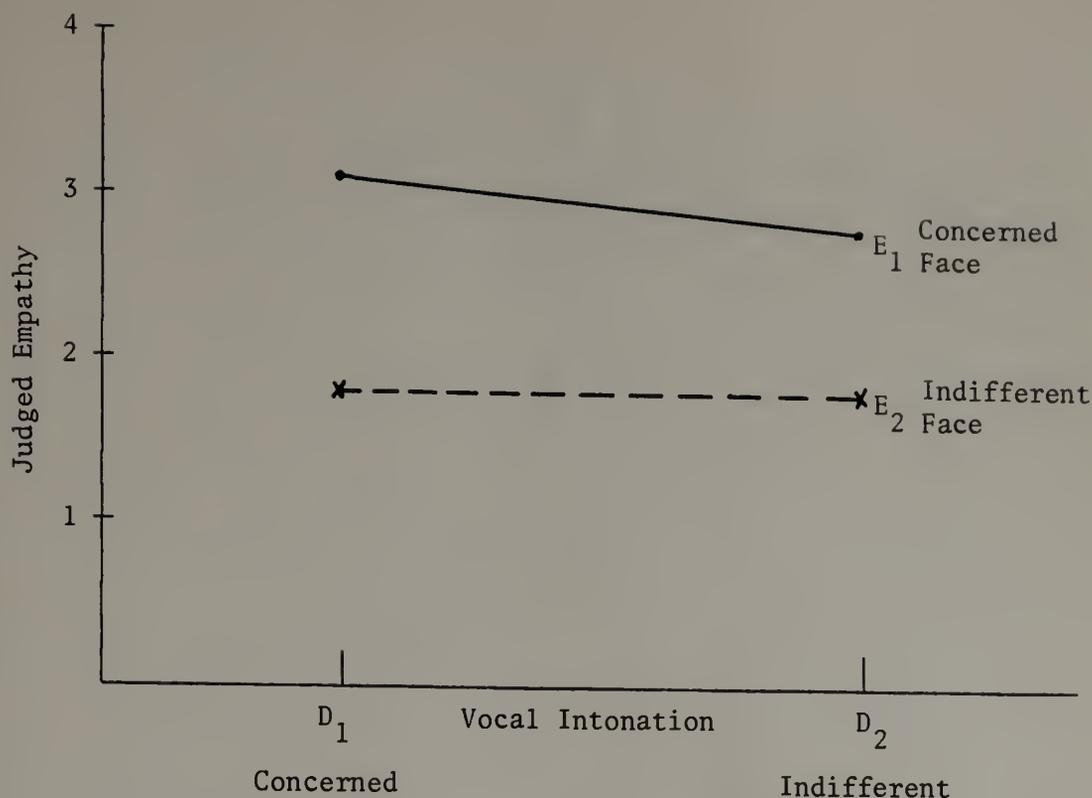


Fig. 4. Vocal intonation X facial expression (DE)

It is apparent that the two positive cues add together in a cumulative fashion produce the highest judgment.

Figures 5(a) and 5(b) show the interaction between groups X vocal intonation X facial expression (ADE) ($F = 14.65$, $df = 1/28$, $p < .001$, % Var. = 1.28%). For counselors (Fig. 5[a]), a concerned face raised the level of judgment equally for both the concerned and the indifferent levels of intonation. Clients, however (Fig. 5[b]), differed from counselors by giving a much greater increased judgment of empathic communication in the concerned face/concerned intonation situation than in the concerned face/indifferent intonation situation. The interaction occurs because clients seem to place more weight on the level of facial expression when making their judgments. Comparison of Figures 5(a) and 5(b)

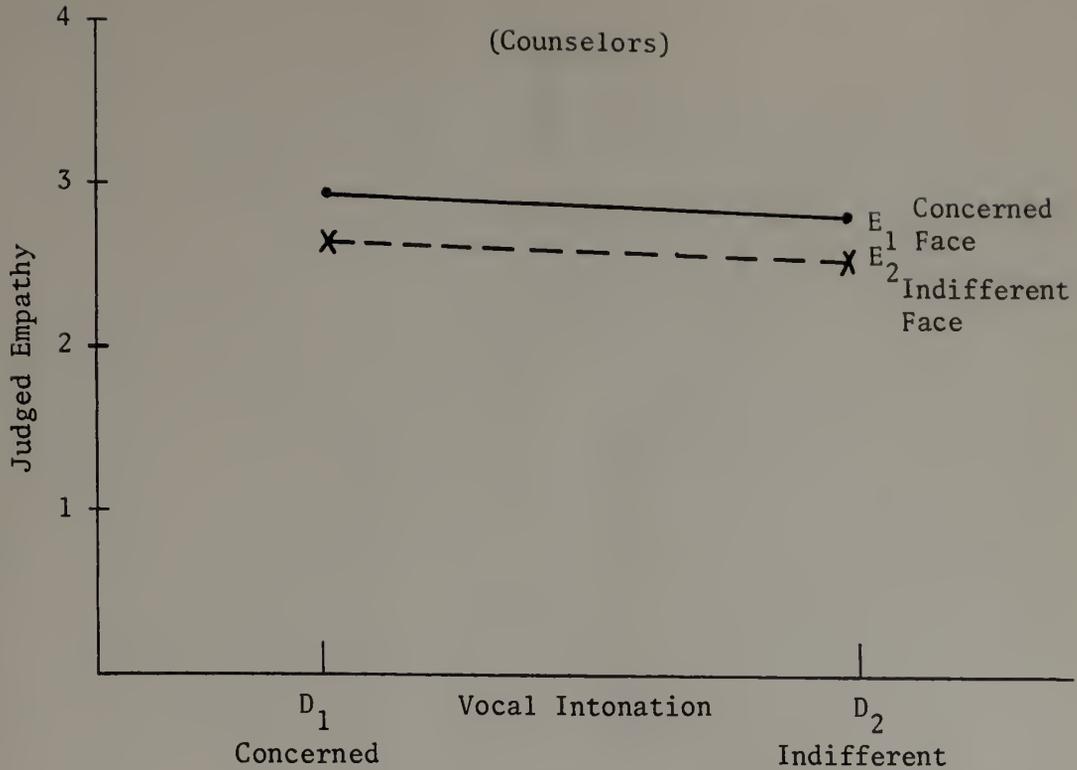


Fig. 5(a). Group X vocal intonation X facial expression (ADE)

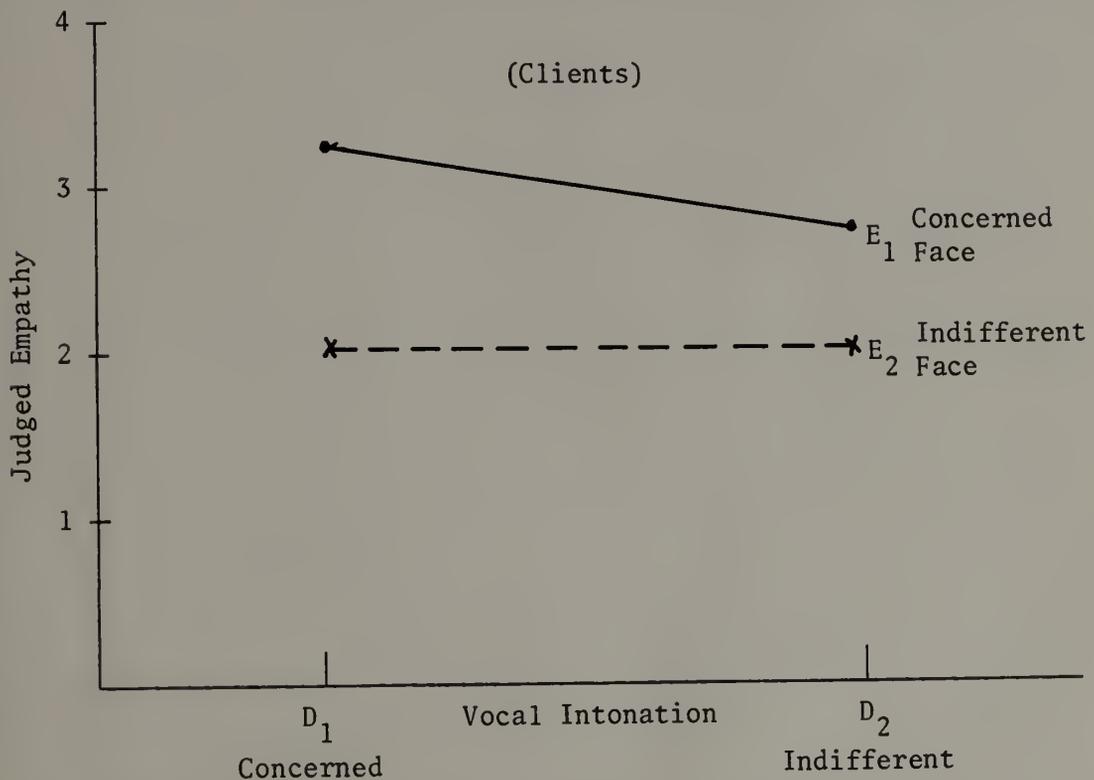


Fig. 5(b). Group X vocal intonation X facial expression (ADE)

also show that clients tend to give lower judgments of empathy when receiving the "negative" cues of indifferent facial expression and indifferent vocal intonation than counselors do.

Figures 6(a) and 6(b) show a second order interaction between groups X facial expression X verbal message (AEF) ($F = 5.97$, $df = 1/28$, $p < .05$, % Var. - 1.18%). Comparing figures 6(a) and 6(b), one can see that both clients and counselors gave higher levels of judgments when viewing a concerned face, regardless of the level of verbal message. Also, with both counselors and clients, the combination of positive factor levels (++) resulted in the highest judgment of empathy and the combination of negative levels (--) resulted in the lowest judgment. The (-+) situation and the (+-) situation fell in between these two. The interaction occurs because for counselors, the concerned face added more to a high verbal message than the indifferent face detracted from the low verbal message. Clients (Fig. 6[b]) on the other hand, reversed this trend and the indifferent face detracted more from the low message than the concerned face added to the high message.

Hypothesis Three (a). There is no significant difference between trained counselors and actual clients in their judgment of communicated counselor empathy.

Inspection of Table 1 reveals that the group main effect (A) failed to reach statistical significance ($F = 2.14$). The null hypothesis was therefore not rejected and conclusion reached that there were no differences found between trained counselors and actual clients with regard to their judgments of communicated counselor empathy when

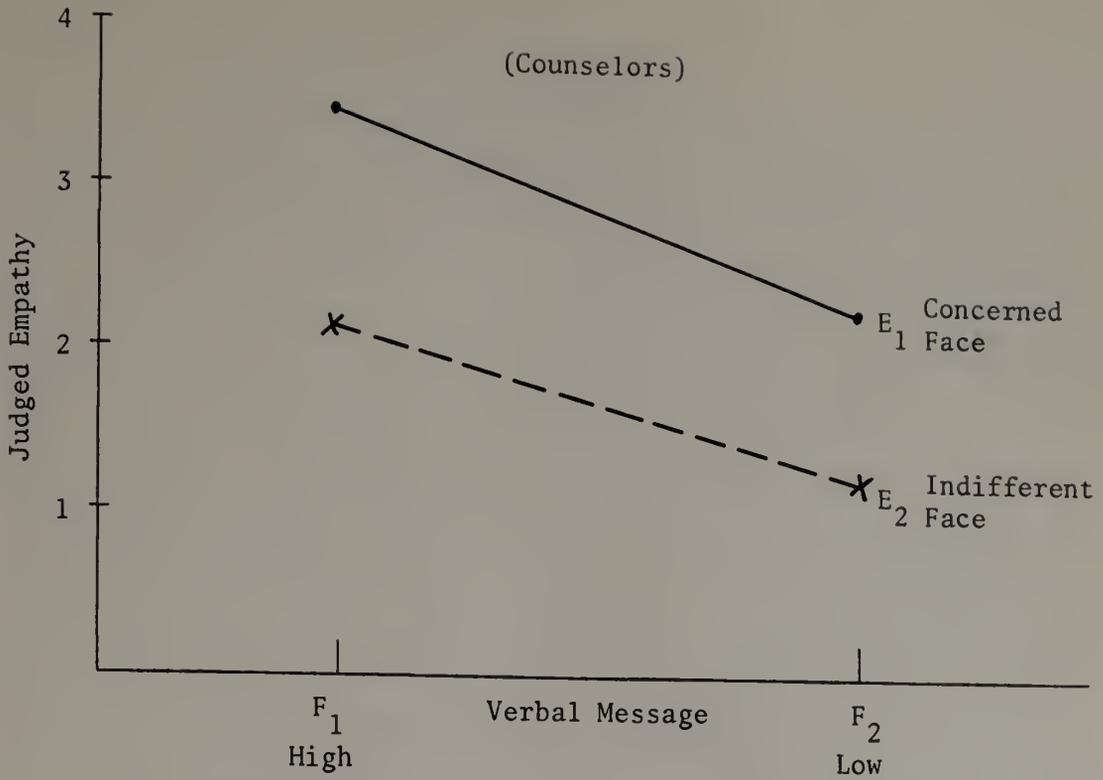


Fig. 6(a). Group X Facial Expression X verbal message (AEF)

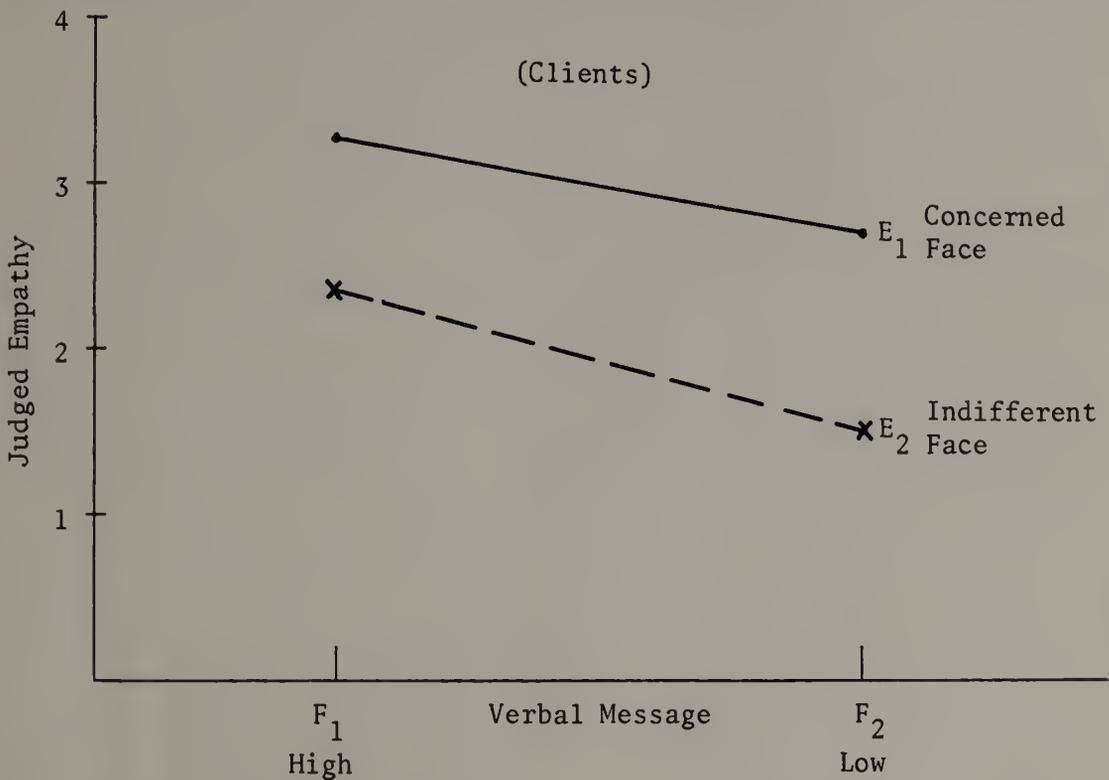


Fig. 6(b). Group X facial expression X verbal message (AEF)

all other effects in the model are held constant. However, significant interactions involving the counselor-client groups tend to override this conclusion of no difference.

Respect

Hypothesis One (b). The main effects of trunk lean, eye contact, vocal intonation, facial expression and verbal message contribute significantly to the variability of judged counselor respect.

The results of the analysis of variance for the dependent measure of judged respect are presented in Table 4. Inspection of this table reveals that all of the five within subject main effects were significant beyond the .01 level of confidence. By translating the analysis of variance information into variance components (θ^2), the percentage of variability accounted for by each effect has been calculated. For the dependent measure of respect, 84.41% of the total variability was accounted for and within this known variability, 50.10% of the total was attributed to the non-verbal main effects, 9.62% to the verbal main effect, 1.10% to the between group effect and the remaining 23.59% to the interactions. A more specific breakdown is found in Table 5.

Trunk lean (B) was found to be a significant factor in the variability of judged respect ($F = 72.97$, $df = 1/28$, $p < .001$, % Var. = 3.21%). Comparison of main effect cell means (Table 6) shows that a higher level of judged counselor respect was communicated when the counselor was in the forward trunk lean as opposed to the backward lean.

Table 4

Analysis of Variance of Judged Respect for Two Groups of
Subjects Responding to Two Levels in Each Factor of
Trunk Lean, Eye Contact, Vocal Intonation,
Facial Expression and Verbal Message

Source of Variance	df	SS	MS	F	θ^2	% Var.
<u>Between Subjects</u>						
Groups (A)	1	19.55	19.55	4.10	.013	1.10
Subjects (S) within groups (error a)	28	133.58	4.77		.068	
<u>Within Subjects</u>						
Trunk Lean (B)	1	43.78	43.78	72.97***	.090	3.21
BS (error b)	28	16.88	.60		.007	
Eye Contact (C)	1	94.38	94.38	107.25***	.195	6.95
CS (error c)	28	24.65	.88		.015	
Vocal Intonation (D)	1	4.96	4.96	10.12**	.009	.32
DS (error d)	28	13.77	.49		.003	
Facial Expression (E)	1	535.51	535.51	278.91***	1.112	39.62
ES (error e)	28	53.90	1.92		.048	
Verbal Message (F)	1	131.28	131.28	77.68***	.270	9.62
FS (error f)	28	47.38	1.69		.041	
AB	1	.13	.13	<1.00	.000	.00
BS (error b)	28	16.88	.60		.007	
AC	1	.01	.01	<1.00	.000	.00
CS (error c)	28	24.65	.88		.015	
AD	1	.05	.05	<1.00	.000	.00
DS (error d)	28	13.77	.49		.003	
AE	1	1.00	1.00	<1.00	.000	.00
ES (error e)	28	53.90	1.92		.048	
AF	1	.00	.00	<1.00	.000	.00
FS (error f)	28	47.38	1.69		.041	
BC	1	2.11	2.11	4.31*	.007	.25
ABC	1	.13	.13	<1.00	.000	.00
BCS (error bc)	28	13.80	.49		.006	
BD	1	2.71	2.71	7.74**	.010	.36
ABD	1	.05	.05	<1.00	.000	.00
BDS (error bd)	28	9.77	.35		.000	
BE	1	7.53	7.53	17.93***	.030	1.07
ABE	1	.65	.65	1.55	.002	.07
BES (error be)	28	11.73	.42		.002	
BF	1	.65	.65	2.24	.002	.07
ABF	1	8.08	.29		.000	
BFS (error bf)	28	8.08	.29		.000	

Table 4 (cont.)

Source of Variance	df	SS	MS	F	θ^2	% Var.
CD	1	.30	.30	<1.00	.000	.00
ACD	1	.03	.03	<1.00	.000	.00
CDS (error cd)	28	14.95	.53		.009	
CE	1	10.63	10.63	17.72***	.042	1.50
ACE	1	.30	.30	<1.00	.000	.00
CES (error ce)	28	16.73	.60		.013	
CF	1	3.63	3.63	6.05*	.013	.46
ACF	1	.00	.00	<1.00	.000	.00
CFS (error cf)	28	16.78	.60		.013	
DE	1	9.01	9.01	16.69***	.035	1.25
ADE	1	.18	.18	<1.00	.000	.00
DES (error de)	28	15.22	.54		.009	
DF	1	.13	.13	<1.00	.000	.00
ADF	1	1.43	1.43	4.21*	.009	.32
DFS (error df)	28	9.60	.34		.000	
EF	1	9.01	9.01	9.19**	.033	1.18
AEF	1	4.96	4.96	5.06*	.033	1.18
EFS (error ef)	28	27.56	.98		.037	
BCD	1	.13	.13	<1.00	.000	.00
ABCD	1	1.00	1.00	3.33	.012	.43
BCDS (error bcd)	28	8.40	.30		.000	
BCE	1	.55	.55	<1.00	.000	.00
ABCE	1	.03	.03	<1.00	.000	.00
BCES (error bce)	28	17.08	.61		.028	
BCF	1	.13	.13	<1.00	.000	.00
ABCF	1	.30	.30	<1.00	.000	.00
BCFS (error bcf)	28	10.73	.38		.000	
BDE	1	1.13	1.13	4.52*	.007	.25
ABDE	1	1.00	1.00	4.00	.013	.47
BDES (error bde)	28	7.02	.25		.000	
BDF	1	1.13	1.13	4.52*	.007	.25
ABDF	1	.46	.46	1.84	.004	.14
BDFS (error bdf)	28	7.07	.25		.000	
BEF	1	2.11	2.11	6.39*	.015	.54
ABEF	1	.01	.01	<1.00	.000	.00
BEFS (error bef)	28	9.16	.33		.000	
CDE	1	2.11	2.11	8.12**	.015	.54
ACDE	1	.03	.03	<1.00	.000	.00
CDES (error cde)	28	7.27	.26		.000	
CDF	1	3.88	3.88	12.52**	.030	1.07
ACDF	1	.13	.13	<1.00	.000	.00
DEFS (error cdf)	28	8.65	.31		.000	
CEF	1	1.75	1.75	6.03*	.012	.43
ACEF	1	.30	.30	1.03	.000	.00
CEFS (error cef)	28	8.23	.29		.000	

Table 4 (cont.)

Source of Variance	df	SS	MS	F	θ^2	% Var.
DEF	1	3.38	3.38	9.39**	.025	.89
ADEF	1	.13	.13	<1.00	.000	.00
DEFS (error def)	28	10.02	.36		.000	
BCDE	1	2.71	2.71	7.97**	.040	1.43
ABCDE	1	1.93	1.93	5.68*	.053	1.89
BCDES (error bcde)	28	9.53	.34		.000	
BCDF	1	1.00	1.00	3.23	.012	.43
ABCDF	1	1.58	1.58	5.10*	.042	1.50
BCDFS (error bcdf)	28	8.57	.31		.000	
BCEF	1	.38	.38	1.03	.000	.00
ABCEF	1	.38	.38	1.03	.000	.00
BCEFS (error bcef)	28	10.28	.37		.000	
BDEF	1	3.63	3.63	9.08**	.054	1.92
ABDEF	1	.08	.08	<1.00	.000	.00
BDEFS (error bdef)	28	11.32	.40		.003	
CDEF	1	2.93	2.93	6.10*	.041	1.46
ACDEF	1	2.30	2.30	4.79*	.061	2.17
CDEFS (error cdef)	28	13.30	.48		.023	
BCDEF	1	.46	.46	1.18	.002	.07
ABCDEF	1	.08	.08	<1.00	.000	.00
BCDEFS (error bcdef)	28	10.99	.39		.000	

Eye contact (C) was highly significant ($F = 107.25$, $df = 1/28$, $p < 1.00$, % Var. = 6.95%). Cell mean inspection indicates that respect was judged at a higher level when the counselor was maintaining direct eye contact with the actor client than when he was looking downward.

The significance of vocal intonation (D) was demonstrated at the .01 level of confidence, but only contributed to .32% of the total variance ($F = 10.12$, $df = 1/28$, $p < .01$, % Var. = .32%). Stated specifically, a concerned vocal intonation resulted in higher levels of judged respect than an indifferent intonational pattern.

Facial expression (E) emerged as the most powerful determinant of variability of judged respect ($F = 278.91$, $df = 1/28$, $p < .001$). This factor accounted for 39.62% of the total variability. Comparison of

Table 5

Percentage of Variability Accounted for by
Main Effects and Selected Interactions (Respect)

Source	% of Total Variability
Groups (A)	1.10
Non-verbal Main Effects	
trunk lean (B)	3.21
eye contact (C)	6.95
vocal intonation (D)	.32
facial expression (E)	<u>39.62</u>
Total Non-verbal	50.10
Verbal Main Effect	9.62
Interactions	
trunk lean X facial expression (BE)	1.07
eye contact X facial expression (CE)	1.50
intonation X facial expression (DE)	1.25
facial expression X verbal message (EF)	1.18
group X facial X verbal message (AEF)	1.18
eye contact X intonation X message (CDF)	1.07
intonation X expression X message (DEF)	.89
all other interactions	<u>15.45</u>
Total Interactions	23.59
Error or unaccounted for variance	<u>15.59</u>
Total Variability	100.00

Table 6
Main Effect Cell Means (Respect)

Source	Mean
Counselor Group (A_1)	2.55
Client Group (A_2)	2.84
Forward Trunk Lean (B_1)	2.91
Backward Trunk Lean (B_2)	2.48
Direct Eye Contact (C_1)	3.01
No Eye Contact (C_2)	2.38
Concerned Vocal Intonation (D_1)	2.76
Indifferent Vocal Intonation (D_2)	2.62
Concerned Facial Expression (E_1)	3.44
Indifferent Facial Expression (E_2)	1.95
High Level Verbal Message (F_1)	3.06
Low Level Verbal Message (F_2)	2.32

the cell mean differences in Table 6 show that a concerned facial expression yields higher levels of judged respect than an indifferent expression.

The main effect of verbal message (F) was shown to be significant ($F = 77.68$, $df = 1/28$, $p < .001$, % Var. = 9.62%). Cell mean inspection confirms that the high level message produced higher levels of judged respect than did the low message.

Hypothesis Two (b). The interactions between trunk lean, eye contact, vocal intonation, facial expression and verbal message contribute to the variability of judged counselor respect.

Inspection of Table 4 reveals that twenty-two interactions were significant beyond the .05 level of confidence. Of these, seven were first order, three were third order and three were fourth order interactions. Only those significant first and second order interactions which contributed to more than .75% of the total variance will be discussed.

Figure 7 presents the trunk lean X facial expression (BE) interaction which was highly significant ($F = 17.93$, $df = 1/28$, $p < .001$, % Var. = 1.07%). The highest level of judged respect occurred when the counselor was leaning forward and maintaining a concerned facial expression. Conversely, when the counselor was leaning backward and maintaining an indifferent expression, the lowest judgments were made. The interaction occurs because the difference between indifferent expression and concerned expression in the forward trunk lean position is greater than in the backward position. That is, a concerned facial ex-

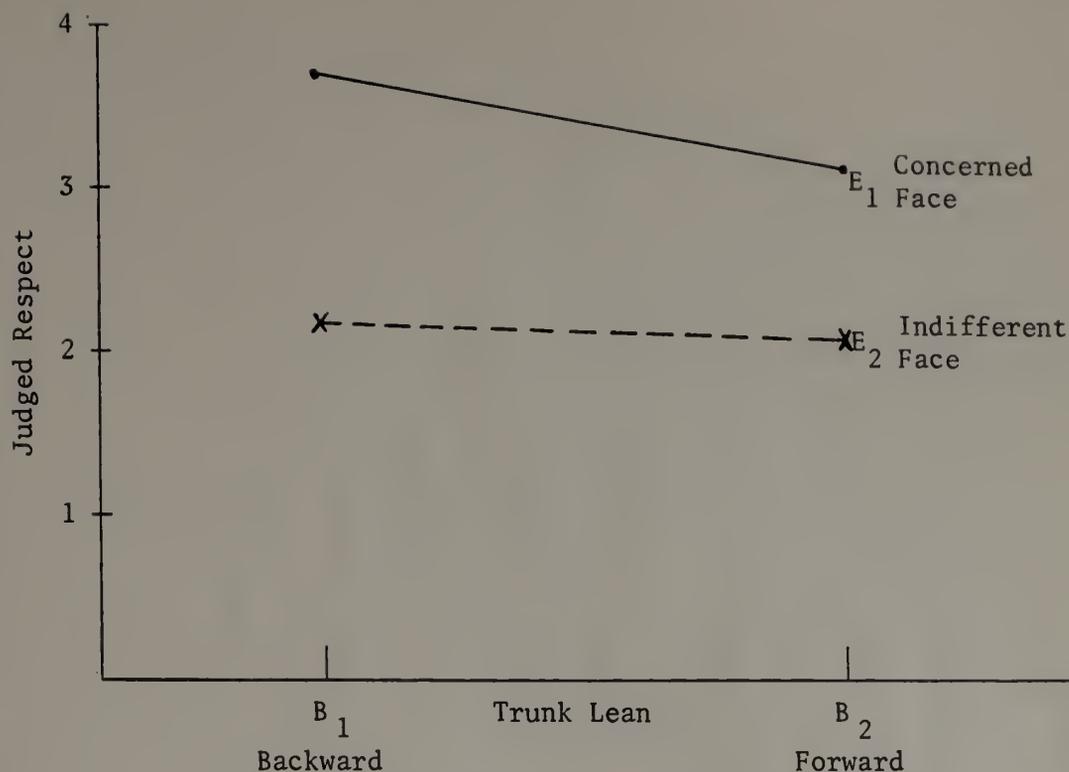


Fig. 7. Trunk lean X facial expression (BE)

pression added more to the judgment of respect at a forward trunk lean than at a backward one.

Figure 8 presents the eye contact X facial expression interaction (CE) ($F = 17.72$, $df = 1/28$, $p < .001$, % Var. = 1.50%). The same interpretation pertains here as did in BE above. A concerned facial expression added more "points" to judged respect in the direct eye contact situation than in the no eye contact situation.

The vocal intonation X facial expression (DE) interaction ($F = 16.69$, $df = 1/28$, $p < .001$, % Var. = 1.25%) shown in Figure 9 also follows the pattern outlined in BE and CE. Here the level of judged respect was about the same when an indifferent expression was combined with both concerned and indifferent intonation. However, when a concerned expression was combined with concerned intonation, a greater increase in

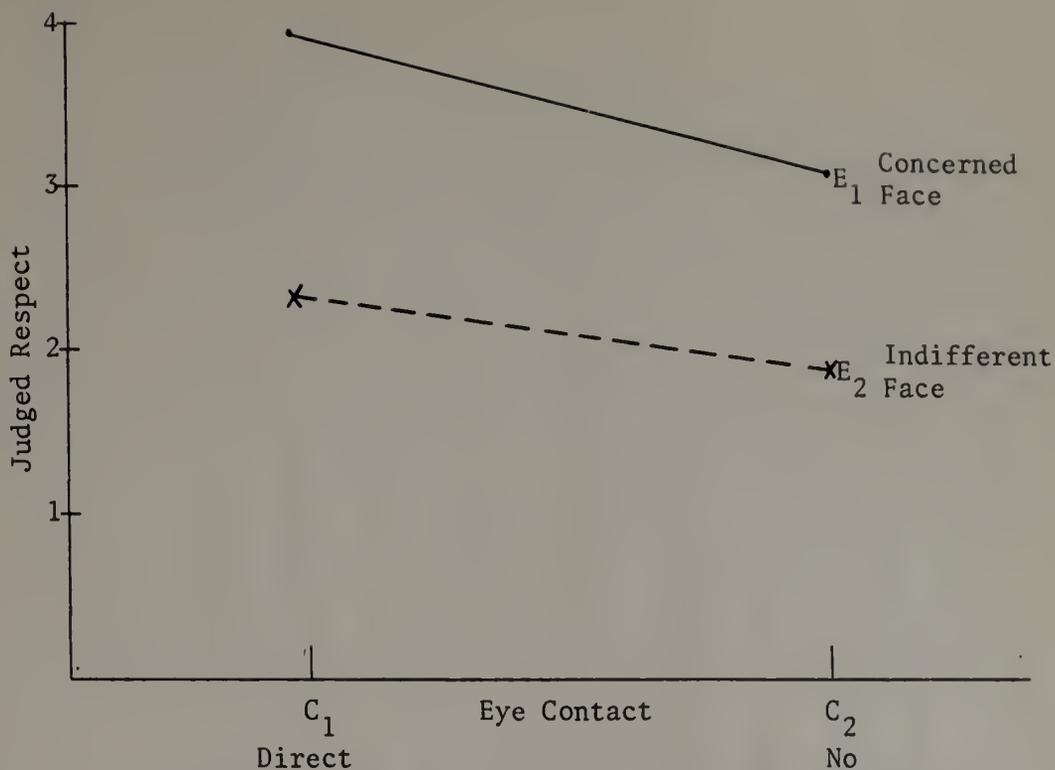


Fig. 8. Eye contact X facial expression (CE)

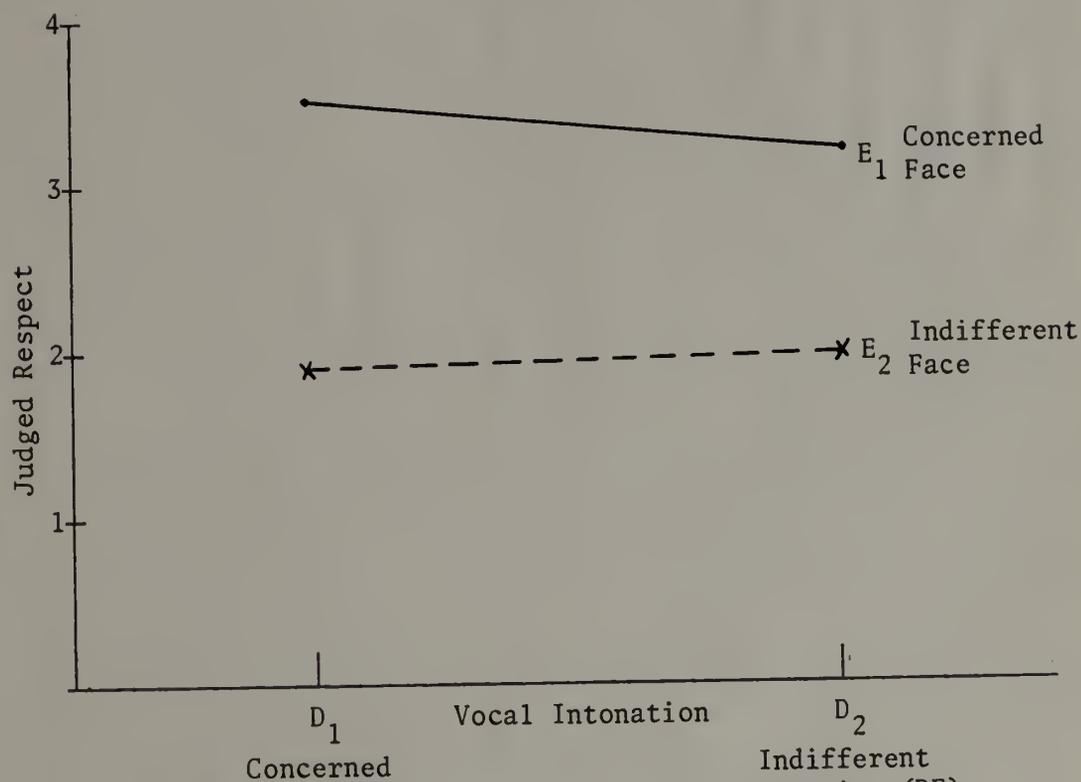


Fig. 9. Vocal intonation X facial expression (DE)

judgment was found than with indifferent intonation.

Figure 10 depicts the facial expression X verbal message (EF) interaction ($F = 9.19$, $df = 1/28$, $p < .01$, % Var. = 1.18%). In this case, respect is judged higher for both the high and low message situations when the counselor is showing a concerned facial expression. In addition, when the facial expression is concerned the high level message yields the greater degree of judged respect. When the facial expression becomes indifferent, however, a reversal occurs in which the low level message is judged as more respectful.

Figures 11(a) and 11(b) show the interaction between groups X facial expression X verbal message (AEF) ($F = 5.06$, $df = 1/28$, $p < .05$, % Var. = 1.18%). Comparison of these figures show that in the high

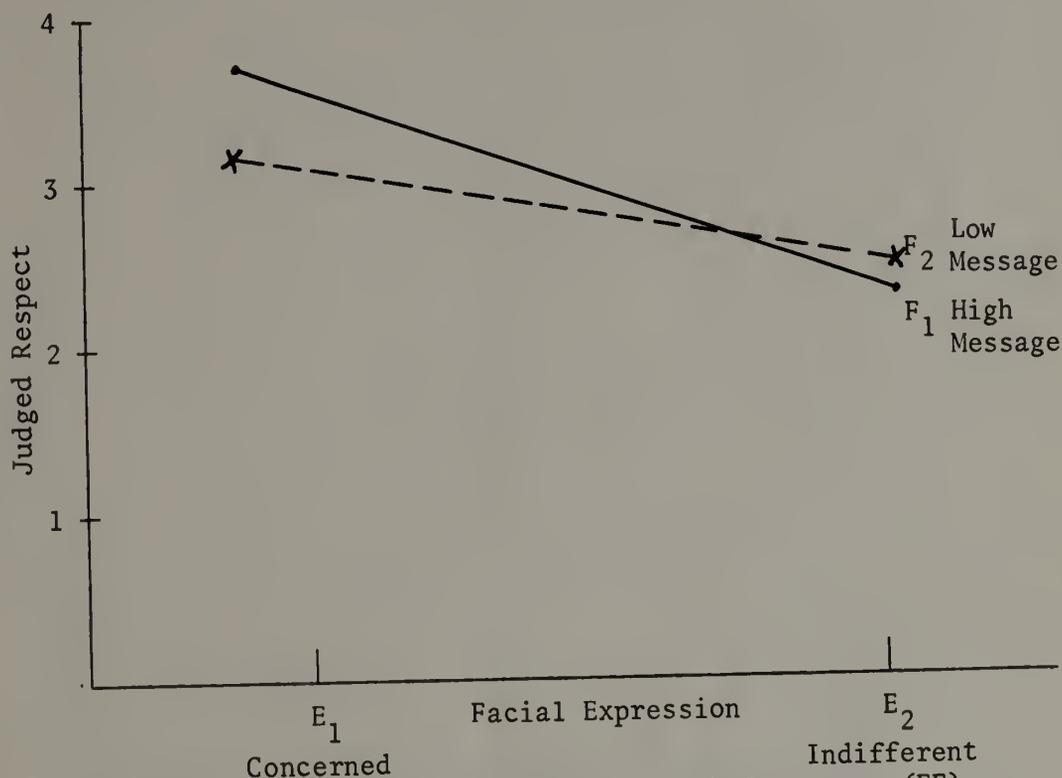


Fig. 10. Facial expression X verbal message (EF)

message situation (11[a]), both clients and counselors gave the same high judgments of respect when "viewing" a concerned facial expression. When the facial expression was indifferent, both gave lower judgments, but the difference between the two groups was greater with counselors giving lower judgments. In the low message situation (11[b]), the pattern was somewhat different in that the difference between clients and counselors was greater in the concerned facial expression situation. It appears that in the low message situation, concerned facial expression produces a greater difference between groups, but in the high message situation, an inappropriate facial expression produces a greater difference.

Figures 12(a) and 12(b) show the interaction effect of eye contact X vocal intonation X verbal message (CDF) ($F = 12.52$, $df = 1/28$, $p < .01$, % Var. = 1.07%). Inspection of these graphs reveals that in the high message situation (12[a]), maintained eye contact yields equally high judgments of respect across both levels of concerned and indifferent intonation. When the counselor was not maintaining eye contact, however, the judged respect was less in the indifferent intonation situation than with concerned intonation. Here, the summation of two negative cues produced the lowest judgment.

In the low message situation (12[b]) the opposite occurs. Here the level of judged respect is the same in the no eye contact situation across both levels of intonation. When eye contact is maintained, however, higher levels of judged respect are perceived in the concerned intonation situation than with indifferent intonation. Evidently,

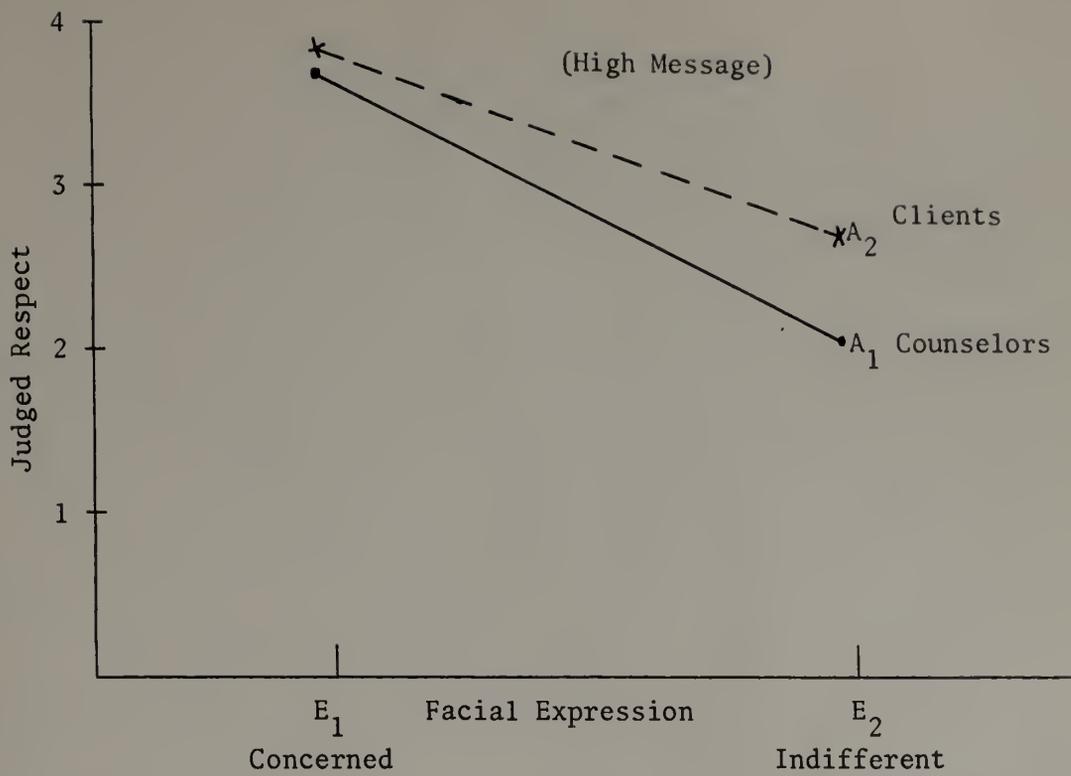


Fig. 11(a). Groups X facial expression X verbal message (AEF)

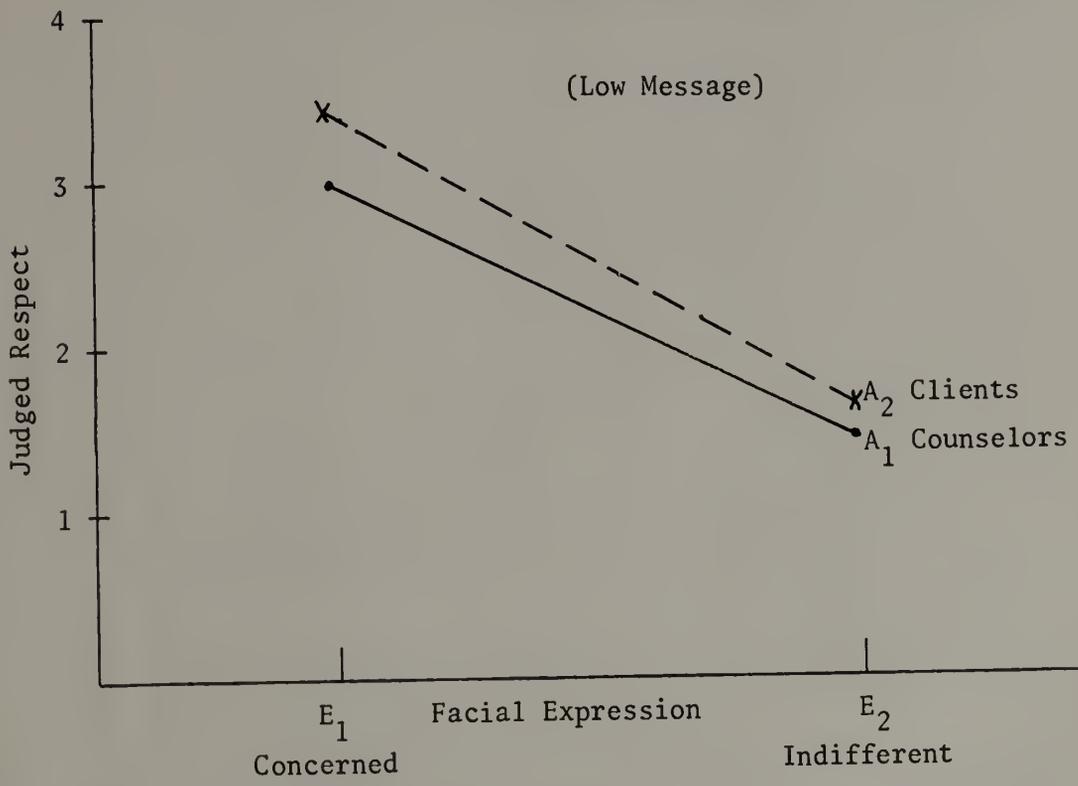


Fig. 11(b). Groups X facial expression X verbal message (AEF)

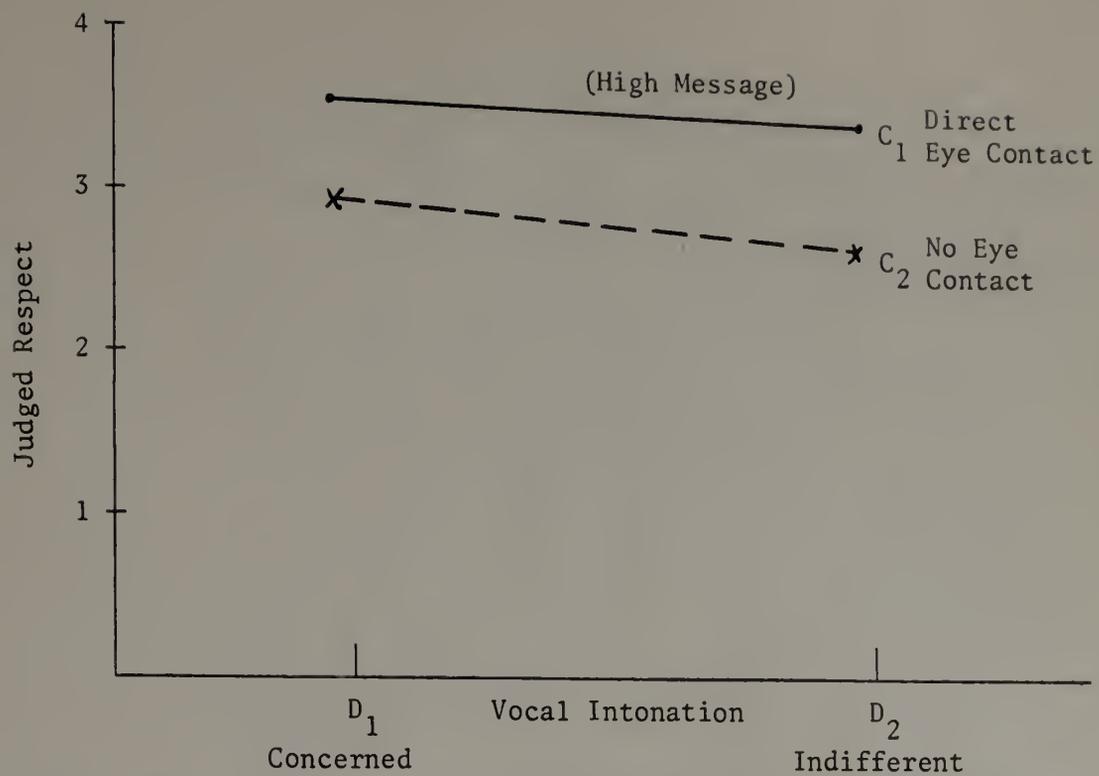


Fig. 12(a). Eye contact X vocal intonation X verbal message (CDF)

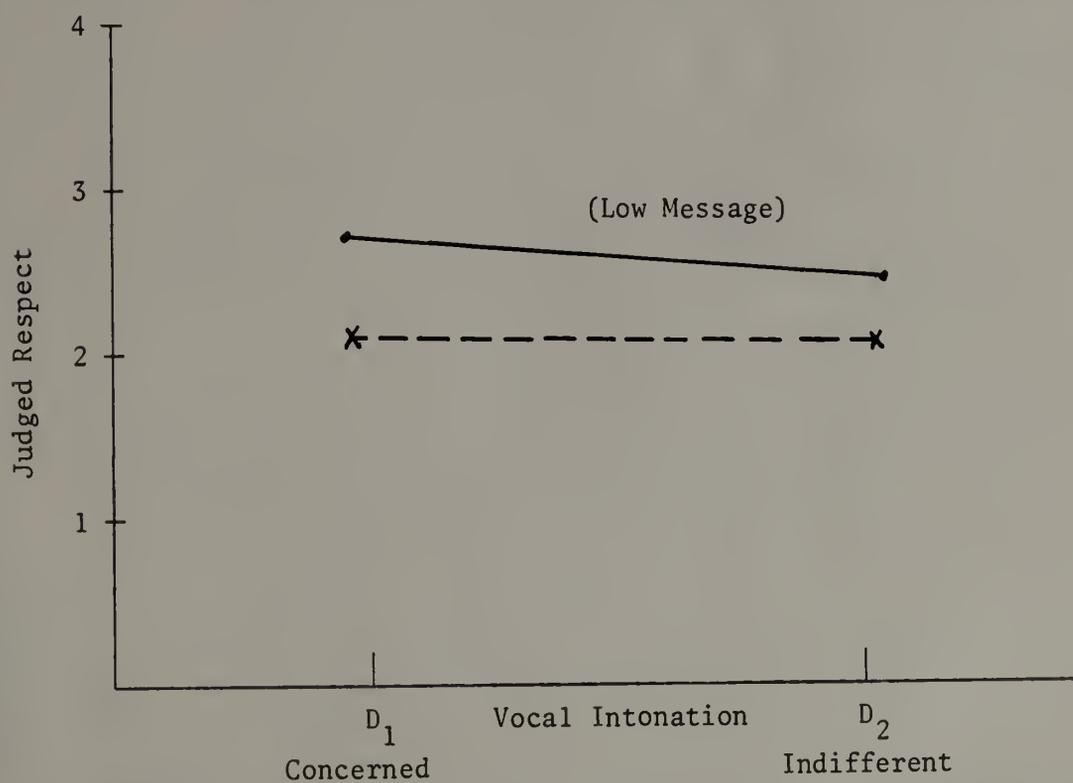


Fig. 12(b). Eye contact X vocal intonation X verbal message (CDF)

two negative cues (no eye contact and indifferent intonation) detracted from the high message and two positive cues (eye contact and concerned intonation) added to the low message.

Figures 13(a) and 13(b) depict the relationships between vocal intonation X facial expression X verbal message (DEF) ($F = 9.39$, $df = 1/28$, $p < .01$, % Var. = .89%). In the high message situation, (13[a]), judged respect was higher with the concerned facial expression in both the concerned and indifferent intonational situations. When the facial expression was indifferent, a greatly lowered judgment was obtained, again, for both intonational situations. In the high message situation (13[b]), concerned facial expression yielded higher judgments of respect than the indifferent expression but the effect of vocal intonation reversed in the two situations. When facial expression was concerned, the concerned vocal intonation added to form a higher judgment over indifferent intonation. However, in the indifferent facial expression situation, a concerned vocal expression yielded lower judgments of respect than the indifferent intonation. Evidently the disparity between these two inconsistent cues produced the lowest judgment of respect.

Hypothesis Three (b). There is no significant difference between trained counselors and actual clients in their judgment of communicated counselor respect.

Inspection of Table 4 reveals that the group main effect (A) failed to reach statistical significance ($F = 4.10$). The null hypothesis was not rejected and the conclusion reached that there were no dif-

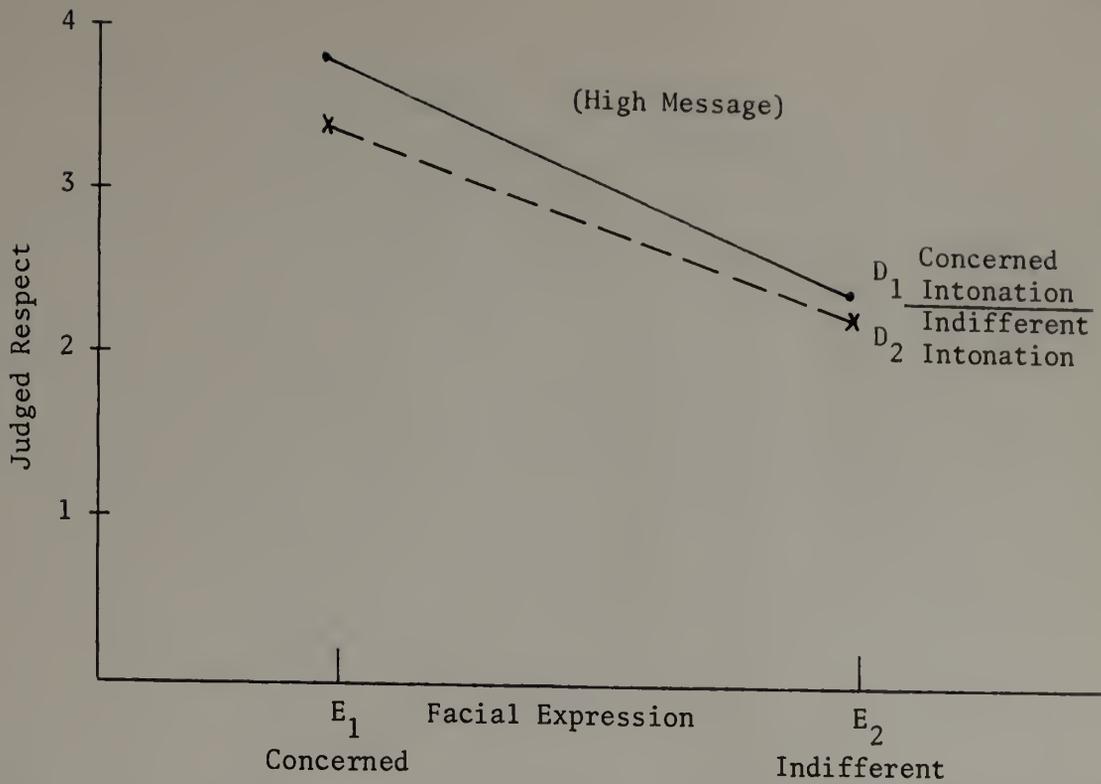


Fig. 13(a). Vocal intonation X facial expression X verbal message (DEF)

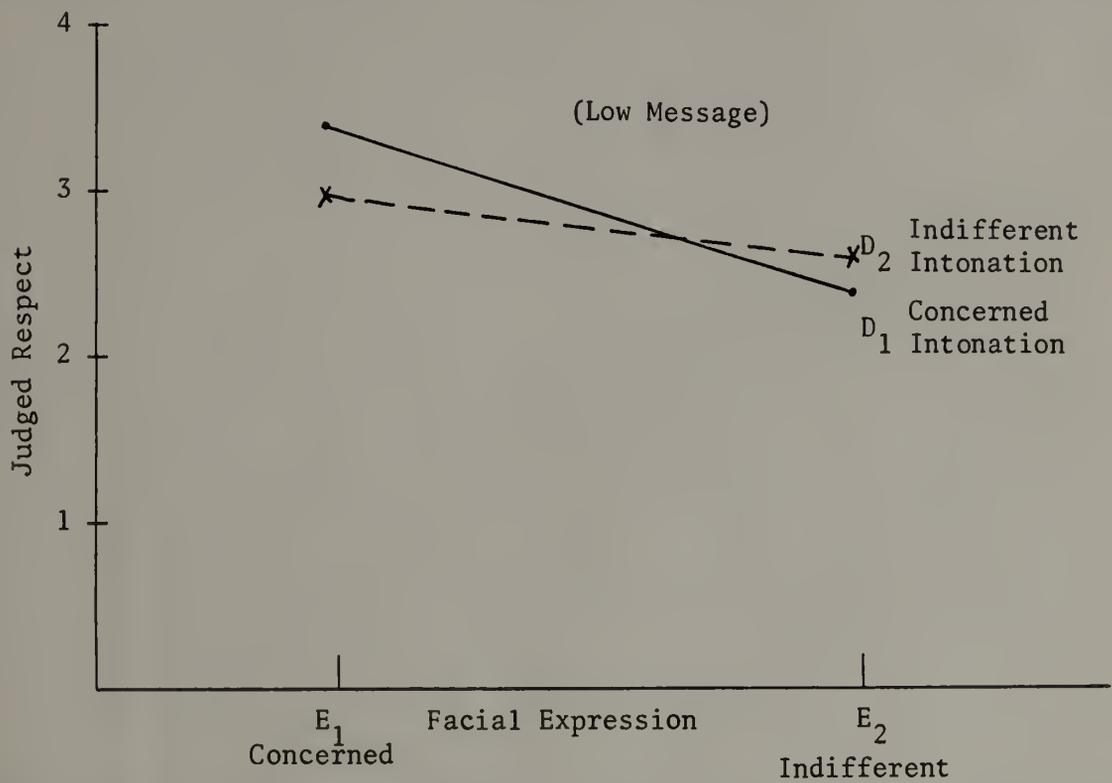


Fig. 13(b). Vocal intonation X facial expression X verbal message (DEF)

ferences found between trained counselors and actual clients with regard to their judgments of communicated counselor respect.

Genuineness

Hypothesis One (c). The main effects of trunk lean, eye contact, vocal intonation, facial expression and verbal message contribute significantly to the variability of judged counselor genuineness.

The results of the analysis of variance for the dependent measure of judged genuineness are presented in Table 7. Inspection of this table reveals that four of the five within group main effects were significant beyond the .001 level of confidence. The significant effects were the non-verbal effects of trunk lean, eye contact, vocal intonation and facial expression. The one nonsignificant effect ($F = .09$) was the verbal message factor. Using the variance component procedure, the percentage of variance accounted for by each effect has been calculated. For the dependent measure of genuineness, 68.23% of the total variability was accounted for, and within this known variability, 23.94% of the total was accounted for by the non-verbal effects, 0.00% to the verbal main effect, 0.00% to the between groups effect and 44.23% to the interactions. A more specific listing of percentages of variance can be found in Table 8.

Trunk lean (B) was found to be a significant factor in the differential judgment of counselor genuineness ($F = 27.58$, $df = 1/28$, $p < .001$, % Var. - 2.47%). Comparison of main effect cell means (Table 9) shows that a higher level of judged genuineness occurred when

Table 7

Analysis of Variance of Judged Genuineness for Two Groups of
Subjects Responding to Two Levels in Each Factor of
Trunk Lean, Eye Contact, Vocal Intonation,
Facial Expression and Verbal Message

Source of Variance	df	SS	MS	F	θ^2	% Var.
<u>Between Subjects</u>	29					
Groups (A)	1	.70	.70	.10	.000	.00
Subjects (S) within groups (error a)	28	192.36	6.87		.094	
<u>Within Subjects</u>						
Trunk Lean (B)	1	32.27	32.27	27.58***	.065	2.47
BS (error b)	28	32.79	1.17		.009	
Eye Contact (C)	1	141.07	141.07	90.43***	.291	11.06
CS (error c)	28	43.79	1.56		.021	
Vocal Intonation (D)	1	16.54	16.54	18.58***	.033	1.25
DS (error d)	28	24.90	.89		.000	
Facial Expression (E)	1	120.42	120.42	25.79***	.241	9.16
ES (error e)	28	130.71	4.67		.118	
Verbal Message (F)	1	.20	.20	.09	.000	.00
FS (error f)	28	62.34	2.23		.042	
AB	1	1.07	1.07	<1.00	.000	.00
BS (error b)	28	32.79	1.17		.009	
AC	1	2.02	2.02	1.29	.002	.08
CS (error c)	28	43.79	1.56		.021	
AD	1	.94	.94	1.06	.000	.00
DS (error d)	28	24.90	.89		.000	
AE	1	.00	.00	<1.00	.000	.00
ES (error e)	28	130.71	4.67		.118	
AF	1	44.20	44.20	19.82***	.175	6.65
FS (error f)	28	62.34	2.23		.042	
BC	1	4.00	4.00	4.71*	.013	.49
ABC	1	.20	.20	<1.00	.000	.00
BCS (error bc)	28	23.79	.85		.000	
BD	1	.00	.00	<1.00	.000	.00
ABD	1	.27	.27	<1.00	.000	.00
BDS (error bd)	28	.8148	.66		.000	
BE	1	3.50	3.50	4.07	.011	.42
ABE	1	.20	.20	<1.00	.000	.00
BES (error be)	28	24.04	.86		.000	
BF	1	.42	.42	<1.00	.000	.00
ABF	1	.07	.07	<1.00	.000	.00
BFS (error bf)	28	39.34	1.23		.022	

Table 7 (cont.)

Source of Variance	df	SS	MS	F	θ^2	% Var.
CD	1	.60	.60	<1.00	.000	.00
ACD	1	4.82	4.82	6.69*	.034	1.29
CDS (error cd)	28	20.08	.72		.000	
CE	1	3.50	3.50	2.43	.009	.34
ACE	1	.50	.50	<1.00	.000	.00
CES (error ce)	28	40.24	1.44		.035	
CF	1	.60	.60	<1.00	.000	.00
ACF	1	1.67	1.67	1.23	.003	.11
CFS (error cf)	28	38.11	1.36		.030	
DE	1	.27	.27	<1.00	.000	.00
ADE	1	.82	.82	1.00	.000	.00
DES (error de)	28	22.92	.82		.000	
DF	1	.50	.50	<1.00	.000	.00
ADF	1	.00	.00	<1.00	.000	.00
DFS (error df)	28	32.12	1.15		.017	
EF	1	41.67	41.67	16.34***	.163	6.19
AEF	1	19.27	19.27	7.56*	.139	5.28
EFS (error ef)	28	71.44	2.55		.104	
BCD	1	2.20	2.20	2.20	.010	.38
ABCD	1	2.20	2.20	2.20	.020	.76
BCDS (error bcd)	28	27.97	1.00		.015	
BCE	1	.42	.42	<1.00	.000	.00
ABCE	1	1.35	1.35	1.08	.002	.08
BCES (error bce)	28	35.11	1.25		.046	
BCF	1	.50	.50	<1.00	.000	.00
ABCF	1	3.04	3.04	2.90	.033	1.25
BCFS (error bcf)	28	29.46	1.05		.021	
BDE	1	.34	.34	<1.00	.000	.00
ABDE	1	.20	.20	<1.00	.000	.00
BDES (error bde)	28	25.33	.90		.003	
BDF	1	.27	.27	<1.00	.000	.00
ABDF	1	.02	.02	<1.00	.000	.00
BDFS (error bdf)	28	11.22	.40		.000	
BEF	1	1.20	1.20	<1.00	.000	.00
ABEF	1	3.04	3.04	2.32	.029	1.10
BEFS (error bef)	28	36.76	1.31		.054	
CDE	1	.04	.04	<1.00	.000	.00
ACDE	1	1.84	1.84	2.92	.020	.76
CDES (error cde)	28	17.50	.63		.000	
CDF	1	.15	.15	<1.00	.000	.00
ACDF	1	4.82	4.82	7.53*	.070	2.66
CDFs (error cdf)	28	18.03	.64		.000	
CEF	1	1.20	1.20	1.38	.003	.11
ACEF	1	.70	.70	<1.00	.000	.00
CEFS (error cef)	28	24.34	.87		.000	

Table 7 (cont.)

Source of Variance	df	SS	MS	F	θ^2	% Var.
DEF	1	.60	.60	<1.00	.000	.00
ADEF	1	.07	.07	<1.00	.000	.00
DEFS (error def)	28	22.08	.79		.000	
BCDE	1	15.00	15.00	15.96***	.234	8.89
ABCDE	1	1.07	1.07	1.14	.004	.15
BCDES (error bcde)	28	26.18	.94		.015	
BCDF	1	5.10	5.10	9.44**	.076	2.89
ABCDF	1	.04	.04	<1.00	.000	.00
BCDFS (error bcdf)	28	15.23	.54		.000	
BCEF	1	2.02	2.02	3.37	.024	.91
ABCEF	1	.07	.07	<1.00	.000	.00
BCEFS (error bcef)	28	16.79	.60		.000	
BDEF	1	.00	.00	<1.00	.000	.00
ABDEF	1	.04	.04	<1.00	.000	.00
BDEFS (error bdef)	28	18.58	.66		.000	
CDEF	1	6.34	6.34	7.55*	.092	3.50
ACDEF	1	.10	.10	<1.00	.000	.00
CDEFS (error cdef)	28	23.43	.84		.000	
BCDEF	1	.15	.15	<1.00	.000	.00
ABCDEF	1	.07	.07	<1.00	.000	.00
BCDEFS (error bcdef)	28	24.53	.88		.000	

the counselor was leaning forward.

Eye contact (C) was a highly significant determinant of variable judgments ($F = 90.43$, $df = 1/28$, $p < .001$, % Var. = 11.06%). Cell mean inspection reveals that higher levels of judged genuineness were a result of maintained eye contact as opposed to no eye contact.

The effect of vocal intonation (D) was demonstrated to be significant ($F = 18.58$, $df = 1/28$, $p < .001$, % Var. = 1.25%). Cell mean inspection indicates that the concerned vocal intonational pattern yielded higher levels of judgments than did the indifferent intonation.

Facial expression (E) emerged as a significant factor in the subjects' perception of communicated genuineness ($F = 25.79$, $df = 1/28$,

Table 8

Percentage of Variability Accounted for by
Main Effects and Selected Interactions (Genuineness)

Source	% of Total Variability
Groups (A)	.00
Non-verbal Main Effects	
trunk lean (B)	2.47
eye contact (C)	11.06
vocal intonation (D)	1.25
facial expression (E)	<u>9.16</u>
Total Non-verbal	23.94
Verbal Main Effect	.00
Interactions	
group X verbal message (AF)	6.65
facial expression X verbal message (EF)	6.19
group X facial X verbal message (AEF)	5.28
group X eye contact X intonation (ACD)	1.29
all other interations	<u>25.88</u>
Total Interactions	44.29
Error or unaccounted for variance	<u>31.77</u>
Total Variability	100.00

Table 9
Main Effect Cell Means (Genuineness)

Source	Mean
Counselor Group (A_1)	3.12
Client Group (A_2)	3.07
Forward Trunk Lean (B_1)	3.28
Backward Trunk Lean (B_2)	2.91
Direct Eye Contact (C_1)	3.48
No Eye Contact (C_2)	2.71
Concerned Vocal Intonation (D_1)	3.23
Indifferent Vocal Intonation (D_2)	2.96
Concerned Facial Expression (E_1)	3.45
Indifferent Facial Expression (E_2)	2.74
High Level Verbal Message (F_1)	3.11
Low Level Verbal Message (F_2)	3.08

$p < .001$, % Var. = 9.16%). Cell mean comparisons show that when the counselor was showing a concerned facial expression, he was communicating a higher degree of genuineness than when he was maintaining an indifferent expression.

The verbal message (F) main effect did not reach significance ($F = .09$). No differences in the communication of counselor genuineness were found to exist between the two levels of verbal message.

Hypothesis Two (c). The interactions between trunk lean, eye contact, vocal intonation, facial expression and verbal message contribute to the variability of judged counselor genuineness.

Inspection of Table 7 shows that nine interactions were significant beyond the .05 level of confidence. Of these, three were of the first order, two were second order and four were third order interactions. Only those significant first and second order interactions which contributed to more than .75% of the total variance will be discussed.

The group X verbal message interaction (AF) is shown in Figure 14 ($F = 19.82$, $df = 1/28$, $p < .001$, % Var. = 6.65%). When a high level verbal message was emitted, the clients judged the level of genuineness higher than the counselors. However, when a low level verbal message was emitted, the situation reversed and the counselors judged the communicated genuineness higher than did the clients.

Figure 15 shows the facial expression X verbal message interaction (EF) ($F = 16.34$, $df = 1/28$, $p < .001$, % Var. = 6.19%). When the actor counselor emitted a high verbal message and showed a concerned facial

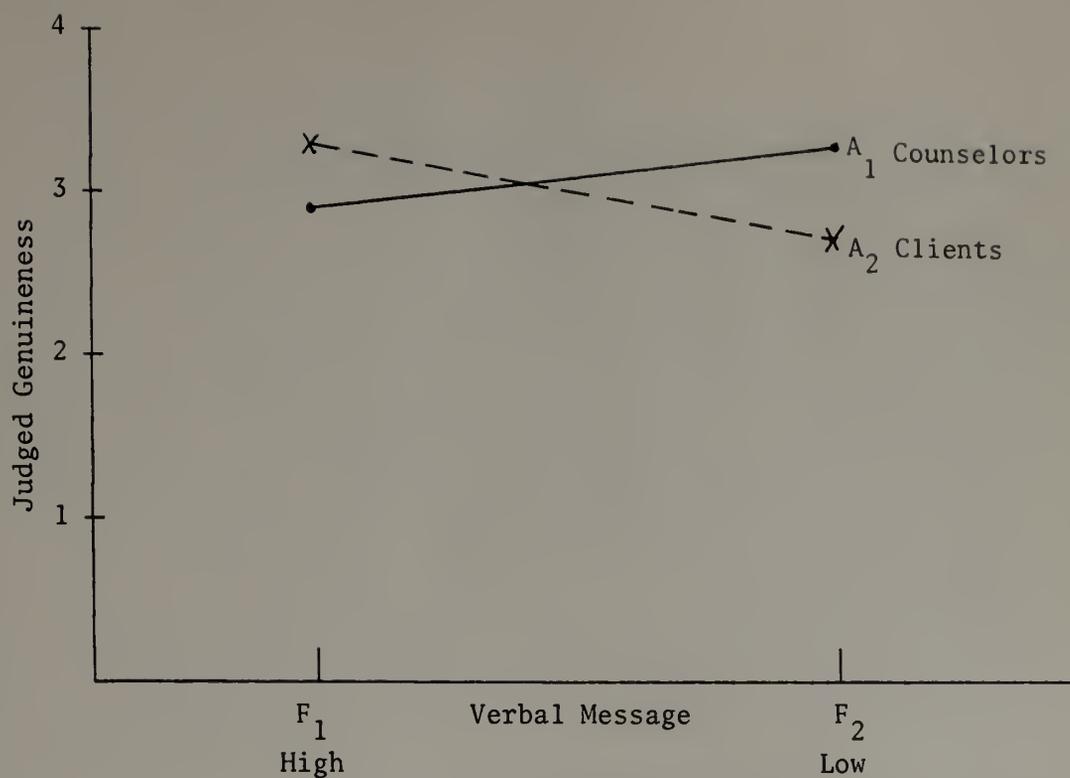


Fig. 14. Groups x verbal message (AF)

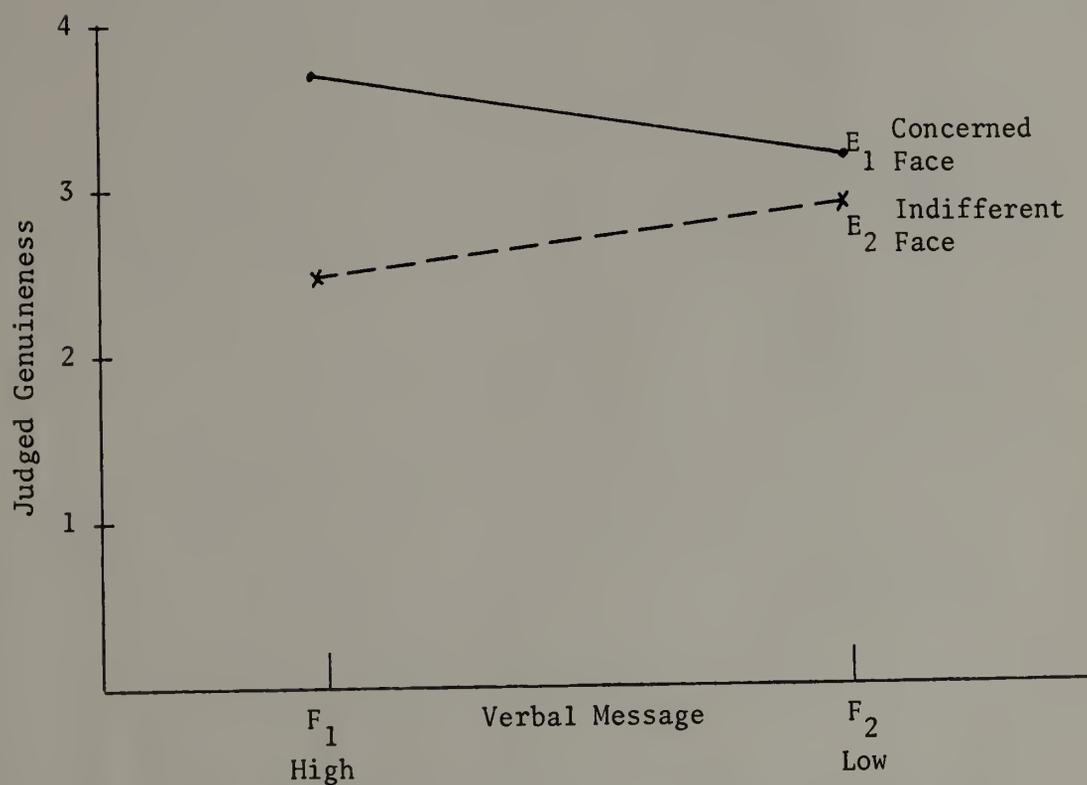
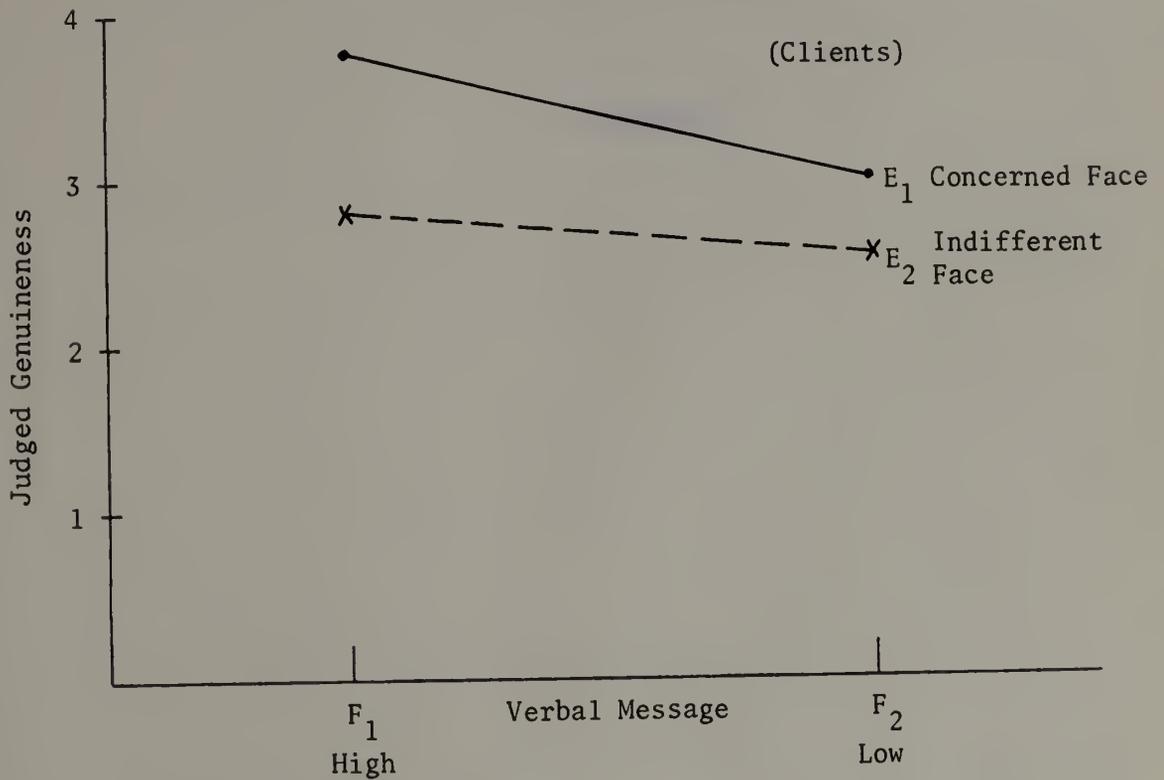
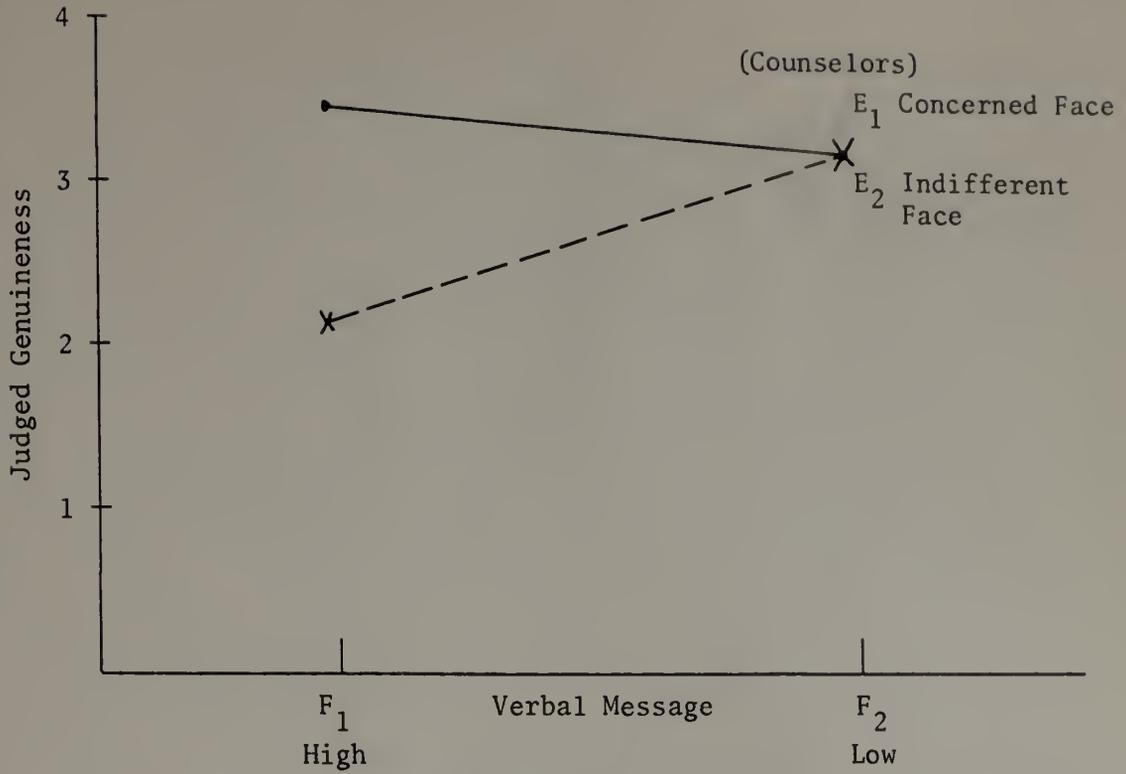


Fig. 15. Facial expression X verbal message (EF)

expression, the highest level of judged genuineness was obtained. When the high verbal message was combined with an indifferent facial expression, the lowest level of genuineness was communicated. When a low message was spoken, the level of judged genuineness lay between the highest and the lowest value for both concerned and indifferent expressions, with the concerned expression slightly higher. The results shown in this graph suggests that the level of genuineness judged by the subjects was a function of the degree of discrepancy between the verbal message and the facial expression.

The group X facial expression X verbal message (AEF) is shown in Figures 16(a) and 16(b) ($F = 7.56$, $df = 1/28$, $p < .05$, % Var. = 5.28%). Counselors (Figure 16[a]) judged genuineness at the same level for the low message with both concerned and indifferent facial expression. When the message was high, however, the concerned face increased the judgment and the indifferent face greatly decreased the judgment. Genuineness for counselors, therefore, appears to be a relationship between the verbal message and the facial expression.

Clients (Figure 16[b]) on the other hand, did not seem to differentiate as much in inconsistent cue situations. In both the low message and high message situation, clients gave higher levels of judged genuineness with a concerned face than with an indifferent one. They, too, increased their judgments of genuineness when the concerned face was coupled with a high message, but, unlike counselors, they also increased their judgments with a high message/indifferent face pairing. The clients, therefore, were seemingly giving more strength



to the spoken message than counselors when judging genuineness.

The group X eye contact X vocal intonation interaction (ACD) was significant ($F = 6.69$, $df = 1/28$, $p < .05$, % Var. = 1.29%) and is shown in Figures 17(a) and 17(b). Both counselors and clients gave higher judgments of genuineness when the actor-counselor maintained direct eye contact, and gave higher judgments in the concerned vocal intonation situation over the indifferent intonational pattern. The interaction occurred because the amount of increase in the direct eye contact situation was greater from indifferent to concerned intonation for counselors (Figure 17[a]) than for clients (Figure 17[b]). This result suggests that, with regard to this interaction effect, counselors pay more attention to intonational variations than clients.

Hypothesis Three (c). There is no significant difference between trained counselors and actual clients in their judgment of communicated counselor genuineness.

Inspection of Table 7 indicates that the overall group differences between counselors and clients failed to reach statistical significance ($F = .10$). The null hypothesis was therefore not rejected and the conclusion reached that there are no overall differences found between counselors' and clients' perceptions of communicated genuineness. The differences found between groups in cases of specific interactions discussed above indicate that the two groups may respond differentially to specific communicational cues.

The previous three sections have examined the effects of the six independent factors on each of the dependent measures of empathy,

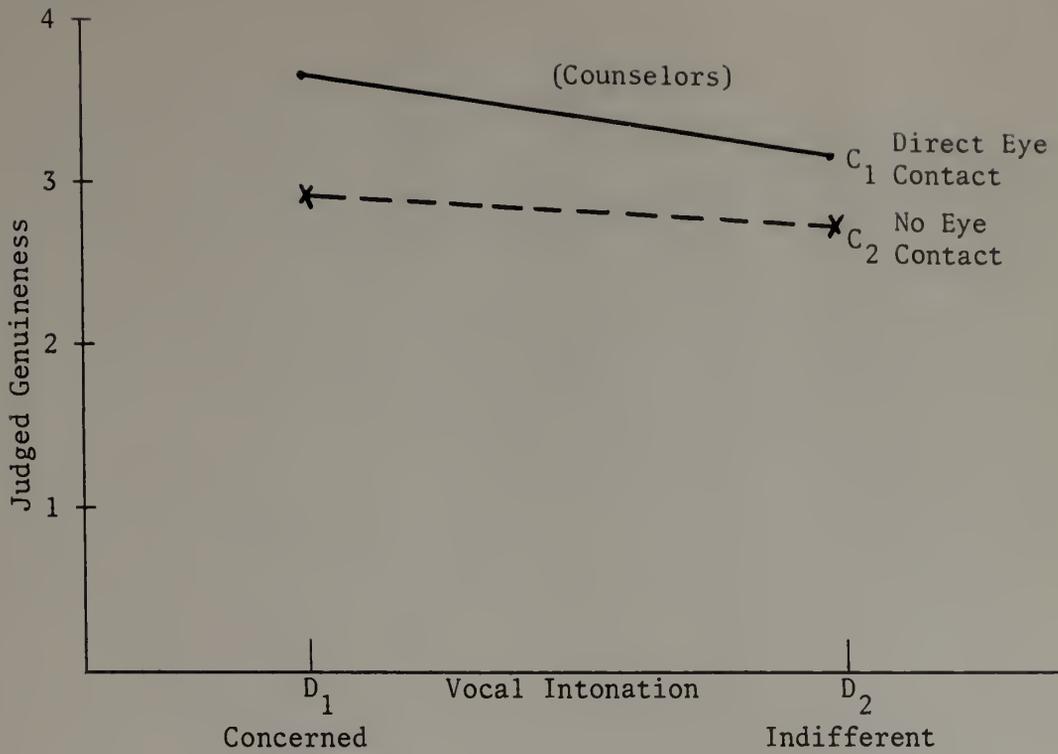


Fig. 17(a). Groups X eye contact X vocal intonation (ACD)

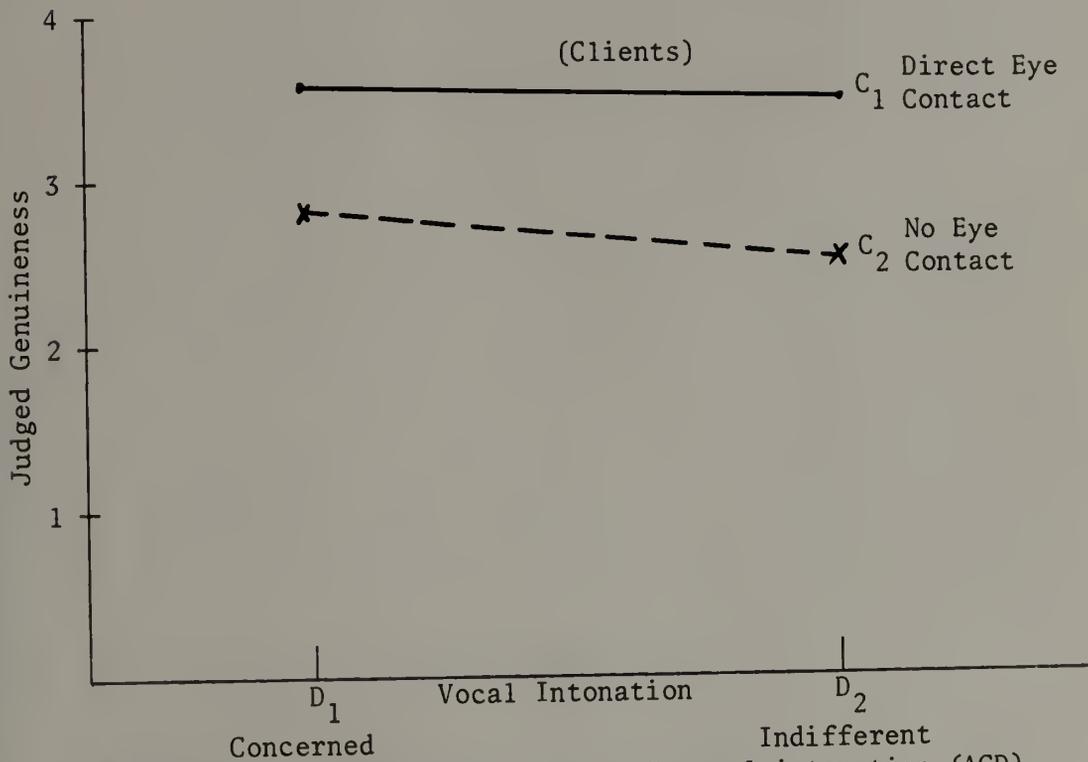


Fig. 17(b). Groups X eye contact X vocal intonation (ACD)

respect and genuineness. The following section will compare and contrast the communicative effect of each of the independent factors of group, trunk lean, eye contact, vocal intonation, facial expression and verbal message for all three counselor attitudes. Comparisons will be made by using the percentage of total variability accounted for by each factor. Table 10 summarizes the variability figures discussed below.

Groups

The analysis of variance with repeated measures on the six independent factors showed that group differences between counselors and actual clients failed to reach statistical significance for each of the three dependent measures of empathy, respect and genuineness. This analysis, however, combines all of the communicational cues as a total and does not take into account the interaction differences found when examining the specific cues within this design. Reference to Figure 2, for example, shows that when judging empathy, counselors and clients did differ with regard to the eye contact factor. In this interaction, the client subjects increased their judgments of empathy more than counselors when eye contact was maintained. Also, when judging genuineness (Figure 14), clients and counselors differed in that counselors judged genuineness higher in the low message situation. The situation reversed when the message was "high" with clients giving higher judgments than counselors.

The conclusion cannot be reached, therefore, that counselors and clients do not receive the cues of communicated empathy, respect and

Table 10

Percentage of Total Variability Accounted for by
Each Factor for the Dependent Measures
of Empathy, Respect and Genuineness

Source	Empathy	Respect	Genuineness
Groups (A)	.44	1.10	.00
Non-verbal Main Effects			
trunk lean (B)	3.14	3.21	2.47
eye contact (C)	6.03	6.95	11.06
vocal intonation (D)	.48	.32	1.25
facial expression (E)	<u>26.01</u>	<u>39.62</u>	<u>9.16</u>
Total Non-verbal	35.66	50.10	23.16
Verbal Message Main Effect	16.94	9.62	.00
Interactions			
facial expression X verbal message (EF)	.00	1.18	6.19
trunk X eye X intonation X facial expression (BCDE)	.07	1.43	8.89
all other interactions	14.61	20.98	29.21
Total Variability Accounted for	67.72	84.41	68.23

genuineness differently. Because of the compensatory nature of the various cues, the main effect of group may show insignificant differences while there are indeed differences between counselors and clients for specific communication cue interactions. In a communications analysis, it is important to note these group differences; for applied practical purposes, it seems warranted to conclude that there were no overall differences found between counselors and clients.

Trunk Lean

Trunk lean (B) as a non-verbal effect proved to be a significant determinant of variability for all three attitudes. Reference to Table 10 reveals that 3.14% of the variance in response to empathic communication was attributed to the position of counselor trunk lean. Comparison of cell means indicate that a forward lean as opposed to a backward lean produced higher levels of judged empathy. For respect, 3.21% of the variance was attributed to trunk lean position again with a forward lean yielding higher values. Genuineness was also judged higher when the counselor was in the forward position and 2.47% of the variance was attributed to this factor. In summary, when the counselor was in the forward trunk lean position he was communicating higher levels of empathy, respect and genuineness than when he was in the backward position.

Eye Contact

The eye contact (C) factor was also a differentiating influence in

the judgments of all three measures of empathy, respect and genuineness. The findings show that 6.30% (empathy), 6.95% (respect) and 11.06% (genuineness) of the variance was accounted for by this factor with the direct eye contact situation yielding higher judgments than no eye contact. Clients appeared to pay more attention to eye contact than counselors (Figure 2) when judging empathy, but eye contact was an equal influence for both groups when judging respect and genuineness. Higher levels of judged respect were also obtained when direct eye contact was coupled with a concerned face (Figure 8) as opposed to an indifferent face. According to this data, eye contact was almost twice as important in judging genuineness than for either respect or empathy.

Vocal Intonation

Vocal intonation (D) was demonstrated to be a statistically significant factor for all three dependent measures, but did not account for as much of the variability as did the other factors. The intonation variable accounted for only .48%, .32% and 1.25% respectively for empathy, respect and genuineness. Cell mean inspection reveals that in all cases, a concerned intonational pattern will elicit higher levels of judgments than an indifferent pattern.

Facial Expression

The facial expression (E) factor emerged as the most significant variable in the differential judgment of empathy, respect and genuineness. When judging communicated empathy, 26.01% of the variance was

accounted for by the facial expression. For respect, 39.62% of the total variance was dependent upon whether it was a concerned or indifferent expression. In the judgment of genuineness, a lesser amount of variance was a result of the main effect of facial expression alone (9.16%), but when direct eye contact was added, accounted for 20.22% of the total variability. A concerned facial expression, when coupled with a forward trunk lean (Figures 3 and 7) added significantly to the judgments of both empathy and respect.

The cumulative effect of adding two positive cues (++) is demonstrated by several interactions involving facial expression. In Figures 3 and 7 a concerned facial expression, when coupled with a forward trunk lean, added significantly to the judgments of both empathy and respect. A concerned facial expression plus a concerned intonation (Figures 4 and 9) added cumulatively to yield greater judgments of respect and genuineness. Also, a concerned facial expression, when added to a high verbal message (Figures 9 and 15), produced greater increases in judgments of respect and genuineness than the effect of concerned facial expression on a low message.

In summary, facial expression was shown to be a very important factor in the communication of empathy, respect and genuineness. Greater strength of these attitudes was communicated when the counselor had a concerned facial expression than when he had a bland or indifferent facial expression.

Total Non-verbal Effects

By adding the percentages of variability accounted for by each of

the non-verbal factors of trunk lean, eye contact, vocal intonation and facial expression, it is shown that non-verbal cues are very important in the communication of the three counselor attitudes of empathy, respect and genuineness. Reference to Table 10 shows that for empathy, 35.66% of the total variability in judgment can be explained by the non-verbal factor. For respect, 50.10% is accounted for non-verbally, and for genuineness, 23.94% is attributed to non-verbal cues. If the ratio of the effect of non-verbal cues to verbal cues is calculated, the ratio for empathy is about 2:1 with non-verbal cues accounting for twice the variability in judged empathy. For respect, the ratio is 5:1 with five times the variability being accounted for by non-verbal cues. Because the verbal component for genuineness did not account for any of the variability in genuineness, a ratio can only be calculated if we assign the verbal component the rank of one and then the ratio is 24:1. According to these data, non-verbal cues account for 24 times the variability than verbal cues in the communication of counselor genuineness.

Verbal Message

The verbal message (F) factor proved to be a significant determinant of variability for empathy and respect, but failed to even approach significance in the judgment of genuineness. For judged empathy, 16.94% of the total variance was accounted for by the difference between a high and a low level verbal message. For respect, 9.62% was a result of the verbal message, which is about half as much as for empathy. In the communication of genuineness, none of the variance was a result

of the verbal message. Inspection of group differences between counselors and clients (Figure 14) with reference to genuineness, however, reveals that clients view the high message as more genuine and the counselors view the low message as more genuine.

Interactions

The interactions between all of the six independent variables accounted for 14.68% of the total variability in judged empathy, 23.59% in judged respect and 44.29% in judged genuineness. It is interesting to note that the interactions for respect accounted for almost twice the variability than the interactions for empathy and the interactions for genuineness almost three times the variability than that for empathy. One can see that genuineness communicated by the counselor is largely determined by the interactions between the various communicational cues.

It is illustrative to look at two specific interactions and their effect on the communication of these three attitudes. The facial expression X verbal message (EF) interaction shows the relationship between the non-verbal factor of greatest influence and the verbal factor of spoken message. Reference to Table 10 shows that for empathy (a rather verbal construct) .00% of the variance was attributed to the interaction. For respect, 1.18% of the variance was accounted for by EF and for genuineness, it was 6.19%.

Another interaction combines all of the non-verbal factors of trunk lean X eye contact X vocal intonation X facial expression. Table 10 re-

veals that for empathy only .07% of the variability is a result of this higher order interaction. For respect it is 1.43% and for genuineness it is 8.89%. Apparently, the contradictory or confirming influence of the various cues was greater for the counselor attitude of genuineness than for either respect or empathy. It is important to note that the combination of all the non-verbal cues was much more important in the judgment of genuineness than for empathy or respect.

CHAPTER V

DISCUSSION

The general focus of this study was an investigation of the relationship between the verbal and non-verbal communication of a specific set of counselor attitudes. Three basic questions were explored. First, what are the relative contributions of selected factors within four channels of communication (facial, body, vocal and verbal) to the perception of the counselor attitudes of empathy, respect and genuineness? Second, how do these channels interact, detract, compensate or complement one another in sending the "message"? And third, do trained counselors differ from actual clients in their perceptions of counselor attitude as communicated by these cues?

By way of experimental design previously discussed, four non-verbal communicative cues and one verbal message cue have been systematically varied in order to test their communicational significance. This chapter will discuss the findings of this experimental study and present some conclusions formed from the data analysis. Discussed also will be some implications of the findings, limitations of the study, and finally, some suggestions for further research.

The overall findings suggest that each of the four non-verbal modalities of trunk lean, eye contact, facial expression and vocal intonation contribute independently and interactively to the communication of the counselor attitudes of empathy, respect and genuineness. The relative contribution of each main and interaction effect has been determined with regard to the communication of counselor attitude. As

expected, it was found that the verbal message as an independent factor also contributes to the variability of judged counselor empathy and respect, but did not contribute significantly to the variability of judged genuineness.

It was also found that each communicational cue interacts with the others such that combinations of certain cues produce a higher value of judgment, other combinations cumulatively lower the judgment, and still other combinations compensate and vitiate inconsistent cues. This suggests that an individual weighs the meaning of each cue, adds the meanings together and then makes a judgment regarding the significance of the message accordingly. Several writers (Mehrabian and Weiner, 1967; Kelly, 1971; Mehrabian, 1971b) have suggested this phenomenon with general evaluation, but not with specific attitudes.

The third general finding was one of no overall difference between trained counselors' and actual clients' perceptions of communicated attitude when all the specific cues are averaged out. Differences in specific instances involving interactive effects, however, tend to override these general conclusions to suggest that counselors and clients do respond differently to specific cues. For example, counselors tended to be more discriminating when faced with the more subtle situations of incongruity between two channels of attitudinal communication.

In the following discussion, each independent factor will be examined and its contribution to the communication of counselor empathy, respect and genuineness discussed. In relating the present findings to previous research in attitudinal communication, a plausible assumption

must be made. Most of the research in this area has used a gross affect dimension of general evaluation (like-dislike, positive-negative) as the dependent measure. The assumption is made, therefore, that all three counselor attitudes can be viewed along a positive-negative affect continuum. That is, when a counselor is communicating high levels of empathy, respect (or positive regard) and genuineness, he is communicating positive affect. When he is communicating low levels, he is communicating negative affect. Some of the discussion of the literature will speak directly to the specific attitudes of empathy, respect and genuineness.

Trunk Lean

Trunk lean emerged as an important factor in the differential communication of all three counselor attitudes of empathy, respect and genuineness. As an independent effect, it accounted for about 3% of the empathic message, about 3% of the respect message and about 2-1/2% of the genuineness message. In all three cases, a forward lean of the counselor torso communicated higher levels of the three attitudes, whereas a backward lean communicated a lower level.

These findings are in line with those of James (1932) and Mehrabian (1968a) who showed that a forward lean communicated positive affect and a backward lean communicated negative affect. James (1932) also demonstrated that a forward lean expressed interest or attentiveness on the part of the communicator. A counselor who is being empathic is being both attentive and is communicating positive affect and apparently can

communicate this in part by leaning forward when interacting with a client.

The finding that higher levels of respect are communicated by a forward trunk lean corroborates the work of Reece and Whitman (1962), who found a direct relationship between forward trunk lean and the communication of warmth.

Although the proxemic variable of distance was controlled in this study (a "neutral" interactive distance of 55 inches was used), one can speculate that leaning forward had the effect of reducing the distance between the counselor and client. The literature is consistent in concluding that an addressee perceives a more positive attitude emanating from the communicator, the closer he sits (within limits of about two feet) (Little, 1965; Mehrabian, 1968b; Kelly, 1971). The dimension of respect has alternatively been called positive regard, and is clearly definable along the positive-negative evaluation continuum.

The counselor in this study, by leaning forward, was not only communicating something by his trunk lean position, but also by his closing the distance and communicating positive affect in both ways. Conversely, by leaning backward, he was increasing the distance and communicating negative affect. These conclusions have strong support from Kelly (1971) and Pierce (1970).

Genuineness or congruence was found to be communicated more readily when the counselor was in the forward position. It is difficult to explain why trunk lean acting as an independent effect would communicate the attitude of genuineness at all, except if attitudinal meaning is

placed on the behavior of leaning forward by society. That is, our society must through experience, equate leaning forward with being honest. Since there is no literature to compare with, one can only speculate that at least in the context of a counseling situation, a forward lean of the torso yields higher levels of perceived genuineness.

In summary, trunk lean was found to be equally important for the conveyance of all three attitudes. It appears that the forward lean of the counselor is a communicative cue signifying greater empathy, respect and genuineness.

Eye Contact

Counselor eye contact was also found to be an important non-verbal component in the communication of the three counselor attitudes of empathy, respect and genuineness. The subject judges perceived higher levels of counselor attitudes when eye contact was maintained between the interactants seen in the stimulus tape. Averted eye gaze was apparently seen as a negative affect communication and resulted in lower judgments of the three conditions. This finding lends support to the increasing body of literature which relates the degree of involvement and expression of feeling to various levels of visual interaction (Kendon, 1967; Mehrabian, 1968b; Argyle and Dean, 1965).

Exline and Winters' (1965) conclusion that there is more eye contact when a communicator wants to become more involved (or affiliated) with an addressee is also supported by the present study. The finding that eye contact communicates respect or warmth corroborates Machotka's

(1965) finding.

Within the counseling context, these findings show support for the fact that more eye contact yields more positive perceptions of the therapists' attitude (Kelly, 1971) and that increased eye contact communicates higher levels of counselor empathy (Haase and Tepper, 1972).

The relative contribution of eye contact to the interpretation of the three attitudes was about 6% for empathy and 7% for respect or roughly equivalent for both measures. Eye contact apparently has the same communicational meaning for both attitudes.

It is interesting to note, however, that for the attitude of genuineness, 11% of this communication was carried in the eye contact factor. Evidently, the expression that honest men will look you in the eye pertains to this counseling interaction where genuineness is equated with a kind of interpersonal honesty. The greater the eye contact, the greater the degree of genuineness communicated by the counselor.

Vocal Intonation

Vocal intonation as an independent effect showed statistical significance for all three counselor attitudes, but did not explain a great deal of the variance among judgments. For both empathy and respect, vocal intonation contributed less than one percent to the total message interpretation. It was slightly more for genuineness where 1.27% was explained by intonation alone. In all cases, a concerned intonation yielded higher levels of counselor attitude and an indifferent intonational pattern produced low levels of the three attitudes of empathy,

respect and genuineness.

First of all, these findings support the many studies which indicate the importance of vocal intonation in the communication of emotional or attitudinal meaning (Davitz, 1964; Mehrabian and Weiner, 1967). There is no question that a concerned vocal intonation yielded higher judgments of empathy, respect and genuineness than an indifferent vocal intonation.

The inconsistency with previous findings comes, however, in the amount of variance which is accounted for by this factor. Mehrabian (1971a) has said "that a person's non-verbal behavior has more bearing than his words on communicating feelings or attitudes to others (p. 44)." His formula for quantifying the relative contributions of each of the three modalities is Total Feeling = 7% Verbal Feeling + 38% Vocal Feeling + 55% Facial Feeling.

The findings of this study show that although vocal intonation is important, it is not quantitatively as important as Mehrabian indicates. The discrepancy could be explained because Mehrabian was talking about gross affect (like-dislike) and that the attitudes within this study are more specific attitudes.

The effect of concerned vocal intonation on the communication of empathy and respect or positive regard can be explained by reference to the definitions of each attitudinal dimension. Empathy is the quality of trying to perceive the other's world as he sees it and a good counselor who is understanding client depression is by definition concerned. Respect or positive regard is an attitude of caring and the concerned

vocal intonation demonstrates and communicates that caring.

Genuineness is a quality of being honest about the attitude one has for another. Concerned intonation by itself, evidently sends a message to the recipient that the sender is honest and genuine about the respect and empathy one feels for the other.

Facial Expression

Facial expression emerged as the most potent channel by which the attitudes of empathy, respect and genuineness was transmitted. In all cases, a concerned facial expression was found to communicate higher levels of counselor attitudes and an indifferent expression was found to communicate lower levels. For empathy, about 26% of the total variability was accounted for by the expression of the face alone. Respect was communicated via the facial expression to the extent of 40% of the total message. For genuineness, only nine percent of the message was carried through the facial expression.

These results follow those of Shapiro (1968a) Mehrabian and Ferris (1967) and Ekman and Friesen (1967) in suggesting that the face is, perhaps, the most important source of information about a person's emotional or attitudinal state. Ekman and Friesen (1967) call the face an affect display system and suggest that it gives away unconscious feelings about a communicator. These findings lend support to those conclusions and add evidence that facial expression is an important communicative cue in the conveyance of therapist attitude.

Many of the explanations of why a concerned facial expression would

convey high levels of empathy, respect and genuineness are the same as for concerned vocal intonation. Obviously, if a person is showing concern through his face, he is trying to be empathic and certainly is showing that he cares for and regards the other person. Genuineness, on the other hand, is harder to explain because the construct deals with the intrapersonal honesty within the counselor as manifest by his behavior. It appears, however that in at least this dyadic situation, a concerned face signified a genuineness which was communicated to the client.

The following discussion will examine the relative importance of each communicational cue as they relate to the communication of the three counselor attitudes.

Counselor Empathy

It has been demonstrated conclusively that the counselor attitude of empathy is communicated not only via the verbal message, but also by the non-verbal communicative modalities of trunk lean, eye contact, vocal intonation and facial expression. Overall, about 35% of the communication of counselor empathy was transmitted via non-verbal means as opposed to about 17% via the verbal message. This means that if the total message is divided into its component parts, two thirds of the message meaning is contained in non-verbal cues and one third in the spoken word. In the specific sense, this finding corroborates an earlier conclusion by Haase and Tepper (1972) and in the general sense corroborates findings by Mehrabian (1971b), Mehrabian and Ferris (1967) and Mehrabian

and Weiner (1967), who have found that any attitudinal or emotional communication is greatly dependent upon the cues found in non-verbal modalities.

Reference to Table 10 shows that facial expression carried the greatest amount of message meaning in the conveyance of counselor empathy (26%). Next in importance was the verbal message (17%) followed by eye contact (6%), trunk lean (3%) and finally vocal intonation (less than 1%).

According to these findings, therefore, a counselor who wanted to be very empathic in his response to a client would lean forward, maintain eye contact, use a concerned vocal intonation and show a concerned face while speaking an appropriately high level message in the Carkhuff and Berenson (1967) sense. Concern was defined in terms of a slower, softer, more relaxed tone of voice and an intense face typified as a furrowed brow, tensed eyebrow and sunken eye. This result is interesting in light of the fact that empathy has previously been defined in verbal terms and has been thought to be expressed via the words of the spoken message. Yet these findings suggest that a major part of the empathic message is carried in the non-verbal modalities.

Counselor Respect

The same relative contributions of each of the non-verbal cues were found to exist in the expression of respect as with empathy. However, more of the "intended message" was carried in the facial expression modality (40%) and less of the message via the verbal modality

(10%) than was found with empathy. The ratio of importance between facial expression and verbal message in the transmission of respect was found to be 4:1. The contributions of trunk lean (3%), eye contact (7%) and vocal intonation (less than 1%) was about the same as for empathy. As with empathy, the major portion of the total message was carried in the facial expression modality.

Of the three counselor attitudes examined in this study, respect or positive regard can be equated most easily to the positive-negative evaluation continuum. A communicator who is being judged for level of respect, warmth, positive regard or caring is being judged on how much he is communicating positive or negative affect. The finding of this study are consistent with all the literature relating non-verbal cues to the communication of positive affect (James, 1932; Mehrabian, 1968a; Kelly, 1971), and support the conclusions that positive or negative attitude can be transmitted through the channels of trunk lean, eye contact, vocal intonation and facial expression. If a counselor wants to communicate maximum levels of positive regard, he should sit forward, maintain eye contact, speak with a concerned intonation, and have a concerned expression on his face. Since both empathy and respect are somewhat verbal constructs, it is also necessary for the verbal message to be "regarding" and "respectful" in order for high levels of communicated counselor respect to occur.

Counselor Genuineness

An examination of the effects of various communicational cues in

the conveyance of counselor genuineness produced some interesting findings. First of all, the verbal message cue as an independent main effect had no significance in the communication of genuineness. Evidently, what the counselor said had no influence on whether he was judged as being genuine or not. This makes sense, since honesty must be judged with reference to either something else spoken at another time or to a contradictory or confirming cue from another channel. The total non-verbal effects accounted for about 23% of the variability, with eye contact (11%) having the greatest influence. Next was facial expression (9%) followed by trunk lean (3%) and vocal intonation (just over 1%). Since genuineness as a construct, has been defined in terms of congruence between personal communications, it would be expected that interactions between the cues would constitute a major portion of the variability. This was confirmed in that 44% of the message was accounted for by all of the interactions between the independent effects, as opposed to 23% for respect and 15% for empathy. (The effect of these interactions will be discussed later.)

Much less of the genuineness message was contained in the facial expression factor and more was in the eye contact modality than was found in the other attitudinal dimensions. This finding is in agreement with literature which states that persons involved in deceitful communication tend to avoid eye contact (Mehrabian, 1971c) and fits nicely with the definition of genuineness as a degree of intrapersonal honesty.

Interactions

Since this research design provided for the simultaneous presentation of a variety of communicational cues, and since communication rarely occurs without both verbal and non-verbal cues operating simultaneously, one cannot just examine the effects of each factor as though they were acting independently. Each factor interacts with another and modifies the significance of each in communicating the message. The following discussion will center around the way interactions affected the total communication process. Although many interactions were statistically significant, only those which substantially contributed to a better understanding of the process will be discussed.

Empathy. Even though the counselor and client subjects in this study showed no overall difference in the way they responded to the total communication of empathy, there was an interaction between subject group and the eye contact cue. Reference to Figure 2 shows that clients respond more to eye contact than counselors and judge empathy higher when eye contact is maintained. Perhaps the attentiveness indicated by direct eye contact is more expected by clients than by counselors.

Counselors and clients also responded to the combination of vocal and facial cues differently. These findings (Figures 5[a], 5[b]) indicate that clients appear to give more weight to the facial expression cue when it is coupled with vocal intonation than do counselors. Apparently, the additive effect of the two positive facial and vocal cues was more communicative for clients than for counselors. Perhaps clients require more information for making judgments about counselor empathy than

do counselors who are more familiar with the construct. Trained counselors may depend less on combinations of cues for making their judgments.

The group X verbal message X facial expression interaction suggests that counselors and clients are differentially influenced by combinations of message levels and facial expression. When an indifferent face is presented, no interaction between group and verbal message occurs. However, when a concerned face is presented counselors give higher levels of empathy to the high verbal message and lower levels of empathy to the low message than do clients. Counselors apparently place more emphasis on the verbal cues than clients when a concerned facial expression is maintained. It may be that the concerned facial expression is depended upon more by clients and molifies the absolute difference between their judgments of verbalizations. It is not surprising that counselors rely more heavily on the verbalizations than do clients. The counselors in this study were trained counselors and most training in empathic communication is through the verbal medium. However, since the client is the ultimate person who must decode the empathic message, these results again point to the importance of nonverbal cues in the communication of empathy.

Other interactions were between just two or more non-verbal cues. The communicational significance was greatly altered when a concerned face was combined with a forward trunk lean and resulted in higher judgments of communicated empathy (Figure 3). Even though a concerned face produces higher judgments of empathy, it is even further increased

when the counselor leans forward.

The same thing holds true for the vocal intonation-facial expression interaction (Figure 4). A concerned face will signify greater levels of empathy than an indifferent face, but when a concerned vocal intonation is added, the resultant increase is even greater.

A rather consistent pattern occurs throughout these results in which two positive cues will add cumulatively in order to produce a higher value of judged attitude when the two are presented simultaneously. Evidently, two consistent cues give the "listener" greater confidence in his judgment than does a single cue. This pattern clearly attests to the importance of a decoder's dependence on multichannel communications in the judgment of complex attitudes. The present study, as well as previous research, illustrates that decoding of complex communications relies heavily on several channels of communication. In the present study the communication of empathy definitely follows a multichannel pattern. To conceive of empathy as a single channel communication grossly underestimates the richness of the transmission of an empathic message.

Respect. Although the findings are in general that counselors and clients do not respond differently to overall attitude communicated by a counselor, there are instances where combinations of cues yielded differential responses. The one case in the judgment of respect came when facial cues and verbal message were presented simultaneously to counselors and clients (Figures 11[a] and 11[b]). In the high verbal message situation, both counselors and clients responded about the same

when viewing a much lower judgment of respect. Also, when a low verbal message was spoken with a concerned facial expression, clients and counselors differed, with counselors again giving a lower value. Evidently, counselors tend to discriminate more finely when inconsistent cues are presented, perhaps because of their training and experience.

Because of an increased sensitivity to emotional and attitudinal communication, counselors are perhaps more aware of subtle changes in inflection and minute differences in facial expression and place a greater importance on these non-verbal cues than the words which are spoken. At least for the attitude of respect, clients are more trusting of the verbal message and do not let inconsistent non-verbal cues influence them as much as counselors.

When the interactive effect of facial expression and verbal message is examined, one finds that a high message combined with a concerned face communicates the greatest degree of respect (Figure 10). The next highest level of respect occurs when a concerned facial expression is coupled with a low message. On the other hand, the lowest level of respect results when either a high or a low message is combined with an indifferent face. Thus, it is apparent that the concerned facial expression determines the level of communicated respect. It appears as though an indifferent facial expression does little to modify either a high or low verbal message. However, a concerned facial expression acts cumulatively with a high message to result in a high judgment of respect.

The synthesis of these findings indicates that if the counselor is displaying an indifferent face, it makes little difference if the ver-

bal message he delivers is high or low. When, however, he is showing a concerned face, not only will the low message result in a higher judgment of respect, but the high message will add cumulatively to result in an even higher judgment. Counselors who are trained only to speak high level verbal messages without regard to their non-verbal facial behavior are not being fully trained.

A similar result occurred in the three factor interaction of verbal message X vocal intonation X facial expression (Figures 13[a] and 13 [b]). In the low message situation, the combination of concerned face and concerned intonation evidently added cumulatively to result in the highest judgment of respect. The indifferent intonation, however, when coupled with a concerned face did not appreciably lower the judgment of respect, thus attesting to the powerful and determining influence of the facial expression cue. Apparently, the facial expression cue is more influential than the vocal cue and when there is an inconsistency, the facial predominates.

Three interactions between non-verbal cues point out the additive and cumulative nature of positive cues. In the trunk lean X facial expression interaction (Figure 7) one can see that the combination of two positive cues (concerned face and forward trunk lean) produces a much higher judgment of respect than other combinations of these factors. The same holds true when concerned face is added to direct eye contact (Figure 8) and when concerned face is added to concerned vocal intonation (Figure 9). This phenomenon can be likened to a navigation system in which a sailor can take a fix on a single point and draw a line along

which he is positioned somewhere. In order to establish his exact position, however, he must take a reading on a second fixed point and draw a second line. His position is established at the point of crossing of the two lines. In communication, it seems as if the listener receives a message via one cue and begins the process of interpretation. A second cue which corroborates the information from the first makes him more confident and adds to his judgment of the attitude. Inconsistent cues, of course, operate just the opposite where no "position" can be established. The absolute level of respect ascertained in a message is again seen to be a function of multiple cues.

The compensatory nature of non-verbal cues is demonstrated in the eye contact X vocal intonation X verbal message interaction (Figures 12[a] and 12[b]). When a low message is spoken and then two positive cues (direct eye contact and concerned vocal intonation) are used, the level of judged respect will be greater than expected from the increase observed between direct and no eye contact in the indifferent intonation situation.

In the same interaction, but with a high message operating, the same phenomenon occurs except that two negative cues (no eye contact and indifferent intonation) detract from the high message. This lends support for the weighted average approach to communication understanding written by Mehrabian (1971b).

One explanation for this phenomenon is that when an inconsistent message is received, the listener weighs the impact of each cue. If the verbal message is one in which no respect or regard is demonstrated

then not one, but two non-verbal cues are received which indicate positive respect and regard, the decoder will choose to believe the non-verbal cues. In a similar fashion, if a high level respectful message is received via the verbal channel simultaneously with two negative verbal cues, a compensatory relationship takes place in which the non-verbal detract from the positive verbal message. In all cases of contradiction between non-verbal and verbal cues of communicated attitude, the non-verbal will be weighted more and the message decoded accordingly.

With regard to respect, it is apparent that non-verbal cues play a role in the communication process which is equally important as was found to be the case with empathy. While the verbal communication is clearly important to both attitudes, the overwhelming influence of the non-verbal cues studied cannot be escaped.

The following discussion of genuineness will reveal similar patterns, although with sufficient idiosyncracies, particularly regarding the contribution of the verbal factor.

Genuineness. As discussed previously, the verbal message main effect did not account for any of the variability of judgment in communicated genuineness. This fact is modified, however, when the group X verbal message interaction is examined. Reference to Figure 14 shows that the counselors perceived a greater degree of genuineness than clients when a low message was spoken. The situation reversed, however, when a high message was spoken with clients perceiving greater levels of genuineness than counselors.

One possible explanation for this might be that clients expect a

therapist to act in a certain way which includes "never speaking in a degrading and judgmental manner." The counselors, on the other hand, might take a low message in stride as an occasional part of the therapy process and not be "shocked" by what was, to the clients, an inappropriate statement and therefore give a higher judgment of genuineness. In any case, this finding clearly demonstrates that in the study of communication the effect of a single independent variable is often altered by the simultaneous presentation of another variable.

Another interaction demonstrates that counselors and clients act differently when confronted with an inconsistency between facial and verbal cues. Figures 16(a) and 16(b) represent findings which suggest that, for counselors, genuineness appears to be a relationship between the verbal message and the facial expression of the communicator. Clients on the other hand trusted the verbal message more and did not greatly lower their judgments when faced with an inconsistent message. It would seem plausible that counselors are more sensitive to emotional dishonesty and more quickly than clients picked up the incongruity of an indifferent face with a high verbal message. This finding points to the reflexive use of non-verbal cues on the part of counselors and strengthens the position that non-verbal cues are powerful communicators.

A third interaction involving counselor-client differences involves the greater dependence on intonational cues by counselors when crossed with an eye contact non-verbal cue (Figures 17[a] and 17 [b]). Perhaps because of greater sensitivity to specific non-verbal cues, counselors "picked up" the confirming and contradictory effect of inconsistent

cues. The clients, on the other hand, seemed to place more credence on the eye contact cue by maintaining a higher judgment of genuineness when direct eye contact was used.

The facial expression X verbal message interaction (Figure 15) demonstrates the way inconsistent message via two channels act on the overall judgment of counselor genuineness (or congruence). When a high message is spoken with an indifferent face, the lowest judgment of genuineness occurs. If the message were to be low, and if the indifferent face were maintained, one would expect that a counselor's genuineness rating would be increased because of the congruity between the two cues. This result was obtained and it is explained by suggesting that judgments of genuineness are heavily influenced by consistency among communicational cues. A concomitant increase in judged genuineness takes place when, while showing a concerned face, the counselor adds a high verbal message. It appears that the level of genuineness is a function of the degree of discrepancy between the verbal message and the facial expression.

An interesting point which demonstrates the subtle nature of the non-verbal cues of communicated attitude is found in a comparison of the data analysis and the comments from the subject judges. After the experiment was over, each subject was asked informally to describe what the basis was for their judgment of the attitudes. Although all the cues were in some way mentioned, it seemed as if vocal intonation was mentioned most often as the cue on which they decided, with verbal message and facial expression a close second. The data, however, shows that

facial expression was usually the most potent cue and vocal intonation the least potent. Evidently, the non-verbal cues were influencing judgments, often without conscious awareness of it happening.

Hall (1966) speaks of the phenomenon of people responding to a multitude of communicational stimuli without realizing it. He speaks of distance between people, artifacts and cosmetic differences, numbers of people in groups, spacing between both objects (chairs, etc.) as well as the many gestural, vocal, proxemic and kinesic effects. His point that individuals respond to non-verbal cues without really being aware that they are doing so seems to have been upheld in this study as well.

One general conclusion is apparent from these results. In comparison, empathy is the most verbal construct of all three attitudes. The words which are spoken are an important source of information to the addressee for accurate judging of the level of communicated empathy. Respect is still dependent upon the use of words, but the evidence shows that non-verbal cues account for more of the variability in judgment. Finally, genuineness appears to be the least dependent upon the verbal message for attitudinal message decoding. These findings lend support to Mehrabian's (1971b) observations that:

The verbal component of an inconsistent message conveys evaluation of an addressee's action... whereas...the nonverbal component of an inconsistent message conveys evaluation of the addressee's person... (p. 145).

The evidence of this study supports these general comments by showing that as we compare empathy, respect and genuineness, the amount of variance accounted for by the verbal message decreased from 17% for empathy

to 10% for respect and finally to 0% for genuineness. If all the non-verbal cues are presented simultaneously, an interaction effect is produced which is an index of the importance of the non-verbal cues. For empathy the "all non-verbal interaction" is .07%, for respect it increases to 1.43% and finally for genuineness, it is 8.89%.

Since in comparison, the communication of empathy was the least dependent upon the non-verbal cues (.07%) and the attitude of genuineness the most dependent (8.89%), one can speculate that the non-verbal behaviors influenced empathy least because of its high reliance upon the words describing the speaker's "action." Conversely, the attitude of genuineness is indeed an index of the speaker's "person" and relies heavily on the non-verbal channels to transmit this information to the listener.

This concept is supported further by examination of the facial expression--verbal message interaction across all three dependent measures. For empathy this interaction accounts for none of the variability, for respect, 1.2%, and for genuineness it accounts for 6%. With empathy being a highly verbal construct, it makes sense that the verbal message plays an important role in its communication. It also makes sense that for genuineness, a construct which by definition identifies the intrapersonal congruity of a communication, a great amount of variance is accounted for by the facial X verbal interaction.

The discussion will now turn to some implications of the research, limitations of the study and some suggestions for further research.

Implications of the Findings

It has been clearly demonstrated that non-verbal as well as verbal behaviors influence the accurate communication of counselor attitude. In fact, the findings suggest that the major portion of an attitudinal message is conveyed via non-verbal channels. The implications of these conclusions can be applied to many settings in which it is important for attitudinal messages to be properly communicated.

The most direct application of these findings would be within the counseling or therapeutic interaction. Regardless of one's orientation to psychotherapy, the therapeutic or counseling process always occurs in the presence of a relationship. Whether the approach is psychoanalytic, behavioristically oriented or client centered, the therapist and client are always in both physical and psychological contact with one another. Communication between the two is the vehicle by which therapeutic progress is made. Since communication is both a verbal and a non-verbal process, the findings of this study are directly applicable to the therapeutic process.

The quality and nature of the therapeutic relationship is largely determined by the attitude conveyed by the therapist. This research shows that the specific attitudes of empathy, respect and genuineness are communicated largely through non-verbal means, and regardless of the verbal content of a spoken message, have specific attitudinal meaning in themselves. As such, the position of the counselor's body or trunk lean will communicate the therapist's attitude such that a forward lean signifies positive affect and a backward lean communicates

negative affect. In a similar fashion, eye contact, facial expression and vocal intonation has its own independent meaning when decoded by the client. As a consequence then, the non-verbal channels which always accompany a verbal message can be either helpful or hurtful in establishing a good relationship between the therapist and client. They are helpful if they are communicating positive affect and hurtful if they communicate negative affect. One would hope that the findings of this study will lead to a better understanding of the components necessary to build a helpful relationship.

The client centered approach to therapy has stressed the importance of the three specific attitudes of empathy, respect and genuineness to the effectiveness of therapy. Although the literature refers to the importance of non-verbal behavior in the communication of these attitudes, very little evidence has been accumulated to support these contentions. This research has not only demonstrated that they are important, but has quantified their individual and interactive contributions to the communication of empathy, respect and genuineness.

An implication from this research is that the therapist should be aware of his non-verbal communications and could, in fact, maximize his attitudinal impact by proper use of non-verbal cues. As such, the therapist who constantly looks out the window or sits back with his feet on the desk should take note of what he might be unknowingly communicating. The counselor or therapist, on the other hand, who trains himself to use non-verbal behaviors that communicate the "helping" attitudes (and assuming that he is genuine about wanting to be helpful), may be a

more valuable contributor to the profession.

The findings of this study also have some important implications for training programs in counseling and therapy. For years a standard supervision technique has been to play and critique audio tape recordings of the student counselor's interviews. One can see from the results of this research, that this method of supervision and assessment seriously neglects the most important source of attitudinal communication from the counselor. It is obvious that more video-tape supervision must be utilized in order to give proper feedback and awareness about the non-verbal cues, other than verbal, which communicate attitude. Some of this is already being done, of course, but those programs which do not seriously include training in non-verbal communication are remiss.

As Truax and Carkhuff (1967) say:

Since part of the therapist's effectiveness depends on non-verbal communications, visual feedback of behavioral communication patterns in either of these ways (video-tape or film) should be a part of every therapist's learning experience. All too often, the therapist will discover that while his feelings and even his voice are genuine, the mirror reflects posing a stilted posturing that makes him seem to be a mannequin rather than a helping person (p. 373).

Another area of training which is becoming popular and for which this research has relevance is the area of human relations skill training. Ivey, Normington, Miller, Morrill and Haase (1968) used video-tape playback to train paraprofessional counselors to relate better by focusing on non-verbal behaviors such as posture, eye contact, facial expression, etc., while they learn to "follow" the conversation verbally. They called the non-verbal communicative behaviors "attending behavior"

and use a type of Skinnerian reinforcement method to encourage use of effective behavior. Southworth and Tepper (1971) also used the attending behavior model to train secretaries in more effective interpersonal relationship skills. Ivey (1971) has for some time utilized the audiovisual feedback system in his microcounseling model of interview training. This research will help identify and quantify the contributions of behaviors which can then be "taught" to those who wish to become more interpersonally competent.

Generalizing the implications of this research to the general public is very easy in this day of intra- and interpersonal awareness. Family therapists can draw on these findings to explain why "mixed messages" often break up marriages and tear children and parents apart. Friends, lovers, businessmen and politicians all can profit from learning about the non-verbal behaviors they use every day to communicate the way they feel to others. Non-verbal communication is a tool used by everyone but understood completely by no one. Research such as this can narrow the gap between ignorance and understanding.

Limitations of the Study and Suggestions for Further Research

Any study within the psychosocial field in which sufficient control is obtained over extraneous variables suffers several limitations. In order, however, to reach any valid conclusions about the molecular effects of specific non-verbal behavior in the communication process, an experimental paradigm was deemed necessary.

One problem encountered in this research was that of creating a stimulus situation in which the "event" to be judged was natural enough for accurate judging, but controlled enough for experimental propriety. By tightly controlling the extraneous variables such as distance, body orientation, movements or gesticulations, etc., the internal validity of the experiment was maximized. Also, all of the experimental variables were combined in order to examine all possible combinations of effects, thus providing valuable information about both main and interactive effects. These two procedures often result in a rather unnatural or awkward stimulus situation and increased the variability of response due to judgments of "strangeness" rather than on the communicative cues alone. Because this was an experimental study, however, the internal validity of the research was deemed more important than the external.

Another limitation involves the degree to which these findings can be generalized. Only one counselor was used as a stimulus, and he was male. All of the subject judges were male. The results, therefore, cannot be generalized beyond males and in fact, only cautiously beyond the realm of this particular male actor counselor. To be somewhat over-cautious, one cannot even generalize beyond the population of therapists and clients found at the University of Massachusetts. It would be overrestrictive, however, to be this cautious and it is felt that replications with other counselors and with other populations will yield the same general results.

It is suggested for further research that perhaps counselors with different characteristics such as age, sex, personality, etc., could be

used. If, for example, a two-level factor of age (young-old) and/or a two-level factor of dress (formal-informal) and/or sex (male-female) were built into the stimulus materials, more information about the perception of counselor attitude via communicative channels other than verbal could be obtained. Perhaps, for example, a forward trunk lean by an aging, neatly dressed counselor means something different than one from a young, informally attired counselor. The effects of artifacts and cosmetics on the communication of attitude are yet to be researched extensively and research which examines these variables would prove invaluable to an understanding of the communication process.

Another limitation to the present study is also a result of its experimental nature. The stimulus interactions which were judged were only a single comment by a client and a single response by the counselor. There was very little contextual knowledge by the subjects and no evidence of the relationship existing between the interactants. The results, therefore, can only be applied to a momentary feeling about the communicated attitude. The judges were asked to imagine that the situation which they were viewing was a real counseling session and asked to block out any technical faults observed in the tape. As such, they really projected an expectation into the judging task. The accuracy of this projection, the effect of the technical distractions and the shortness of the viewed interaction segment builds into the study an error which can not be either avoided or explained in an experimental study of this type.

One way to deal with these criticisms is to do an invivo study in

which actual interviews are recorded while the experimenter (counselor) varies the factors under study. This, of course, makes the observations more natural, but results in a lack of control over unwanted and unexplainable variables.

In summary, the limitations of this study basically revolve around the experimental approach taken to study the various factors of communication. By maximizing the internal validity, the external validity or generalizability has been sacrificed. Unfortunately, however, it does little good to generalize an effect unless there is solid reason to believe it is indeed operating. Therefore, this method is deemed sufficient, if not preferable, for the study of the communicational significance of non-verbal behaviors.

General Summary

This study was undertaken in order to ascertain the contributions of various non-verbal communicational modalities to the perception of three specific counselor attitudes. The research literature had demonstrated that many kinds of proxemic, kinesic, facial and vocal behaviors contributed to the transmission of affect and had shown that the non-verbal modalities were more influential than verbal in communicating attitudes. The literature lacked, however, references to multichannel communication of affect which included all of the non-verbal modalities mentioned above. In addition, the communicative process of the specific attitudes of empathy, respect and genuineness which are part of the therapeutic relationship were not extensively researched.

The study was designed, therefore, to simultaneously present to judges both verbal and non-verbal cues of attitudinal communication. Judges who were both trained counselors and actual clients then responded to the videotaped stimulus and judged the degree of empathy, respect and genuineness communicated by the stimulus counselor. A repeated measures design cancelled out personal differences between judges.

The findings of this research indicated that non-verbal behaviors are very important in the communication of counselor attitude. In fact, it has been shown that at least two and as much as nine times the variance in judgments of counselor empathy and respect was accounted for by the non-verbal factors. The communication of counselor genuineness was found to be largely determined by the interaction between all the various communication cues with congruence of the non-verbal modalities resulting in higher perceptions of genuineness.

Consistent with previous research, it was found that a more forward lean of the body, maintained eye contact, the speaking of a high verbal message with a concerned intonation while showing a concerned facial expression resulted more positive counselor affect. Specifically, each of these conditions led to a higher judgment of counselor empathy, respect and genuineness.

It was also determined that counselors and clients did not differ from one another in the way they perceived the counselor attitudes when all the cues are taken as a whole. Specific investigations of interaction effects, however, show that in general counselors are more sen-

sitive to tonal and facial variations and incongruities and respond to more subtle differences between the cues. Clients, on the other hand, relied more strongly on the verbal message than counselors for determining the meaning of an attitudinal message.

The implications of this research stressed the importance of awareness by counselors and therapists of the effect of their non-verbal communication of feeling. Whenever an affective message is transmitted many channels of communication are utilized. Often, these channels contradict one another and the message becomes distorted. Counselors who interact constantly with clients who ask for a sharing of their private world must be aware of the confusion which inconsistent cues can produce. Strong, Taylor, Bratton and Loper (1971) state the dilemma accurately:

If counselors' impacts verbally and non-verbally are congruent, counselors need not be concerned about their non-verbal behavior. However, if non-verbal cues substantially alter the significance of verbal cues, counselors must consciously control their non-verbal behavior to influence their impact on clients (p. 554).

In summary, the implications of these findings about the process of communicating attitude extend from specific personal interaction found within the counseling setting to general interactions which constitute everyday social encounters. Those interested in researching any phase of the communicational process need to be aware of the importance and power of non-verbal cues which have for some time been taken for granted. Specific training programs should also incorporate these findings, both on the general level of positive or negative affective communication and also with regard to the transmission of the specific counselor attitudes of empathy, respect and genuineness.

R E F E R E N C E S

- Argyle, M. and Dean, J. Eye contact, distance and affiliation. Sociometry, 1965, 28, 289-304.
- Aspy, D.N. Empathy-congruence-caring are not singular. Personnel and Guidance Journal, 1970, 48, 637-640.
- Bergin, A.E. and Strupp, H.H. Changing Frontiers in the Science of Psychotherapy. Chicago: Aldine, 1972.
- Birdwhistell, R.L. Introduction to Kinesics. Louisville: University of Louisville, 1952.
- Birdwhistell, R.L. The kinesic level in the investigation of the emotions. In P.H. Knapp (ed.), Expression of the Emotions in Man. New York: International Universities Press, 1963.
- Birdwhistell, R.L. Kinesics and Context. Philadelphia: University of Pennsylvania Press, 1970.
- Carkhuff, R.R. Helping and Human Relations (vol. I and II). New York: Holt, Rinehart and Winston, 1969.
- Carkhuff, R.R. and Berenson, B. Beyond Counseling and Therapy. New York: Holt, Rinehart and Winston, 1967.
- Charney, E.J. Psychosomatic manifestations of rapport in psychotherapy. Psychosomatic Medicine, 1966, 28, 305-315.
- Darwin, C. The Expression of Emotion in Man and Animals. London: Murray, 1872.
- Davitz, J. (ed.) The Communication of Emotional Meaning. New York: McGraw-Hill, 1964.
- Davitz, J. and Davitz, L. The communication of feelings by content free

- speech. Journal of Communication, 1959, 9, 6-13.
- Davitz, J. and Davitz, L. Nonverbal vocal communication of feeling. Journal of Communication, 1961, 11, 81-86.
- Dilley, J., Lee, J., and Verrill, E. Is empathy ear-to-ear or face-to-face? Personnel and Guidance Journal, 1971, 50, 188-191.
- Dittmann, A.T. The relationship between body movements and moods in interviews. Journal of Consulting Psychology, 1962, 26, 480.
- Duncan, S. Nonverbal communication. Psychological Bulletin, 1969, 72, 118-137.
- Edwards, A.L. Techniques of Attitude Scale Construction. New York: Appleton-Century-Crofts, Inc., 1957.
- Ekman, P. Differential communication of affect by head and body cues. Journal of Personality and Social Psychology, 1965, 2, 725-735.
- Ekman, P. and Friesen, W. Head and body cues in the judgment of emotion: A reformulation. Perceptual Motor Skills, 1967, 24, 711-724.
- Ekman, P. and Friesen, W. Nonverbal behavior in psychotherapy research. In I.M.Shilen (ed.), Research in Psychotherapy (vol. III). American Psychological Association, 1968.
- Exline, R.V. Explorations in the process of person perception: Visual interaction in relation to competition, sex and need for affiliation. Journal of Personality, 1963, 31, 1-20.
- Exline, R.V. and Eldridge, C. Effects of two patterns of a speaker's visual behavior upon the perception of the authenticity of his verbal message. Paper presented at the Eastern Psychological Association Annual Convention, April, 1967.

- Exline, R.V. and Winters, L.C. Affective relations and mutual glances in dyads. In S.S. Tomkins and C.I. Izzard (eds.), Affect, Cognition and Personality. New York: Springer, 1965.
- Exline, R.V., Grey, D. and Schuette, D. Visual behavior in a dyad as affected by interview content and sex of respondent. Journal of Personality and Social Psychology, 1965, 1, 201-209.
- Fretz, B.R. Postural movements in a counseling dyad. Journal of Counseling Psychology, 1966, 13, 335-343.
- Frois-Wittmann, J. The judgment of facial expression. Journal of Experimental Psychology, 1930, 13, 113-151.
- Haase, R.F. The relationship of sex and instructional set to the regulation of interpersonal distance in a counseling analogue. Journal of Counseling Psychology, 1970, 17(3), 233-236.
- Haase, R.F. Expected mean squares and estimates of the strength of association in the 2 X 2 X 2 X 2 X 3 X 26 mixed model ANOVA. Amherst, Massachusetts: University of Massachusetts Counseling Center Research Report No. 29.
- Haase, R.F. and DiMattia, D.F. Proxemic behavior: counselor, administrator and client preference for seating arrangement in dyadic interaction. Journal of Counseling Psychology, 1970, 17, 319-325.
- Haase, R.F. and Tepper, D.T., Jr. Nonverbal components of empathic communication. Journal of Counseling Psychology, 1972, 19, in press.
- Hall, E.T. The Silent Language. New York: Fawcett, 1959.
- Hall, E.T. A system for the notation of proxemic behavior. American Anthropologist, 1963, 65, 1003-1026.

- Hall, E.T. The Hidden Dimension. New York: Doubleday, 1966.
- Ivey, A.E. Microcounseling: Innovations in Interview Training.
Springfield, Illinois: Charles C. Thomas, 1971.
- Ivey, A.E., Normington, C.J., Miller, C.D., Morrill, W.H. and Haase, R.F.
Microcounseling and attending behavior: An approach to pre-
practicum counselor training. Journal of Counseling Psychology
Monograph Supplement. September, 1968, 15, 1-12.
- James, William. A study of the expression of bodily posture. Journal
of General Psychology, 1932, 7, 405-436.
- Kelly, F.D. Nonverbal communication in the counseling and psychothera-
peutic interaction. Unpublished doctoral dissertation, University
of Massachusetts, 1971.
- Kendon, A. Some functions of gaze-direction in social interaction.
Acta Psychologica, 1967, 26, 22-63.
- Kramer, E. Judgment of personal characteristics and emotions from non-
verbal properties of speech. Psychological Bulletin, 1963, 60,
408-420.
- Krasner, L. The use of generalized reinforcers in psychotherapy research.
Psychological Reports, 1955, 1, 19-25.
- Lambert, W.W. and Lambert, W.E. Social Psychology. New York: Prentice-
Hall, 1964.
- Landis, C. General behavior and facial expression. Journal of Compara-
tive Psychology, 1924, 4, 447-509.
- Langfield, H. The judgment of emotions from facial expressions. Journal
of Abnormal Psychology, 1918, 13, 172-184.

- Levitt, E.A. The relationship between vocal and facial emotional communicative abilities. Dissertation Abstracts, 1962, 23, 1783.
- Levitt, E.A. The relationship between abilities to express emotional meanings vocally and facially. In J.R.Davitz (ed.), The Communication of Emotional Meaning. New York: McGraw-Hill, 1964.
- Levy, P.K. The ability to express and perceive vocal communications of feeling. In J.Davitz (ed.), The Communication of Emotional Meaning. New York: McGraw-Hill, 1964.
- Little, K.B. Personal space. Journal of Experimental Social Psychology, 1965, 1, 237-247.
- Matchotka, P. Body movement as communication. Behavioral Science Research, 1965, 2, 33-66.
- Mehrabian, A. Orientation behaviors and nonverbal attitude communication. Journal of Communication, 1967, 17, 324-332.
- Mehrabian, A. Inference of attitudes from the posture, orientation and distance of a communicator. Journal of Consulting and Clinical Psychology, 1968a, 32, No e, 296-308.
- Mehrabian, A. Relationship of attitude to seated posture, orientation and distance. Journal of Personality and Social Psychology, 1968b, 10, 26-30.
- Mehrabian, A. Communication without words. Psychology Today, 1968c, 2(4), 52-56.
- Mehrabian, A. Significance of posture and position in the communication of attitude and status relationships. Psychological Bulletin, 1969, 71, No. 5, 359-372.

- Mehrabian, A. A semantic space for nonverbal behavior. Journal of Consulting and Clinical Psychology, 1970, 35(2), 248-257.
- Mehrabian, A. Silent Messages. Belmont, California: Wadsworth Publishing Co., 1971a.
- Mehrabian, A. Nonverbal communication. In J.K.Cole (ed.), Nebraska Symposium on Motivation. Lincoln, Nebraska: University of Nebraska Press, 1971b.
- Mehrabian, A. Nonverbal betrayal of feeling. Journal of Experimental Research in Personality, 1971c, 5, 64-73.
- Mehrabian, A. and Friar, J. Encoding of attitude by a seated communicator via posture and position cues. Journal of Consulting and Clinical Psychology, 1969, 33, 330-336.
- Mehrabian, A. and Ferris, S. Inference of attitudes from nonverbal communication in two channels. Journal of Consulting Psychology, 1967, 31, 248-252.
- Mehrabian, A. and Wiener, M. Decoding of inconsistent communications. Journal of Personality and Social Psychology, 1967, 6, 109-114.
- Mehrabian, A. and Williams, M. Nonverbal concomitants of perceived and intended persuasiveness. Journal of Personality and Social Psychology, 1969, 13, 37-58.
- Meltzoff, J. and Kornreich, M. Research in Psychotherapy. New York: Atherton Press, Inc., 1970.
- Nielsen, G. Studies in Self Confrontation. Cleveland: Howard Allen, 1964.
- Pierce, P. Client attitudes generated by varied interaction distances

- and counselor trunk lean in the dyadic counseling interaction.
Unpublished doctoral dissertation. University of Massachusetts,
1970.
- Reece, M.M. and Whitman, R.N. Expressive movements, warmth and verbal reinforcement. Journal of Abnormal and Social Psychology, 1962, 64, 234-236.
- Rogers, C.R. Client-Centered Therapy. Boston: Houghton Mifflin, 1951.
- Rogers, C.R. The necessary and sufficient conditions of therapeutic personality change. Journal of Consulting Psychology, 1957, 21, 95-103.
- Rogers, C.R. On Becoming a Person. Boston: Houghton Mifflin, 1961.
- Rogers, C.R. The conditions of change from a client-centered viewpoint. In G.B. Berenson and R.C. Carkhuff (eds.), Sources of Gain in Counseling and Psychotherapy. New York: Holt, Rinhart and Winston, 1967.
- Schefflen, A.E. On the structure of human communication. American Behavioral Scientist, 1967, 10(8), 8-12.
- Schlosberg, H. Three dimensions of emotion. The Psychological Review, 1954, LXI, 81-88.
- Shapiro, J. Agreement between channels of communication in interviews. Journal of Consulting Psychology, 1966, 30, 535-538.
- Shapiro, J. Responsitivity to facial and linguistic cues. Journal of Communication, 1968a, 18, 11-17.
- Shapiro, J. Relationships between visual and auditory cues of therapeutic effectiveness. Journal of Clinical Psychology, 1968b, 24, 236-239.

- Shapiro, J., Foster, C. and Powell, T. Facial and bodily cues of genuineness, empathy and warmth. Journal of Clinical Psychology, 1968, 24, 233-236.
- Sommer, R. Personal Space: The Behavioral Basis of Design. Englewood Cliffs, New Jersey: Prentice-Hall, 1969.
- Soskin, W.F. and Kauffman, P.E. Judgment of emotion in word-free voice samples. Journal of Communication, 1961, 11, 73-80.
- Southworth, J.A. and Tepper, D.T., Jr. Human relations awareness workshop for receptionists. Paper presented at the APGA Convention, Atlantic City, New Jersey, April, 1971.
- Starkweather, J.A. Vocal communication of personality and human feelings. Journal of Communication, 1961, 11, 63-72.
- Strong, S.R., Taylor, R.G., Bratton, J.C. and Loper, R.G. Nonverbal behavior and perceived counselor characteristics. Journal of Consulting Psychology, 1971, 18, 554-561.
- Sullivan, H.S. The Psychiatric Interview. New York: W.W.Norton, 1954.
- Trager, G.L. Paralanguage: A first approximation. Studies in Linguistics, 1958, 13, 1-12.
- Thompson, D. and Meltzer, L. Communication of emotional intent by facial expression. Journal of Abnormal Social Psychology, 1964, 68, 129-135.
- Truax, C.B. and Carkhuff, R.R. Toward Effective Counseling and Psychotherapy: Training and Practice. Chicago: Aldine Publishing Co., 1967.
- Truax, C. and Mitchell, K.M. Research on certain therapist interpersonal

- skills in relation to process and outcome. In A. Bergin and S. Garfield, Handbook of Psychotherapy and Behavior Change. New York: Wiley, 1971.
- Williams, F. and Sundene, B. Dimensions of recognition: Visual vs. vocal expression of emotion. A.V. Communication Review, 1965, 13, 44-52.
- Williams, F. and Tolch, J. Communication by facial expression. Journal of Communication, 1965, 15, 17-27.
- Winer, B.J. Statistical Principles in Experimental Design. New York: McGraw-Hill, 1962.
- Wolberg, L.R. The Technique of Psychotherapy. New York: Grune and Stratton, 1967.
- Zaidel, S.F. and Mehrabian, A. The ability to infer positive and negative attitudes facially and vocally. Journal of Experimental Research in Personality, 1969, 3, 233-241.

APPENDIX A

POSITIVE REGARD (RESPECT)

Attached is a series of client-therapist verbal interactions which are examples of varying degrees of positive regard communicated by the counselor.

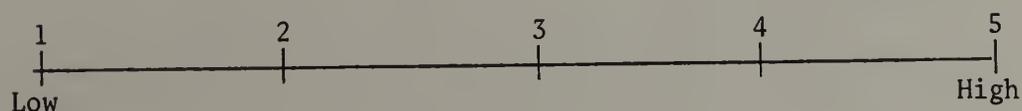
I would appreciate your judging each excerpt for its level of communicated positive regard according to the scale listed below. Each judgment should be made independently of other judgments. Please write the number (1-5) beside the excerpt identification number.

A brief description of positive regard has been added for your reference if needed.

Positive Regard

This dimension describes the counselor's attitude of regard, respect and concern for the client's feelings, experience and potentials. It is an attitude of respect for a person's right to be his unique self--to value and prize him as a free person without conditions. At high levels of this dimension, the counselor's responses do not contain a value judgment or give advice, and are usually within the client's frame of reference rather than the counselor's.

1. The counselor communicates total lack of respect and negative regard.
2. ...little respect and slight negative regard.
3. ...minimum respect and no negative regard.
4. ...deep respect and some positive regard.
5. ...very deepest respect and positive regard.



1. ___ Client: It's kind of lonely at home--my parents both work.
Therapist: Don't you have any brothers or sisters?
2. ___ C: (sadly) I wrote my boyfriend a letter and I knew he wouldn't answer it, but I thought he would come up to see me last Sunday.
T: You were just sort of looking for him even though you knew he probably wouldn't come.
3. ___ C: If there had been any way that I could end it all completely and not just become a burden or an extra care, I would have committed suicide.
T: Things seemed so hopeless that you lost the will to keep trying.
4. ___ C: I really wanted to succeed at that. I tried, but just couldn't make it. Well, I guess that's the way it goes.
T: Yeah, you're right, we can't win them all.
- *5. ___ C: With the job market what it is, I don't know what sort of job will be offered to me...
T: It might not be the best in the world, but you'll have to learn to live with what you get.
6. ___ C: (sadly) I wrote my boyfriend a letter and I knew he wouldn't answer it, but I thought he would come up to see me last Sunday.
T: Why don't you call him?
- †7. ___ C: I really wanted to succeed at that. I tried, but just couldn't make it. Well, I guess that's the way it goes.
T: You know, even though you sound resigned to it, I get a sense of strong disappointment from you.

*Chosen for the low level message. Empathy: Mdn. = 1.00 (Q = .00)

Positive Regard: Mdn. = 1.31 (Q = .55)

†Chosen for the high level message. Empathy: Mdn. = 4.04 (Q = .94)

Positive Regard: Mdn. = 4.11 (Q = .72)

8. ___ Client: If there had been any way that I could end it all completely and not just become a burden or an extra care, I would have committed suicide.

Therapist: What good would it do to kill yourself?

9. ___ C: With the job market what it is, I don't know what sort of job will be offered to me...

T: You're not very confident about landing a job for yourself under difficult circumstances.

10. ___ C: It's kind of lonely at home--my parents both work.

T: You sound angry with your parents because they're not home when you need them.

11. ___ C: I really wanted to succeed at that. I tried, but just couldn't make it. Well, I guess that's the way it goes.

T: You did your best and you can't understand why you failed.

12. ___ C: With the job market what it is, I don't know what sort of job will be offered to me...

T: Well, at least you're in the same boat as everybody else.

13. ___ C: It's kind of lonely at home--my parents both work.

T: It's hard to come home to an empty house.

14. ___ C: (sadly) I wrote my boyfriend a letter and I knew he wouldn't answer it, but I thought he would come up to see me last Sunday.

T: You're wondering if your boyfriend still cares about you.

15. ___ C: If there had been any way that I could end it all completely and not just become a burden or an extra care, I would have committed suicide.

T: You were feeling pretty desperate, but still cared about others.

16. ___ C: It's kind of lonely at home--my parents both work.

T: You sound as though you really feel left out at home.

17. ___ C: Sometimes I get so depressed I just don't know what to do.

T: Sometimes you feel like you're never going to get up again.

18. ___ Client: (sadly) I wrote my boyfriend a letter and I knew he wouldn't answer it, but I thought he would come up to see me last Sunday.
- Therapist: Why did you write if you knew you wouldn't get an answer?
19. ___ C: I really wanted to succeed at that. I tried, but just couldn't make it. Well, I guess that's the way it goes.
- T: I get the impression that not succeeding still hurts a lot.
20. ___ C: If there had been any way that I could end it all completely and not just become a burden or an extra care, I would have committed suicide.
- T: Don't you think suicide is immoral?
21. ___ C: Sometimes I get so depressed I just don't know what to do.
- T: Everyone feels that way once in a while.
22. ___ C: With the job market what it is, I don't know what sort of job will be offered to me...
- T: You're worried that no one will want you and that you'll get stuck with a bad job.
23. ___ C: It's kind of lonely at home--my parents both work.
- T: You might try inviting some of your friends over.
24. ___ C: (sadly) I wrote my boyfriend a letter and I knew he wouldn't answer it, but I thought he would come up to see me last Sunday.
- T: Why don't you call him?
25. ___ C: I really wanted to succeed at that. I tried, but just couldn't make it. Well, I guess that's the way it goes.
- T: Maybe you didn't have long enough to work out the solution?
26. ___ C: Sometimes I get so depressed I just don't know what to do.
- T: At times like this it seems as if you don't know what direction to go in.

27. ___ Client: I really wanted to succeed at that. I tried, but just couldn't make it. Well, I guess that's the way it goes.

Therapist: It sounds like you feel it's hopeless to try again.

28. ___ C: (sadly) I wrote my boyfriend a letter and I knew he wouldn't answer it, but I thought he would come up to see me last Sunday.

T: You sound very disappointed that he isn't paying attention to you.

29. ___ C: Sometimes I get so depressed I just don't know what to do.

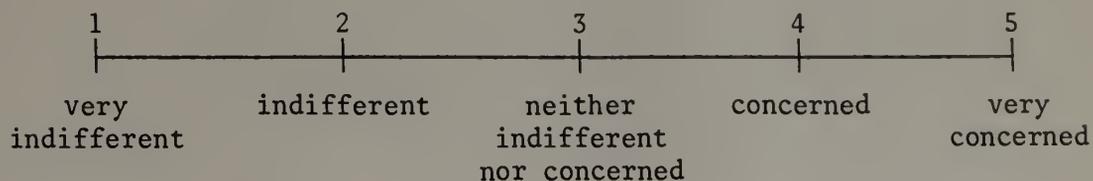
T: If you're that depressed, why don't you see a physician about some medication?

30. ___ C: It's kind of lonely at home--my parents both work.

T: You spend a lot of time by yourself and are feeling quite alone.

APPENDIX B

The tape recording which you will hear is of an actor-client talking to a counseling psychologist. You will hear a series of numbered interchanges in which the psychologist will respond to a depressive statement spoken by the "client." Please listen to the interchange, paying special attention to the psychologist's tone of voice. Then rate according to the following scale, the degree of concern for the client's depression indicated by the psychologist's tone of voice:



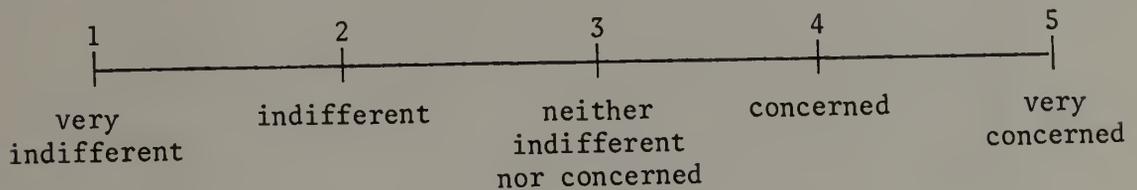
<u>Tape #1</u>	<u>Tape #2</u>
1. _____	L2. _____
2. _____	L4. _____
4. _____	L5. _____
5. _____	L6. _____
6. _____	L8. _____
7. _____	L10. _____
L2. _____	12. _____
L4. _____	13. _____
L5. _____	14. _____
L6. _____	15. _____
L8. _____	18. _____
L10. _____	L11. _____
12. _____	L13. _____
13. _____	L18. _____
14. _____	L20. _____
15. _____	L21. _____
18. _____	1. _____
L11. _____	2. _____
L13. _____	4. _____
L18. _____	5. _____
L20. _____	6. _____
L21. _____	7. _____

APPENDIX C

The man in the picture is a counseling psychologist who is talking with a very depressed client. At the moment the picture was taken, the counselor was responding to the following statement made by the client:

"If there had been any way that I could end it all completely and not just become a burden or an extra care, I would have committed suicide."

Using the 5 point scale printed below, please indicate your judgment of the level of CONCERN communicated by the counselor in responding to this statement.

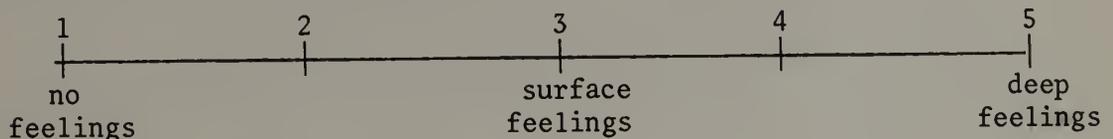


APPENDIX D

You are about to view a set of four video tapes, each of which has eight different interactions between an actor-client and a counseling psychologist. The total time for viewing and judging is about 15 minutes. Because of the experimental nature of this task, the interactions will at times appear unnatural and the videotaping not always perfect. Please try to disregard the mechanical errors and concentrate on the attitude communicated by the counselor. Although the segments will seem repetitive, you should remember that each of the 32 segments is different in some way. The outcome of the research will depend upon your continued attention throughout the judging session as you rate each segment according to the criteria described below. Just before each interaction, you will see and hear numbers which are not in any order. Since it is important that you mark the answer sheet on the correct number, place your finger beside the appropriate number on the answer sheet as you view the interactions. After each interaction, mark your judgment (1-5) directly on the answer sheet beside the number which corresponds to the code on the tape.

The counselor attitude that you will judge today is one commonly referred to as empathy. This attitude can be explained as a sensitivity to and an understanding of a person's real feelings and is manifest by an ability to reflect or communicate those feelings accurately. It is the ability of one person to sense the other person's emotional world as if it were his own and share his understanding of deep as well as superficial feelings. The counselor you will be viewing in each interaction will be communicating varying degrees of his understanding of the actor-client's depressed feelings. You are asked to rate along a 5 point scale the degree to which the counselor understands the client's feelings and communicates this understanding to him. Use all the cues from the counselor's communication in making your judgment about how empathic he responds to the actor-client.

Scale by which to make judgments:



More specific descriptions of each point on the scale:

1. The counselor communicates no understanding of obvious feelings.
2. ...some understanding of obvious feelings.
3. ...accurate understanding of surface, but not deep feelings.
4. ...accurate understanding of surface and some deep feelings.
5. ...accurate understanding of surface and deep feelings.

Thank you very much for your help--I'll explain the study to you if you wish at the end of data collection.

