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THE EFFECT OF ANXIETY ON THE DECODING OF VERBAL/NONVERBAL COMMUNICATION OF COUNSELOR REGARD

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THE EFFECT OF ANXIETY ON THE DECODING OF VERBAL/NONVERBAL COMMUNICATION OF COUNSELOR REGARD

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degree of

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By

STANLEY RICHARD RAY

Norman, Oklahoma

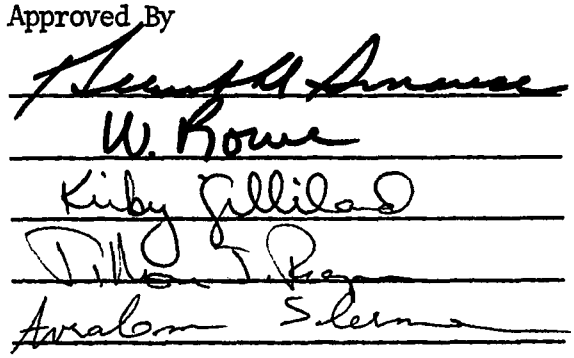
1981

THE EFFECT OF ANXIETY ON THE DECODING OF

VERBAL/NONVERBAL COMMUNICATION OF

COUNSELOR REGARD

Approved By



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THE EFFECT OF ANXIETY ON THE DECODING OF VERBAL/NONVERBAL COMMUNICATION OF COUNSELOR REGARD

ABSTRACT

The effects of anxiety level and gender were examined relative to the decoding of channel-discrepant and channel-consistent verbal-nonverbal communication of counselor regard within a 2x2x2x2 analysis of variance design. A total of 128 subjects were randomly assigned to one of 16 independent experimental groups and viewed a videotape of a counselor who interacted with the subjects as if they were actual clients. After viewing one of four possible stimulus tapes, which were verbal-nonverbal counselor messages conveying positive or negative attitude for each channel (V+NV+, V+NV-, V-NV+, V-NV-), each subject completed the Barrett-Lennard Relationship Inventory. Results failed to support the dominance of nonverbal cues or include significance relative to gender or anxiety manipulations. Consistent counselor messages were not found to be superior to inconsistent messages. However, significant differences were found when the four possible combinations of counselor messages (V+NV+, V+NV-, V-NV+, V-NV-) were compared. The results are discussed relative to attitude intensity effects as a possible determining factor in the resolution of channel discrepant messages. Implications for theory and practice are also discussed.

INTRODUCTION

The study of nonverbal cues relative to the process of counseling has been increasing in the past few years. As a result of empirical research suggesting the importance of the nonverbal domain many researchers (Haase & Tepper, 1972; Smith-Hanen, 1977; Strong, Taylor, Bratton, & Looper, 1971) have suggested that nonverbal factors be given more attention in the training of counselors. A comprehensive review of nonverbal research relative to the context of counseling/psychotherapy has been compiled by Gladstein (1974).

Investigations of nonverbal behavior in counseling have produced significant findings of a theoretical and practical nature. However, too few studies have examined the effects of verbal and nonverbal characteristics in combination. A case in point is the examination of channel discrepant messages, which is a focus of the current study. Since total communication can be conceptualized in terms of discrete verbal and nonverbal channels there exists the possibility that the discrete channels may be contradictory to each other in terms of attitude conveyed. In the event of receiving incongruent messages the client must, in some way, resolve these simultaneous contradictions in communication.

The research findings conflict with respect to how resolution is achieved. Mehrabian (1970) suggested that inconsistent verbal-nonverbal messages are decoded in the direction of the attitude conveyed by the nonverbal channel; a cue dominance effect. Supportative studies include Mehrabian and Weiner (1967), Mehrabian and Ferris (1967), and Tepper and Haase (1978). The preceding studies also suggested that

specific nonverbal behaviors tend to have differential weighting in attitude conveyance. For example, Mehrabian and Ferris (1967) found that attitude was conveyed more by facial cues than by vocal intonation cues. A major implication of the cited results is that inconsistent or incongruent messages are easily decoded by the addressee towards the value carried by the nonverbal channel.

The results of several other studies, however, tend to challenge this assumption. Newman (1977) found that schizophrenics were confused by incongruent messages. Graves and Robinson's (1976) findings suggested a negative response to inconsistent messages. Beatty and Beatty (1976) found that inconsistent messages are less believable than consistent messages. Verbal channel dominance for inconsistent messages in the context of conflict resolution was reported by Johnson, McCarty, and Allen (1976). And Argyle, Alkema, and Gilmour (1971) found that resolution of inconsistent messages was determined by the channel that conveyed the strongest attitude regardless of whether the channel was verbal or nonverbal. Obviously, mediating variables exist that tend to affect the decoding process.

A recent study by Reade and Smouse (1980) reports the effect of counselor response style on the decoding of consistent-inconsistent counselor messages and points again to inconsistencies in resolution between the verbal and nonverbal channels in the face of channel discrepant messages. They found that although the counselor confrontative style resulted in dominant nonverbal impact, this dominance was not found for either the cognitive or the affective counselor orientations. Reade and Smouse suggested that the differential effect could

been due to the increased emotional arousal that is associated with client confrontation. Carkhuff and Berenson (1967) state "in a very real sense the therapist (by confronting) precipitates a crisis for the client" (p. 152). Thus, it is possible that the level of emotional arousal served as a mediating variable that contributed to the differential decoding of incongruent verbal and nonverbal cues.

According to Easterbrook (1959), increased emotional arousal is associated with perceptual overfocusing that results in reduced cue utilization. Perhaps, with emotional arousal the verbal cues tend to be perceptually excluded with the end result being nonverbal dominance. Since anxiety is related to higher levels of arousal (Malmo, Shagass, & Davis, 1950) and since client anxiety is a common reason for seeking counseling or as a result of high levels of self-disclosure with a counselor (Moxnes, 1974) it would seem significant to investigate the effect of client anxiety (associated with increased arousal) on the decoding of consistent and inconsistent verbal-nonverbal counselor communications.

Although Easterbrook indicated that his emotional arousal construct basically involves drive theory which associates motivational states with performance, Spielberger (1970) conceptualized anxiety in terms of state and trait constructs which, according to Glover and Cravens (1974), refers to a broader range of phenomena than that considered by drive theory. Accordingly, the present authors were guided by Easterbrook's theory, but also used the Spielberger instrument.

Although gender differences have been found regarding the decoding of nonverbal behaviors such as differential sensitivity to frontal vs.

side physical approach (Patterson, Mullens, & Romano, 1971) and the interpretation of touching behaviors (Nguyen, Heslin, Nguyen, 1975), the relationship between gender and the decoding of combined verbal-non-verbal cues has gone unexplored. Thus, because empirical data are scarce and the theory base is undeveloped this aspect of the current study will be exploratory in nature.

HYPOTHESES

1. The nonverbal channel of communication will be significantly more impactful in the high anxiety condition as compared to the low anxiety condition. That is, it is predicted that a significant interaction will be found among the anxiety, nonverbal, and verbal variables.

2. The nonverbal channel will fail to be significantly more impactful (i.e. a higher nonverbal mean than the verbal under the positive condition with a lower nonverbal mean than the verbal for the negative condition) collapsing across anxiety and gender conditions, a null prediction. Thus, no significant verbal x nonverbal interaction will be found.

3. Following Graves and Robinson's (1976) finding that inconsistent messages were perceived as more negative than both the V+NV+ and V-NV- consistent messages, it is predicted that the composite regard score for the consistent counselor messages will be found to be significantly higher than the composite score for the inconsistent counselor messages.

An alpha level of .05 was adopted for Hypotheses 1 and 3. Since Hypothesis 2 predicts acceptance of the null, an alpha level for this test was set at .10 to avoid capitalizing on error variance that would tend to make it easier to reject the null and, in this case, support the hypothesis.

METHOD

Subjects: Five-hundred and fifty introductory psychology students were administered the Spielberger Trait Anxiety Inventory (STAI). Thirty-two males and 32 females were randomly selected both from a low anxiety and high anxiety group defined by the upper and lower 27% of the distribution of STAI scores (Cox, 1957). All 128 experimental subjects received course credit for their participation. Only counseling-naive subjects were retained for the experiment since previous counseling experience could interact with the experimental variables of this study.

Independent Variables: The four independent variables included: counselor verbal attitude (positive, negative), counselor nonverbal attitude (positive, negative), subject trait anxiety (high, low), and gender.

The verbal component of the counselor message was scripted to represent either positive or negative counselor attitudes toward the client/subject. The positive verbal message reflected concern and respect for the client and the client's problems. The negative verbal counselor message conveyed indifference and a lack of respect for the client and the client's problems.

The nonverbal component of the counselor message conveyed either positive or negative attitude as expressed by voice intonation, facial expressions, and eye contact. These nonverbal behaviors have been found to be salient aspects in the communication of attitude (Argyle & Dean, 1965; Mehrabian & Ferris, 1967; Mehrabian & Weiner, 1967).

Positive voice intonation was defined as representing the qualities of seriousness, warmth, closeness, and concern, with the negative condition characterized by dull, flat, and rather uninvolved vocal intonations (Duncan, Rice, & Butler, 1968). Positive facial cues included a concerned expression (lowered brow) and affirmative head nod with the negative involving side to side head movements and frowning (Fretz, 1966). Positive eye contact consisted of the counselor/actor engaging in direct gaze for at least 80% of the time with the negative looking condition characterized by less than 20% of the possible time duration (Kleck & Nuessle, 1968).

According to Spielberger (1970), trait anxiety refers to the predisposition towards experiencing anxiety in terms of frequency and/or intensity. State anxiety refers to the degree of subjectively perceived anxiety at the current moment in time. Since state and trait anxiety are conceptually different both types were measured in the current experiment to evaluate the independent effects of the anxiety manipulation. Subjects were chosen on the basis of prescreening scores being in the upper or lower 27% of the distribution of trait anxiety scores. State anxiety was assessed as an added manipulation check during the experimental procedure just preceding exposure to the stimulus tapes (described in the following section). Spielberger (1970) reported A-trait test-retest reliability correlations ranging from .73 to .86 with concurrent validity correlations from .75 to .77 for the IPAT Anxiety Scale and from .79 to .83 for the Taylor Manifest Anxiety Scale.

Stimulus Materials: Stimulus materials for the current study were designed to approximate, for the subjects, the experience of interacting with a counselor in a counseling situation. This was accomplished by presenting information related to a single client by means of a written case study and an interactive videotape sequence based on the case study.

Four videotape segments, each approximately five minutes in length, revealed only the counselor's head and shoulders to control of the possible effects of trunk lean, body movements (gestures), and arm and leg postural configurations which have been found to influence judges' perceptions of counselors (Tepper & Haase, 1978; Haase & Tepper, 1972). The camera was positioned over a "stand in" client's right shoulder to provide a naturalistic frame of spatial reference. The distance between the counselor and the camera was approximately 55 inches. This distance was found by Kelly (1972) to have a neutral effect on clients as compared to closer or farther distances. Each videotape segment included 16 counselor statements. The four videotape segment included 16 counselor statements. The four videotape segments represented the four possible combinations of counselor verbal-nonverbal behavior examined in this study, namely: verbal positive, nonverbal positive (V+NV+); verbal positive, nonverbal negative (V+NV-); verbal negative, nonverbal positive (V-NV+); verbal negative, nonverbal negative (V-NV-). Each of the four stimulus combinations was represented by a separate videotape segment.

The written stimulus materials provided to each subject were developed to foster subject identification with the client role. Basi-

cally, the brief description included information relating to the presenting problem (anxiety reaction), personal history (overachiever, divorced parents), and client behavioral characteristics (nonassertive, ingratiating). The client statements, presented to the subjects, were written to interact with the counselor statements presented by way of videotape. Two different sets of client statements were developed to interphase with the positive and the negative verbal statements presented by the counselor. Each set contained 16 client verbalizations, which matched the 16 counselor verbalizations. The client statements were individually photographed and mounted on slides, one slide per counselor verbalization. The slides were projected on a screen just below the videotape monitor, in coordination with the counselor's verbalizations. Since the tape segments involved an uninterrupted view of the counselor from beginning to end projecting the client statements in the preceding manner allowed the subjects to view the counselor peripherally while reading the client statements. This procedure was similar to a naturalistic encounter in which the speaker can view the listener while speaking.

Validation of Stimulus Materials: Validation of the verbal and nonverbal videotaped stimuli of the counselor was done using undergraduate students as judges inasmuch as the experimental subjects would also be undergraduates. Trained counselors were not used in the validation procedure because cues of attitude for a counselor might not be cues of attitude for the client/subjects (Elliott, 1979).

Sixteen males and 16 females, naive to the task, volunteered for the validation of the nonverbal behavior of the videotaped counselor. They were randomly assigned to one of four groups with each group containing four males and four females. Each group viewed just one of the four possible tapes (V+NV+, V+NV-, V-NV+, V-NV-). They received written instructions prior to exposure which briefed them of the purpose of the procedure, defined nonverbal behavior, and instructed them to disregard the actual verbal content of the counselor. The judges viewed their given tape twice before evaluating the nonverbal attitude of the counselor. The evaluation instrument was an 11 point Likert scale anchored with the statements "very positive attitude" and "very negative attitude" in a counterbalanced fashion. Individual t-test comparisons made between each pair of groups indicated that each of the two positive nonverbal tapes were significantly different ($p<.05$), in the predicted direction, from each of the two negative nonverbal tape segments. Moreover, no significant differences were found between the homogeneous nonverbal conditions (NV+ vs. NV+, NV- vs. NV-). An inspection of the mean scores revealed that all of the nonverbal messages were of approximately the same stimulus intensity. No gender differences with respect to the interpretation of counselor nonverbal behavior were found among the judges.

Four males and four females evaluated the counselor attitudes conveyed by the verbal content channel. The judges reviewed three positive and three negative sets of counselor-client dialogue which were presented to them in counterbalanced order. After reading each script the judges

evaluated the conveyed attitude on an 11 point scale identical to the one used for the nonverbal validation described above. After tabulating the results one positive and one negative script was selected on the basis of comparable stimulus intensity. Not only were the selected dialogues approximately equivalent to each other in terms of stimulus intensity, they were also approximately equal to the stimulus intensity of the validated counselor videotaped nonverbal stimuli selected for the

The selection of both verbal and nonverbal stimulus materials of equal attitude intensity was done to control for the effects of this variable. Argyle, Alkema, and Gilmour (1971) found that unbalanced stimulus intensity between the verbal and nonverbal channels of inconsistent messages can determine the mode of resolution with the channel conveying the strongest attitude being the more valued or impactful one.

The believability of the stimulus materials was assessed by one doctoral and one master's level psychologist, both of whom were employed full-time in an applied setting. Each had more than eight years experience supervising professional staff and students. They both found all four stimulus conditions to be "very believable" on a three point scale, the other options being "not believable" and "moderately believable".

Dependent Measure: The Regard Subscale of the Barrett-Lennard Relationship Inventory (Barrett-Lennard, 1962) served as the dependent measure and was selected for two reasons. First, counselor regard has been found by Halkides (Note 1) to be highly associated ($p<.001$) with the criterion of therapeutic success. Secondly, since the current study investigated

the decoding of verbal and nonverbal counselor attitude it was important to select an instrument sensitive to variations in counselor attitude toward a client/subject. The Level of Regard Subscale specifically yields a quantitative score regarding the affective aspect of one person's response to another (attitude).

The test-retest reliability of the Barrett-Lennard (Note 2) was found to be from +79 to +.89 on the various subscales with a coefficient of +.85 on the composite or overall scale score. Validity has been suggested by several studies which determined the ability of the inventory to detect the variables which it is purported to measure (Clark & Culbert, 1965; Gross & DeRidder, 1966; Emmerling, Note 3). The complete form of the Barrett-Lennard Relationship Inventory was administered in the current study to avoid compromising the validity and reliability of the instrument.

Procedure: The subjects, by cell, interacted with the videotape segment in small groups ranging from two to eight subjects per administration. The subjects, upon their arrival at the site of the experiment, were seated at a rectangular table so as to assure equal visibility for each subject present. A videotape monitor with a poster sized screen immediately below it was positioned at one end of the table.

After the seating was completed, written copies of the procedural instructions were given to the subjects. The instructions explained that the purpose of the experiment was to discover the subject's impressions of participating in a counseling interaction and instructed the

subjects to identify with the client role as if they were actually seeking help for a difficult personal problem. Following the reading and signing of a participant consent form subjects were presented a written description of the client and client problem. The brief description included the presenting problem, history, and characteristic behaviors. After reading the client description the subjects were administered the Spielberger State Anxiety Inventory.

This administration was followed by the enactment of the videotape procedure. Essentially, the subjects were asked to view the videotape. At the end of each counselor statement, an auditory "beep" signaled the subjects to look to the screen directly below the videotape monitor and read the client response projected there. The 16 counselor verbalizations (audio) and client (visual) responses followed in an integrated sequence. After viewing the videotape, the subjects completed the Barrett-Lennard Relationship Inventory, were debriefed and dismissed.

Results: A 2x2x2x2 completely crossed factorial design (ANOVA) was used to analyze the data. Planned comparisons were made to test hypotheses not specifically examined by the factorial ANOVA technique. The Dunn's Technique was used for additional post hoc comparisons. In addition, variance components were calculated. Both the planned comparisons and the calculation of the variance components followed procedures outlined by Keppel (1973).

The results of the 2x2x2x2 factorial ANOVA appear in Table 1. Significant main effects were found for both the verbal, $F(1,112)=$

36.5,$p<.001$, as well as the nonverbal, $F(1,112)=28.64, p<.001$, variables. An estimate of variance components revealed that the verbal main effect accounted for 19% of the total variance concerning the judgement of regard while the nonverbal main effect accounted for 14%. A comparison of the variance components suggested approximate equivalency of variability in judged counselor regard between the verbal and nonverbal cues. No main effects for anxiety or gender were found. In addition, no interactions were significant.

The first hypothesis predicted that the nonverbal component would be significantly more impactful in the high anxiety condition as compared to the low anxiety condition across gender levels. Thus, an interaction between anxiety x nonverbal x verbal was predicted. The hypothesis was not supported, $p>.05$.

The second hypothesis predicted that the nonverbal component would fail to be significantly dominant across anxiety levels, a null prediction derived directly from the theory base. The hypothesis was supported, verbal x nonverbal interaction, $F(1,112)=1.11, p>.25$. A planned comparison between the inconsistent messages (V+NV- vs. V-NV+) also yielded no significance, $F(1,62)=.24, p>.25$, which supported no channel dominance for the inconsistent messages considered separate from the consistent messages.

Hypothesis three contrasted the communicative impact of consistent channel communications with the channel discrepant messages. It was predicted that the consistent messages would be superior in communicating regard. The planned comparison results failed to support, $p>.05$.

A post hoc analysis of the various verbal-nonverbal combinations (V+NV+, V+NV-, V-NV+, V-NV-) illustrated the comparative effects of each combined message. The means for each message, across gender and anxiety levels, are shown in Table 2. An analysis of possible pairwise comparisons of combined messages, using Dunn's multiple comparison technique, indicated that the channel discrepant counselor messages (V+NV- vs. V-NV+) are not significantly different, $p>.05$, when compared to each other. However, all of the remaining five comparisons were statistically significant. The specific results are available from Table 2.

A t-test of Spielberger state anxiety scores compared the low and high trait anxiety groups and indicated that the two groups differed significantly, $p<.005$, on the state dimension as well. The state measure was administered to the subjects during the experimental procedure just prior to exposure to the stimulus tapes.

DISCUSSION

The results of the current experiment failed to support the hypothesized interactive relationship among the verbal channel of communication, the nonverbal channel, and subject trait anxiety. Drawing from Easterbrook's (1959) cue utilization (drive) theory it was predicted that high trait anxiety would influence the decoding of verbal and nonverbal counselor cues with the nonverbal channel dominating in terms of communicating counselor regard.

The lack of significance could have been due to several things. First, it is possible that the failure to find the predicted results could have been due to factors which fall outside the range of drive theory (Glover & Cravens, 1974) and, instead, related to Spielberger's (1970) state-trait constructs of anxiety. For example, O'Neil, Spielberger, and Hansen (1969) found that a comparison between discrepant subject state and trait anxiety groups (high state, low trait vs. low state, high trait) yielded a wider performance differential than that found between a consistent low group as compared to a consistent high group. The current study contrasted subjects that represented the consistent conditions.

An alternative explanation might involve the lack of an external source of stress such as social evaluation. Gorsuch and Spielberger (1966) showed that individual differences in anxiety are not enough to influence performance. The subjects must, in addition, have an awareness of the correct response-reinforcement contingency. Gorsuch and

Spielberger suggest that this awareness of "correct" behavior induces cognitive performance worries which are disrupting to actual performance. However, the presence of response-reinforcement contingencies seems to be contradictory to the concept of unconditional positive regard in client-centered therapy. Since the current experiment used the client-centered approach in the experimental situation, perhaps the use of this type of therapy reduces performance anxieties with the result that clients do not experience impairments or distortions relative to decoding counselor communications through the verbal and nonverbal channels.

Another explanation for the current results could involve the uncontrolled effects of subject representational styles (Grinder & Bandler, 1976). Grinder and Bandler suggested that persons, when experiencing anxiety, tend to perceive environmental cues commensurate with a dominant sensory system. In the case of auditory digital dominance the focus is on symbolic rational cues which are consistent with the verbal content channel of the current study. Visually dominant persons tend to focus on visual cues such as facial expressions and head movements, the nonverbal channel of the current study. Subsequently, verbal or nonverbal channel dominance could depend on an interaction between anxiety and individual decoder differences relating to the auditory digital and visual representational systems.

No gender differences were found relative to the decoding of counselor verbal-nonverbal communication of regard. This aspect of the current experiment was exploratory in nature so no specific predictions were made. The lack of difference suggests that both male and females

make the same interpretation of combined counselor verbal-nonverbal cues as they (the cues) relate to the communications of attitude or regard.

Hypothesis two, which predicted the lack of nonverbal channel dominance across anxiety levels, was confirmed. This finding is consistent with Reade and Smouse's (1980) results which also failed to find nonverbal channel dominance for both the cognitive and the affective counselor orientations. Moreover, the current study found that the communicative impact of each channel was approximately equal. The estimate of variance components revealed that the verbal channel accounted for 19% of the total variance while the nonverbal channel accounted for 14%. However, this channel equivalency finding is contradictory to previous research (Tepper & Haase, 1978; Beatty & Beatty, 1976) which found either verbal or nonverbal channel dominance. Perhaps, the current finding can be best understood in light of Argyle, Alkema, and Gilmour's (1971) results. They found that the key factor in the resolution of channel discrepant messages was the relative strength of the attitude conveyed by either channel, not the channel itself. The current study controlled for the effect of attitude intensity by selecting verbal and nonverbal stimuli of approximately the same level of attitude intensity across the four different combined messages (V+NV+, V+NV-, V-NV+, V-NV-). Thus, the lack of channel dominance found by the current study is easily understood in terms of stimulus intensity considerations. A post hoc methodological review of several studies which found channel dominance (Beatty & Beatty, 1976; Graves & Robinson,

1976; Johnson, McCarty, & Allen, 1976; Haase & Tepper, 1972; Mehrabian & Ferris, 1967; Mehrabian & Weiner, 1967; Tepper & Haase, 1978) revealed that none of these studies reported controls for both verbal and nonverbal attitude intensities.

Consistent with the finding of channel equivalency in the interpretation of combined verbal-nonverbal counselor messages were the values yielded by each of the four combined messages (V+NV+, V+NV-, V-NV+, V-NV-). The consistent positive message communicated high levels of positive regard, the consistent negative communicated high levels of negative regard with both the channel discrepant messages communicating neutral regard values. This pattern of results suggest an additive method of interpretation with the attitudinal values of each channel (positive or negative) being summed to yield the final composite interpretive value.

A comparison of consistent messages with channel discrepant messages failed to yield significance. This finding failed to support Graves and Robinson (1976) who found that inconsistent messages were perceived more negatively than consistent messages of both a positive and negative nature. Again, channel attitudinal intensity factors could explain this difference in findings since Graves and Robinson failed to control for this variable. Alternatively, it is possible that the difference might be due to a lack of correlation between the dependent measure of counselor genuiness used in Graves and Robinson's study and counselor regard which was the dependent measure for the current study (Barrett-Lennard, 1962).

The implications of the results of this study to counseling practice are straightforward. The findings suggest that what a counselor says

and how it is said are both equally important factors in the communication of counselor regard. Subsequently, a counselor should maintain awareness of the respective attitudes expressed by both the verbal and nonverbal channels.

The results of the current study indicate that mixed messages (V+NV-, V-NV+) resulted in the communication of neutral regard while the consistent negative message (V-NV-) conveyed negative counselor regard. Care should be taken when applying these results to practice for several reasons. First, a counselor who has previously established a strong positive relationship with a client (as compared to the brief interaction of the current study) might not destroy the established overall level of positive regard by communicating an infrequent V-NV- message. Possibly, the opposite at times could be true. For example, if a counselor expressed verbal and nonverbal anger (V-NV-) toward a client for engaging in self-destructive behavior the client might perceive this message as being high in positive regard, a genuine caring for the well-being of the client. Also the long term and frequent use of inconsistent counselor messages, which communicate neutral regard (not caring or caring) might actually result in less than a neutral relationship since the client would fail to experience the counselor in a genuine way.

Limitations of the current study involved the analogue methodology, the use of only university students as subjects, and the inclusion of limited nonverbal cues. Also, the results can be generalized only to male counselors in a dyad relationship with male or female clients.

Further research might investigate the relationship between anxiety and the neurolinguistic representational styles of decoders comparing dominant auditory digital subjects with dominant visual subjects relative to the decoding of counselor verbal-nonverbal messages.

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TABLE 1

Analysis of Variance of Level of Regard Scores

Source	SS	df	MS	F
Gender (A)	887.26	1	887.26	3.01
Anxiety (B)	484.39	1	484.39	1.64
Verbal (C)	10749.45	1	10749.45	36.50 *
Nonverbal (D)	8433.76	1	8433.76	28.64 *
AxB	182.88	1	182.88	.62
AxC	446.25	1	446.25	1.51
AxD	395.51	1	395.51	1.34
BxC	524.06	1	524.06	1.78
BxD	10.69	1	10.69	.04
CxD	328.32	1	328.32	1.11
AxBxC	.02	1	.02	.00007
AxBxD	53.82	1	53.82	.18
AxCxD	178.13	1	178.13	.60
BxCxD	130.01	1	130.01	.44
AxBxCxD	328.30	1	328.30	1.11
ERROR	32984.88	112	294.50	

*p<.001

TABLE 2

Means, Standard Deviations, and Multiple Comparison Results of Barrett-Lennard Level of Regard Scores

Letter of Denotation	A	B	C	D
Condition	V+NV+	V+NV-	V-NV+	V-NV-
Barrett-Lennard Regard Mean Score	73.3	60.3	58.2	38.8
Standard Deviation	12.6	13.4	14.7	20.2
Results of Multiple Comparisons	BCD*	AD	AD	ABC

*The means of the letters atop columns are significantly different ($p<.05$) from the condition of reference shown at the bottom of each column.

APPENDIX A

PROSPECTUS

I. Problem Statement

It is generally accepted that there is a strong interaction between the verbal and nonverbal channels of counselor communication. The implications for counseling theory, practice, and research are evident. Haase and Tepper (1972), Strong, Taylor, Bratton and Looper (1971), and Smith-Hanes (1977), suggested that more attention be given to nonverbal factors in the training of counselors. As support for this notion Tepper and Haase (1978) found that the specific facilitative conditions of genuineness, empathy, and regard are communicated more through nonverbal means than by counselor statements. A knowledge of nonverbal factors can also assist the counselor in interpreting the possible meanings of client nonverbal behaviors (Ekman & Friesen, 1969).

Since total communication in counseling can be conceptualized in terms of discrete verbal and nonverbal channels such as verbal content, paralanguage (voice characteristics), posture, eye contact, and facial express (Key, 1975), there is the possibility that the discrete components may be contradictory to each other in terms of counselor attitude conveyed. In this case the client must, in some way, resolve these simultaneous contradictions in communication.

Several studies indicate that persons tend to resolve such channel discrepant messages by finding the nonverbal channels more salient or believable in terms of the total message conveyed (Haase & Tepper, 1972; Mehrabian & Ferris, 1967; Mehrabian & Weiner, 1967; and Tepper & Haase, 1978). However, several researchers who investigated nontypical populations or special conditions found the opposite to be true, that is resolution was achieved towards the verbal channel (Argyle, Alkema & Gilmore, 1971; Bugental, Kaswan, Love & Fox, 1970; and Johnson, McCarty & Allen, 1976). Obviously, there are mediating variables in operation that tend to affect the interpreting process that have yet to be investigated.

A recent study by Reade (Note 1) points again to inconsistencies in resolution between the verbal and nonverbal channels in the face of channel discrepant messages. Reade investigated the effect of counselor response style on the decoding of consistent-inconsistent counselor messages. He found that although the counselor confrontive response orientation resulted in dominant nonverbal impact, this dominance was not found for either the cognitive or the affective counselor orientations. Reade suggested that the differential effect could have been due to the increased client arousal or stress that is associated with counselor confrontation. Carkhuff (1967) states "in a very real sense the therapist (by confronting) precipitates a crisis for the client (p. 152)." Thus, the implication is that the level of subject arousal/stress could have served as

a mediating variable that leads to the differential decoding of verbal and nonverbal cues.

According to Easterbrook (1959) increased arousal is associated with perceptual focusing that results in reduced cue utilization. Perhaps, with arousal, the verbal cues tend to be perceptually excluded with the end result being nonverbal dominance. Since client arousal is a common occurrence in counseling as a result of self-disclosure (Moxnes, 1974) as well as other factors, it would seem significant to investigate the effect of client arousal/stress on the decoding of consistent-inconsistent verbal-nonverbal channels in a counseling context. Such is the purpose of the present study.

II. Literature Review

A. Introduction

The following section is a review of the research pertinent to the current study. Several different content areas seem to have particular relevance to the current study and each will be separately reviewed and identified by subheadings. These areas include, in the order of their appearance, general issues of nonverbal research, paralanguage, eye contact, facial expressions, stress/arousal, and videotape as a mode of stimulus presentation.

B. General Issues of Nonverbal Research

Nonverbal researchers have taken different stances concerning the issue of what behaviors should be included within the domain

of nonverbal communication. There is the broad view represented by Hall (1968) and Birdwhistell (1970) which purports that nonverbal communication includes everything that takes place in interpersonal communication except for the words used. A more narrow view is taken by MacKay (1972) who distinguishes between nonverbal communication and nonverbal behavior on the basis of the conscious intent on the part of the communicator. Gladstein (1974) suggests that the conceptual view (narrow vs. broad) held by researchers determines the form of the research produced. For example, a researcher who holds a broad view would tend to study the simultaneous effects of several channels of nonverbal behavior. Conversely, the belief in a narrow view would dictate research of a more circumscribed nature with the investigation focusing on perhaps just one channel. Most researchers, however, seem to take a middle approach with the result being a generalized focus on three major areas of nonverbal research, kinesics, proxemics, and paralanguage.

There are differing opinions held concerning the function of nonverbal behavior. These differences seem rooted in whether nonverbal behavior is seen as being of cultural or biological origins. The biological point of view suggests that nonverbal behavior is a more primitive regressive form of communication. Tomkins (1962) proposed that for each emotion there are particular firings of neurons for which the proprioceptive feedback provides the basis for our experience of emotion. The cultural view was advocated

by Birdwhistell (1963) when he stated "There are probably no universal symbols of emotional state," p. 126. Ekman and Friesen have done extensive research related to this cultural-biological controversy (Ekman, 1972; Ekman & Friesen, 1969, 1971). Their findings suggest that the facial expressions of emotion are "universal." However, cultural expectations may determine how and when they are expressed.

Ekman and Friesen (1969) proposed five basic functions associated with nonverbal behavior which follow:

1) Repetition - a nonverbal behavior confirms and reinforces a verbal expression.

2) Contradiction - nonverbal behavior contradicts a verbal expression as in sarcasm.

3) Complement - nonverbal behavior is consistent with and adds fidelity to a verbal expression.

4) Accent - nonverbal behavior can serve to emphasize certain aspects of the verbal expression.

5) Regulate - nonverbal behavior serves to regulate communication especially through the use of eye contact and gestures.

The major areas of nonverbal research include kinesics, paralanguage, and proxemics (Gladstein, 1974). Kinesics refers broadly to body movement, paralanguage to the noncontent aspects of speech, and proxemics to aspects of spatial orientation and physical distance in the context of an interpersonal situation.

Since the current study will only be concerned with the nonverbal behaviors of paralanguage, facial expression, and eye contact, these channels will be the only aspects of nonverbal behavior to be reviewed in subsequent sections of this general review. In addition, the research concerning nonverbal channel discrepant messages will be reviewed because of the obvious implications to the current study.

C. Paralanguage

Paralanguage generally refers to the noncontent aspects of speech. According to Key (1975) paralanguage refers to:

> ...some kind of articulation of the vocal apparatus, or significant lack of it, i.e., hesitation, between segments of vocal articulation. This includes all noises and sounds which are extra speech sounds such as hissing, shushing, whistling, and imitation sounds, as well as a large variety of speech modifications such as quality of voice (sepulchral, whiney, giggling), extra high-pitched utterances, or hesitations and speed in talking. (p. 10)

Another way that paralanguage can be conceptualized is in terms of temporal aspects such as reaction time latency, interruptions, duration of utterance, and simultaneous speech (Matarazzo & Wiens, 1972).

One of the major findings of paralinguistic research involves the relationship between vocal characteristics and the communication of attitude. Mehrabian (1972) introduced the following formula which indicated the weighted coefficients for the verbal, vocal, and facial channels in the communication of attitude: A total = 0.07 A (verbal) + 0.38 A (vocal) + 0.55 A (facial). As can be

readily seen the vocal (paralinguistic) component accounts for much more variance in the communication of attitude than the verbal (content) channel. Mehrabian (1971) found a positive relationship between pleasantness of the vocal component and affiliative behavior. Mehrabian and Ksionzky (1972) found that a pleasant voice was associated with ingratiating behavior. They further found that responsiveness to others was judged to be associated with increased vocal activity and speech volume. Bugenthal's (1974) results indicated that vocal pauses, choosing words carefully, was seen by judges as evidence of low speaker credibility. Conversely, a spontaneous voice was seen as being indicative of high speaker credibility.

Paralanguage research has established a firm relationship between vocal characteristics and the emotional state of the speaker, especially if the emotion is anxiety. Thompson and Bradway (1950) simulated a psychotherapy interview and had speakers recite numbers with appropriate inflections to indicate the felt emotions. Listeners were able to match the voice recordings to the particular emotions conveyed by the speakers. Jurich and Jurich (1974) found that there was a positive relationship between GSR levels (finger sweatprint measure of anxiety) and the tone of voice. Friedhoff, Alpert, and Kurtzberg (1962) investigated the association between the intensity of spoken words to emotional arousal. Subjects verbalized the word "no" to words that were presented visually to them. The findings indicated an increase of subject vocal intensity when the

subjects were presented words that were, presumably, emotion arousing. However, this finding was obtained only when a masking noise prevented the subjects from perceiving their own vocal characteristics. Costanzo, Merkel and Costanzo (1969) instructed students to read five different paragraphs with themes of anger, indifference, contempt, love, and grief. They were asked to read the paragraphs as if they were an actor. Judges then rated the voices in terms of peak-tempo, peak-pitch, and peak-loudness. Voices rated highest on peak-pitch were associated with love and grief, peak-loudness was associated with anger and contempt, and peak-tempo was associated with indifference.

Many studies have investigated the paralinguistic characteristics of counselors, an especially relevant area of interest for the current study. Duncan and Butler (1968) compared the paralinguistic characteristics of counselors during peak and poor psychotherapy hours. The peak interviews were associated with normal vocal stress with open voice, normal stress with oversoft intensity and overflow pitch, and nonfluencies (except for filled pauses). These characteristics can be qualitatively described as exhibiting warmth, seriousness, and relaxation. The poor interviews were associated with flat stress, normal stress with oversoft intensity and normal pitch, and inappropriate stress. Thus, qualitatively, in poor interviews the counselor's voice conveyed an uninvolved attitude to the client. Ornston, Cicchetti, Levine and Fierman (1968) found that experienced counselors were more verbally productive as com-

pared to novice counselors. Strupp and Wallach (1965) discovered that increased counselor verbal productivity was associated with the facilitative condition of empathy. Hargrove (1974) found that the latency of the counselor verbalization, after a client statement, was a strong predictor of counselor empathy. Rapport and the length of the counselor response was found to be positively correlated by Seals and Prichard (1973).

In summary, paralinguistic studies indicate that various vocal characteristics are associated with the communication of attitude. The emotional state of the speaker can be reliably judged on the basis of vocal cues, especially if the emotional state is anxiety. And, finally, counselor vocal characteristics vary from peak to poor interviews and are associated with the communication of counselor empathy and the establishment of rapport.

D. Level of Gaze

Cranach (1971) has compiled a list of terms and definitions that accommodates the findings in the research literature. The following list of seven terms emerged as major looking behaviors:

1) Onesided look - gaze by one person in the direction of another's face.
2) Face gaze - directing of one person's gaze at another's face.
3) Eye gaze - directing of one person's gaze at another's eyes.
4) Mutual gaze - two person's gaze at each other's face.

5) Eye contact - two person's look into each other's eyes and are aware of each other's eye gaze.

6) Gaze avoidance - avoidance of another's eye gaze.

7) Gaze omission - failure to look at another without intention to avoid eye contact.

Varying levels of eye contact have been found to influence the personal characteristics attributed to the looker by observers. Wiemann (1974) had subjects interview four confederates who gazed at them 100, 75, 25, or 0% of the time. As gaze decreased they were rated as less friendly. Kleck and Nuessle (1968) instructed subject/observers to rate a film depicting a male confederate who gazed at a male interviewer either 80 or 15% of the time. The high gaze condition was rated as more attractive and less tense. La Crosse (1975) trained confederates to engage in affiliative and non-affiliative behavior which included either 80 or 40% eye contact, respectively. Subjects rated the affiliative behavior as more attractive and persuasive citing the frequency of eye contact as a primary cue. However, too much eye contact has been found to be anxiety producing or can cause the perceiver to avoid engaging in mutual eye contact (Ellsworth & Ludwig, 1972).

Gaze has also been found to indicate levels of attractiveness or liking. Kleck and Rubenstein (1975) varied the physical attractiveness of females by the changing of hairstyles and makeup. The high attractive condition was associated with higher levels of gaze from males. Mehrabian (1968) had subjects role play an

interaction with an imaginary addressee. The subjects were instructed to attribute five degrees of liking to the imaginary person. Gaze was lowest for the most disliked addressee, maximal for meutral liking, and slightly less for intensely liked addressees. Mehrabian suggested that perhaps gaze decreases with dislike and decreases with degree of unfamiliarity. Scherer and Schiff (1973) instructed judges to rate the intimacy level of confederate couples who presented either high or low levels of mutual gaze, touching behavior, or referring to each other by name. The results indicated that gaze was the primary indicator for judged level of intimacy.

Important sex differences have been established for frequency of gaze. Females tend to engage in more overall looking than males; that is looking while talking and looking while listening (Exline, Gray, & Schuette, 1965; Levine, Note 2; and Levy, Note 3). Libby and Paklevich (1973) noted the greatest levels in mutual gaze were found in female/female pairs. Argyle and Ingham (1972) found greater eye contact in same sex pairs with less in male/female pairs.

Studies of gaze in a counseling relationship has indicated that level of gaze interacts with counselor style (Tipton & Rymer, 1978) and with interviewee level of self-disclosure (Ellsworth & Ross, 1975). Tipton and Rymer found, specifically, that eye contact may be particularly importnat in the context of a problem-

focused style. Ellsworth and Ross found that either a continuous or contigent interviewer gaze was associated with more intimate interviewee speech.

In summary, it seems that level of gaze is an important cue in interpersonal relationships. The level of gaze seems to be related to how the looker is judged in terms of personal characteristics. Further, attractiveness and liking seem to be positively related to increased looking behavior. Sex differences in looking behavior are pronounced with females engaging in looking behavior more frequently than males. Finally, gaze seems to be related to counselor therapeutic style and the level of self-disclosure that the client engages in.

E. Facial Expressions

Key (1975) listed the following major components of facial expression that have had relevance to nonverbal research.

1. forehead/brow - normal, raised, lowered, contracted (knit--troubled--vertical furrows), single brow raised, wrinkled brow (horizontal furrows)

2. eyes - normal (straight ahead), raised, lowered, to side (averted), wide open, narrowed (squint), rolling, wink/blink/closed

3. nose - normal, dialated (expanded, flare--unilateral, bilateral), wrinkled nose, twitching nose

4. cheecks - inflated (puffed), sucked in, trembling, tongue in cheek

5. mouth - normal, relaxed (droopy), tense (set, compressed), corners up, corners down, retracted (withdrawn), pout (puckered, pursed, protracted), open (smiling), open (gapping), curled lip (scornful)

6. tongue - sticking out tongue, rolling tongue, drooling tongue, lip lick

7. teeth - clenched teeth, lip bite

8. chin - anterior thrust, lateral thrust, drop (jaw drop), jaw movement (chewing) (p. 85)

Ekman and Friesen (1971) state that the face is a major site of the affect displays. They further suggest that there is neural linkage of the facial muscles as affect programs, which are capable of being innervated by both the voluntary and the involuntary systems. This proposition is consistent with Ekman and Friesen's view that the facial display of emotions is due to both biological and cultural influences. The pancultural view has been supported by several studies (Ekman, Friesen, & Ellsworth, 1972; Izard, 1969; Triandis & Lambert, 1958). All the studies have taken basically the same approach. Pictures of facial expressions were shown to subjects from different cultures with the instruction to decode the emotion conveyed. Substantial agreement was found for subjects representing a total of 11 different cultural/national backgrounds.

Consistent with the biological view concerning the involuntary innervation of facial muscles is the finding of "micromomentary facial expressions." Haggard and Issacs (1966) discovered facial displays of emotion lasting from one-eighth to one-fifth of a second while viewing psychotherapy tapes in slow motion. These displays are too rapid to be normally consciously perceived and were found to be contradictory to the facial display held constant. Haggard and Issacs found that the high speed facial displays were associated

with conflictual feelings and impulses experienced by the client. Ekman and Friesen (1969) found that micro-displays occur during intentional deception and are not subject to conscious control. The displays were found to communicate emotional meaning when viewed in slow motion. Further, observers could be trained to detect and decode the micro-displays without the benefit of slow motion viewing. Schwartz (1974) attached electrodes to four facial muscles (the corrugator, frontalis, depressor anguli oris, and the masseter). The subjects were then instructed to think of joyful, sad, or angry experiences. No visual differentiation was possible but the electronic readings permitted accurate differentiation of the feeling states.

Correlations between facial features and pathological emotional states have been shown. Heimann (1967) measured the left-right facial symmetry of normals, schizophrenics, and subjects receiving LSD and experiencing mental stress. Films of the subjects were examined every tenth frame for static facial positions. The results suggested decreased symmetry for the schizophrenic and LSD groups. Waxer (1974, 1976) found that psychological depression correlated positively with downward head and mouth angle.

The facial component seems to be a focal channel of communication in counseling. Mehrabian and Ferris (1967) found that the facial component dominates the vocal (paralanguage) in terms of attitude conveyed. Shapiro, Foster, and Powell (1968) indicated that the therapeutic attitudes are communicated more by facial cues

than postural cues. Further support for the dominance of facial over postural cues was provided by Dittman, Parloff, and Boomer (1965).

The relationship between facial cues and the counseling factors of interviewer warmth and client self-disclosure was suggested by the following two studies. Bayes (1972) looked at observer's ratings of interviewer interpersonal warmth and correlated this rating with specific behavior observed from a videotape of an interview. The rate of smiling correlated highest with interpersonal warmth ($r = .67$), followed by the frequency of positive statements about others. Hackney (1974) examined the effect of listener's nonverbal behavior on client level of self-disclosure (measured by the frequency of self-referents and affective statements). Female subjects were instructed to engage in a five-minute monologue to a listener on a videotape screen. The listener engaged in one of the following behaviors: no expression, head nods, smiles, head nods and smiles. The results indicated that when the listener was female head nods, smiles, and head nods and smiles facilitated self-disclosing behavior. However, when the listener was male smiling served to inhibit the female subject's self-disclosing behavior.

In summary, facial expressions are considered a primary source for determining the emotional state of the encoder. The evidence points to both cultural and biological contributions in regard to facial affect expressions. Concerning counseling several findings are pertinent. Micromomentary facial expressions have been

identified and seem to be associated with emotional conflict or attempts at deception. Specific facial expressions have been associated with psychopathological states. In regard to the process of counseling, facial cues seem to contribute to the communication of therapeutic attitudes and effect the level of client self-disclosure.

F. Inconsistent Communications

Inconsistencies of attitude conveyed by the verbal and nonverbal channels of communication have been frequently referred to in the literature as relating to the double bind notion of neurosis (Haley, 1963) and schizophrenia (Bateson, Jackson, Haley & Weakland, 1956). Vetter (1969) suggested that channel discrepancy could serve as a promising research approach to investigating the sort of contradictory messages elucidated by double bind theory. However, Abeles' (1976) description of the double bind does not compare to the oversimplified notion of channel discrepancy. She states "(the double bind) is an interactional pattern characterized by severe limitations imposed by paradoxical communication in an intensely important relationship which results in an untenable situation, but one from which its participants are unable to extricate themselves," p. 114. One might ask then if channel discrepancy or inconsistencies might represent the paradoxical communication mentioned above. Waltzawick (1965) in distinguishing paradox from contradiction suggests that contradiction avails a real choice of one of the alternatives, paradox merely involves the illusion of choice when there is no choice to be made.

It would seem that it might be inappropriate to generalize the results of studies investigating channel inconsistencies to double bind theory, as Mehrabian and Weiner (1967) did when suggesting that their results tended to refute some key double bind constructs relating to the resolution of channel discrepant attitudes. However, the investigation of inconsistent multichannel messages might be important for reasons other than application to double bind theory. For example, Berger (1965) and Le France, Hill and Millmoe (cited in Abeles, 1976) found that parents of schizophrenics send more verbal/nonverbal conflicting messages than do parents of normals. This study was based on subject recall of written verbal/nonverbal contradictions and were asked if they could remember experiencing such messages from their parents. Bugental, Love, and Giantetto (1971) found greater frequencies of verbal/nonverbal contradictions made by mothers of disturbed children as compared to normals. Ferreira (1960) found that parents of delinquent children also engaged in a greater frequency of channel discrepant messages.

There is strong evidence that verbal/nonverbal contradictions are easily resolved. Mehrabian and Weiner (1967) compared inconsistent lexical and vocal (intonation) channels and found that the vocal dominated in terms of total communicative impact. Mehrabian and Ferris (1967) found that the facial component, in turn, dominated the vocal, a finding supported by Bugental, Kaswan, and Love (1970). Further, Mehrabian and Ferris (1967) suggested that the combined effects of simultaneous communicative channels (verbal, vocal,

and facial) are equal to the weighted sum of their independent effects with the nonverbal components (vocal and facial) accounting for 93% of the total communication of attitude.

However, a few studies counter Mehrabian's expressed assumption that the nonverbal tends to dominate the verbal in terns of channel discrepant messages (Mehrabian & Ferris, 1967). Bugental et al. (1970) used videotaped messages containing conflicting inputs, friendly or unfriendly, in regard to verbal content, vocal tone, and facial expression channels. The actors in the tapes included a male and a female across conditions. Criticisms with a smile were interpreted more negatively by children than adults, with the age difference being the most severe for female "joking." Women were rated more negatively, by both adults and children, when expressing conflicting messages. The major implication for this study is that children tend to react to criticism regardless of whether the negative attitude is expressed verbally or nonverbally in simultaneous channel discrepant messages. Newman (1977) investigated the resolution of inconsistent attitudes (verbal/nonverbal) by schizophrenic patients as compared to a matched group of normals. The verbal, represented by sentences, conveyed three degrees of verbal strength (mild, moderate, and strong) used for both the positive and negative conditions. The nonverbal channel, vocal intonation, was held at moderate strength. It was found that schizophrenics experienced more confusion overall and tended to rate inconsistent messages with a negative vocal component as more

confusing than the normal subjects. Newman also found, as did Alkema, and Gilmour (1971) that normals will resolve towards the verbal when the attitude is stronger than that carried by the nonverbal channel. Johnson, McCarty, and Allen (1976) examined incongruent communications (verbal/nonverbal) in the context of negotiation. He found that verbal messages had significantly greater impact than did nonverbal messages.

To summarize, channel inconsistencies in communication may not be representative of the communications discussed in double bind theory. However, higher frequencies of inconsistent channel messages do seem to be associated with parents of schizophrenics, mothers of disturbed children, and by the parents of delinquent children. Thus, the study of channel discrepant messages should have some clinical applications. The research indicates that, generally, people tend to resolve inconsistent channel communications toward the attitude conveyed by the nonverbal. However, several exceptions were found. Children tend to resolve towards negative messages regardless of mode of conveyance (verbal/nonverbal). Resolution towards the verbal channel was found for schizophrenics, subjects in negotiation situations, and for normals when the attitude of the verbal channel is opposite and stronger in terms of attitude strength than the nonverbal.

G. Arousal/Stress

There seems to be no generally accepted definition of stress. Monat and Lazarus (1977), in the introductory chapter of their

book, review many of the conflicting opinions concerning the concept of stress. In turn, they propose the following: "The arena that the stress area refers to consists of any event in which environmental demands, internal demands, or both tax or exceed the adaptive resources of an individual, social system, or tissue system" (p. 3). This is consistent with Monet and Lazarus suggestion that stress can be distinguished into different types; physiological, psychological, or social. For the purposes of this review the psychological and physiological are the more relevant.

Selye (1956) defined physiological stress as "the state manifested by a specific syndrome which consists of all the nonspecifically induced changes within a biological system" (p. 54). The General Adaptation Syndrome (GAS) is a triphasic reaction that occurs regardless of the nature of the stressor involved. The three phases include the initial shock stage (alarm), the resistance stage, and the exhaustion stage. The alarm phase is characterized by the activation of physiologic defense systems in response to a stressor. Thus, there is adrenaline discharged, autonomic excitability, and increase in heart rate, blood chemistry changes, as well as other physiologic adjustments for a flight or fight reaction. In the resistance stage the body mobilizes its defenses to combat the source of stress. The body attempts to return to the homeostatic condition which existed before the stress. If the body is successful some bodily adaptation is achieved. However, if the

resistance stage fails, the final phase of exhaustion is reached. The body returns to the symptoms that existed in the alarm phase. The defensive energy is used up and death can ensue.

A study by Weininger (1954) illustrates some of the physiological damage that can be produced by stress. Rats were randomly assigned to two groups. The first group were stroked for ten minutes a day for three weeks immediately following weaning. The second group received no such treatment but were left in their cages. Later both groups were stressed by being held immobile for a period of time. Upon autopsy the gentled rats showed less cardiovascular damage, had smaller adrenal glands, and fewer stomach ulcers.

Physiological changes seem to be associated with psychological stress. Persky, Hamburg, Basowitz, Grinker, Sabshin, Corchin, Heiz, Board and Heath (1958) studied the effect of a stressful interview of 22 anxiety prone psychiatric patients who were observed by two participant observers who rated their emotional responses. The plasma level of hydrocortisone was simultaneously studied. The degree of increased anxiety, anger, depression, and a combined effect was found to be positively related to increases in hydrocortisone levels.

The interaction between psychological stress and psysiological damage falls within the broad domain of psychosomatic research. Colligan (1975) suggested that virtually all diseases are related to emotional stress. Holmes and Mazuda (1972) provide supportative

results in terms of the interaction between stress and disease. They had 394 persons rate the degree of social readjustment to 43 major life crises. The first five, in order, included death of spouse, divorce, marital separation, jail term, and the death of a close family member. To validate the hypothesized relationship between life crises and stress Holmes and Mazuda conducted a detailed study of 250 Navy personnel aboard three Naval crusiers. Life change data was gathered for six months prior to sailing then health records were examined after the men had been at sea six months. In the first month of the cruise the high risk group (those who had experienced severe life crises before embarking) had nearly 90% more illnesses than the low risk group.

Persky (1953) suggested that there are differences between physical and psychological stress. He indicated that certain physiological measures of stress are only affected by psychological stress. In other words, a person might engage in physical exercise and effect the adaptive mechanism without entering into a stress reaction which could be caused if psychological stress were also present.

The presence of stress seems to lead to changes in subjective experience. Lazarus (1966) reported four indices that indicate the presence of stress; reports of disturbed affects, motor-behavioral changes, changes in cognitive functioning, and physiological changes. Sarason (1960) indicated that there is general scientific agreement that disturbed affect (anger, aggression, fear, and arousal)

accompanies periods of stress. Vinokur and Selzer (1975) studied the effects of stressful life changes on emotional state. They found that the frequency of stressful events was associated with feelings of depression, paranoia, aggression, anxiety, distress, and tension. Mechanic (1962) studied doctoral candidates longitudinally from the period before the doctoral general examination to just after. The subjects reported progressive subjective discomfort before the test that dissipated after the examination. These studies seem to support the viability of self-report as a method of assessing stress.

There seem to be many ways in which people cope with psychological stress. Mechanic (1977) found that joking behavior was positively related to highly anxious subjects preceding an examination. Lazarus (1966) suggested that as the degree of threat increases coping becomes more primitive (i.e., use of projection and denial). Barthol and Ku (cited in Lazarus, 1966) suggest that persons under stress do not merely become more primitive in their adaptation but resort to modes of behavior that have worked for them in the past under similar circumstances. A study by Koriat, Melkman, Averill, and Lazarus (1972) identified some cognitive coping strategies to stress. They found that subjects could consciously exercise control over their emotional reactions to stress. The subjects viewed filmed workshop accidents (i.e., finger severed by a power saw). One group was asked to involve themselves emotionally as much as possible.

The other group was asked to detach themselves from emotonal involvement. The involvement group tended to cognitively imagine that the accidents were happening directly to them. The most commonly used detachment strategy involved the subjects reminding themselves that the scenes were dramatic while focusing on the technical aspects of the film.

Lazarus (1961) suggested that many of the symptoms of neuroses are changes that serve to distort the actual threat of the stressor. He indicated that to prevent the final stage of exhaustion (General Adaptation Syndrome, Selye, 1956) that the person may psychologically reduce the stressor to a level that is biologically tolerable. It would seem that this process of reduction involves, at least in some if not most cases, perceptual distortion. For example, Buss and Brock (1963) found significantly less recall of a negative communication that shock was harmful as opposed to a more positive communication regarding shock. The implication of this study is that selective recall demonstrated the effect of a repressive or suppressive defense which distorted the perceptual process.

This concept of perceptual distortion is consistent with a theory proposed by Easterbrook (1959) which elaborates the relationship between arousal/stress and cue utilization. According to Easterbrook low levels of arousal results in a lack of perceptual focus with both relevant and irrelevant cues being accessible to the perceiver. Moderate levels of arousal/stress result in focusing on relevant cues with the irrelevant cues being excluded. This

interaction results in the highest levels of performance. High levels of stress result in overfocusing with the outcome that relevant cues become excluded with a subsequent drop in performance. The relationship takes the graphic form of an inverted U which, of course, is curvilinear. It is this hypothesized relationship that will be examined in the current study.

The area of stress research is vaguely defined but seems to involve the taxing of the adaptive processes of individual, social, or tissue systems. Stress causes both physiological and psychological changes with there being an interaction between the two. Psychological stress has been related to physiological damage or illness. Different coping devices to stress include joking, neurotic behavior, cognitive restructuring, and psychological defense mechanisms which serve to distort what is perceived. A theory which details the relationship between stress/arousal and cue utilization was summarized and will serve as a theoretical base for the current study.

H. The Use of Videotape as a Mode of Stimulus Presentation

The purpose of this section is to address the issues concerning the stimulus value of videotape as a media. Certainly such information is pertinent to the interpretation of the results of this study since videotape will be used as a mode to simulate a counseling experience for the subjects.

A review of the relevant literature yielded few studies that directly compared the effects of different media forms in a coun-

seling context. English and Jelenevsky (1971) had trained judges compare counselor behavior as presented in audio, visual, and audio-visual modes. They found that counselor empathy was reliably rated (above .50) for all three modia forms. However, no particular media form was found to yield distinctively higher reliability ratings. Baum (1974) studied the perception of client problems as conveyed by various media. The results indicated that subjects who read a client interview would perceive the problem as being more serious and possibly more debilitating than would subjects who perceived the interview via audio or videotape. There were no significant differences found between audio and videotape and the judged degree of client problem.

From the field of jurisprudence Miller, Bender, Florence, and Nicholson (1974) compared the effect of live vs. videotaped presentation of legal evidence to actual jury panels. They found no significant differences between the modes of presentation in terms of attorney credibility, retention of trial related information, and interest or motivation.

Since direct comparison studies of different media, such as the above, are so limited in number and scope perhaps the effect of videotape can be, in part, judged by inference from studies designed to evaluate the effects of videotape on behavior. Mann (1972) examined the effects of the vicarious treatment of test anxiety. When compared with controls significant differences were found suggesting vicarious extinction and counterconditioning. Frankel (1971) found that, for counselor trainees, videotape feedback and modeling was

effective in increasing the frequency of counselor focus on client feelings. Eisenburg and Delaney (1970) found that subject exposure to a model on tape significantly influenced their responses to clients seen on videotape in simulation. Delaney (1969) has proposed a model for counselor training that involves the use of videotapes of clients. Training is achieved by having the trainees respond to the clients videotaped communication.

The preceding selection of studies yielded equivocal results in terms of the question regarding the specific stimulus value of videotape as compared to the other forms of media presentation. However, the results did suggest that videotape presentation does compare favorably with live presentation in terms of the transmittal of information, credibility, motivation of the viewer, and the ability to affect behavioral and emotional change. Certainly, additional research is needed to explore the differences of video vs. live presentation especially since video is being used as a tool for the training of students in counseling as a counseling simulation instrument.

I. Rationale for the Present Study

There are several major reasons why the present study could yield an important contribution to the research literature concerning the decoding of inconsistent messages. These justifications generally relate to the categories of contribution to theory, practice, and counselor training.

Currently, the relevant research indicates two basic findings. One, that discrete communicative cues presented simultaneously carry differential impact in terms of attitude conveyed. In other words, when a contradictory message is expressed the decoder resolves the inconsistency by finding one or more of the cues more believable or salient than the others. Thus, there is a cue dominance effect. The second major finding suggests that several factors seem to determine how the inconsistent message is resolved. These factors include such influences as sex of the encoder, age of the decoder, psychopathological processes in the decoder, and relative strength of attitude conveyed by the verbal vs. the nonverbal channels.

A major problem with this research area involves the lack of a theoretical base to unify and explain the preceding results. The writer purposes to test the utility of Easterbrook's (1959) theory concerning cue utilization relative to arousal. Significant results could be followed by a series of studies investigating the various factors that affect the process of resolution relative to inconsistent messages. Instead of merely producing surface results, as much of the existing literature has done, the focus could shift to the mechanism or process of resolution within the model proposed by Easterbrook. Easterbrook's model seems, on face validity, to be able to accommodate and explain the two major findings listed above in terms of perceptual focusing as the result of arousal and the aspect of cue relevancy for the decoder.

A major contribution of the present study's results to counseling practice could involve counselor insight in terms of which

of his/her communicative channels, verbal or nonverbal, is having the greatest impact upon the client relative to client arousal. With this understanding the counselor could deliberately choose which channel to emphasize fully in attempts to communicate to the client. Essentially, the counselor could utilize client arousal as a cue expecting that the higher the stress/arousal the greater the tendency for the client to focus on the nonverbal components of counselor communication. Lower levels of client stress could indicate to the counselor that the client would be more receptive to verbal content in addition to the nonverbal message.

If this study yields significance then the preceding techniques would be quite useful in communicating as effectively as possible in any number of stressful counseling situations such as building rapport, crisis situations, client anxiety states, and counselor confrontation.

The implications to counselor training are obvious. Counselor trainees could benefit from didactic instruction regarding the current hypothesized relationship. Specific skills training relative to effective communication might involve the area of counselor encoding (verbal and nonverbal), and training relating to the decoding of client stress/arousal levels (i.e., self-report, voice intonation, facial expression, etc.). This training might be best accomplished by role playing with immediate feedback and/or through the use of videotape playback.

III. Method

A. Subjects

The subjects will consist of 32 male and 32 female undergraduate students who will be enrolled in educational psychology at the University of Oklahoma, spring of 1980. They will receive course credit as compensation for their participation. The subjects will be defined in terms of age range after random selection from the available pool. Since previous counseling experience could interact with the experimental variables of this study only counseling naive students will be considered for selection.

B. Stimulus Materials and Design

Stimulus materials for this study will be designed to approximate the experience, for the subjects, of interacting with a counselor in a counseling situation. This will be accomplished by the construction of two separate but interactive modes of stimulus presentation, written materials and videotape. The written materials will serve the purpose of acquainting the subjects with a common client problem and will provide the subjects with client dialogue with which they will be instructed to identify with as if they were a client. The videotape segments will involve a counselor responding interactively with the client dialogue being read by the subjects.

Four videotape segments, each approximately five minutes in length, will reveal only the counselor's head and shoulders to

control for the possible effects of trunk lean, body movements (gestures), and arm and leg postural configurations which have been found to influence jodge's perceptions of counselors (Tepper & Haase, 1978; Haase & Tepper, 1972). The camera will be positioned over a "stand in" client's right shoulder to provide a naturalistic frame of spatial reference. The distance between the counselor and the camera will be approximately 55 inches. This distance was found by Kelly (1972) to have a neutral effect on clients as compared to closer or farther distances. Each videotape segment will include 16 counselor statements. In addition, a bound booklet of index cards containing 16 written verbal statements, each on a separate card, will be constructed. The subjects will read the client responses in sequence following each counselor response on the tape to approximate a typical interactive exchange between counselor and client. The role of the counselor will be portrayed by a male professional actor.

The four videotape segments will represent combinations of two independent variables, the nonverbal counselor message and the verbal counselor message. Each of these two independent variables will be varied two ways which will represent positive and negative counselor attitude. The possible combinations of counselor message will result in the following four stimulus conditions: (a) verbal positive-nonverbal positive, V+NV+, (b) verbal negative-nonverbal positive, V-NV+, (c) verbal positive-nonverbal negative V+NV-, (d) verbal negative-nonverbal negative, V-NV-.

The third independent variable involves subject self-reported stress level. This variable will be varied two ways, high and low stress.

The three independent variables, each varied two ways, will be incorporated into a 2x2x2 factorial analysis of variance design.

The nonverbal component of the counselor message will convey either positive or negative attitude on the basis of voice intonation, facial expressions, and eye contact. These nonverbal channels have been found to be instrumental in the communication of attitude (Argyle & Dean, 1965; Mehrabian & Ferris, 1967; Mehrabian & Weiner, 1967). Positive voice intonation will be defined as representing the qualities of seriousness, warmth, closeness, and concern, with the negative condition characterized by dull, flat, and rather uninvolved vocal intonations (Duncan, Rice, & Butler, 1968). Positive facial cues include a concerned expression (lowered brow) and affirmative head nod with the negative involving side to side head movements and frowning (Fretz, 1966). Positive eye contact will involve the counselor/actor looking directly at the camera for at least 80% of the time with the negative looking condition characterized by less than 20% of the possible time duration (Kleck & Nuessle, 1968).

The verbal component of the counselor message will be scripted to represent either positive or negative counselor attitudes to the client. The positive verbal messages will reflect concern and respect for the client and the client's problems. The negative

verbal counselor messages will convey indifference and a lack of respect for the client and the client's problems.

The third independent variable, high and low subject stress level, will be approximated by the manipulation of subject expectancy. Specifically, upon arrival at the site of the experiment, the subjects will be notified that they will participate in two successive experiments with the first involving the area of counseling. The high stress condition subjects will be told that the second experiment will involve an investigation of pain tolerance. The low stress instructions to the subjects will differ in that the second experiment is described as involving a survey of attitudes towards consumer products. In actuality no second experiment will take place. The Perceived Stress Index (PSI) will be administered to the subjects following the viewing of the counseling videotape to assess the efficacy of the preceding procedure for inducing differential levels of stress in the subjects.

The final stimulus materials for the current study will be developed to facilitate subject identification with the client role. Towards this end a written description of a client and the client's problems will be provided to the subjects. Basically, this brief description will include information relating to the presenting problem (anxiety reaction), personal history (over-achiever, divorced parents, etc.), and client behavior (non-assertive, ingratiating).

C. Validation of Stimulus Materials

The nonverbal behaviors of the videotaped counselor will be rated independently by six undergraduate students. Undergraduates will be used as judges because undergraduates will comprise the subjects for the study. Thus, undergraduate ratings should yield more accurate results regarding the stimulus value of the taped counselor's verbal and nonverbal behaviors.

Six raters, three males and three females, will view all four video segments, in a random order, before any rating is undertaken so that comparisons can be made among the tapes. During the second viewing there will be a pause after each segment to allow the individual ratings to be made. The judges will be asked to rate the nonverbal characteristics of the counselor in regard to the non-verbal attitude conveyed. A separate scale will be used for each of the four conditions ranging from a positive (+)5 to a negative (-)5. The endpoints refer to a very positive (+5) or very negative (-5) attitude conveyed nonverbally by the counselor on tape. A stimulus value mean of at least +3 or -3 will be considered criterial for establishing the validity of the stimulus.

The verbal counselor dialogue will be validated in a procedure similar to the one described above. Six undergraduate students, three males and three females, will serve as independent judges. The judges will be provided six separate written dialogues presented in a counterbalanced order. All of the written dialogues will be read before the rating procedure for comparison purposes. Each

dialogue will be rated separately following the second reading of each. A +5 to -5 point scale identical to the one described above will be utilized. Two of the six dialogues, representing positive and negative verbal counselor attitude, will be selected for use in the study if the criterial limits of a minimum mean of +3 and -3 are attained on the two.

D. Procedure

The eight independent experimental groups will each contain eight subjects, four males and four females. The subjects will, upon their arrival at the site of the experiment, be seated at a long table with dividers placed to separate each subject from the others. The purpose of the dividers is to reduce the possibility of any one subject being influenced by the reactions of others to the stimulus materials. In addition, the dividers could facilitate subject identification with the client role by providing a degree of privacy. The television monitor will be placed at eye level and will be positioned to insure equal visibility to each subject present.

After the seating is completed written introductory comments will be provided to the subjects. They will be informed that two successive experiments will be held. Depending on whether the high or low arousal/stress condition is indicated the subjects will be notified that the second experiment, following the counseling study, will involve, respectively, a study of pain tolerance (high arousal/stress) or a survey of attitudes towards consumer products

(low arousal/stress). The subjects will then receive written instruction regarding the procedure of the counseling study and will be asked to sign a consent to be a participant form after reading the procedure.

The procedure description to be provided to the subjects follows:

> The general purpose of this study involves discovering your impressions of a counselor who will interact with you as if you were a client seeking help for a difficult personal problem. Since it is impractical for each of you to be interviewed by a counselor individually this study will attempt to approximate a counseling experience for you by several means.
>
> You will be asked, initially, to identify as closely as possible with the problems and behavior of a client who will be described in detail for you shortly. Identifying with the client means pretending that you are the client actually living the client's life, feeling the client's feelings, and thinking the client's thoughts, as fully as possible.
>
> After you have achieved a sense of identification with the client role you will be given a booklet of index cards. Each card will contain one verbal statement labeled "client." You are to look to the TV monitor in front of you. The counselor will appear and respond to you as if you were a client. His statement will be followed by a beep which will signal you to open your booklet and read the first client statement silently as if you were saying the words directly to the counselor on the monitor. After reading the first client statement you are to look back to the TV monitor. The counselor will respond to the client statement just read. After the counselor's response a beep will again sound which will signal you to read the second client statement. This procedure will continue for several minutes and will be similar to a real counseling session for you except your (the client's) statements will be provided to you.
>
> Once the videotape segment has been viewed in its entirety you will be asked to complete two brief pencil and paper questionnaires.

Following the signing of the consent form subjects will be presented the description of the client and client problem. The brief description includes the presenting problem, history, and chara-

cteristic behaviors. After reading the client description the subjects will be reviewed concerning the procedures of the study. The review will be followed by the procedure being enacted.

The Perceived Stress Index (PSI) will be administered immediately following the viewing of the videotape. The PSI administration will be followed by the Level or Regard Subscale of the Barrett-Lennard Relationship Inventory. Upon completion of these two measures the subjects will be fully debriefed and dismissed.

E. Hypotheses

1. The major hypothesis of this study is that the nonverbal channel of communication will be significantly more impactful in the high stress condition as compared to the low stress condition. That is, it is predicted that a significant (.05 level) interaction will be found between level of stress and the nonverbal channel of counselor communication of counselor regard.
2. Conversely, the verbal channel will be significantly less impactful in the high stress condition as compared to the low stress condition. Thus, it is hypothesized that there will be found a significant (.05 level) interaction between level of stress and the verbal channel of counselor communication of counselor regard.
3. It is predicted that the consistent positive counselor communication (V+NV+) will yield a significant (.05 level) difference as compared to the consistent negative counselor message (V-NV-)

with the positive message producing higher levels of counselor regard across stress conditions.

4. Since previous research has indicated that the nonverbal channel of communication tends to dominate the verbal channel in inconsistent messages it is predicted that the positive nonverbal inconsistent message (V-NV+) will yield a significantly higher (.05 level) counselor regard mean score than the negative nonverbal inconsistent message (V+NV-) across stress conditions.
5. It is hypothesized that there will be a significant (.05 level) interaction found between the verbal and nonverbal channels of counselor communication. That is, as the verbal channel becomes more communicatively impactful the nonverbal channel will be proportionately less so. Conversely as the nonverbal channel becomes more communicatingly impactful the nonverbal will be less so.
6. The composite regard score for the consistent counselor message (V+NV+, V-NV-) will be found to be significantly (.05 level) higher than the composite regard score for the inconsistent counselor messages (V+NV-, V-NV+).

F. Measures

The following two measures will be used for the current study; the Perceived Stress Index (PSI), and the Level of Regard Scale of the Barrett-Lennard Relationship Inventory. The PSI developed by Jacobs and Muntz (1968) will be used to determine the subjectively felt stress level of the subjects. Thus, the PSI will yield a

quantitative measure (validity check) regarding the stress independent variable which will be varied two ways (high and low). The Regard Scale of the Barrett-Lennard (Barrett-Lennard, 1962) will serve as the dependent measure for the current study.

The Perceived Stress Index is a measure of subjectively experienced stress developed specifically for use with college students. It utilizes Thurstone's scaling technique with weighted adjectives from which the subject selects one representative of "how you normally feel" and one that describes "how you feel at this moment." Differences between the respective adjective loadings indicate the disparity between the two subjective states.

The reliability of the PSI is, to date, undetermined. However, there have been several studies that have supported the validity of the instrument. Jacobs and Muntz (1968) in a contrived field experiment found that the treatment effect, stress, was detected at the .001 level. Order of presentation in terms of "as you generally feel" and "how you feel at this moment" yielded no significant differences. Further, there were no significant differences found for spurious effects due to the treatment group feeling more pleasant in the "normally feel condition" as compared to the control group. Jacobs and Thornton (1970) extended the validity of the PSI by a study designed to see whether the PSI is sensitive to gradients of stress. Their findings indicated that gradients of stress can be detected to a significant level by the PSI. Lee (Note 4) found that the PSI detected significant differences (.01 level) concerning

psychological stress associated with intercollegiate athletic competition as compared to stress levels associated with practice.

The dependent measure of the current study, the Level of Regard Subscale of the Barrett-Lennard Relationship Inventory, was chosen for two reasons. First, counselor regard has been found by Halkides (Note 5) to be highly associated, at the .001 level of significance, with the criterion of therapeutic success. Secondly, since the current study is investigating the decoding of counselor verbal and nonverbal attitude it was important to select an instrument that would detect variations concerning counselor attitude towards the client (subject). The Level of Regard Subscale specifically yields a composite loading regarding the affective aspect of one person's response to another (attitude). In other words, feelings towards the other's sense of "personhood" of a positive or negative nature.

The test-retest reliability of the Barrett-Lennard (Note 6) found coefficients ranging from +.79 to +.89 on the subscales with a coefficient of +.85 on the composite or overall scale score. Validity has been established by several studies which determined the ability of the Inventory to detect the variables inherent in the theoretical foundations of the instrument (Clark & Culbert, 1965; Gross & De Ridder, 1966; & Emmerling, Note 7).

G. Statistical Analysis of Data

The data yielded by the dependent measure, the Regard Subscale of the Barrett-Lennard Relationship Inventory, will be analyzed by

a 2x2x2 factorial analysis of variance design. Interactional effects, if found, will be analyzed by Scheffe's individual cells comparison technique.

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APPENDIX B

ADDENDUM

A CHANGE IN METHODOLOGY RELATIVE TO THE EFFECTS OF AROUSAL/STRESS ON THE DECODING OF VERBAL/NONVERBAL COMMUNICATION OF COUNSELOR REGARD

A PROSPECTUS

The methodological changes from the original prospectus, which has been filed, include the adding of another two level independent variable, gender, and changes related to the manipulation of anxiety. Thus, the final experimental design takes the form of a 2x2x2x2 completely crossed factorial ANOVA. The number of independent groups has been doubled to 16 cells. Each cell will contain eight subjects homogeneous in terms of gender and anxiety level. One-hundred and twenty-eight subjects, 64 males and 64 females, will be used for this study.

Subject selection will be made on the basis of pretest scores yielded by the Spielberger Trait Anxiety Inventory. Two subject pools will be established on the basis of the upper and lower 27% of the population. Thirty-two males and 32 females will be selected from each of the two pools. A second anxiety measure, the Spielberger State Anxiety Inventory, will be administered during the experimental procedure. Thus, two types of anxiety, state and trait, will be considered in the interpretation of the results of this experiment.

APPENDIX C

CONSENT TO BE A PARTICIPANT FORM

I, _____, voluntarily consent to participate in this study regarding personal counseling, the procedures of which have been explained to me in full.

By signing this form I have not waived any of my legal rights or released investigators from liability for negligence. I am fully aware that I may revoke my consent and discontinue my participation at any time that I choose.

Psychological tests administered to me will be treated as confidential. My anonymity will be preserved by the assignment of code numbers to the test data. No further applications of the test data, other than for the purpose of this study, will be made.

I am participating in this study with the expectation that the only direct benefit to me will be of an educational nature. However, I, and many others, may indirectly benefit by the results of this scientific investigation.

_____
(Participant's Signature) (Date)

APPENDIX D

GENERAL INSTRUCTIONS TO SUBJECTS CONCERNING THE EXPERIMENTAL PROCEDURE

GENERAL INSTRUCTIONS FOR PARTICIPATION IN THE CURRENT EXPERIMENT

The general purpose of this study involves discovering your impressions of a counselor who will interact with you as if you were a client seeking help for a difficult personal problem. Since it is impractical for each of you to be interviewed individually this study will attempt to approximate a counseling experience for you by several means.

After completing a preliminary pencil and paper questionnaire you are to identify as closely as possible with the problems and behavior of a client who will be described in detail for you. Identifying with the client means pretending that you are the client actually living the client's life, feeling the client's feelings, and thinking the client's thoughts, as fully as possible.

After you have achieved a sense of identification with the client role, the procedure will begin. You are to look to the TV monitor in front of you. The counselor will appear and respond to you as if you were a client. His statement will be followed by a beep which will signal you to look to the screen below the TV monitor. A client statement will be projected on the screen for you to read, silently. You are to read this client statement as if you were saying the words directly to the counselor on the monitor. After you have finished reading the first client statement on the screen, you are to look back to the TV monitor. The counselor will respond to the client statement you just

read. After the counselor's response a beep will again sound which will signal you to read the second client statement. This procedure will continue for several minutes and will be similar to a real counseling session for you except your (the client's) statements will be provided to you.

Once the videotape segment has been viewed in its entirety you will be asked to complete a pencil and paper questionnaire. Your responses will be collected by the experimenter and the study will be completed.

If you are willing to participate in the study described above please read and sign the attached consent form.

APPENDIX E

CASE DESCRIPTION (TO BE PROVIDED TO SUBJECTS)

CASE DESCRIPTION

This section will provide you with the sort of information necessary for you to understand and relate personally to the described client's experience. Please read the following information and try to identify with the client in your own personal way. The client is referred to as Pat. Please assume that the client is the same age and sex as you.

Reason for seeking counseling: The client, Pat, came to the University Counseling Center complaining of intense anxiety that had begun a few weeks earlier. The episodes were of approximately two hours duration per occurrence and tended to be more frequent late at night. Predominant thoughts and feelings during the anxiety episodes included a strong sense of impending doom, worries about having some dreaded terminal or crippling disease, and fears of being rejected by friends and the dating partner.

Brief history: Pat reported a relatively uneventful childhood. However, Pat expressed dissatisfaction with current family relationships. The mother was described as being unhappy much of the time, overexcitable, and insecure. The father was described as being cold, self-centered, and emotionally unavailable. The parents had been divorced approximately one year. Pat was an achiever in school making good grades and being moderately active in extracurricular school activities. Friends were easily made and seemed to be valued highly. A few weeks prior to Pat's anxiety episodes Pat's mother experienced some health problems which seriously concerned the client.

Client behaviors: Pat's behavior towards others was typically passive. In addition, there was a tendency towards trying to please others at any cost. Anger, on the part of others, was extremely distressing to Pat. However, Pat was quite verbal, insightful, and well motivated to work on problems that might be associated with the anxiety episodes.

APPENDIX F

VERBAL DIALOGUE (POSITIVE ATTITUDE CONDITION)

COUNSELING DIALOGUE (POSITIVE VERBAL ATTITUDE)

Co. 1 How are things going?

Cl. 1 Better . . . my anxiety seems to be better this week . . . although I'm not sure why.

Co. 2 You've felt better but there doesn't seem to be anything to indicate why this might have been so?

Cl. 2 Yeah . . . It's great feeling better but I guess I'm still confused about what caused the anxiety attacks.

Co. 3 It seems that perhaps if you knew what was setting it off, then you would be in a position of more control or at least if it did happen it would make some sense for you.

Cl. 3 Yeah . . . exactly . . . if I could just put my finger on what triggers it I wouldn't feel so lost and so afraid that at any time it could happen again.

Co. 4 Have you had some thoughts about what might be contributing to the anxiety?

Cl. 4 Yeah . . . you know . . . uh . . . I've been giving this whole thing a lot of thought and I wonder if my feelings about my family may have something to do with my anxiety.

Co. 5 What do you mean?

Cl. 5 Well . . . the other day I was alone for awhile and I was thinking about my mother's recent illness . . . and . . . soon after I started feeling real scared inside . . . I quickly tried to think of something else and went to visit a friend so I wouldn't be all alone . . . since this happened I've wondered whether I'm more uptight about this whole thing than I'd thought.

Co. 6 What might you be afraid of in regard to your mother?

Cl. 6 I don't know . . . she's not all that sick but I just can't help worrying that something terrible might happen to her.

Co. 7 Do you have a fantasy about what might happen to your mother?

Cl. 7 Well . . . I keep imagining that she is real sick . . . maybe dying . . . and there is no one to take care of her . . .

Co. 8 Your thought seem to say that your mother desperately needs someone but there is no one to take care of her.

Cl. 8 These feelings have been so intense that I've been calling her several times a day to see if she's all right, even though I know in my head that she is . . . I really get panicked when she's out or something and no one answers the phone . . . in fact twice when this has happened I've drive home to see if everything's OK . . . and of course she was . . . she's really physically fine.

Co. 9 These feelings of worry seem quite strong for you . . . I'm wondering if they have just come up since your mother's illness or have been there for some time?

Cl. 9 Well, they have been worse since her illness, but really I've worried about her like this since my parent's divorce. She's not very strong and I guess I worry that without Dad that she won't be able to take care of herself very well.

Co. 10 Are you trying to be strong for her like your dad was when they were married?

Cl. 10 (long sigh) There is nobody else but me. She has few friends and no relatives close by . . . I'm all she has . . . yet . . . I don't know . . . sometimes I hate Dad for leaving her but I envy him because he's free of the responsibility for her . . . sometimes I'd like to run away like he did.

Co. 11 You must feel a tremendous burden . . . responsible for your mother but really not able to change things to make them better. Is that true for you?

Cl. 11 Oh, I know what I could do to make her happy . . . I could quit school, move in with her, be her friend, take care of all the bills and worries, and be a go between for her and Dad so they wouldn't have to talk to each other . . . but . . . I do have school, my own friends and life and don't really want to give them up . . . I just don't know what to do.

Co. 12 To take care of your mother means giving up your own life. The choice seems to be to either take care of yourself or your mother, but you can't do both. It also seems that either choice leaves you feeling bad and there seems to be no way out for you.

Cl. 12 No . . . there's not . . . that is unless Mom and Dad got back together or . . . Mother was able to finally take care of herself without depending so much on me.

Co. 13 So . . . if your dad came back he could take care of her or . . . . if your Mom was more independent you would be freed and would not have to worry about her so much.

Cl. 13 Yes, but neither one of these things is really going to happen. Dad is happier now than I've ever seen him and as far as Mom changing . . . well she's always depended on people too much.

Co. 14 Dad's not coming back ever and Mom's never going to be strong.

Cl. 14 That's it . . . it sounds so awful when I hear it but I know it's true . . .

Co. 15 I guess you've tried all kinds of things to make things different but nothing's ever worked.

Cl. 15 I've been trying for years . . . I've talked to Dad to get him to come back . . . with Mother I've been nice, encouraged, supported and gotten angry and . . . well . . . nothing is really different than it always has been.

Co. 16 Has there ever been a time when your mother was perhaps away from your dad for a while when she took care of herself?

Cl. 16 No . . . Well . . . yeah I think I do remember a time . . . it was when I was small and Dad had to go away for a whole month for special training . . . things went just fine . . . Mom took over the stuff that Dad usually did and . . . well . . . nothing bad happened at all.

APPENDIX G

VERBAL DIALOGUE (NEGATIVE ATTITUDE CONDITION)

COUNSELING DIALOGUE (NEGATIVE VERBAL ATTITUDE)

Co. 1 How are things?

Cl. 1 Well . . . some better, my anxiety seems to be lessening some, but . . . it still scares me everytime I think about those anxiety attacks . . . I guess I'm afraid that they will start all over and they are so awful.

Co. 2 I'm glad you're feeling better . . . how are your classes?

Cl. 2 Fine I guess . . . about the same as usual . . . I've really had no problems making grades.

Co. 3 Many people do though, midterms and finals lead to many people feeling anxious.

Cl. 3 Maybe so . . . I don't know . . . I don't feel like grades are a problem but maybe they are . . . I just don't know.

Co. 4 You might want to give it some more thought . . . Uh . . .

Cl. 4 I did notice something this week about my anxiety . . . just the other day my mother called and after I got off the phone I got a real scared feeling inside . . . I don't know why but I did . . . I went and talked to a friend for awhile and it seemed to help.

Co. 5 How long have you had a bad relationship with your mother?

Cl. 5 . . . Bad relationship . . . I . . . uh . . . I care for my mother . . . I don't know . . . uh . . . do you think we have a bad relationship?

Co. 6 I don't know . . . things like that are hard to evaluate.

Cl. 6 I don't know . . . I never thought much about it before . . . uh . . . how long have you been in this building?

Co. 7 Oh, about a year I guess . . . the last place was really a pit.

Cl. 7 It must have been bad if this is an improvement . . . have you worked here long?

Co. 8 Well about two years . . . I really like being on campus . . . close to campus life and activities.

Cl. 8 Me too but I've recently been thinking of dropping out . . .

Co. 9 You'd sure be missing a lot if you did . . . Saturdays at the ball game . . . partying with friends.

Cl. 9 Yeah, but this scared feeling inside has been so bad that I . . . I just can't enjoy things like that much anymore . . . it just takes such an effort to go through the motions.

Co. 10 I didn't know things were so bad for you, why haven't you told me sooner?

Cl. 10 . . . I thought that I . . . uh . . . maybe I haven't been clear . . . I guess . . . I feel that maybe you don't like me.

Co. 11 Don't like you! Sure I do . . . I like all the people I see in counseling.

Cl. 11 How much time till the end of the session?

Co. 12 Forty minutes . . . do you need to leave early today?

Cl. 12 No, I was just wondering . . . I . . . uh . . . (long pause)

Cl. 13 Uh . . . sure I like you . . . where did you get such a crazy idea like that?

Co. 13 . . . I don't know . . . I'm sorry . . . I didn't mean to offend you . . .

Co. 14 Don't worry about it . . . if I got offended easily I wouldn't last two days in this job . . . what else would you like to talk about?

Cl. 14 . . . I . . . uh . . . I don't know . . .

Co. 15 . . . uh . . . OK . . . how's the lovelife?

Cl. 15 Lovelife? . . . Do I have to talk about that?

Co. 16 Sure you do . . . how can I help you if you're going to be so inhibited in here?

Cl. 16 . . . uh . . . I don't know . . . maybe you can't help me . . . maybe nobody can.

APPENDIX H

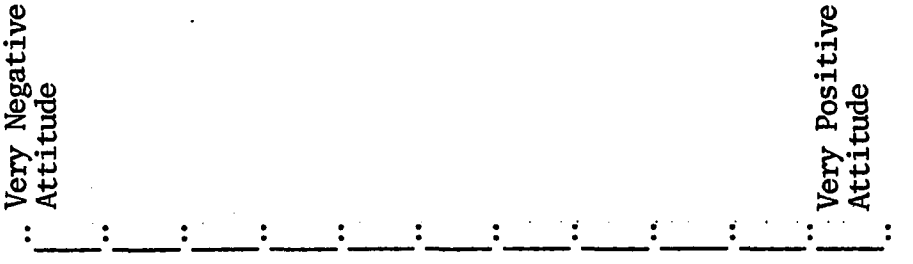
COUNSELOR NONVERBAL BEHAVIOR RATING INSTRUMENT

NONVERBAL BEHAVIOR RATING INSTRUMENT

You are to view the following videotape segment and rate it on the basis of the nonverbal attitude (negative or positive) conveyed by the counselor. Since this rating involves only nonverbal behavior please try to focus just on the nonverbal characteristics ignoring what the counselor on tape actually says in words. For example, if you were rating a fellow student's behavior and s/he said, in a kind voice, "I hate you" you would disregard the content of the message and rate the nonverbal behavior in a positive direction since the voice intonation was of a kind quality (positive attitude).

Nonverbal behavior refers to all aspects of communication except for the words used. Please evaluate the attitude conveyed by the counselor via the combined influence of voice intonation, facial expressions and movements (smiles, frowns), and eye contact (duration).

You will see the videotape segment twice so that you can fully evaluate the nonverbal behaviors presented. At the end of the second viewing you will complete the scale which follows below.



APPENDIX I

THE VERBAL DIALOGUE RATING INSTRUMENT

VERBAL DIALOGUE RATING INSTRUMENT

You are to read the six attached counseling dialogues and then rate each on the basis of the attitude (negative or positive) shown to the client by the counselor. As you are reading the dialogues, pretend as if you were the client actually saying these words to the counselor and hearing the counselor respond to you.

Please read all six of the dialogues twice. Read them all in order before rating them in order to make comparisons among the six dialogues. Then read them again rating each before going on to the next one.

The endpoints of the scale below refer to a negative attitude (left end) or a positive attitude (right end), shown by the counselor to the client.

	Very Negative Counselor Attitude										Very Positive Counselor Attitude
Dialogue 1	:	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :
Dialogue 2	:	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :
Dialogue 3	:	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :
Dialogue 4	:	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :
Dialogue 5	:	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :
Dialogue 6	:	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :	___ :

APPENDIX J

THE SPIELBERGER STATE ANXIETY INVENTORY

SELF-EVALUATION QUESTIONNAIRE

Developed by C.D. Spielberger, R.L. Gorsuch and R. Lushene

STAI FORM X-1

NAME _____ DATE _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken the appropriate circle to the right of the statement to indicate how you feel right now, that is, at this moment. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

		NOT AT ALL	SOMEWHAT	MODERATELY SO	VERY MUCH SO
1.	I feel calm	1	2	3	4
2.	I feel secure	1	2	3	4
3.	I am tense	1	2	3	4
4.	I am regretful	1	2	3	4
5.	I feel at ease	1	2	3	4
6.	I feel upset	1	2	3	4
7.	I am presently worrying over possible misfortunes.	1	2	3	4
8.	I feel rested	1	2	3	4
9.	I feel anxious	1	2	3	4
10.	I feel comfortable	1	2	3	4
11.	I feel self-confident	1	2	3	4
12.	I feel nervous	1	2	3	4
13.	I am jittery	1	2	3	4
14.	I feel "high strung"	1	2	3	4
15.	I am relaxed	1	2	3	4
16.	I feel content	1	2	3	4
17.	I am worried	1	2	3	4
18.	I feel over-excited and "rattled"	1	2	3	4
19.	I feel joyful	1	2	3	4
20.	I feel pleasant	1	2	3	4

APPENDIX K

THE SPIELBERGER TRAIT ANXIETY INVENTORY

SELF-EVALUATION QUESTIONNAIRE

STAI FORM X-2

NAME _____ DATE _____

DIRECTIONS: A number of statements which people have used to describe themselves are given below. Read each statement and then blacken in the appropriate circle to the right of the statement to indicate how you generally feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.	ALMOST NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS
21. I feel pleasant	1	2	3	4
22. I tire quickly	1	2	3	4
23. I feel like crying	1	2	3	4
24. I wish I could be as happy as others seem to be	1	2	3	4
25. I am losing out on things because I can't make up my mind soon enough	1	2	3	4
26. I feel rested	1	2	3	4
27. I am "calm, cool, and collected"	1	2	3	4
28. I feel that difficulties are piling up so that I cannot overcome them	1	2	3	4
29. I worry too much over something that really doesn't matter	1	2	3	4
30. I am happy	1	2	3	4
31. I am inclined to take things hard	1	2	3	4
32. I lack self-confidence	1	2	3	4
33. I feel secure	1	2	3	4
34. I try to avoid facing a crisis or difficulty	1	2	3	4
35. I feel blue	1	2	3	4
36. I am content	1	2	3	4
37. Some unimportant thought runs through my mind and bothers me	1	2	3	4
38. I take disappointments so keenly that I can't put them out of my mind	1	2	3	4
39. I am a steady person	1	2	3	4
40. I get in a state of tension or turmoil as I think over my recent concerns and interests	1	2	3	4

APPENDIX L

THE BARRETT-LENNARD RELATIONSHIP INVENTORY

BLRI

Please do not write your name on this form. It will be coded anonymously and your answers will be used for research purposes only. If you are male please write the number one in the upper right hand corner. If you are female write the number two.

Below are listed a variety of ways in which one person could feel or behave in relation to another person. Please consider each statement with respect to whether you think it is true or not true in regard to your relationship to the therapist just viewed on videotape. The pronoun he in the items below refers to the therapist on the tape. Mark each statement in the left margin according to how strongly you feel it is true or not true. Please mark every one. Write in +1, +2, +3; or -1, -2, -3, to stand for the following answers:

+1: I feel that it is probably true, or more true than untrue.

+2: I feel that it is true.

+3: I strongly feel that it is true.

-1: I feel that it is probably untrue, or more untrue than true.

-2: I feel that it is not true.

-3: I strongly feel that it is not true.

____1. He respects me as a person.

____2. He wants to understand how I see things.

____3. His interest in me depends on the things I say or do.

____4. He is comfortable and at ease in our relationship.

____5. He feels a true liking for me.

____6. He may understand my words but he does not see the way I feel.

____7. Whether I am feeling happy or unhappy with myself makes no real difference to the way he feels about me.

____8. I feel that he puts on a role or front with me.

____9. He is impatient with me.

_____10. He nearly always knows exactly what I mean.

_____11. Depending on my behaviour, he has a better opinion of me sometimes than he has at other times.

_____12. I feel that he is real and genuine with me.

_____13. I feel appreciated by him.

_____14. He looks at what I do from his own point of view.

_____15. His feeling toward me doesn't depend on how I feel toward him.

_____16. It makes him uneasy when I ask or talk about certain things.

_____17. He is indifferent to me.

_____18. He usually senses or realises what I am feeling.

_____19. He wants me to be a particular kind of person.

_____20. I nearly always feel that what he says expresses exactly what he is feeling and thinking as he says it.

_____21. He finds me rather dull and uninteresting.

_____22. His own attitudes toward some of the things I do or say prevent him from understanding me.

_____23. I can (or could) be openly critical or appreciative of him without really making him feel any differently about me.

_____24. He wants me to think that he likes me or understands me more than he really does.

_____25. He cares for me.

_____26. Sometimes he thinks that I feel a certain way, because that's the way he feels.

_____27. He likes certain things about me, and there are other things he does not like.

_____28. He does not avoid anything that is important for our relationship.

_____29. I feel that he disapproves of me.

_____30. He realizes what I mean even when I have difficulty in saying it.

_____31. His attitude toward me stays the same: he is not pleased with me sometimes and critical or disappointed at other times.

_____32. Sometimes he is not at all comfortable but we go on, outwardly ignoring it.

_____33. He just tolerates me.

_____34. He usually understands the whole of what I mean.

_____35. If I show that I am angry with him he becomes hurt or angry with me, too.

_____36. He expresses his true impressions and feelings with me.

_____37. He is friendly and warm with me.

_____38. He just takes no notice of some things that I think or feel.

_____39. How much he likes or dislikes me is not altered by anything that I tell him about myself.

_____40. At times I sense that he is not aware of what he is really feeling with me.

_____41. I feel that he really values me.

_____42. He appreciates exactly how the things I experience feel to me.

_____43. He approves of some things I do, and plainly disapproves of others.

_____44. He is willing to express whatever is actually in his mind with me, including any feelings about himself or about me.

_____45. He doesn't like me for myself.

_____46. At times he thinks that I feel a lot more strongly about a particular thing than I really do.

_____47. Whether I am in good spirits or feeling upset does not make him feel any more or less appreciative of me.

_____48. He is openly himself in our relationship.

_____49. I seem to irritate and bother him.

_____50. He does not realize how sensitive I am about some of the things we discuss.

_____51. Whether the ideas and feelings I express are "good" or "bad" seems to make no difference to his feeling toward me.

_____52. There are times when I feel that his outward response to me is quite different from the way he feels underneath.

_____53. At times he feels contempt for me.

_____54. He understands me.

_____55. Sometimes I am more worthwhile in his eyes than I am at other times.

_____56. I have not felt he tries to hide anything from himself that he feels with me.

_____57. He is truly interested in me.

_____58. His response to me is usually so fixed and automatic that I don't really get through to him.

_____59. I don't think that anything I say or do really changes the way he feels toward me.

_____60. What he says to me often gives a wrong impression of his whole thought or feeling at the time.

_____61. He feels deep affection for me.

_____62. When I am hurt or upset he can recognize my feelings exactly, without becoming upset himself.

_____63. What other people think of me does (or would, if he knew) affect the way he feels toward me.

_____64. I believe that he has feelings he does not tell me about that are causing difficulty in our relationship.