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Nonimmediacy as an implicit measure of problem areas experienced by college students.

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NONIMMEDIACY AS AN IMPLICIT MEASURE OF PROBLEM
AREAS EXPERIENCED BY COLLEGE STUDENTS

A Thesis Presented

By

GENE B. ZANOR

Submitted to the Graduate School of the
University of Massachusetts in
partial fulfillment of the requirements for the degree of

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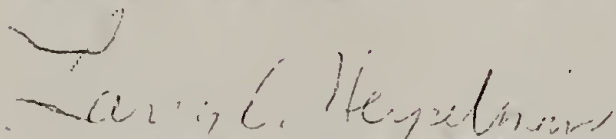
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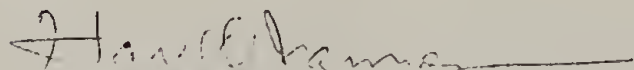
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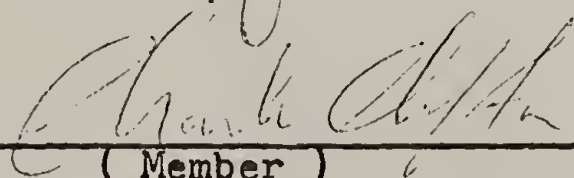
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Table of Contents

Acknowledgements	iii
List of Tables.....	vii
List of Figures.....	ix
Introduction.....	1
Traditional studies of communication patterns and their psychological significance.....	1
Additional measures of communication patterns and their relevance to a conceptual framework of com- munication.....	7
Nonimmediacy: A communication pattern and its Psycho- logical significance.....	10
Overview of the study.....	20
Method.....	26
Subjects.....	26
Measures.....	26
Nonimmediacy forced-choice scale.....	26
Self-report scale.....	30
Interviewer rating scale.....	31
Procedure.....	31
Pretest.....	31
Posttest.....	33
Results.....	35
Scores and Scoring.....	35
Nonimmediacy scales.....	35

Table of Contents

Self-report scales.....	35
Analysis of results.....	38
Analysis of nonimmediacy pretest data.....	39
Self-report pretest data.....	39
Analysis of nonimmediacy posttest data.....	41
Self-report posttest data.....	43
Analyses of nonimmediacy and self-report data over both administrations.....	43
Analysis of within-groups' variability.....	48
Sex.....	50
Age.....	50
Defensiveness.....	56
Nonimmediacy and intensity of problems.....	59
Correlations among the three measures.....	60
Intercorrelations among items on the same scale...	67
Discussion.....	71
Nonimmediacy and defensiveness.....	71
References.....	84
Appendices.....	87
Appendix I.....	87
Appendix II.....	89
Appendix II-A.....	94
Appendix III.....	95
Appendix IV.....	99

Table of Contents

Appendix IV-A.....	104
Appendix V.....	105
Appendix V-A.....	109

List of Tables

Table		Page
1	Number of counseling and control <u>Ss</u> for each age level, sex, and year in school represented in the study.....	27
2	Mean total nonimmediacy, "problem" nonimmediacy, and "neutral" nonimmediacy scores for counseling and control groups on pre- and posttest measures.	36
3	Mean total self-report, total interviewer rating, and "defensiveness" scores for counseling and control groups on pre- and posttest measures.....	37
4	Analysis of variance I: Comparison of "problem" nonimmediacy and "neutral" nonimmediacy for counseling and control groups (pretest data only)....	40
5	Analysis of variance II: Comparison of "problem" nonimmediacy and "neutral" nonimmediacy scores for counseling and control groups (posttest data only).....	42
6	Analysis of variance III: Comparison of "problem" nonimmediacy and "neutral" nonimmediacy scores for counseling and control groups on both pre- and post-administrations.....	44
7	Analysis of variance IV: Comparison of total nonimmediacy for counseling and control groups on both pre- and posttest administrations.....	46

List of Tables

Table	Page
8	Analysis of variance V: Comparison of total self-report scores for counseling and control groups on both pre- and posttest administrations..47
9	Results of tests of heterogeneity of variance for group variances.....49
10	Analysis of "problem" nonimmediacy and "neutral" nonimmediacy for males and females (pretest only).51
11	Analysis of total self-report and total nonimmediacy scores for males and females(pretest only)52
12	Comparison of "problem" and "neutral" nonimmediacy for younger and older subjects (pretest data only).....54
13	Comparison of total self-report and total nonimmediacy for younger and older subjects (pretest data).....55
14	Analysis of "problem" nonimmediacy and "neutral" nonimmediacy for high and low defensive subjects (pretest only).....57
15	Analysis of total self-report and total nonimmediacy scores for high and low defensiveness subjects (pretest only).....58
16	Comparison of self-report scores for problems expressed nonimmediately and problems expressed im-

List of Tables

Table		Page
16	mediately for counseling and control groups (pretest data only).....	61
17	Overall correlations between nonimmediacy, self- report, and interviewer rating.....	63
18	Item correlations between nonimmediacy, self-report, and interviewer rating items.....	64
19	Significant (p .01) intercorrelations among items on each of the three measures in the study.....	68

List of Figures

Figure		Page
1	Experimental procedure for the study.....	25

1. INTRODUCTION

Perhaps the most distinctive and distinguishing feature of human interaction is the use of language. It is through this rather complex system of abstract symbols that men are able to communicate their needs, feelings and ideas to one another. And as Thomas Szasz states, ". . . talking often helps people to cope with their problems in living." (Szasz, 1961, p. 137).

Verbal behavior is obviously a very important aspect of the psychodiagnostic and psychotherapeutic processes. It is ". . . one of the primary types of activity on which psychiatrists and psychologists focus their attention in order to make inferences as to the psychologic states and conflicts of an individual. . . (Gottschalk & Hambidge, 1955, p. 405)".

Traditional Studies of Communication Patterns and their Psychological Significance

Traditionally, many psychologists interested in language patterns as diagnostic indicators of psychopathology, have used the frequency of occurrence of particular grammatical parts of speech to differentiate "normal" language samples from language samples of different diagnostic groups. Mahl and Schulze (1964) and Brodsky and Dixon (1968), in summarizing some of the more classical measures, observed, for instance, that high verb-adjective ratios

("action quotients" (Boder, 1940) seemed to be associated with severity of psychopathology, and degree of anxiety.

Several studies mentioned by Mahl and Schulze (1964) and by Brodsky and Dixon (1968) concluded that the verb-adjective quotient (VAQ) is a useful diagnostic tool. Balken and Masserman (1940) found that the VAQ could be used to differentiate three diagnostic groups: conversion hysterics, patients with anxiety reactions, and obsessive compulsives. High verb-adjective quotients were associated more with patients in anxiety states than with either hysterics or obsessive compulsives when this measure was computed from TAT responses. Balken and Masserman argued that since hysteria and obsessive-compulsive behavior provide some defense against anxiety, patients in these two diagnostic categories showed less tension, reflected in fewer actions in their TAT stories. Patients in anxiety states, however, expressed their anxiety through dramatic, forceful actions in the stories, and thereby obtained the highest verb-adjective quotients.

Although she did not formally compute VAQ values, Fairbanks (1944) evaluated the relative proportions of various parts of speech for two groups, schizophrenics and normal college freshmen. She found that schizophrenics used relatively more pronouns and verbs, and fewer nouns and adjectives. As she later noted, however, the differences she found might have also been attributed to other

differences existing between the two groups (e.g., IQ, educational level, etc.). Lorenz and Cobb (1954) also found significantly higher VAQ values in groups of hospitalized patients as compared with a normal population.

Gottschalk and Hambidge (1955) used both TAT material and spontaneous verbal activity to assess the ratio of "verbs denoting neuromuscular action" to adjectives:

A/adj. They found that A/adj. correlated positively with a neurotic patient's increased activity. The same measure applied to the verbal material of 22 other subjects (11 subjects hospitalized for psychiatric illness, 11 non-hospitalized subjects) did show some evidence of different language patterns for the two groups. The authors felt that definite conclusions were not warranted, however, since other influential factors (e.g., intelligence, education, social background) had not been controlled.

Despite the general finding that VAQ might be directly related to degree of drive or anxiety, Boder's (1940) finding that differences normally exist in VAQ values for different topics must also be considered. For example, the frequency of verbs to adjectives is seven times greater in conversational language than in scientific language.

Another classical measure in language behavior studies, the type-token ratio (TTR), also seems to be associated with anxiety and psychopathology. The TTR is the number of different words (types) divided by the total

number of words (tokens) in a standard language sample (e.g., a 25-word sample). It measures verbal diversity, or, conversely, verbal stereotypy. Theoretically, an inverse relationship between the TTR and anxiety is expected ". . . since anxiety may be considered to inhibit the variability of behavior and thus lower the value of the TTR. . . (Back, Mahl, Risberg and Solomon, reported in Mahl & Schulze, 1964)".

Fairbanks (1944) applied the TTR to the language samples she obtained from schizophrenics and normal college freshmen. The mean TTR was generally lower for schizophrenics (range = .49 to .62) than for the freshmen (range = .61 to .67). These results are viewed with caution, however, since she did not control for IQ across groups, a factor believed to be positively correlated with the TTR. Fairbanks did present a clinical argument for these findings which seems intuitively plausible. Schizophrenics characteristically tend toward stereotypy in their attitudes, speech or movements. A low TTR, reflecting repetitive use of the same words, is perhaps just another form of the schizophrenics' repetitive, stereotypic behavior.

Using the type-token ratio, Jaffe (1961) analyzed two psychotherapeutic interviews with a considerably impaired, yet basically intelligent, outpatient. He found a fairly high TTR for the patient and concluded that this was due to

the highly intellectualized nature of the therapeutic interaction. This finding indicates one of the difficulties in using these measures as pointed out previously by Fairbanks (1944); i.e., higher TTR values may reflect level of intelligence rather than absence of anxiety. Upon closer inspection of the therapeutic interview with the patient, Jaffe did find that the TTR values were lower at certain points during the interview, specifically those moments when the patient was confused, anxious, or misunderstanding an issue.

Frequency of personal pronouns (PP) (Brodsky & Dixon, 1968) is another measure which was found to be different in language of hospitalized psychiatric patients and non-hospitalized normal controls (Fairbanks, 1944; Lorenz & Cobb, 1954). Hospitalized patients used personal pronouns more frequently, a finding which is perhaps indicative of the schizophrenics' greater tendencies to ignore the environment and to be more preoccupied with themselves.

Balken and Masserman (1949) found the occurrence of first personal pronouns to be one of the ten most significant objective criteria (of 85 criteria tested) used to analyze and discriminate fantasy productions of three diagnostic groups (obsessive compulsives, anxiety reactors, and hysterics).

Brodsky and Dixon (1968) pointed out, however, that personal pronoun frequency, like the verb-adjective ratio

(Boder, 1940), also varies with the topic being discussed (in this case, whether it is a personal or impersonal topic).

Qualifiers (e.g., suppose, guess, but, however, if, etc.) are another verbal occurrence assumed to be related to diagnostic status. Since, by their nature, they imply a modified commitment to the terms of the statement, or some conflict about the message, they are expected to occur more often in problem-ridden people. Consequently, Fairbanks (1944) found that schizophrenics, believed to be more indecisive and conflicted than college freshmen, used terms like "suppose", and "guess" 158 times, while the freshmen never used such terms when the 100 most frequently used words for both groups were assessed.

Balken and Masserman (1940) evaluated the use of qualifiers in three diagnostic groups. They found the highest instances of qualification for doubtful, ambivalent, and defensive obsessive-compulsives. Anxious patients also used qualifiers frequently, but not to the extent used by the obsessive-compulsives. It was argued that the hysterics successfully reduced their anxiety by converting it into an organic dysfunction and therefore manifested the least amount of ambivalence, using the lowest number of qualifiers.

The incidence of qualifiers also is presumed to reflect whether or not a patient has successfully or un-

successfully experienced counseling (Raimy, 1948). With an unsuccessful therapeutic outcome, the incidence of qualifiers was greater when discussing the therapy than when therapy had been successful.

Verb tense also is fruitful in discriminating groups. Fairbanks (1944) found schizophrenics using significantly more past tense verbs than college freshmen, perhaps as a reflection of the former group's preoccupation with the past. Jaffe (1961) discovered that a change from using past tense to using present tense verbs was actually indicative of greater emotionality and involvement. This particular finding might further explain why less involved, and seemingly less emotional, schizophrenics were found by Fairbanks to use past tense verbs more frequently than present tense verbs.

Additional measures of communication patterns and their relevance to a conceptual framework of communication.

The literature discussed thus far has emphasized the use of simple frequency counts of various parts of speech in the language of different groups as diagnostic measures, with no explicit basis in a conceptual framework that might be relevant to communication.

Wiener and Mehrabian (1968) conceptualize communication as a two-way phenomenon in which a speaker conveys his various feelings and experiences to a listener. The

listener, in turn, decodes the components of the message the speaker has conveyed. The classical measures, like the type-token ratio or other word counts, seem to provide category systems into which the listener can divide the kinds of words the speaker uses, without necessarily imputing specific connotative significance to these words. The simple frequency counts, when looked at in the context of different language samples, occasionally indicate certain affective states or conditions present in the speaker (e.g., anxiety or psychopathology). There seem to be no explicit principles for relating each specific category systematically to communicator affect however, or for choosing one category system over another. Grammatical parts of speech, by themselves, do not appear to infer communicator affect.

An alternative system, the discomfort-relief quotient (DRQ) developed by Dollard and Mowrer (1947) also depends on categorizing various words a speaker uses. The categories, however, are not based on particular parts of speech which in themselves do not imply affective states. Instead, the DRQ depends on the listener dividing the speaker's words into two broader, more conceptual categories: those words which connote discomfort and those words which connote relief from discomfort.

The DRQ is simply the number of distress words in proportion to the number of relief words plus the number of

distress words in a language sample. As a measure, therefore, the DRQ seems to have more "face validity" as a source of information about feelings a speaker wishes to communicate. The ordinary listener can process the overall tone of the message from the relative occurrence of words denoting distress, or relief from distress.

The DRQ is assumed to be a reliable measure of tension during psychotherapy (Dollard & Mowrer, 1947; Lebo & Applegate, 1958). On the basis of learning theory, Dollard and Mowrer hypothesize that, with successful therapy, the patient learns more effective modes of handling problems. When the problems are handled effectively, anxiety or drive tension related to the problem is reduced; consequently, the DRQ (as a measure of tension) is also reduced. If high tension levels are still evident as high DRQ values at the end of therapy, this might be indicative of therapeutic failure with recommendations for reopening the case.

Dollard and Mowrer (1947) found the DRQ in the recorded protocols of patients to change significantly as therapy progressed. They also designated some limitations of the DRQ, however. Although it appears to reflect tension changes, the exact type of tension or drive is not easily assessed; i.e., whether it is primary or secondary drive, unitary or multiple, patient's own drive state or that of other family members, patient's drive or "community"

drives.

Lebo and Applegate (1958) added to these limitations the fact that the DRQ is also sensitive to the topic of discussion, i.e., whether it is a happy or an unhappy topic. The interviewer or counselor is therefore able to externally influence a patient's discomfort-relief quotient by the questions or topics he selects to introduce. Conclusions about the patient's true internal state of tension are tenuous.

Nonimmediacy: A Communication Pattern and Its Psychological Significance

More recently, Wiener and Mehrabian (1968) developed a system of language analysis which, like more traditional measures, attempts to relate types of words and phrases a person uses to his inner feeling states. Communication for Wiener and Mehrabian is a representation of an experience. The "sender" of a message represents his experiences in words so that a "recipient" of the message can understand them. Feelings, attitudes and preferences are part of the experiences a "sender" or communicator might want to express. More specifically, according to Wiener and Mehrabian (1968), an isomorphic relationship exists between experiences and communications about these experiences; so that negative feelings accompanied by an experience of "psychological distance" from the object, person,

or event toward which the feelings are directed are expressed in "non-immediate" or distancing communications. Wiener and Mehrabian define "nonimmediacy" as "any indication of separation, non-identity, attenuation of directness, or change in intensity of interaction among the communicator, the addressee, the object of the communication, or the communication. . . ." (p. 32).

Nonimmediacy can be conceptualized within an "approach-avoidance" framework. (Dollard and Miller, 1950).

Mehrabian (1964) first referred to the categories of non-immediacy as categories of "formal distance". He assumed that affectively negative communications included an implicit dimension of nonimmediacy, distance, or avoidance. Affectively positive communications, on the other hand, included a dimension of immediacy, closeness, or approach.

Nonimmediacy is an implicit form of communication. In our society, where emphasis is placed on more objective factual statements rather than on more evaluative, judgmental ones, evaluation and judgment can be expressed less directly in the form of nonimmediacy.

The system of nonimmediacy formulated by Wiener and Mehrabian (1968) simply calls for translating nonimmediacy literally from verbal forms. For example, literally, "you and I" is more separate or nonimmediate than "we". On the basis of this principle, Wiener and Mehrabian have developed an extensive system of nonimmediacy scales (1968).

This system of language analysis referred to by Wiener and Mehrabian as "nonimmediacy" seems to have several advantages over previous measures: a) it appears to be less influenced by the explicit content of the communication; b) it can be easily decoded by an ordinary listener; and c) it varies along several dimensions, and, as a measure, is applicable to even single thought units. Because of these advantages, nonimmediacy might be considered a potential diagnostic tool for assessing communications of "normal" and "abnormal" groups.

In assessing the validity of these nonimmediacy scales as measures of negative affect, evaluation, or preference, Wiener and Mehrabian and their associates have carried out a number of studies in a laboratory setting. One of their findings was that nonimmediacy or immediacy reflects the true affect experienced by a subject regardless of the affect he expresses in his explicit content. In other words, unlike the DRQ and earlier classical measures, nonimmediacy seems to be less effected by content or topic. The explicit message a subject conveys may be congruous or incongruous with the implicit attitude he feels.

Both introductory psychology students and nursing students (Mehrabian, 1964) tended to reveal inner states when nonimmediacy was scored regardless of what they said explicitly in verbal content.

Each S received all of the four following instructions: to write a positive statement about a person they liked (positive experience, positive expression); a positive statement about a disliked person (negative experience, positive expression); a negative statement about a liked person (positive experience, negative expression); and a negative statement about a disliked person (negative experience, negative expression). As expected, positive statements about disliked people were more nonimmediate than positive statements about liked people; and negative statements about disliked persons were more nonimmediate than negative statements about liked persons. Therefore, judged "formal distance" for each of the two negative experiences was always significantly greater than "formal distance" for positive experiences regardless of whether the expression of the experience was negative or positive. As Wiener and Mehrabian concluded, the "formal distance" or nonimmediacy categories "discriminate between communications about affectively positively experienced events as against communications about affectively negatively experienced events, irrespective of the expressed affective or evaluative contents of the communications" (Mehrabian, 1965, p. 4818).

Using spoken communications instead of written ones, Mehrabian (1966a) replicated the finding that the experience factor had a much greater effect in determining the amount

of nonimmediacy in statements. Forty-eight undergraduate students were asked to say something positive about a person they liked, and about a person they disliked; they were also asked to say something negative about a person they liked and a person they disliked. As before, the only significant effect was due to the experience or attitude factor.

In general, then, according to the previous findings, more nonimmediacy in written and spoken communications seemed to reflect a more negative attitude, preference, or evaluation by the communicator toward the object of his communication; as opposed to a positive attitude, preference, or evaluation, regardless of what the communicator conveyed explicitly in the verbal content of his message.

Mehrabian (1967b) hypothesized that the true nature of the relationship between nonimmediacy and affect or attitude is a "monotonically increasing function" of the negative affect. As the negative affect becomes more intense, the extent and degree of nonimmediate statements become greater. He found the relationship to be in this general direction, with only one exception, when 173 subjects were asked to write about themselves and one of the following: a person they disliked very much, a person they neither liked nor disliked, a person they liked very much. Contrary to expectations, nonimmediacy scores were quite high for statements about persons reported to be

liked very much, as well as for very disliked persons. Since nonimmediacy is assumed to be an implicit channel of communication, Mehrabian explained this exception to the general hypothesis by stating that Ss, unable to, or afraid to, feel negatively about someone they reported as liking very much, probably used this implicit channel to express mixed positive and negative feelings about the well-liked person.

Studies reported to this point used trained judges as scorers for the nonimmediacy categories. Since communication phenomena require that a recipient or listener be able to decode the information sent by the communicator (Wiener and Mehrabian, 1968), Mehrabian (1966b) tested whether untrained observers could also decode variations in the nonimmediacy channel. He gave 32 untrained observers 15 pairs of communications which they were to evaluate for the affect or preference the speaker of the communication felt for the object of the communication (a person, event, or inanimate object). Both members of each pair of communications contained the same explicit information but differed from each other in the amount of nonimmediacy of the statement. The nonimmediacy dimension varied along 5 of the 12 nonimmediacy categories developed by Wiener and Mehrabian (1968). Mehrabian found that observers significantly assigned more negative affect to nonimmediate statements, and more positive affect to more

immediate statements; thus supporting his hypothesis that untrained listeners could respond to the nonimmediacy dimension of communication. He found, however, that observers responded significantly more to this dimension when statements were presented in pairs so that they could be contrasted for relative degrees of nonimmediacy.

In a similar study, Mehrabian (1967) again evaluated the ability of untrained observers to infer different attitudes from two explicitly equivalent neutral communications on the basis of differences in nonimmediacy only. This time, nonimmediacy varied along the 7 other dimensions of nonimmediacy. Nonimmediate statements were again associated significantly more often with negative attitudes on the part of the communicator, and more immediate statements were associated with more positive attitudes, by 92 college undergraduates.

Most of the Wiener and Mehrabian studies assessed the degree of nonimmediacy associated with communications about natural feelings already found in the Ss. Mehrabian and Wiener (1966), however, experimentally induced positive and negative experiences in their Ss and essentially found the same result: i.e., negative experiences were more often associated with higher nonimmediacy scores than were positive experiences. The Ss were arbitrarily assigned a high and a low score for two passages which they had been asked to write. It was assumed that a high score induced

a feeling of "success" (positive) associated with the writing task; while a low score induced a feeling of "failure" (negative) associated with the task. The Ss were then asked to write a statement about each one of the passages. Therefore, they would be writing one statement about a "success" and one about a "failure". As expected, the mean nonimmediacy score for the failure-associated statements was significantly greater than the mean nonimmediacy score for the success-associated statements.

Gottlieb, Wiener, and Mehrabian (1967) similarly induced success and failure experiences in their Ss and demonstrated that communications associated with the failure situation were more nonimmediate than those associated with the success situation. Each S first participated in an "experiment" to assess their ability at concept formation, which is supposedly related to intelligence. The Ss were arbitrarily stopped during the concept formation task and were told that they were either doing so poorly (negative experience) that the task had to be discontinued, or that they were doing so well (positive experience) that the task could be discontinued. The Ss were then led to believe that the experiment was over, but were then solicited by another E to take part in a "different experiment". In this "different experiment", they were asked to write about the experience they had previous-

ly had in the first "experiment". An additional variable was introduced into this study, that is, whether the S was to write about his experience to a peer or to an authority (professor). In either case, whether writing to a peer or an authority, Ss used more nonimmediate terms for the failure experience than for the success experience.

Another interesting aspect of this particular study was the comparison of the nonimmediacy categories with the discomfort-relief quotient (DRQ) mentioned earlier, as well as with content categories. The authors found significant effects in the same directions for the DRQ, and for explicit content categories, as those found for the nonimmediacy concept. Higher DRQ values were associated more with the negative failure experience than with the positive success experience; and more negative content statements were associated with the failure experience, while more positive explicit content was associated with the success experience.

When Gottlieb, Wiener, and Mehrabian (1967) considered their findings more carefully, however, they agreed that although the DRQ was the least complicated measure to apply, it could be used only with longer communications (those with a number of thought units), since it is a simple "presence-absence" measure. The nonimmediacy scales consist of several categories which can be applied to a single-unit communication. If one category is not applicable to

the unit, another might be. For the DRQ, if there is neither the presence nor the absence of "discomfort" or "relief from discomfort" words respectively, the measure cannot be computed for the particular unit. The DRQ also is more limited than the nonimmediacy measures because it depends more upon the specific nature of the topic (e.g., happy or sad) being discussed.

Although Gottlieb, Wiener, and Mehrabian also found explicit content to be as effective for assessing negative as opposed to positive affective experiences, they agreed that scoring content would require specific criteria for judging specific categories and their frequencies and intensities. As McQuown (1957) points out, there is no objective system of content analysis. Different analysts try to establish different categories and different labels.

The Wiener and Mehrabian scales, therefore, seem to have more potential than the DRQ, and they are more objective than content analysis. In addition, in contrast to the earlier classical measures, the nonimmediacy model seems more applicable to communication phenomena which require the ability of both the communicator and the listener to process and somehow use the information (both implicit and explicit) transmitted in the communication.

Overview of the Study

The present study attempted to further validate the direct relationship found by Wiener and Mehrabian and their associates between nonimmediacy and negative affective experiences. This was done, moreover, in a clinical setting as part of the diagnostic and therapeutic processes.

It is a common assumption that individuals coming into a clinical setting for diagnostic evaluation or treatment have certain conflicts which are causing them some amount of discomfort. In other words, they are experiencing negative feelings (e.g., anxiety, psychological pain, intense drive, etc.) associated with the conflict area. It was one of the purposes of the present study to determine whether or not the Wiener and Mehrabian non-immediacy model can be used in differentiating individuals' communications about negatively-experienced conflict areas from their communications about non-conflict areas. Specifically, if a client at a counseling facility had honestly reported his particular problem areas on a self-report inventory, it was expected that these problem areas would be communicated by the client in nonimmediate ways on a nonimmediacy measure. Problem areas which the client did not directly report on the self-report inventory, but which were judged as problems for the client by an interviewer at the counseling facility using an interviewer rating scale, were also expected to be communicated by the

client nonimmediately. Only those areas which generally did not arouse negative affect in the client (i.e., were reported neither by the client nor by the interviewer as problems) were expected to be communicated by the client in less nonimmediate words and phrases on a non-immediacy measure. Since Mehrabian (1967b) also found very positively reported experiences to be communicated in non-immediate terms, it was expected in the present study that those areas in which the client denied having any problems would also reflect more nonimmediacy. The latter expectation might be viewed in relation to Mehrabian's (1967b) finding that Ss who have explicitly reported an experience as very positive, may subsequently be reluctant to admit any negative feelings about the experience. Consequently, they might use the implicit nonimmediacy channel to express the mixed positive and negative feelings they have. Neutral, or slightly positive areas of experience were expected to be reflected in lower non-immediacy values associated with communications about these areas.

A second purpose of the present study was to assess whether nonimmediacy can also reflect changes in experience; that is, if a negative experience is made more positive through therapy, for example, will nonimmediacy reflect this change? Dollard and Mowrer's DRQ measure reflected whether a patient had learned to cope with speci-

fic problems when its value was reduced from the beginning of therapy to the end. In the present study, a nonimmediacy measure was used in the same manner to assess whether therapy had been successful in reducing the negative feelings associated with conflicts for which adequate solutions were learned (in the therapist's judgment) by the client. It was hypothesized, therefore, that at the end of therapy or counseling, the client would communicate in a less nonimmediate manner about problems he had resolved than he had communicated about these same areas prior to therapy or counseling. If the problem remained unresolved, however, the nonimmediacy measures associated with communications about the problem were expected to remain nearly the same after counseling or therapy as before. It may not be surprising, however, to find that nonimmediacy for a problem area increased after counseling if the problem remained unresolved. The client may feel even more helpless in the face of his unresolved problem and this might further increase his conflict about the problem. Nonimmediacy was expected to reflect this increase in negative experience.

A "normal" sample of university students who did not come to a counseling center or mental health facility was studied in order to provide some comparative "basal" measures of nonimmediacy. It was assumed, for the purposes of this study, that "normal" individuals would have fewer

problems and fewer negative experiences than would individuals who chose to come for counseling. On the basis of this assumption, it was expected that the overall nonimmediacy measure associated with the communications of the "normal" group would be lower than that of the counseling group. Nonimmediacy, as an implicit measure of negatively-experienced problems, would serve to differentiate the two "diagnostic" groups.

Since the "normal" group received no formal treatment for problems, it was also expected that when Ss in this group were given the nonimmediacy scales again (after a time interval comparable to the treatment duration for counseling Ss), their overall nonimmediacy measure would not change significantly from what it was the first time they filled out the nonimmediacy scales. In other words, it was one purpose of the study to assess whether nonimmediacy is a reliable measure which does not change significantly with the passage of time so long as major life experiences remain relatively the same.

Some degree of nonimmediacy was expected for the "normal" sample since it was assumed that they were not completely free of problems. But it was expected that most of their nonimmediacy would be associated more often with areas which have a high potential for producing conflict (e.g., sex, school problems) even in "normal" college students.

A schematic diagram of the experimental procedures designed to test the hypotheses of the present study is presented in Figure 1.

Figure 1

Experimental Procedure for the Study

	Pretest	Three Treatment Sessions	Posttest
Counseling Ss	Nonimmediacy Scales (Problem, Neutral) Self-report Inventory	Interviewer Rating after first and third sessions	Nonimmediacy Scales (Problem, Neutral) Self-report Inventory
Control Ss	Nonimmediacy Scales (Problem, Neutral) Self-report Inventory	Three Week Time Interval No scales administered	Nonimmediacy Scales (Problem, Neutral) Self-report Inventory

2. METHOD

Subjects

Thirty-two college students seeking treatment at the Counseling Center or the Mental Health Service of the University of Massachusetts volunteered to participate in the study. Forty-four students who were enrolled in three undergraduate advanced psychology courses at the University also volunteered, and served as "normal" control Ss for the "client" sample. The two groups included an approximately equal number of males and females, and seemed fairly representative of different age ranges and class statuses expected at a university. The age, sex, and year data for the two samples are given in Table 1.

Measures

Nonimmediacy Forced-Choice scale: Twelve graduate students in psychology were asked to judge the content of 50 pairs of statements, and to select those pairs which conveyed information about real or potential problem topics (as opposed to neutral or non-problem topics). After judging each pair as either a "problem" pair or a "neutral" pair, the same 12 graduate students were asked to judge which single statement, in each pair of statements they had judged, implied a more negative feeling

Table 1

Number of Counseling and Control Ss for each Age Level, Sex, and Year in School Represented in the Study

	Sex	<u>N</u>	Year in School	<u>N</u>	Age	<u>N</u>
Counseling Subjects	M	17	1st	5	18	2
			2nd	5	19	4
			3rd	3	20	3
			4th	3	21	2
			Grad	1	22 & older	6
	F	15	1st	7	18	4
			2nd	4	19	4
			3rd	2	20	5
			4th	2	21	1
			Grad	0	22 & older	1
Control Subjects	M	20	1st	6	18	6
			2nd	4	19	2
			3rd	7	20	5
			4th	3	21	5
			Grad	0	22 & older	2
	F	24	1st	0	18	0
			2nd	9	19	6
			3rd	9	20	10
			4th	6	21	5
			Grad	0	22 & older	3

about the topic of the communication on the part of the hypothetical speaker. The students were asked to make the latter judgment on the basis of slight differences in wording between the single statements of each pair whose explicit contents were otherwise essentially the same.

The percentage of judges who perceived certain pairs of statements as "problem" pairs and others as "neutral" pairs are presented in Appendix I. The percentage of judges who chose statements containing "nonimmediate" words rather than "immediate" words as indicative of negative affect on the part of the hypothetical speaker are also included in Appendix I.

On the basis of these judgments and additional concrete suggestions offered by some of the judges, a forced-choice nonimmediacy scale was designed (see Appendix II). The scale consisted of 50 items. Twenty-five of these were "problem" statements related to five general problem areas suggested by the Mooney Problem Check List (College and Adult forms; Mooney and Gordon, 1950). The general areas included: a) Health and physical development; b) School, or occupational experiences, and related vocational and financial concerns; c) Social-psychological relations; d) Personal-psychological conflicts; and e) Home and family relationships. For each of the five general areas, five specific statements of common problems related to the area, each varying respectively along five of the

12 dimensions of nonimmediacy described by Wiener and Mehrabian (1968), were included in the questionnaire. The following five dimensions of nonimmediacy were chosen in order to limit the extent of the nonimmediacy measure to a less cumbersome form than it would be if all 12 nonimmediacy variations were chosen: Spatial (S), Part (P), Passivity (Pa), Modified (M), and Intensity-Extensivity (X). These particular dimensions of nonimmediacy were selected because they seem to be the more obvious, more objectively and easily scored dimensions of the nonimmediacy categories. More extensive definitions of these dimensions are found in Appendix III.

The remaining 25 items on the scale were "neutral" statements related to five generally neutral, or slightly positive, areas of experience: hobbies, colors, "things", music, and shapes. Again, five specific statements for each general area, each varying respectively along five of Wiener and Mehrabian's 12 nonimmediacy dimensions, were randomly distributed throughout the forced-choice scale.

Each of the 25 "problem" statements and 25 "neutral" statements were presented in the scale paired with a more immediate statement. Both members of the pair explicitly contained the same information. One member of the pair communicated this information in a more nonimmediate form than the other member of the pair of statements. All statement pairs were counterbalanced for the position of

the more nonimmediate member; i.e., for some pairs, the most nonimmediate member appeared first, while for other pairs, the most nonimmediate member appeared second. Specific topic areas (problem and neutral), and statements related to these, were ordered randomly in the scale. The statements, approximately matched within each pair for number of words, contained instances of both positive and negative explicit content.

As a control for simply random circling of items by the Ss, the forced-choice scale also included 10 statement pairs in which one of the statements obviously violated grammatical structure. The "ungrammatical" statements were counterbalanced for their position in the pair; i.e., sometimes they appeared first in the pair, sometimes, second. These statements were also randomly ordered in the scale. It was assumed that, if a S selected a number of "ungrammatical" statements, he was probably circling his choices in a random fashion.

Self-Report Scale. Using the 25 specific "problem" areas included in the forced-choice scale, the investigator developed a series of 25 corresponding items designed to directly and explicitly assess the nature and extent (on a 5-point scale) of specific problems experienced by the Ss, (see Appendix IV). Added to this self-report scale was a modified version of the K-scale of the Minnesota Multiphasic Personality Inventory, the original L-6 scale con-

sisting of 22 items. This scale was designed to assess defensiveness on the part of a "test-taker". It was interpreted as a test-taker's attempt to "fake good" when it was scored unusually high; or as "excessive frankness and self-criticism" (an attempt to "fake bad") when it was scored unusually low (Anastasi, 1961).

Interviewer Rating Scale. The self-report scale discussed above was appropriately modified to enable interviewers at the counseling facilities to judge the nature and extent of a S's problems. (see Appendix V).

Procedure

Pretest. Both the 32 volunteer Ss at the counseling facilities and the 44 "normal" control Ss were given the nonimmediacy forced-choice scale accompanied by the following instructions: (with the appropriate exclusions for the control group indicated by brackets):

"We are interested in determining how people (who come to the Counseling Center/Mental Health Service) communicate. Below are a series of statements. You will notice that the statements are arranged in pairs. In each pair, both statements give about the same information, but are worded slightly differently. As quickly as possible, and on your own, circle the letter (A or B) corresponding to the one particular statement in each pair which best approximates how you would communicate the information given in the statement. Remember, do this quickly, yet carefully, so that it reflects your first, natural impression (which is usually the right impression) of how you would actually communicate at this moment. Do all sentence pairs. If the statement does not exactly

fit your communication pattern, choose the one which you feel comes closest to it, or is more like you."

For the counseling Ss, the form was given at a convenient time prior to the S's initial treatment interview at the counseling facility (usually at the initial intake appointment). For "normal" Ss, the form was given in a classroom setting, but the Ss were asked to work on the form individually.

The Ss in both groups were also asked to fill out the self-report form on the same occasion they were given the nonimmediacy scale. (For instructions accompanying the Self-Report Form, see Appendix IV). The Ss were not informed of the nature or purpose of the study, and no explanation of the relationship between the two different questionnaires was given.

Finally, interviewers at each of the counseling facilities rated the Ss they came in contact with on the Interviewer Rating Scale at the end of their first treatment interview with the S. The interviewers were not aware of the purposes of the study, and were not shown the Ss' nonimmediacy and self-report measures. (For accompanying instructions to the Interviewer Rating Scale, see Appendix V). Only 22 of the 32 participating counseling Ss were rated on this scale.

For 22 counseling Ss there were, therefore, three sources of information at the outset of treatment: a

self-report of perceived problems the S was willing to state explicitly; an implicit measure of negatively experienced areas (the nonimmediacy forced-choice scale); and a judgmental rating by an outside person (the interviewer) of the S's problems. For the remaining 10 counseling Ss and for the 44 control Ss (whose primary purpose was to provide comparative "basal" data), only two sources of information were available at this point: the self-report scale and the implicit measure of negative experiences (the nonimmediacy scale).

Posttest. Following three "treatment" sessions at the counseling facility, only 10 of the counseling Ss were re-administered both the nonimmediacy forced-choice scale and the self-report scale; and, only nine of these 10 were rerated on the check list of problems by the interviewers. The remaining 22 counseling Ss either dropped out of treatment or did not complete the necessary scales at the end of their third treatment session.

For all 44 "normal" Ss, the forced-choice and self-report scales were re-administered in class after a period of time elapsed comparable to the amount of time it took for the counseling Ss to have three treatment sessions (about three weeks).

The second administration of the forced-choice form was accompanied by the following instructions (with appropriate exclusions for the control group indicated

by brackets):

"As you already know, we are interested in how people (who come to the Counseling Center/Mental Health Service) communicate. Remember, you filled out a similar form some time ago. We would like you to complete this form again as part of our communication research. We would like you to follow the same instructions as before. Below are a series of statements. You will notice that the statements are arranged in pairs. In each pair, both statements give about the same information, but are worded slightly differently. As quickly as possible, and on your own, circle the letter (A or B) corresponding to the one particular statement in each pair which best approximates how you would communicate the information given in the statement at this moment. Remember, do this quickly, yet carefully, so that it reflects your first, natural impression (which is usually the right impression) of how you would actually communicate. Do all sentence pairs. If the statement does not exactly fit your communication pattern, choose the one which you feel comes closest to it, or is more like you. Do not try to recall how you answered previously, but answer as you would now."

Instructions for the second administration of the self-report scale and the interviewer rating scale are found in Appendices IV-A and V-A, respectively.

3. RESULTS

Scores and Scoring

Nonimmediacy Scales. The nonimmediacy forced-choice scales were scored on the basis of the total number of nonimmediate statements chosen by the S for both "problem" and "neutral" topic areas. For each nonimmediate statement chosen, a score of 1 was assigned; for each immediate statement, a score of 0 was assigned.

The means and standard deviations for "problem" nonimmediacy scores only, for "neutral" nonimmediacy only, and for the total nonimmediacy scores (problem and neutral combined) are presented in Table 2 for both the counseling and "normal" control groups. The table includes the three nonimmediacy mean scores (total, "problem" and "neutral") for both the pretest and posttest administrations of the forced-choice scale.

Self-report Scales. The self-report scales were scored by summing over the rating values (ranging from 0 to 4) the S assigned to each of the 25 self-report items. In addition, each S was given a defensiveness score on the basis of the L-6 scale of the MMPI, scored according to MMPI standards. The means and standard deviations for the total self-report scores for both groups for pre- and posttest administrations are presented in Table 3, along with the means and standard deviations for the defensiveness scale

Mean Total Nonimmediacy, "Problem" Nonimmediacy, and "Neutral" Nonimmediacy Scores for Counseling and Control Groups on Pre- and Posttest Measures

36

Table 3

Mean Total Self-Report, Total Interviewer Rating, and "Defensiveness" Scores for Counseling and Control Groups on Pre- and Posttest Measures

	Total Self-report						Total Interviewer Rating						Defensiveness		
	Pretest			Posttest			Pretest			Posttest			Pretest only		
	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD	N
Counseling Ss	39.66	14.81	32	35.90	15.22	10	24.45	15.67	22	23.11	20.37	9	9.90	3.80	32
Control Ss	37.02	14.28	44	35.15	13.58	44	--	--	--	--	--	--	10.30	3.90	44
Control Ss Re-Maining after Random Elimination of Ss	35.50	14.16	32	--	--	--	--	--	--	--	--	--	--	--	--

for the first administration only.

Finally, the interviewer's rating scale was scored in the same manner as the self-report scale, summing over the rating values (0 to 4) the interviewer assigned each of the 25 items in the scale. The pre- and posttest means and standard deviations for these scores are also presented in Table 3.

Analysis of Results

Since none of the 76 Ss participating in the study circled their choices on the nonimmediacy scale in a random fashion, (as evidenced by their choices on the 10 "control" items of that scale), no Ss were eliminated from the study for this reason.

Because only about one-third of the 32 counseling Ss who initially volunteered to participate in the study were re-tested on the self-report and nonimmediacy measures, it was decided that the pre- and post-test data be considered in separate analyses of variance and t-tests before combining the data.

In order to compare the two subject groups, only the nonimmediacy and self-report scores were included in the analyses of variance and t-tests since the "normal" control Ss were not rated on the interviewer rating scale.

Analysis of nonimmediacy pretest data. A mixed design, with one-between and one-within subjects factors, was used to analyze the nonimmediacy pretest data. For this analysis, 12 Ss from the "normal" control group were randomly eliminated to yield two equal groups of 32 Ss each.

The groups (between subjects factor) were compared, and the "problem" nonimmediacy score for each of the Ss in the two groups was compared to the "neutral" nonimmediacy score for each S (within subjects factor). The results of this analysis are presented in Table 4.

Only the difference between "problem" nonimmediacy and "neutral" nonimmediacy was significant ($p < .001$). There was no significant difference between the two groups on these measures, nor was there any significant interactions. Both counseling and control Ss chose the more nonimmediate statement significantly more often in describing problem areas than they did in describing neutral areas of experience.

Self-report pretest data. A t-test comparing self-report scores on the pretest administration of the self-report scale was used to evaluate differences between the 32 counseling Ss ($M=39.66$, $S.D.=14.81$) and 32 control Ss ($M=35.50$, $S.D.=14.16$) included in the previous analysis of variance. Although counseling Ss seemed to report more problems on the self-report scale, this difference was not significant ($t=1.15$, $df=62$).

Table 4

Analysis of Variance I: Comparison of "Problem" Nonimmediacy and "Neutral" Nonimmediacy for Counseling and Control Groups (Pretest Data Only)

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Group (G)	1	.0078	.00088
S/G	62	8.8062	
Problem-Neutral (P)	1	652.5078	134.66*
GP	1	9.5073	1.97
SP/G	62	4.8455	

* $p < .001$.

For the pretest data, then, the two groups did not differ significantly in their responses to either the self-report or the nonimmediacy measure. Subjects in both groups were more nonimmediate on problem items in the non-immediacy scale than they were on neutral items of the scale. The Ss in both groups reported a comparable number of problems (the counseling Ss reported only slightly more problems than the controls).

Analysis of Nonimmediacy Posttest Data. For the nonimmediacy posttest data, a one-between, one-within analysis of variance design was used. The 10 counseling Ss who were retested were compared with the 44 control Ss who were retested, using an analysis for unequal, but proportional, cell frequencies suggested by Myers (1967, p. 102).

In the analysis of the posttest data, Ss' "problem" nonimmediacy scores were compared with their "neutral" nonimmediacy scores on the second administration of the nonimmediacy forced-choice scale. Similar to the results of the analysis for the same pretest data, the only significant difference was between "problem" and "neutral" nonimmediacy which was consistent across both groups. Again, "problem" nonimmediacy was greater than "neutral" nonimmediacy for both groups. The results of this analysis are presented in Table 5.

Table 5

Analysis of Variance II: Comparison of "Problem" Nonimmediacy and "Neutral" Nonimmediacy Scores for Counseling and Control Groups (Posttest Data Only)

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Group (G)	1	1.09	.119
S/G	52	9.10	
Problem-Neutral (P)	1	650.24	136.76 *
GP	1	4.75	.215
SP/G	52		

* $p < .001$.

Self-report Posttest Data. Using the Ss' total self-report scores, a t test was applied to the posttest data for the two groups which were retested: 10 counseling Ss ($M=35.90$, $S.D.=15.22$) and 44 control Ss ($M=35.16$, $S.D.=13.58$).

Consistent with the findings of a similar t test using pretest data, there was no significant difference between the two groups on the self-report measure ($t=.142$, $df=52$). The counseling Ss tended to be somewhat more variable, however, in their responses to the self-report questionnaire than the control Ss.

Analyses of Nonimmediacy and Self-Report Data over Both Administrations. Finally, the pre- and posttest data for both groups were combined and analyzed in three separate mixed designs. For these analyses, only those 10 counseling Ss who had been retested were included. The 44 control Ss were also included, and analyses for unequal, but proportional, cell frequencies were used (Myers, 1967).

The first overall analysis, a one-between, two within factor design, compared the two groups (the between subjects factor) on the two nonimmediacy scores ("problem" versus "neutral", a within subjects factor) for the first and second administrations of the nonimmediacy scales (the second within subjects factor).

The results of this analysis, presented in Table 6,

Table 6

Analysis of Variance III: Comparison of "Problem" Nonimmediacy and "Neutral" Nonimmediacy Scores for Counseling and Control Groups on Both Pre- and Post-Administrations

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Group (G)	1	2.89	.185
S/G	52	15.64	.
Administration (A)	1	8.96	2.670
GA	1	.15	.044
SA/G	52	3.35	
Problem-Neutral (P)	1	1129.80	202.002*
GP	1	8.37	1.497
SP/G	52	5.59	.
AP	1	4.74	1.360
GAP	1	4.36	1.250
SAP/G	52	3.50	

*p < .001.

indicate that the difference between "problem" nonimmediacy and "neutral" nonimmediacy (P effect) was significant ($p < .001$). The difference between the two groups, hypothesized initially, that counseling Ss should have more problems reflected in higher "problem" nonimmediacy scores than control Ss, was not significant (G X P effect). In addition, contrary to expectation, there were no significant changes in either problem or neutral nonimmediacy following treatment for the counseling Ss (G X A X P effect). For control Ss, neither problem nor neutral nonimmediacy changed significantly from the first to the second administration of the nonimmediacy scale (G X A X P effect).

Comparison of total nonimmediacy scores for both groups over both administrations of the nonimmediacy scales was made using a one-between, one-within mixed design. The results of this analysis, presented in Table 7, were consistent with previous results. No difference existed between counseling and control groups. Neither was there a significant change in nonimmediacy from the first to the second administration of the nonimmediacy scale.

A similar one-between, one-within mixed design was used to compare the two groups on pre- and posttest self-report measures (see Table 8). The analysis yielded a significant difference ($p < .025$) between pre- and posttest measures only across both groups (A effect). This effect

Table 7

Analysis of Variance IV: Comparison of Total Nonimmediacy Scores for Counseling and Control Groups on Both Pre- and Posttest Administrations

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Groups (G)	1	5.78	.185
S/G	52	31.28	
Administration (A)	1	17.93	2.672
GA	1	.283	.042
SA/G	52	6.71	

Table 8

Analysis of Variance V: Comparison of Total Self-Report Scores for Counseling and Control Groups on Both Pre- and Posttest Administrations

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Group (G)	1	56.32	.155
S/G	52	364.37	
Administration (A)	1	140.08	5.929 *
GA	1	20.28	.858
SA/G	52	23.63	

* $p < .025$.

was apparently due to a change (decrease) in the number and/or severity of reported problems for both groups, after the three week time interval. Both counseling and control Ss reported fewer problems on the self-report measure at the second administration of the scales. The counseling Ss reported a greater change relative to the control Ss on the self-report measure, but this discrepancy between the two groups was not significant (G X A effect).

Analysis of Within-Groups' Variability

It should be noted that in the results of the analyses of variance reported above, the group effect was not only nonsignificant, but it yielded F-ratios which were significantly less than unity. The occurrence of F-ratios which are significantly less than one (i.e., where their reciprocals are significant), might indicate the presence of heterogeneous variances in the groups being compared. The variances for the groups being considered in each of the analyses were not significantly heterogeneous, however, as shown in Table 9.

A possible alternative explanation for a number of F-ratios which are significantly less than one is that a systematic effect that was not accounted for by the analysis was operating to increase the within-groups' variability.

Table 9

Results of Tests of Heterogeneity of Variance for Group Variances

Analysis	Group	Number of Scores	Variances	df	F
I	Counseling	64	12.89	63	1.165
	Control	64	11.06	63	
II	Counseling	20	13.21	19	1.038
	Control	88	13.71	87	
III	Counseling	40	13.78	39	1.162
	Control	176	11.86	175	
IV	Counseling	20	15.96	19	1.363
	Control	88	21.76	87	
V	Counseling	20	187.31	19	1.095
	Control	88	205.13	87	

lity without contributing to a concomitant increase in the between-groups' variability (Myers, 1967). In an attempt to assess possible factors which might be contributing to variability within the two groups, Ss were first divided on the basis of sex, then into two extreme age groups, and finally on the basis of "defensiveness" scores. In each of the three cases, only the Ss' pre-test data were analyzed.

Sex. Both of the counseling and control groups each consisted of about half male and half female Ss. Dividing all Ss participating in the study on the basis of sex, yielded two groups, 39 females and 37 males. For the purpose of the analysis, two females were randomly eliminated to yield two equal groups of 37 Ss each. These groups were compared first on "problem" and "neutral" nonimmediacy; and then, in a separate analysis, on total nonimmediacy and self-report scores. The results of both analyses, presented in Tables 10 and 11 respectively, supported the findings of previous analyses of pretest data. Only the "problem" - "neutral" difference, and the expected nonimmediacy-self-report difference were significant. However, the F-ratio for the group effect more closely approximated 1, and lent support to the null-hypothesis that no systematic difference existed between the two groups (male and female) on these measures.

Age. To assess the variability in the groups which might be attributable to an age factor, the 12 18-year-old

Table 10

Analysis of "Problem" Nonimmediacy and "Neutral" Nonimmediacy for Males and Females (Pretest Only)

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Sex (A)	1	16.89	1.99
S/A	72	8.45	
Problem-Neutral (P)	1	718.08	149.19 *
AP	1	2.19	.45
SP/A	72	4.82	

* $p < .001$.

Table 11

Analysis of Total Self-Report and Total Nonimmediacy Scores
for Males and Females (Pretest Only)

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Sex (A)	1	132.43	1.097
S/A	72	120.64	
Questionnaire (Q)	1	17383.89	154.480 *
AQ	1	10.81	.096
SQ/A	72	112.53	

* $p < .001$.

Ss participating in the study were compared with the 12 Ss who were 22-years old, or older. (Mean age = 24.2, range = 22 - 32). The 12 younger and 12 older Ss were first compared on the responses they made to "problem" non-immediacy items and "neutral" nonimmediacy items on the nonimmediacy scale. In a separate analysis, both age groups were compared on their total nonimmediacy and total self-report scores. The results of both analyses are given in Tables 12 and 13, respectively.

For the "problem" nonimmediacy and "neutral" non-immediacy comparison, the group effect (A effect) approached significance ($p \leq .06$). It was expected that if more Ss had been included in the analysis, the group effect would have reached significance. Younger Ss tended to be somewhat more nonimmediate than older Ss. In addition, the difference between "problem" and "neutral" nonimmediacy found in previous analyses was still evident after the Ss had been divided into the two extreme age groups represented in the study.

When the two subject groups (old and young) were compared on both nonimmediacy and self-report measures (Table 13), only the difference between the two measures was significant ($p \leq .001$) as expected on the basis of their discrepant scoring systems (Q effect). Although the A X Q interaction did not reach significance, inspection of the AQ cell means indicated that younger Ss were more non-

Table 12

Comparison of "Problem" and "Neutral" Nonimmediacy for
Younger and Older Subjects (Pretest Data Only)

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Age (A)	1	22.69	3.96 ^a
S/A	22	5.73	
Problem-Neutral (P)	1	221.02	54.66 *
PA	1	.52	.13
SP/A	22	4.04	

^a $p < .06$.

* $p < .001$.

Table 13

Comparison of Total Self-Report and Total Nonimmediacy
Scores for Younger and Older Subjects (Pretest Data)

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Age (A)	1	20.02	.138
S/A	22	145.42	
Questionnaire (Q)	1	7129.69	43.99 *
AQ	1	25.52	.158
SQ/A	22	162.06	

* $p < .001$.

immediate than older Ss (A_1Q_1 cell mean = 15.75; A_2Q_1 cell mean = 13.00). The groups' respective self-report scores were comparable, however (A_1Q_2 cell mean = 38.67; A_2Q_2 cell mean = 38.83). The nearly significant difference found between older and younger Ss in the previous analysis was still reflected in the present analysis.

Defensiveness. Finally, a distribution of the pre-test defensiveness scores for all Ss showed that most Ss were in the normal range of scores expected from a college population according to MMPI standards. Only 10 Ss had relatively low defensiveness scores; and only 9 Ss could be considered highly defensive. To yield two equal groups of nine Ss each for the following analyses, one of the low defensive Ss was eliminated.

Analyses of problem-neutral nonimmediacy comparisons, and of total nonimmediacy-total self-report comparisons for high and low defensive Ss are presented in Tables 14 and 15 respectively. The groups did not differ significantly on the problem-neutral nonimmediacy comparison, but they were different when their nonimmediacy and self-report scores were compared ($p < .001$). Those Ss who were low on defensiveness had both higher total nonimmediacy scores (Mean total nonimmediacy = 18.00, SD. = 2.29) and higher self-report scores (Mean total self-report = 52.78, SD = 16.62) than highly defensive Ss (Mean total non-

Table 14

Analysis of "Problem" Nonimmediacy and "Neutral" Nonimmediacy for High and Low Defensive Subjects (Pre-test Only)

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Defensiveness (D)	1	20.25	3.77
S/D	16	5.37	
Problem-Neutral (P)	1	148.03	31.26 *
DP	1	14.94	3.16
SP/D	16	4.74	

* $p < .001$.

Table 15

Analysis of Total Self-Report and Total Nonimmediacy Scores
for High and Low Defensive Subjects (Pretest Only)

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Defensiveness (D)	1	1806.25	26.74 *
S/D	16	67.56	
Questionnaire (Q)	1	4970.25	79.18 *
DQ	1	1144.69	18.25 *
SQ/D	16	62.72	

* $p < .001$.

immediacy = 15.11, SD = 4.03; Mean total self-report = 27.33, SD = 7.70) (D effect). The difference between the two groups on the nonimmediacy measure was not nearly as great as the difference between the two groups on the self-report measure (D X Q effect). The low defensive Ss varied less among themselves on the nonimmediacy measure ($S^2 = 2.29$) than did the highly defensive Ss ($S^2 = 4.03$); but the direction of the variances was reversed for the self-report measure: low defensive Ss had more varied scores on this measure than did highly defensive Ss ($S^2 = 16.62$ and 7.70, respectively.)

On the basis of the analyses which attempted to account for age effects and "defensiveness", it might be speculated that Ss' age differences or "defensive" attitudes might be systematically increasing within-groups' variability in the earlier analyses, and thereby contributing to significantly low F-ratios. These conclusions are tenuous, however, since only a portion of the Ss and only their pretest data were used to test the age and "defensiveness" factors.

Nonimmediacy and Intensity of Problems. In order to assess whether Ss' perceptions of the intensity of their own problems were related to the way in which they communicate these problems, a one-between, one-within analysis of variance was performed on a selected portion of the self-report data. For the purpose of this analysis, only the

"problem" items on the nonimmediacy measure and their corresponding ratings by the Ss on the self-report measure were considered. Since each S had chosen at least five nonimmediate responses and five immediate responses on the 25 "problem" items of the nonimmediacy scale, it was possible to randomly select five problem areas where a S was immediate in his responses and five where he was not. The two total self-report scores corresponding to the Ss' five immediate items, and his five nonimmediate items respectively then represented how he perceived those problems he had distanced himself from and those problems he talked about more directly (the within-subjects factor). Counseling and control Ss (the between-subjects factor) were compared on these two scores. The results of this analysis, given in Table 16, show a significant difference between the problems expressed by these two means of communication (immediate and nonimmediate). The Ss perceived those problems which they communicated in a nonimmediate fashion as significantly more intense than the problems which they communicated directly (I effect, $p \leq .005$). The difference between counseling and control groups was not significant.

Correlations among the three measures. The analyses of variance considered the relationship between nonimmediacy as an implicit measure of negative experiences and the explicit self-report measure, but they did not take into account the interviewer ratings. Pearson-product moment

Table 16

Comparison of Self-Report Scores for Problems Expressed
Nonimmediately and Problems Expressed Immediately for
Counseling and Control Groups (Pretest Data Only)

Source of Variance	<u>df</u>	<u>MS</u>	<u>F</u>
Group (G)	1	53.82	2.81
S/G	62	19.14	
Immediate- Nonimmediate (I)	1	51.26	10.80 *
GI	1	.0078	.0016
SI/G	62	4.75	

* $p < .005$.

correlation coefficients were calculated to obtain a more specific idea of the relationship between the three measures used in the study. Correlations, first between the three measures, and secondly between specific corresponding items across the three measures, were calculated. The resultant overall correlations between the three measures are presented in Table 17.

From these correlations it is evident that the non-immediacy measure did not correlate highly with either of the two more explicit measures. Both self-report and interviewer ratings tended to correlate more highly although these correlations did not reach significance.

When specific corresponding items across the three scales were correlated, the .01 level of significance was considered appropriate in order to decrease the probability of spuriously high correlations due to chance, since so many correlations were being considered. The item correlations are presented in Table 18 for the two groups separately, and for pre- and posttest measures.

The number of correlations which reached significance at the .01 level were the number expected on the basis of chance alone. No relationship between the problem items on the nonimmediacy scale and the corresponding items on either the self-report scale or the interviewer rating scale is evident from the correlations. In addition, no significant relationship existed between corresponding items

Table 17

Overall Correlations Between Nonimmediacy, Self-Report, and Interviewer Rating

Subjects	N-I, S-R	N-I, I-R	S-R, I-R	Subjects	N-I, S-R	N-I, I-R	S-R, I-R
	r	r	r		r	r	r
22 Counseling Ss	.0410	.1299	.4195	9 Counseling Ss	-.1166	.0094	.6297
44 Control Ss; 10 Counseling Ss	.0320	--	--	44 Control Ss; 1 Counseling Ss	.0286	--	--

Table 18

Item Correlations Between Nonimmediacy, Self-report,
and Interviewer Rating Items

Items	Pretest		Posttest	
N-I, S-R	22 Counseling Ss	44 Control, 10 Counsel- ing Ss	9 Counsel- ing Ss	44 Control, 1 Counsel- ing Ss
	r	r	r	r
1,21	.1806	.1552	.5330	.2432
3,3	-.2408	.1377	-.2774	-.0703
4,18	.0275	-.1061	-.7002*	.0338
6,16	-.0879	-.0758	-.3287	.3591
8,22	-.1466	.0337	.2774	-.0730
11,6	-.4601*	.0652	-.1492	.1224
13,17	.0201	.0713	.4320	-.2286
16,25	.4282*	.1821	-.1250	.2200
20,8	.0588	-.2876*	-.7920*	-.1250
21,29	-.1871	-.1832	.0563	.0967
22,1	-.2639	.0954	.0598	.0863
26,11	.0619	.0283	-.4588	.1677
27,28	-.1161	.0451	-.3592	.3463
29,39	.1134	-.0950	-.4588	.0422
32,26	-.3343	.2208	-.2857	-.0380
33,7	.3395	.1351	.5000	.2080
34,42	-.0852	.0390	-.4082	-.0818
36,35	.0817	-.0997	-.6013	-.1442
39,30	.0790	-.0954	.2041	-.0249
42,27	.0098	-.1371	.0563	.0675
45,32	-.0173	.1011	-.5590	.1108
47,2	-.0593	-.0313	-.0202	-.2059
48,34	.1033	.0612	-.4725	-.3348*
52,10	.4086	-.1407	-.2868	.0281
58,36	-.3547	.0920	-.2182	-.1252
N-I, I-R				
1,6	-.1336	--	.0000	--
3,10	-.2947	--	.0945	--
4,9	.1389	--	-.4568	--
6,15	-.1959	--	-.3054	--

*p < .05

**p < .01

Table 18 (continued)

Items	Pretest		Posttest	
N-I, I-R	22 Counsel- ing Ss	44 Control, 10 Counsel- ing Ss	9 Counsel- ing Ss	44 Control, 1 Counsel- ing Ss
	r	r	r	r
8,22	-.1663	--	.3467	--
11,23	-.0728	--	.2539	--
13,4	-.3494	--	.2548	--
16,19	.0946	--	-.3865	--
20,21	.1236	--	-.4099	--
21,11	-.2217	--	.1890	--
22,8	.1828	--	-.2174	--
26,13	-.0309	--	.1147	--
27,1	.2539	--	-.1768	--
29,2	.2401	--	.1890	--
32,12	-.2525	--	-.0668	--
33,5	-.2389	--	.2294	--
34,16	.1338	--	.0533	--
36,26	-.0037	--	-.4488	--
39,18	-.1541	--	.7538*	--
42,25	-.3421	--	-.1563	--
45,17	-.1635	--	.2626	--
47,3	-.1884	--	-.5976	--
48,20	-.1498	--	.0000	--
52,7	-.0698	--	-.8030**	--
58,14	.1243	--	-.1670	--
S-R, I-R				
21,6	.0102	--	.0000	--
3,10	-.3219	--	-.1048	--
18,9	-.0102	--	.5815	--
16,15	.3274	--	.1168	--
22,22	.4098	--	.7308*	--
6,23	-.1232	--	-.0309	--
17,4	.4393*	--	.6549	--
25,19	.3640	--	.2347	--
8,21	.1978	--	.4378	--

* p < .05

** p < .01

Table 18 (continued)

Items	Pretest		Posttest	
S-R, I-R	22 Counsel- ing Ss	44 Control, 10 Counsel- ing Ss	9 Counsel- ing Ss	44 Control, 1 Counsel- ing Ss
	r	r	r	r
29,11	.5419**	---	.4890	---
1,8	.3781	---	-.0945	---
11,13	-.2813	---	-.2895	---
28,1	-.1293	---	-.1270	---
39,2	.6467**	---	-.3468	---
26,12	.4793*	---	.7350*	---
7,5	-.1950	---	.6555	---
42,16	.2380	---	.0000	---
35,26	.4379*	---	.6629	---
30,18	-.1135	---	.1846	---
27,25	.0327	---	.0703	---
32,17	.2202	---	-.3230	---
2,3	.6160**	---	.5565	---
34,20	.1925	---	.0000	---
10,7	.2354	---	.2895	---
36,14	.3010	---	.6376	---

* p < .05

** p < .01

of the self-report and the interviewer rating scales.

Intercorrelations Among Items on the Same Scale. Each scale (nonimmediacy, self-report or interviewer scale) was considered independently, and intercorrelations among items within the five general problem areas on which the scales were based (health, school, personal problems, interpersonal difficulties, and homelife) were computed. Those correlations which were significant ($p \leq .01$) are presented in Table 19.

Several general conclusions can be drawn from these correlations: For both groups, the items within each general problem area on the forced-choice scale of nonimmediacy were seldom systematically related; i.e., if Ss chose the most nonimmediate statement for one of the specific problems associated with a general problem area, they would not then necessarily choose the most nonimmediate statement for other closely related problems. In other words, nonimmediacy was not always consistent across problems which, on the surface at least, appear to be nearly the same kinds of problems. For counseling Ss, the interviewer rating scales seemed to be the most consistent measure, especially in the areas of personal conflict and homelife. Interviewer ratings of items in these two areas were highly correlated. Interviewers who tended to see a S as having difficulties with a specific personal or home-related problem subsequently tended to

Table 19

Significant ($p < .01$) Intercorrelations Among Items
on Each of the Three Measures In the Study

Area	Pretest			Posttest		
	Questionnaire Items	r	Ss	Questionnaire Items	r	Ss
Health	S-R: 11,34	.6702	22Coun- seling	S-R: 21,17	.8376	9 Counsel
	I-R: 13,20	.6283		S-R: 21,18	.8376	
	I-R: 13,9	.6598		S-R: 17,18	1.0000	
	I-R: 4,9	.5733		I-R: 4,9	.8410	
	S-R: 11,28	.3801	44Con- trol, 10Coun- seling	N-I: 26,13	.4170	44 Con- trol, 1 Counsel
	S-R: 11,17	.4764		S-R: 11,17	.6328	
	S-R: 11,18	.3962		S-R: 11,18	.6193	
	S-R: 21,34	.5681		S-R: 21,34	.5086	
	S-R: 21,18	.3711		S-R: 11,34	.5352	
	S-R: 34,17	.4419		S-R: 34,17	.4287	
	S-R: 17,18	.7168		S-R: 17,18	.7647	
	S-R: 34,18	.4724				
School	I-R: 5,7	.7321	22Coun- seling	S-R: 35,10	.8517	9 Counsel
	N-I: 22,20	.3588	44Con- trol, 10 Coun- seling			44Con- trol, 1 Counsel
	S-R: 7,35	.5476		S-R: 7,35	.5715	
	S-R: 7,10	.3782		S-R: 7,10	.4576	
	S-R: 35,10	.5637		S-R: 35,10	.4261	
Person- al			22Coun- seling			9 Counsel
	I-R: 18,16	.7731		I-R: 18,16	.8357	
	I-R: 18,19	.6077		I-R: 18,19	.9156	
	I-R: 16,22	.6642		I-R: 16,22	.8944	
	I-R: 22,19	.6054		I-R: 22,19	.9035	
	I-R: 19,3	.6591		I-R: 18,22	.9199	
				I-R: 16,19	.9476	
				I-R: 16,3	.8260	
				I-R: 22,3	.8124	

Table 19 (continued)

Area	Pretest			Posttest		
Personal	Questionnaire Items	r	Ss	Questionnaire Items	r	Ss
Social	S-R: 30,25	.4371	44Control, 10Counseling	S-R: 30,25	.5867	44Control, 1 Counsel
	S-R: 30,2	.5174		S-R: 30,2	.5162	
	S-R: 25,2	.5299		S-R: 25,2	.4087	
Social	N-I: 58,29	-.6140	22 Counseling	I-R: 14,15	.8162	9 Counsel
	S-R: 36,26	.5743		I-R: 1,2	.9354	
	N-I: 58,29	-.5559	44 Control, 10 Counsel	S-R: 36,26	.4135	44Control, 1 Counsel
Home-Life	S-R: 6,3	.5672	22Counseling	S-R: 6,29	.8116	9 Counsel
	S-R: 3,32	.6810		N-I: 45,42	-1.0000	
	S-R: 3,29	.8194				
	S-R: 32,29	.6109				
	S-R: 23,10	.9114				
	S-R: 23,17	.6168				
	I-R: 10,11	.6828		I-R: 10,11	.9286	
	I-R: 10,17	.6432		I-R: 25,11	.8268	
	I-R: 10,25	.5470				
	I-R: 17,11	.6665				
	I-R: 17,25	.4436				
	I-R: 23,10	.9114				
	I-R: 23,17	.6168				
	I-R: 23,25	.5470				
	I-R: 23,11	.5825				
	S-R: 6,3	.6132	44Control, 10 Counsel	S-R: 6,3	.5659	
	S-R: 6,32	.4976		S-R: 6,32	.4291	
	S-R: 6,29	.6475		S-R: 6,29	.6117	
	S-R: 3,29	.5519		S-R: 3,29	.6337	
	S-R: 32,29	.6334		S-R: 32,29	.5364	
				N-I: 11,42	-.4408	

generalize to other specific problems in the two areas and attribute them to the counseling Ss. The counseling Ss themselves did not rate items in the same area in a highly related fashion. The control Ss were very consistent in their reports of problems subsumed under certain general areas. Items within the areas of health, school difficulties, and homelife were highly intercorrelated, as seen in the table.

4. DISCUSSION

Wiener and Mehrabian (1968) proposed that nonimmediacy as an implicit channel of communication reflects variations in a communicator's experiences. The present findings indicating that "problem" and "neutral" nonimmediacy were significantly different (Tables 4, 5, and 6, for example) support Wiener and Mehrabian's hypothesis that negatively-experienced areas are communicated in more nonimmediate ways than are neutral or slightly positive areas of experience. Both for students seeking counseling at a university counseling service and for their "normal" college-age controls, areas seen as either real or potential problems were communicated more often by using nonimmediate words and phrases than were neutral areas of experience.

The nonimmediacy measure used in the present study to assess differences in experience provided a standardized, and, to some extent, more "objective" measure of a subject's experiences than explicit, direct report of these experiences. As an implicit measure of experiences, the non-immediacy scale seemed to be less dependent on the subject's willingness or ability to report negatively-experienced problem areas.

Nonimmediacy and Defensiveness. There was some evidence that the nonimmediacy scale was sensitive to differences in attitudes that subjects have about admitting their problems (Table 14). Specifically, when subjects who were

highly defensive (high L-6 score) and unwilling to admit they have problems were compared with subjects who, at the other extreme, were very self-critical (low L-6 score), there was a significant difference between them on nonimmediacy and self-report measures. Highly self-critical subjects (low defensiveness scores) tended to use more nonimmediacy, and explicitly reported three times as many problems as highly defensive subjects (high defensiveness scores). This finding seems contrary to Mehrabian's (1967b) conclusion that denial of any problems (i.e., explicitly reporting very positive experiences) is accompanied by greater nonimmediacy relative to admission of only slightly positive or neutral experiences. Perhaps those subjects who were very self-critical used nonimmediacy to "distance" themselves from the overwhelming number of problems they perceived themselves as having. This distancing mechanism (nonimmediacy) enabled them to deal with their pervasive problems. Highly defensive subjects, on the other hand, may have used their defensiveness as a mechanism to deal with their problems. By being unwilling to admit they have many problems to begin with, they prevented themselves from becoming overwhelmed by more problems than they could handle effectively. Consequently, they did not need to depend on "distancing" mechanisms to deal with pervasive problems. These latter conclusions are merely speculative, however, since they were based on

the pretest nonimmediacy and self-report measures for only a small sample (18 of the 76 subjects in the study). It is felt, however, that if the nonimmediacy scale included some measure of the S's attitude toward reporting his problems (e.g. the "defensiveness" scale of the MMPI), this factor could be taken into account in the S's final nonimmediacy score, if necessary.

Since all subjects in the study, counseling or "normal", consistently used more nonimmediate statements to express how they would communicate about problem topics than about neutral topics, one speculation is that most of them have "learned" to express problem topics using certain words and phrases which are considered more nonimmediate than other words and phrases. Apparently, ordinary listeners are able to respond to the nonimmediacy dimension as an indicator of negative feeling or attitude on the part of a speaker (Mehrabian, 1966b; Mehrabian, 1967a). It was assumed, therefore, that most people who are responsive to this dimension in the communications of others are somehow "familiar" with the contexts within which the nonimmediacy dimension is used. Consequently, they perhaps associate nonimmediate communications with particular kinds of experiences, like problems, and "learn" to use nonimmediacy when talking about these kinds of experiences, whether their own or problem experiences in general. Wiener and Mehrabian (1968), in fact, conclude that "the relationship

between negative experience and nonimmediacy in verbal communication can be explained by . . . communication as instrumental (learned) acts . . ." (p. 49), as well as by an approach-avoidance conceptualization.

A possible alternative explanation for the consistent difference for all Ss between "problem" nonimmediacy and "neutral" nonimmediacy might be offered. Perhaps nonimmediacy reflects the importance a subject assigns to particular experiences. School, family, and personal areas of experience are assumed to be more important to most people than are experiences with hobbies, colors or shapes. This difference in importance was perhaps reflected in greater nonimmediacy for negative experiences in "problem" areas (e.g. school or family relationships) than for negative experiences in "neutral" areas (e.g. hobbies).

To assess whether some of the problem areas which the S perceived as more important were also reflected in the nonimmediacy measure, the "problem" items on the nonimmediacy protocols were considered separately. These items were divided into problems expressed nonimmediately and problems expressed immediately by the S. A significant difference in the importance or intensity the S assigned to these two types of problems on his self-report ratings was found (Table 18). In other words, the Ss reported more intense problems for those areas about which they talked in nonimmediate ways than for the problem areas about which they

talked directly. The problems which were more often a part of a S's experiences (i.e., were more important to him) were reflected in nonimmediate communications about them; while the problems which were of less concern to him were communicated in immediate ways. This can be considered consistent with Wiener and Mehrabian's conceptualization of the function of nonimmediacy.

Finally, the possibility of questionnaire bias must be considered in evaluating the reasons for the consistent "problem" nonimmediacy and "neutral" nonimmediacy difference found in the study. Perhaps it is more "natural" or easier for the writer to conceive of nonimmediate statements when the topics are problem areas rather than neutral ones. This possibility is supported to some extent by the previous observation that nonimmediacy (i.e., distancing) seems more appropriate, and is therefore used more often, by people to describe experiences that occupy a significant, and often problematic, part of their lives. Nonimmediacy seems to be less frequently used to express attitudes and feelings about neutral or non-significant areas, because it has less meaning or purpose in the latter context. In the development of the nonimmediacy forced-choice measure, nonimmediate statements for problem areas seemed easier to write, while writing nonimmediate statements for neutral areas presented a more difficult and challenging task.

The Ss in the present study might have chosen more non-

immediate statements associated with problem areas because these statements were perceived as being more "natural" by the Ss, and, in fact, were statements that they were likely to encounter in real life. The Ss tended not to choose nonimmediate statements associated with neutral topics perhaps because these are encountered less often and seem "unnatural" or awkward to the Ss.

Although nonimmediacy reflected differences between communications about problem and neutral experiences for all subjects, it did not differentiate between "normal" and counseling groups as initially hypothesized. The subjects in the two groups, however, claimed to be experiencing very severe personal problems, and most often were seeking help for school-related or vocational problems. The average student seemed to be experiencing similar types of problems, although he did not seek counseling. The nonimmediacy measure did not seem to be refined enough to detect these very slight differences between the groups.

When the Ss were divided into two groups on the basis of age differences, rather than into counseling and control groups, the nonimmediacy measure seemed more sensitive to group differences (Table 14). Younger Ss were more nonimmediate than older Ss ($p \leq .06$). Although both older and younger Ss directly reported a comparable number of problems on their self-report ratings, the younger Ss tended to distance themselves more from their problems using non-

immediacy than did the older Ss. It can be speculated that older, supposedly more sophisticated, Ss are able to deal more directly with their problems than the younger, less experienced Ss.

That nonimmediacy was able to discriminate between the two discrepant age groups, and between two groups whose attitudes towards reporting their problems differed (high and low defensive groups), suggests that failure to find significant group differences between the control and counseling samples may be a result of the fact that, in reality, these two groups were not very different. It can be concluded that the less refined, dichotomous nonimmediacy measure used in this study was apparently unable to detect only minimal differences in psychological adjustment.

Despite a lack of significant differences between the two subject groups on total self-report scores as well as on nonimmediacy scores (Table 8), there was some evidence from intercorrelations among the items on the self-report scale (Table 19) that subjects in each of the groups differed in the way they viewed their problems. The control subjects reported a wider range of moderately severe problems than did the counseling sample. The controls seemed to generalize from one specific problem to include other similar types of problems. For example, if a control subject reported a specific problem related to school, he subsequently tended to perceive himself as having problems in

other school-related areas as well. The counseling subjects, on the other hand, tended to see themselves as having slightly fewer, yet more serious problems than the controls. These problems were perceived as only slightly related to, or even completely unrelated to, other problems of a similar nature. Perhaps the counseling subjects, before seeking treatment at a counseling facility, had thought out their problems and attempted to define them more specifically, rather than attributing them to a more generalized source. Or perhaps, when the counseling subjects entered the counseling situation and were given the self-report measure, presumably as part of the counseling process, they were inclined thereby to describe their problems in a more focused manner.

Although the two groups seemed to differ in the way they perceived their problems, the total self-report measure did not reflect this difference. Group differences may have been obscured because of the global nature of the self-report scores.

The hypothesis that nonimmediacy would reflect changes in experiences for the counseling subjects following treatment was not supported (Tables 8, 9 and 10). Although counseling subjects reported fewer problems (albeit not significantly fewer) at the end of their third treatment session, nonimmediacy did not change significantly from the first to the third session. As expected for the controls,

nonimmediacy did not change significantly after three weeks' time. It may be concluded that the nonimmediacy scale used in this study is a fairly reliable one (over time) as long as there are no extraordinary changes in experience. The lack of change in nonimmediacy for both groups however, might have been a result of the short-term nature of the treatment for the counseling group, and the short time interval between the first and second administration of the nonimmediacy measure for the control group. After only three weeks, both groups did report a small change in the direction of fewer or less serious problems on their self-report ratings; but, again, the nonimmediacy measure might have been insensitive to such small changes in the subjects' experiences. From the self-report measure, the counseling subjects, as expected, perceived a greater change following treatment than did the control subjects who did not have any formal treatment. This change for counseling subjects in self-report ratings only, although not significant according to the analysis (Table 8, G X A interaction) might have reached significance if more than the 10 counseling subjects had been retested.

Although a relationship was found in the analysis of variance reported earlier (Table 16) between nonimmediacy and the intensity or importance a subject assigned to his problems, this relationship was not evident when problem items on the self-report scales were correlated with problem items on the nonimmediacy measure. There were no signi-

ficant correlations between a subject's self-report of his specific problems, or an interviewer's judgment of a subject's problems, and corresponding problem items on the non-immediacy forced-choice scale used in the study (Table 18).

There was no systematic relationship evident in the correlations between what a subject explicitly admitted as problems he was negatively experiencing and those problems he communicated nonimmediately. Neither was there any definite relationship between the "objective" judgment an interviewer at a counseling facility made about the subject's problems and the specific problems the subject reported, or talked about in nonimmediate ways.

The failure of the correlations to show the relationship that was found in the analysis of variance between certain problem areas on the self-report measure and corresponding areas on nonimmediacy seemed to be due to the fact that each correlation was based on only two of the subjects' item scores, while the analysis of variance comparison was based on a total of 10 scores for each subject. In addition, correlations across subjects were calculated for 9, 22, 45 and 54 subjects respectively, while the analysis of variance considered data for 64 subjects. The greater number of scores considered per subject and the greater number of subjects in the analysis of variance increased the probability of finding the relationship.

Although the nonimmediacy measure did not correlate

highly with either of the two explicit measures (self-report and interviewer rating) which were designed to ascertain problems which were specific to the subjects in the study, these two explicit measures, on the other hand were positively related to each other. This was not surprising in view of the fact that the interviewers based at least part of their judgments of the subjects' problems on what the subjects told them. It was highly possible, also, that the nature of the scoring procedures for the three measures contributed to suppressing the relationship between nonimmediacy and the two other measures. Nonimmediacy was scored on a 0 or 1 scale, depending on whether the statement the subject chose was immediate or nonimmediate; while both the self-report ratings and the interviewer ratings were scored along similar, more extended 5-point scales, ranging from 0 to 4. As such, the nonimmediacy measure used in the study was restricted and unrefined, and it might not have tapped thereby, the various degrees and expressions of nonimmediacy possible.

The above findings seem to indicate that, in the context of a clinical setting, nonimmediacy can be a valid measure of negatively-perceived problem areas, as Wiener and Mehrabian (1968) have proposed. When measured by means of the forced-choice scale used in the present study, however, nonimmediacy lacked the sensitivity to detect very specific problems for individual subjects, or to detect

very small changes in the way individual subjects experienced problem areas. In addition, nonimmediacy did not readily discriminate between two groups with slightly different degrees of problems (college students seeking counseling and college students who did not seek counseling). Future research, designed to further assess the diagnostic value of nonimmediacy, might include comparisons of nonimmediacy usage for more disparate diagnostic groups, such as schizophrenics and "normals".

In addition, future efforts might be directed at refining the nonimmediacy measure used in the present study. It is a reliable and, to some extent, sensitive measure of nonimmediacy, and it would seem to warrant further development. The forced-choice technique might be extended to present the subjects with several alternative choices instead of only two. The statements, rather than being either immediate or nonimmediate, might represent different degrees of nonimmediacy. Given more than just two alternatives from which to choose, the subjects might be less restricted in their choices and they might be able to express their individual ways of communicating more precisely.

It is hopeful that this technique, if developed, would enable a person to communicate the nature and extent of his problems in a more precise manner than explicit verbal reports currently allow him to do. In addition, the technique may perhaps provide the clinician with a clear frame of

reference for each individual client and a reliable estimate of the client's problems and progress.

REFERENCES

- Anastasi, A., Psychological Testing, New York: The Macmillan Company, 1961.
- Balken, E. R., & Masserman, J. H., "The Language of Phantasy: III. The language of phantasies of patients with conversion hysteria, anxiety states, and obsessive-compulsive neurosis", Journal of Psychology, 1940, 10, 75-86.
- Boder, D. P., "The adjective-verb quotient", Psychological Record, 1940, 3, 310-343.
- Brodsky, S. L., & Dixon, J. C., "Impersonal and personal language patterns of repressors and sensitizers", Journal of General Psychology, 1968, 78, 27-33.
- Dollard, J., & Mowrer, O. H., "A method of measuring tension in written documents", Journal of Abnormal and Social Psychology, 1947, 42, 3-32.
- Fairbanks, H., "The quantitative differentiation of samples of spoken language", Psychological Monographs, 1944, 56, 19-38.
- Gottlieb, R., Wiener, M., & Mehrabian, A., "Immediacy, DRQ, and content in verbalizations about positive and negative experiences", Journal of Personality and Social Psychology, 1967, 7, 266-274.
- Gottschalk, L. A., & Hambidge, G., Jr., "Verbal behavior analysis: A systematic approach to the problem of quantifying psychologic processes", Journal of Projective Techniques, 1955, 19, 387-409.

- Jaffe, J., "Dyadic analysis of two psychotherapeutic interviews", In L. A. Gottschalk (Ed.), Comparative Psycholinguistic Analysis of Two Psychotherapeutic Interviews, New York; International Universities Press, Inc., 1961, 73-90.
- Lebo, D., & Applegate, W., "The influence of instructional set upon the discomfort-relief quotient", Journal of Clinical Psychology, 1958, 14, 280-284.
- Lorenz, M., & Cobb, S., "Language behavior in psychotic and neurotic subjects", Archives of Neurology and Psychiatry, 1954, 72, 665-673.
- Mahl, G. F., "Measures of two expressive aspects of a patient's speech in two psychotherapeutic interviews", In L. A. Gottschalk, (Ed.), Psycholinguistic Analysis of Two Psychotherapeutic Interviews, New York: International Universities Press, Inc., 1961, 91-114.
- Mahl, G. F., & Schulze, C., "Psychological research in the extra-linguistic area", In T. A. Sebeok, A. S. Hayes, & M. C. Bateson, (Eds.), Approaches to Semiotics, The Hague: Mouton & Co., 1964, 51-124.
- McQuown, N. A., "Linguistic transcription and specification of psychiatric interview materials", Psychiatry, 1957, 20, 79-86.
- Mehrabian, A., "Differences in the forms of verbal communication as a function of positive and negative affective experiences", Dissertation Abstract, 1965, 25(8), 4818-4819.
- Mehrabian, A., "Immediacy: an indicator of attitudes in lin-

guistic communication", Journal of Personality, 1966a, 34, 26-34.

Mehrabian, A., "Attitudes in relation to the forms of communicator-object relationship in spoken communications", Journal of Personality, 1966b, 34, 80-93.

Mehrabian, A., "Attitudes inferred from neutral verbal communication", Journal of Consulting Psychology, 1967a, 31, 414-417.

Mehrabian, A., "Attitudes inferred from non-immediacy of verbal communications" Journal of Verbal Learning and Verbal Behavior, 1967b, 6, 294-295.

Mehrabian, A., & Wiener, M., "Non-immediacy between communicator and object of communication in a verbal message: application to the inference of attitudes", Journal of Consulting Psychology, 1966, 30, 420-425.

Mooney, R. L., & Gordon, L. V., Mooney Problem Check List: 1950 Revision, New York: Psychological Corporation, 1950.

Myers, J. L., Fundamentals of Experimental Design, Boston: Allyn and Bacon, 1967.

Raimy, V. C., "Self-reference in counseling interviews", Journal of Consulting Psychology, 1948, 12, 155-163.

Szasz, T. S., The Myth of Mental Illness, New York: Hoeber-Harper, 1961.

Wiener, M., & Mehrabian, A., Language Within Language: Immediacy, A Channel in Verbal Communication, New York: Appleton-Century -Crofts, 1968.

APPENDIX I

Preliminary Form of Nonimmediacy Forced-Choice Scale:
 Percentage of Judges Agreeing on "Problem" Item Pairs,
 "Neutral" Item Pairs and Nonimmediate Statements as
 Indicators of Negative Affect by the Speaker.

Item Number	"Problem " Pairs	"Neutral" Pairs	Nonimmediate Statement
1	50%		33%
2		92%	89%
3	92%		50%
4	89%		75%
5		100%	89%
6	66%		100%
7	89%		92%
8		100%	92%
9	89%		89%
10	100%		92%
11		92%	50%
12		100%	58%
13	92%		66%
14		100%	75%
15		100%	92%
16	8%		58%
17	33%		89%
18	89%		66%
19	75%		75%
20		100%	89%
21		92%	66%
22	89%		75%
23		100%	100%
24	42%		92%
25	100%		89%
26		89%	92%
27	92%		75%
28	50%		89%
29	89%		75%
30		92%	66%
31	42%		89%
32		92%	75%
33		100%	100%
34	89%		89%
35		100%	100%
36	50%		75%
37		100%	66%
38		100%	100%

APPENDIX I (continued)

Item number	"Problem" Pairs	"Neutral" Pairs	Nonimmediate Statement
39	89%		75%
40		100%	92%
41	42%		89%
42	92%		50%
43		92%	100%
44		100%	89%
45	66%		50%
46		100%	100%
47		92%	89%
48		92%	66%
49		100%	92%
50		100%	92%

APPENDIX II

Forced-Choice Nonimmediacy Scale With Pretest Instructions

AGE _____

SEX _____

YEAR IN SCHOOL _____

We are interested in determining how people (who come to the Counseling Center/ Mental Health Service) communicate. Below are a series of statements. You will notice that the statements are arranged in pairs. In each pair, both statements give about the same information, but are worded slightly differently. As quickly as possible, and on your own, circle the letter (A or B) corresponding to the one particular statement in each pair which best approximates how you would communicate the information given in the statement. Remember, do this quickly, yet carefully, so that it reflects your first, natural impression (which is usually the right impression) of how you would actually communicate at this moment. Do all sentence pairs. If the statement does not exactly fit your communication pattern, choose the one which you feel comes closest to it, or is more like you .

APPENDIX II (continued)

A My roommate and I are both as healthy as each other.

B Really, I am just as healthy as my roommate is.

A The red shoes I'm wearing are comfortable.

B Those red shoes I have on are comfortable.

A My parents are objecting to my friends and to my beliefs.

B It's true my parents object to the friends and the beliefs I have.

A I'm having those depressing feelings again.

B I'm having these depressions again.

A I would like the silver pair of earrings.

B Something in me wants the silver earrings.

A I never agree with people who have strong religious beliefs.

B I do not agree with people who are strongly religious.

A My eyes prefer to look at grey.

B I prefer looking at grey colors.

A I have never wanted to participate in any unusual sex practices.

B I have not wanted to participate in an unusual sex practice.

A I often buy groceries here.

B Groceries for me are often here.

A I am arranging the blocks into pairs.

B The blocks have to be arranged by me into pairs.

A Some of the habits my parents have annoy me.

B My parents annoy me with some of their habits.

A There is soft and fluff in my towel.

B My towel is soft and fluffy.

A I can't stop feeling anxious about things.

B I am still feeling anxious about things.

A I must have a green balloon.

B I would like a green balloon.

A I have not played the flute for three or four years.

B It's just that I haven't played the flute in years.

APPENDIX II (continued)

A I don't do things well.

B I cannot do anything well.

A I hardly use my typewriter at all.

B I don't use my typewriter often.

A My camera makes pictures appear to me.

B I take alot of pictures with my camera.

A I didn't play hopscotch when I was young.

B I never played hopscotch when I was young.

A I need the money I have here in my pocket for school.

B I need that money I'm carrying in my pocket for school.

A Those times I spend here at home are pleasant and enjoyable.

B The times I am here at home are pleasant and enjoyable.

A My thought about my future are pessimistic.

B I am thinking pessimistically about my future.

A I see a mouse in his hole.

B The hole is displaying a mouse.

A I'm listening to music that is pleasing to me.

B The music I hear is pleasant to my ears.

A I have a large number of buttons.

B Obviously, I have a large button supply.

A My sleep is fitful and disturbed.

B I am restless and disturbed in my sleep.

A I won't take drugs without a doctor's prescription.

B I couldn't take drugs except by doctor's orders.

A Filling the gas tank in my car occurred yesterday.

B I just filled the gas tank in my car yesterday.

A The love relationship I'm having now is disappointing to me.

B That love relationship I have at the moment is disappointing to me.

A I am not able to use the thin piece of paper without tearing it.

B The paper is too thin to be used without tearing it.

APPENDIX II (continued)

A I like to put my notebooks in one place.

B One place notebooks are put is desirable.

A I'm really shy and I obviously find talking with new people difficult.

B I am shy and I have difficulty talking with new people I meet.

A I am enjoying school.

B Actually, I enjoy school.

A I'm just lonesome.

B I am lonely.

A I miss listening to the radio.

B I very often miss hearing the radio.

A I never have as much trouble with my studies as my classmates do.

B I don't have as much trouble studying as my classmates do.

A I need a telephone.

B Obviously, I must have a phone.

A It's a fact that I prefer triangles to circles.

B I do like triangles better than I like circles.

A My feelings are not easily hurt when I'm misunderstood.

B I don't feel easily hurt when I'm misunderstood.

A New songs are being alot on the radio..

B There are alot of new songs on the radio.

A This banjo is the first one I ever owned.

B That banjo here is the first one I ever had.

A I am free and independent of my family.

B I am not being bound by family rules.

A It's true this is dark blue and not black.

B This is a dark blue color, not black.

A I'm touching the square-shaped block with my hand.

B My hand is touching the block that's square-shaped.

A I have not wanted to leave home except once or twice.

B I have very rarely ever had the desire to leave home.

APPENDIX II (continued)

A I am giving you that round piece of wood here so that you can make a toy out of it.

B I'm giving you this round piece of wood so that you can make a toy out of it.

A I feel these strangers sitting next to me are looking at me critically.

B I feel those strangers sitting beside me are looking at me critically.

A I never worry about being sick.

B I don't worry about being sick.

A I bought a toy train for my nephew.

B Buying the toy train is for my nephew.

A My fingers are clumsy when it comes to caring for plants.

B I am "all thumbs" when I am taking care of plants.

A I can't stand looking at stamp collections.

B I don't like to look at stamp collections.

A I can't understand anything I read.

B I'm not understanding the material I read.

A The chair I'm sitting in is a real antique.

B That chair I'm in is a genuine antique.

A Those shells I have collected here are my favorite ones.

B The shells I have in this collection are my favorite ones.

A I don't have the squares I need for my design.

B I have very few squares that can be used for my design.

A I prefer vanilla ice cream.

B Ice cream that's vanilla is preferred.

A I never wear purple.

B I don't wear purple.

A My behavior conforms to the customs of others around me.

B I conform by my behavior to others around me.

A I bought three records this past week.

B I must have bought three records in the past week.

A The tin can along the street is kicked.

B I kicked the tin can along the street.

APPENDIX II-A

Posttest Instructions for Forced-Choice Nonimmediacy Scale

AGE _____

SEX _____

YEAR IN SCHOOL _____

As you already know, we are interested in how people (who come to the Counseling Center/ Mental Health Service) communicate. Remember, you filled out a similar form some time ago. We would like you to complete another form as part of our communications research. We would like you to follow the same instructions as before. Below are a series of statements. You will notice that the statements are arranged in pairs. In each pair, both statements give about the same information, but are worded slightly differently. As quickly as possible, and on your own, circle the letter (A or B) corresponding to the one particular statement in each pair which best approximates how you would communicate the information given in the statement at this moment. Remember, do this quickly, yet carefully, so that it reflects your first, natural impression (which is usually the right impression) of how you would actually communicate. Do all statement pairs. If the statement does not exactly fit your communication pattern, choose the one which you feel comes closest to it, or is more like you. Do not try to recall how you answered previously, but answer as you would now .

APPENDIX III

Definitions and Scoring Criteria for Categories of
Nonimmediacy

(From Wiener and Mehrabian, 1968, pp. 87-95)

Spatial Category (S): The score "S" is used if, in the verbalization (a) demonstratives such as "that" or "those" (in contrast to "the", "this", or "these") appear in the communication; (b) adverbial clauses introduced by "where" appear in the communication; (c) any other term which denotes spatial distance (not here) appears in the communication.

Examples:

THOSE people were contriving against me	S
I did not know WHERE to begin	S
I did not know HOW to begin	S
I like THOSE chairs	S
I dislike THE book very much	
THIS is the kind of guitar I've always wanted	

Part Category (P): The score "P" is assigned if, in the verbalization, the symbol used for designating the subject refers to a part, characteristic, attribute, or aspect of the consensual (assumed) subject or the symbol used for designating the object refers to a part, characteristic, attribute, or aspect of the consensual (assumed) object.

Instances of verbalization in which the statement is in the form of a negation, but where the boundary conditions allow an affirmative statement are scored "P". In such instances of negation, the communicator is changing from one characteristic of the subject (or object) to another. For example, given the question " Is she good-looking?", the answer "She's not bad-looking" is scored "P_n". A response "She is not good-looking" or "She is ugly (beautiful)" would not be scored for negation.

The score may be anyone of "P_s", "P_o", or "P_{s,o}" (part subject, part object, or part subject and object) with or without P_n.

APPENDIX III (continued)

Examples:

I like the PRINT of Passage X.	P _o
X's MANNERS irritate me.	P _o
I hate X's GUTS.	P _o
MY HAND (I) accidentally touched X.	P _s
X's MANNERS are repulsive to MY SENSES.	P _s , P _o
I am not SKINNY (FAT).	P _n

Passivity Category (Pa): A second group of variations within the general rubric of agent-action-object relationships (P was the first variation in this rubric considered) is subsumed under the term "passivity". Passivity is scored for instances in which the subject or object or both are literally stated as being acted upon or driven to act by external forces, where the boundary conditions ¹ do not require this construction. The separation of the action from the subject or the object is interpreted to reflect nonimmediacy.

The score "Pa" is assigned if, in the verbalization, the subject and the object are related to

1

Wiener and Mehrabian define a "boundary condition" as "limiting conditions imposed on the possible forms of a communication" (1968, p. 11). "Boundary conditions" "are all the external-contextual as well as grammatical or other implicit communication rules which specify the finite number of possible messages in the situation" (p. 12). For example, if an event has occurred in the past and the communicator uses a past tense verb in describing the event, no significance can be assigned to his choice of verb tense; but if he refers to an ongoing or recent event in the past tense, some significance as to his internal feeling about the event might be postulated.

APPENDIX III (continued)

one another in any of the following ways: (a) one or both of them "have to" or are "forced to" be related; (b) the communication is grammatically in the passive voice; or (c) words such as "because" are used which denote external "causation" of the event or behavior. The score "Pa_o" is assigned if the object is stated as being passively related to the subject, or is passively involved in the situation; "Pa_s" is assigned if the subject is stated as being passively related to the object, or is passively involved in the situation.

Examples:

I HAD to read Passage X. Pa_s

X and I HAVE TO (SHOULD, MUST, ARE BOUND TO, etc) get together Pa_s, Pa_o

The blocks HAD TO BE divided the way I did it. Pa_o

I divided the blocks several ways. The feeling of humiliation overcame me. Pa_s

Modified Category (M): The next group of variations within the agent-action-object rubric is subsumed under the category of modification. This category is assigned to a communication in which an objectification or qualification of the communication is introduced in the verbalization. The communicator, through the qualification, indicates the possibility that his statements may not be consensually shared with others (or the addressee). This implication of other possible "interpretations" of the event indicates a separation or discreteness of the communicator from other possible communicators. Similarly in the instance of objectification, there is a separation of the communicator from the object of the communication or the communication itself. In these instances, the event or the communication is considered as if it were external to and discrete from the speaker.

APPENDIX II (continued)

The score "M" is used if, in the verbalization, the relationship between the subject and the object is modified either by qualification or objectification. The following illustrate the kinds of words and phrases scored "M":

I feel (think, find, believe)	obviously
It is possible (obvious, evident)	supposedly
It seems (seemed)	apparently

probably	really
perhaps	just
somehow	

Examples:

Some MIGHT say Passage X is interesting	M
I FEEL (THINK, BELIEVE) X hates me.	M
REALLY, X and I can be good friends.	M
IT IS EVIDENT that I will win.	M
I will win the game.	

Intensity-Extensivity Category (X): The score "X" is assigned if, the intensity, extensivity, or frequency of the subject-object relationship is modified. The following exemplify the kinds of words and phrases scored "X":

some	never	mostly
few	very little	greatly
rarely	hardly	enormously

Examples:

Jim and I HARDLY know each other.	X
She RARELY comes to see me.	X
I talked to her a great deal.	X

APPENDIX IV

Self-Report Scale With Pretest Instructions

AGE _____

SEX _____

YEAR IN SCHOOL _____

We are interested in finding out some common sources of conflict or difficulty for people (who come to the Counseling Center/ Mental Health Service) on this campus.

Below are a series of scaled items, and True-False items which include many potential sources of difficulty or conflict for people living in a university setting.

Where there is a scaled item (i.e., a statement followed by a series of numbered alternatives from 0 to 4, which express the frequency with which you might have recently experienced, or are presently experiencing, the difficulty), please circle that particular value (0 to 4) which best describes your present experiences in the area mentioned. Where there is a True-False item, please circle that response (T or F) which best describes your present experiences in the area mentioned.

Please answer all items. If an item is not applicable to you, please circle the 0 point on the scaled items and the appropriate letter (T or F) on the True-False items.

APPENDIX IV (continued)

Scale values:

- 0 = not at all
 1 = once in a while, but it's not really like me
 2 = sometimes
 3 = often
 4 = very often

I feel uncertain about my future and choice of career
 0 1 2 3 4

I feel like people are watching me
 0 1 2 3 4

My parents and I have strong disagreements
 0 1 2 3 4

People often disappoint me T F

It takes alot of argument to convince most people
 of the truth T F

I feel anger and annoyance toward my parents even for small
 things they do
 0 1 2 3 4

I am not doing well in school
 0 1 2 3 4

I have financial worries
 0 1 2 3 4

At times I feel like smashing things T F

I have reading problems (e.g. not being able to understand
 what I should
 0 1 2 3 4

I have difficulty sleeping
 0 1 2 3 4

I have often met people who were supposed to be experts
 who were no better than I T F

I have very few quarrels with members of my family T F

APPENDIX IV (continued)

Scale values:

0 = not at all
 1 = once in a while, but it's not really
 like me
 2 = sometimes
 3 = often
 4 = very often

I have periods in which I feel unusually cheerful without
 any special reason T F

I certainly feel useless at times T F

I am conflicted about my religion
 0 1 2 3 4

I feel tense or nervous
 0 1 2 3 4

I feel depressed
 0 1 2 3 4

At periods my mind seems to work more slowly than usual T F

Most people will use somewhat unfair means to gain profit
 or an advantage rather than to lose T F

I worry about my health
 0 1 2 3 4

It makes me impatient to have people ask my advice or
 otherwise interrupt me when I am working on something import-
 ant T F

When in a group of people I have trouble thinking of the
 right things to talk about T F

I feel inferior to others
 0 1 2 3 4

I'm very shy
 0 1 2 3 4

I feel conflicted about making my own decisions, especially
 when they conflict with my parents' wishes
 0 1 2 3 4

APPENDIX IV (continued)

Scale values:

- 0 = not at all
 1 = once in a while, but it's not really like me
 2 = sometimes
 3 = often
 4 = very often

I have taken drugs or want to take them, but feel afraid or ambivalent about them

0 1 2 3 4

I am unhappy at home

0 1 2 3 4

I am overly sensitive about being misunderstood

0 1 2 3 4

I find it hard to make talk when I meet new people T F

I want to leave home permanently, or am conflicted about leaving home

0 1 2 3 4

I have sometimes felt that difficulties were piling up so high that I could not overcome them T F

I feel sick (e.g. headaches, pains, nausea, etc.)

0 1 2 3 4

I find studying difficult

0 1 2 3 4

I conform to other people and don't have a mind of my own

0 1 2 3 4

I often think " I wish I were a child again " T F

I get mad easily and then get over it soon. T F

I have had a very disappointing love relationship

0 1 2 3 4

I frequently find myself worrying about something T F

APPENDIX IV (continued)

Scale values:

0 = not at all

1 = once in a while, but it's not really
like me

2 = sometimes

3 = often

4 = very often

I have fears about being a homosexual
 0 1 2 3 4

I have no friends or satisfactory peer relationships
 0 1 2 3 4

Often I can't understand why I have been so cross and
 grouchy T F

I think nearly anyone would tell a lie to keep out of
 trouble T F

Criticism or scolding hurts me terribly T F

I worry over money and business T F

At times my thoughts have raced ahead faster than I
 could speak them T F

It makes me uncomfortable to put on a stunt at a party
 even when others are doing the same sort of things T F

APPENDIX IV-A

Posttest Instructions for the Self-Report Scale

As you already know, we are interested in finding out some common sources of conflict or difficulty for people (who come to the Counseling Center/ Mental Health Service) on this campus. Remember, you filled out a similar form some time ago. As a part of our research project, we would like you to fill out another form.

Below are a series of scaled items, and True-False items which include many potential sources of difficulty or conflict for people living in a university setting.

Where there is a scaled item (i.e., a statement followed by a series of numbered alternatives from 0 to 4, which express the frequency with which you might have recently experienced, or are presently experiencing, the difficulty), please circle that particular value (0 to 4) which best describes your present experiences in the area mentioned. Where there is a True-False item, please circle that response (T or F) which best describes your present experiences in the area mentioned.

Please answer all items. If an item is not applicable to you, please circle the 0 point on the scaled items and the appropriate letter (T or F) on the True-False items. Do not try to recall how you answered previously, but answer as you would now.

APPENDIX V

Interviewer Rating Scale With Pretest Instructions

CLIENT'S AGE _____

CLIENT'S SEX _____

CLIENT'S YEAR IN SCHOOL _____

CASE NUMBER _____

Below are a number of statements dealing with some common areas of conflict found among individuals seeking counseling or treatment at a university counseling service (mental health service) . We are interested in finding out what types of conflicts are characteristic of clients coming to the University of Massachusetts Counseling Center (Mental Health Service) . Following your initial counseling interview with each client, please circle the value (0 to 4) in each statement which you feel best describes how often the client now experiences the problem mentioned in the statement. Do this for all statements. If you see no problem for the client, please circle the 0 value on the scale.

It is preferable that you follow your own particular and usual method of conducting the initial interview, and not necessarily probe for the particular conflict areas mentioned below. Remember, complete this scale after your initial counseling interview with the client.

APPENDIX V (continued)

Scale values:

0	not at all
1	once in a while, but it's not really like me
2	sometimes
3	often
4	very often

Client is concerned about drugs (whether to take them, or if already taking them, what to do about it, etc.)

0 1 2 3 4

Client's love relationships are disappointing

0 1 2 3 4

Client feels people are watching him

0 1 2 3 4

Client feels tense or overly anxious

0 1 2 3 4

Client fails in his school work

0 1 2 3 4

Client is overly concerned about his physical health

0 1 2 3 4

Client has problems with reading (e.g., not understanding what he reads)

0 1 2 3 4

Client feels uncertain about his (her) future and choice of career

0 1 2 3 4

Client feels unusually depressed

0 1 2 3 4

Client has strong disagreements with his parents

0 1 2 3 4

Client feels generally unhappy at home

0 1 2 3 4

APPENDIX V (continued)

Scale values:

0	not at all
1	once in a while, but it's not really like me
2	sometimes
3	often
4	very often

Client is extremely shy

0 1 2 3 4

Client has difficulties sleeping

0 1 2 3 4

Client conforms to other people and doesn't have a mind of his own

0 1 2 3 4

Client has conflicts about his religious beliefs

0 1 2 3 4

Client's peer relationships are not satisfactory

0 1 2 3 4

Client feels alienated from his home setting

0 1 2 3 4

Client is overly sensitive about being misunderstood by others

0 1 2 3 4

Client feels inferior to others

0 1 2 3 4

Client complains of feeling sick (e.g., headaches, pains, nausea, etc.)

0 1 2 3 4

Client has financial problems

0 1 2 3 4

Client has sexual conflicts or difficulties

0 1 2 3 4

Client feels anger or annoyance toward his parents even over small things

0 1 2 3 4

APPENDIX V (continued)

Scale values:

- | | |
|---|--|
| 0 | not at all |
| 1 | once in a while, but it's not really like me |
| 2 | sometimes |
| 3 | often |
| 4 | very often |

Client has homosexual fears

0 1 2 3 4

Client is ambivalent about making his own decisions, especially those which conflict with his parents' wishes

0 1 2 3 4

Client finds studying difficult

0 1 2 3 4

Comments, if any:

APPENDIX V-A

Posttest Instructions for the Interviewer Rating Scale

CLIENT'S AGE _____

CLIENT'S SEX _____
CLIENT'S YEAR IN SCHOOL _____

CASE NUMBER _____

Below are a number of statements dealing with some common sources of conflict found among individuals who are participating in treatment at a university counseling service (mental health service) . We are interested in finding out what types of conflicts are still characteristic of clients coming to the University of Massachusetts Counseling Center (Mental Health Service) at the end of three sessions of treatment.

Following your third session with each client, please circle the value (0 to 4) in each statement which best describes how often the client now experiences the problem mentioned in the statement. Do this for all statements. If you see no problem for the client, please circle the 0 value on the scale.

It is preferable that you follow your own particular and usual method of conducting the session and not necessarily probe for the particular conflict areas mentioned below. Remember, complete this scale after the third session with the client. Do not try to recall how you answered previously, but answer as you would now.

Before beginning to complete this form, please rate the client for the amount of success he has had (with your help) in dealing with the problems he initially presented by checking the value below which best describes his progress:

- _____ 0 problem(s) still present; I strongly recommend further treatment
- _____ 1 problem(s) partly reduced; I moderately recommend further treatment
- _____ 2 problem(s) reduced; I feel no further treatment is necessary at this time

