

The Effects of Self-Actualization  
on Self-Disclosure

by

René de Rocquigny

A Dissertation Submitted to the Faculty of Graduate Studies  
in Partial Fulfillment of the Requirements for  
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Department of Psychology  
University of Manitoba

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## DEDICATION

This dissertation is dedicated to the memory of my father who instilled in me a love of nature, the joys of hard work, and most of all an appreciation for people. It would have been nice to share this accomplishment. His life had meaning ... he did not live in vain.

## Abstract

This study was undertaken to provide support for the very much emphasized role of self-disclosure in the life of the self-actualized person, as proposed to exist by Sidney Jourard. Included in the major hypothesis was an investigation of the effect of a self-actualizer's self-disclosures on a non-self-actualizer's level of disclosure, as well as ensuing impression ratings and elements of trust.

The experiment was conducted with male university students who were paired on the basis of level of self-actualization. A 2x2x2x2 factorial design was used so as to include Subject level of self-actualization (self-actualization or non-self-actualization), the Partner's level of self-actualization (self-actualization or non-self-actualization), and the Subject's level of self concept (high or low), and the Subject's Role (Interviewer or Interviewee).

A multivariate analysis method was employed to determine main effects and interaction effects on eleven dependent variables. Significant multivariate F's were followed up with a consideration of the significant univariate F's and an emphasis on the standardized discriminant function coefficients. Other analyses were carried out in order to test specific comparisons as hypothesized. The study also includes an item analysis of the Personal Orientation Inventory.

The results indicated the following:

1. The self-actualized Subjects were significantly more at ease during the interview.
2. Both the self-actualized and the non-self-actualized Subjects were less at ease with a self-actualized partner.
3. Both the self-actualized and the non-self-actualized self-disclosed more during the interview when paired with a self-actualized partner; while only one of the self-disclosure measures was significant, the other measures showed the same trend.
4. The non-self-actualized had a tendency to speak more but self-disclosed less.
5. Self-actualized Subjects showed a greater willingness to self-disclose, as indicated by a post-interview self-disclosure questionnaire. Although the behavioral ratings of self-disclosure during the interview showed a trend for higher disclosure by the self-actualized Subjects, these ratings were not statistically significant.
6. The self-actualized partner was trusted more and seen, to some extent, as a better listener.
7. The self-actualized were significantly more preferred as close friends.
8. There was a tendency for self-actualized Interviewers to be considered better interviewers than the non-self-actualized.
9. The self-actualized is more involved in different activities, particularly general social activities and artistic-related activities.
10. The self-actualized Subjects did not receive a significantly higher "overall" rating on the 30-item "polar-adjective" impression scale.
11. Self concept was significantly correlated with self-actualization and the individuals with a good self concept received better impression ratings than those with a lower self concept. The high self concept group was also more "active" than the low self concept group.

Having found partial support for the hypothesized "effect of self-actualization on self-disclosure", its implications for mental health and for psychotherapy are discussed. Considerations and suggestions for future research are reviewed briefly.

## Résumé

Le but de cette étude était de vérifier l'hypothèse émise à maintes reprises dans les écrits de Sidney Jourard à l'effet que les personnes qui s'épanouissent le plus ont tendance à divulger plus souvent ce qui les concerne personnellement. Quatre facteurs étaient considérés comme variables indépendents. Ils consistaient du (1) niveau d'actualisation de soi pour l'individu, ainsi que (2) celui de son partenaire, (3) le niveau d'acceptation de soi, et (4) le rôle de la personne durant l'entrevue.

Les résultats démontrent, en partie, l'importance de l'actualisation de la personne quant au degré de divulgation, non seulement pour l'individu, mais aussi pour son effet sur celui de son partenaire. Donc l'hypothèse de Jourard semble avoir été partiellement confirmée par cette étude. Les résultats sont discutés et l'auteur en considère l'implication pour la santé mentale et pour la psychothérapie.

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## CHAPTER I

### INTRODUCTION

A choice that confronts every one at every moment is this: Shall we permit our fellows to know us as we now are, or shall we remain enigmas wishing to be seen as persons we are not? (Jourard, 1971a, p.VII)

The purpose of this research is to examine the effects of self-actualization on self-disclosure. Self-disclosure generally refers to the revealing of information about oneself to another (Cozby, 1973). Jourard states that "self-disclosure is the act of making yourself manifest, showing yourself so others can perceive you" (Jourard, 1971, p. 19). It refers, more specifically, to an individual's communicating to one or more others some personal information that he believes these others would be unlikely to acquire unless he himself discloses it. Moreover, Culbert (1968) has suggested that his information must be "personally private". That is, it must be of such a nature that it is not something the individual would disclose to everyone who might inquire about it.

Self-disclosure may be simply defined as any information about oneself which a person communicates verbally to another person. Self-actualization, on the other hand, can be "loosely" described as "the full use and exploitation of

talents, capacities, potentialities, etc." (Maslow, 1954, p.200).

On the basis of the present literature on both self-disclosure and self-actualization, the author has hypothesized that people who are considered to be self-actualized will self-disclose more than individuals who are not self-actualized. Indeed a great deal has already been said about the necessity of self-disclosure for a healthy personality in terms of self-actualization, or what is also referred to sometimes as positive mental health (Jourard, 1958a, 1959a, 1959b, 1963, 1964, 1971a, 1971b; Jourard and Lasakow, 1958). For example, in his introduction to The Transparent Self (1971a), Jourard writes:

When a man does not acknowledge to himself who, what, and how he is, he is out of touch with reality, and he will sicken. No one can help him without access to the facts. And it seems to be another fact that "no man can come to know himself except as an outcome of disclosing himself to another person". This is the lesson we have learned in the field of psychotherapy. (p.6)  
(Underlining by author)

In his review of the literature on self-disclosure, Cozby (1973) also states that Jourard's writings indicate that disclosure should be negatively related to "clinical" maladjustment and also positively to "positive" mental health (e.g., self-actualization).

It should be pointed out that self-disclosure, as used by Jourard and by the author in this study, refers to disclosure to another person and particularly verbal disclosure. Although self-disclosure can also occur through non-verbal means, non-verbal self-disclosure was not accounted

for in this study.

Jourard (1964, 1968, 1971) has carried out a large number of studies on self-disclosure and written extensively on the importance of self-disclosure in the life of any individual who will be living to the fullest of his capacities. Research has yet to determine, however, if the self-actualized individual will actually tend to self-disclose more easily to another person as would be expected from Jourard's writings (Jourard, 1967, 1968, 1971a).

Client-centered therapists like Rogers (1951, 1958a, 1959, 1961a) have emphasized the importance of self-disclosure in the process of therapy to bring about a "fully functioning person". In fact the whole area of client-centered therapy, which emphasized the freedom of the individual to actualize himself, is based on the notion that the person has to disclose himself to another person. The person then becomes more aware of his or her own needs and desires and can more easily integrate these needs and desires in his or her perception of "self".

Self-disclosure is a variable which can be readily measured, as can be attested by the large number of studies in this area (cf. Jourard, 1971b). Self-actualizing behavior, however, tends to be considered more idiosyncratic, and thus presents difficulties in its measurement; the study of self-actualization is certainly more sparse in our psychological literature. Maslow (1954, 1956b, 1967a, 1968a,

1968b, 1971) is undoubtedly the one who has contributed the most in trying to determine the essence of actualization. He focused on "growth motivation" and felt that self-actualization was at the highest level in a hierarchy of needs. He has described it in this fashion:

What a man "can" be, he "must" be. This need we may call self-actualization...it refers to man's desire for self-fulfillment, namely to the tendency for him to become actualized in what he is potentially. This tendency might be phrased as the desire to become everything that one is capable of becoming.

The specific form that these needs will take will of course vary greatly from person to person. In one individual it may take the form of the desire to be an ideal mother, in another it may be expressed aesthetically, and in still another it may be expressed in painting pictures or inventions.

The clear emergence of these needs usually rests upon prior satisfaction of the physiological, safety, love, and esteem needs. (Maslow, 1954, pp. 91-92)

Thus the person who struggled all his life to simply exist or who has never experienced being loved or cared for is less likely to reach the stage of self-actualization than a person who has always been well fed and loved. A person must have a certain amount of freedom and security in order to be able to actualize his or her capacities or potentials.

In describing self-actualizing people, Maslow (1954) wrote further that, "Such people seem to be fulfilling themselves and to be doing the best that they are capable of doing, reminding us of Nietzsche's exhortation, 'Become what thou art.'" They are people who have developed or are

developing to the full stature of which they are capable" (p.201).

Shostrom (1964) has devised a questionnaire, The Personal Orientation Inventory (POI), which measures what has been considered to be essential aspects of self-actualization. It is an instrument which has been used quite extensively and it has been shown that the reliability and validity of the POI are very satisfactory (Shostrom, 1964, 1966; Shostrom, Knapp and Knapp, 1976; Knapp, 1976). This is the questionnaire which was used in the present study to differentiate the different degrees of self-actualization of the Subjects taking part in this experiment. Shostrom (1966) has quite appropriately adopted Maslow's description of the self-actualizing person:

A person who is more fully functioning and lives a more enriched life than does the average person. Such an individual is seen as developing and utilizing all of his unique capabilities, or potentialities, free of the inhibitions and emotional turmoil of those less self-actualized. (Shostrom, 1966, p. 5)

The following chapters will review a number of studies pertaining to self-disclosure and self-actualization.

The first chapter as a whole will be reviewing different studies done on self-disclosure. It will look at: (1) the validity and equivalence of self-disclosure measurements, (2) some personality correlates of self-disclosure and general factors related to self-disclosure, (3) the dyadic effect of self-disclosure, (4) studies which failed to obtain positive results, (5) self-disclosure and therapy, and

(6) self-disclosure and physical and psychological well-being.

This is followed by a review of the area of positive mental health and self-actualization in particular. Special attention will be paid to Maslow's contribution in the development of the concept of self-actualization. There will also be a consideration of Rogers' concept of the "fully functioning person". A section on therapy and self-actualization is also included as well as a brief look at the role of creativity in self-actualization. The chapter ends with an examination of other general characteristics of self-actualization.

Chapter IV is devoted to the major measurement of self-actualization utilized in this study, namely the Personal Orientation Inventory (POI) developed by Shostrom (1964). There is a review of its development as well as a close look at studies supporting the validity of the POI and studies concerning its reliability.

Chapter V provides a brief recapitulation of what has been presented in the review of the literature and restates the purpose of the thesis along with the hypotheses to be tested. This is followed by a detailed presentation of the methodology for this research project.

#### Overview of the Study

The present research centered around one main hypothesis, namely that self-actualized individuals would self-disclose more (verbally to another person) than non-self-actualized individuals. All other hypotheses were derived from this main

hypothesis. For example, it was also hypothesized that self-actualized individuals would be rated as more trustworthy than non-self-actualized individuals and would be given a more favorable overall general rating by their respective partner in an interview setting.

The basic design of the study consisted of pairing high and low levels of self-actualized individuals such that four different groups could be examined and compared (i.e. High-High, High-Low, Low-High, Low-Low). The reason for a High-Low and a Low-High group is that for each pairing one of the members would be assigned the role of interviewer. The interviewer would be asked to "try and get to know the other person as well as he could in twenty minutes". Since it was expected that self-actualized interviewers would self-disclose more than non-self-actualized interviewers, it was hypothesized that non-self-actualized interviewees would self-disclose more when interviewed by a self-actualized interviewer than when interviewed by a non-self-actualized interviewer. This would be the result of the dyadic effect of self-disclosure as already indicated by several studies (Jourard, 1959a; Jourard and Landsman, 1960; Jourard and Richman, 1963; Levinger and Senn, 1967; Skyepeck, 1967; Rivenbark, 1971; Ehrlich and Graeven, 1971; Murdock, Chenowith, and Rissman, 1969; Chittick and Himelstein, 1967). The latter hypothesis is mostly of interest for the area of psychotherapy, particularly the more humanistic orientations in psychotherapy.

In order to maintain a check on the importance of self-actualization as the main contributor to the hypothesized effects, another element, the level of the Subject's self concept, was introduced as a control factor. The self concept was measured by the Tennessee Self Concept Scale (TSCS) (Fitts, 1965). Thus there were two different groups for each type of pairing, i.e., a group of high level self concept and a group of low level self concept. Each pair, however, remained homogeneous with respect to its level of self concept. The groups of high and low level self concepts were determined independently for the self-actualized group and the non-self-actualized group. That is, the self-actualized group was divided in high level self concept and low level self concept on the basis of their scores relative to that group, and the same applied for the non-self-actualized group.

## CHAPTER II

### SELF-DISCLOSURE

Although the term "self-disclosure" has been used and made popular by Jourard (e.g., 1964), Cozby (1973) points out that other terms such as "verbal accessibility" (e.g., Polansky, 1965), and "social accessibility" (e.g., Rickers-Ovsiankina, 1956) have been used to describe the same concept.

The various questionnaires developed in the area of self-disclosure simply ask the subjects to indicate by means of a three-point scale for a number of items, how much personal data they have disclosed to various people in the past. The scores obtained in this fashion are viewed as an index of a person's "openness", or demonstrated readiness to disclose to the target persons (Jourard, 1971b). For example, Shapiro and Swensen (1969) found strong correlations between what one spouse claimed to know about the other and what the other spouse had said he had disclosed. In another investigation of self-disclosure in (1) normals, (2) normals with neurotic symptoms, and (3) neurotic in-patients, Mayo (1968) found that normals reported higher self-disclosure than the other two groups.

Jourard and Resnick (1970) selected subjects with the highest and lowest scores for "past disclosure" and "willingness to disclose to a peer". They were all administered a 40-item self-disclosure questionnaire (Jourard 1971b) which asked them to indicate which of the topics they had fully revealed to somebody in their lives, and which topics they would be willing to discuss fully with a same-sex partner whom they would first meet in the course of the study. When low disclosers were paired with low disclosers and their performance on a self-disclosing interview compared with that produced by high-disclosing pairs, it was found that the low disclosers did indeed disclose much less to one another than did the high disclosers. Thus the questionnaires were able to predict the behavior in the interviews. Drag (1971) also found significant correlations ( $\rho = .77$ ,  $p < .01$ ) between the measures of willingness to disclose and actual disclosure to a roommate.

Jourard (1961) found that nursing students who scored high on a self-disclosure questionnaire tended to be rated as high in the "ability to establish and maintain a communicative relationship with patients" a year later as well as showing a high degree of openness with the nursing faculty.

An interesting study by Graham (1970) investigated the relationship between self-disclosure and an individual's

attitude towards death. As expected, it was found that "acceptors of death" self-disclosed more than "non-acceptors". The total past disclosure scores of both "acceptors" and "non-acceptors" was significantly correlated with actual disclosure to the experimenter.

Other studies have been reported which indicate that self-disclosure is related to behavioral measures of interpersonal competence and openness (Frankfurt, 1965; Taylor, 1965). They observed that persons reporting high self-disclosure revealed more about themselves in social interaction situations than low scorers. Mullaney (1963) analyzed the MMPI scale scores of college students and found that the disclosure groups were significantly different from one another only on the Social Introversion scale. The Low Disclosure group was more socially introverted than the High Disclosure group. Thus, it would appear that the less a person discloses, the more socially introverted he is.

One of the most extensive studies done on self-disclosure examined several personality dimensions of Peace Corps trainees (Halverson and Shore, 1969). As had been predicted, self-disclosure was negatively correlated with authoritarianism and positively correlated with "conceptual complexity" as measured by the Paragraph Completion Inventory. Halverson and Shore point out that the fact that the more authoritarian individual reports that he discloses less about himself suggests, consistent with the theory of authoritarianism, that one with relatively closed belief systems acts so as

to minimize the challenge to his values and beliefs. They also suggest that a person of a higher level of "conceptual complexity" interacts in an interdependent manner (i.e., assuming mutuality and equality in relationships), whereas one at a low level presumably interacts unilaterally (e.g., dominant and submissive roles). It would therefore be expected that there would be more openness in communicating to others in an interdependent rather than a unilateral interaction (Halverson and Shore, 1969).

The self-disclosure of the Peace Corps trainees was also positively related to behavioral ratings of "interpersonal flexibility" and "general adaptability" (Halverson and Shore, 1969). The authors state that the relationship of social accessibility (self-disclosure) to the "interpersonal flexibility" and "general adaptability" ratings supports the idea that there is a process dimension underlying social accessibility which has to do with behavioral plasticity as well as openness. Halverson and Shore (1969) also report that trainees who demonstrated a readiness to confide personal information to others were found to be more well liked by other trainees and the training staff after six weeks of training, than trainees who were reluctant to disclose personal information (Halverson and Shore, 1969).

Contrary to a common belief that self-disclosure is related to dependency and need for approval, Kopfstein and Kopfstein (1973) found that individuals reporting higher needs for social approval (as measured by the Marlowe-

Crowne Scale) were more evasive than those reporting reliance on self-approval. Similarly, they found that those individuals who were rated dependent on others by peers (that is, as having a high need for social approval) were more impersonal than persons given lower peer ratings of need for approval.

Taylor and Oberlander (1969) investigated the relations among need affiliation, self-disclosure predispositions, and perceptual responses to various types of interpersonal and noninterpersonal stimuli. High and low revealers were compared in various perceptual tasks involving embedded figures and high speed tachistoscopic presentation of stimuli. High revealers, as they had predicted, were more skillful in recognizing embedded figures of people. They also reported as clearest those parts of a stimulus configuration which contained human versus nonhuman figures, all of which were presented below threshold. Taylor and Oberlander also report that when their subjects were presented with superimposed human and nonhuman figures, the high revealers showed greater sensitivity for identification of human figures. Altman and Taylor (1973) state that these results indicate that high revealers are more attuned to people, read their interpersonal world with greater clarity, and probably make more discriminations about interpersonal stimuli.

It should be noted also that a large number of studies have demonstrated that women disclose more than men (Himmelstein and Lubin, 1966; Jourard, 1958; Jourard and Lasakow, 1958;

Jourard and Richman, 1963; Pedersen and Higbee, 1969). However, Pedersen and Higbee (1969) report that masculinity-feminity, as measured by the Gough Feminity Scale, was not correlated with self-disclosure.

#### Equivalence of Methods of Determining Self-Disclosure

Pedersen and Breglio (1968) found that both total depth and total amount of disclosure as measured by the Self-Disclosure Questionnaire (SDQ) were significantly correlated with total self-disclosure as measured by Jourard's initial 60-item Self-Disclosure Inventory (SD-60) (Jourard, 1958; Jourard and Lasakow, 1958). The SDQ required Subjects to answer questions on a sheet of paper (actual self-disclosure). Thus it was found that people who claimed on the SD-60 to have disclosed more to target persons tended actually to disclose more on a questionnaire which requested them to disclose information about themselves. Such a finding also provides construct validity for the SD-60.

Another study by Pedersen and Higbee (1968) examined the equivalence and construct validity of two self-disclosure measures, the SD-60 and Jourard's shortened version of the Jourard Self-Disclosure Inventory, the SD-25 (Jourard 1961c), and one social accessibility measure the 50-item Social Accessibility Scale (SA) developed and used by Rickers-Ovsiankina and Kusmin (1958). Pedersen and Higbee used the multitrait-multimethod matrix as suggested by Campbell and Fiske (1959) for such purposes. Campbell (1960) points out that in order to demonstrate construct validity we must

show not only that a test correlates highly with other variables with which it should theoretically correlate (convergent validation) but also that it does not correlate significantly with variables from which it should differ (discriminant validation). The results indicated that construct validity exists for the 60-item Self-Disclosure Inventory and the 25-item Self-Disclosure Inventory since the multitrait-multimethod matrices exhibited both convergent and discriminant validity. However it was also found that there is some variation between these two methods of measuring self-disclosure. It also provided evidence indicating that the 50-item Social Accessibility Scale measures a variable different from that measured by the two self-disclosure measures.

Another way of determining the equivalence of methods for measuring self-disclosure is by looking at the correlation between the measures which actually use different methods of obtaining the same trait (i.e. self-disclosure). For example, it was found that the score for past disclosure correlated significantly with disclosure in interviews as rated by judges when investigating the amount of self-disclosure by "acceptors of death" as compared to "non-acceptors" (Graham, 1970). As was indicated by the questionnaire pertaining to past disclosure, the "acceptors" actually disclosed themselves most fully to the experimenter and obtained scores signifying fuller self-disclosure on the Sentence-Completion Blank.

### General Factors Related to Self-Disclosure

Significant correlations ( $r=.49$ ,  $p<.01$  and  $r=.27$ ,  $p<.05$ ) have been found for 52 college females between scores for self-disclosure to mother and father respectively, and scores on the Tennessee Department of Mental Health Self-Concept Scale (Jourard, 1971b). This was considered as evidence to support the hypothesis that attitudes of self-acceptance are a factor in self-disclosing behavior. This certainly ties in well with Graham's observation that those who fully acknowledge the finality of their death entered more fully into self-disclosing relationships with their peers and showed themselves more willing to self-reveal to an experimenter than those who denied the reality of their death (Graham, 1970).

Different nationalities are often stereotyped in regard to general personality differences and it is not surprising that studies have examined self-disclosure patterns across nationalities. It was found that English females obtained lower mean total disclosure scores than American females (Jourard, 1961c). It was also found that American college students disclose more than do comparable students from Britain, the Middle East, Puerto Rico, and Germany (Jourard, 1971b).

One study taking religious denomination into consideration came up with the finding that Jewish males are higher disclosers to significant people in their lives than are comparable Methodist, Baptist or Catholic students (Jourard,

1961d). Police officers have been shown to resist self-disclosure (Jourard, 1971b); a group of married police officers displayed less self-disclosure to their wives and closest male friends than a group of young married male college students.

From a study examining physical attraction and self-disclosure, Jourard (1971b) concludes that reputation for readiness to disclose oneself is a factor in interpersonal attraction. Contrary to what had been expected, it was found that self-disclosure and body contact (two measures of physical intimacy) were virtually independent of each other (Jourard and Rubin, 1968). Jourard (1971b) concludes that there are various situational and personality correlates of self-disclosure to various target persons. Among women, for example, liking for a target person has been found to be a strong correlate of disclosure to that person, whereas among men knowledge of the other person is a much stronger correlate of disclosure (Jourard and Landsman, 1960). For both sexes, however, disclosure output to a certain person is most strongly correlated with disclosure-input received from that person. This has been called the "dyadic effect" (Jourard, 1959a).

A study investigating self-disclosure in children aged six to twelve (Jourard, 1961e) has shown that the mean disclosure output to closest friend of the same sex showed a linear increase with age. Jourard (1971b) proposes that children of both sexes begin life with their mother

as their closest confident and do not differ up to age twelve in overall amount of disclosure. As they enter adolescence the females usually start disclosing more than the males. As adolescence and young adulthood is reached, the typical pattern is for the amount of disclosure to parents to be reduced but with increases in disclosure to the closest same-sex friend. Then, with marriage the spouse becomes the closest confident, with further decreases in confiding to parents and closest same-sex friend (Jourard, 1961e).

#### Dyadic Effect of Self-Disclosure

When Jourard measured self-disclosure within a group of female nursing college faculty members, it was found that the amount disclosed to a given colleague correlated highly with the amount of disclosure received from that colleague (Jourard, 1959a). Such evidence for a reciprocity effect has been obtained from a number of other studies (Jourard and Landsman, 1960; Jourard and Richman, 1963; Levinger and Senn, 1967; Skypeck, 1967; Rivenbark, 1971). Several studies have also shown that a high-disclosing confederate elicits greater self-disclosure from subjects than a low-disclosing confederate (Ehrlich and Graeven, 1971; Murdock, Chenowith, and Rissman, 1969; Chittick and Himmelstein, 1967).

Worthy, Gary, and Kahn (1969) have suggested that reception of self-disclosing information from another person is quite rewarding since reception of such information

implies that one is trusted. They also feel that more intimate information represents greater reward for the receiver and will bring about more intimate self-disclosure from the receiver.

In a review of the effects of "Experimenters' Self-Disclosure on Subjects' Behavior", Jourard (1969) reports on a study by Drag (1968) which showed convincingly that even twenty minutes of mutual disclosure between an experimenter and a subject in an experiment has powerful effects. Not only does it bring about a greater amount of self-disclosure on the part of the subject but it can bring about a superior performance on a learning task (Frey, 1967). Frey reported that subjects who had engaged in mutual disclosure with him, prior to the conduct of the learning experiment, took about one-third fewer trials to learn a paired-associate list to criterion than did subjects with whom he did not get so acquainted. One can speculate about an increase in motivation brought about by the self-disclosure.

Kormann (1967) did some research to determine if there would be any changes on a psychological test (the Edwards Personal Preference Schedule) due to interaction of a personal nature with the examiner. It was found that the experimental group (receiving get acquainted sessions) changed more responses on the EPPS than did the control group. Twenty percent of the experimental group members indicated they tried to be more "open" on the test after

meeting the examiner between the first and second testing. In that same line, Heifitz (1967) reported that subjects in his experimental group produced more responses on a projective test (The Rotter Incomplete Sentence Blank) that impressed a judging panel as "more revealing", after mutually disclosing conversations with him, than did the members of the control group. Jourard feels that this certainly suggests that when people are tested by someone with whom they have gotten personally acquainted, they are less defensive, or more self-disclosing than when the tester remains a stranger (Jourard, 1969). Thus, Kormann's and Heifitz's studies indicate quite clearly that when the test-examiner makes himself known, even a little, the subjects vary their self-presentation on the tests.

An interesting study by Jourard and Jaffe (1970) demonstrated how subjects tend to match their speaking time to that of the interviewer. The experimenter asked personal questions of the subject but answered these questions about herself, truthfully, before the subject responded. When the experimenter spoke briefly, the subjects also spoke briefly, but when the experimenter spoke at length, the subjects spoke significantly longer. When the experimenter changed from long to short utterances on certain topics, so did the subjects. Or when he switched from short to long, again the subjects did likewise. In another study examining experimenter-subject "distance" and self-disclosure,

Jourard and Friedman (1970) found that subjects to whom the experimenter revealed something of himself disclosed themselves at greater length than did subjects to whom he did not so reveal himself. An interesting result was that touching, in combination with the experimenter's self-disclosure resulted in even more disclosure on the part of the subject. The results also show that the experimenter's distance reduction was associated with increases of positive feelings, of subjects' self-disclosure, and subjects' impression change.

Of course, Resnick's experiment (Jourard and Resnick, 1970) is a classical study supporting the "dyadic effect" of self-disclosure. In brief, it was found that pairs of high disclosers disclosed much more than pairs of low disclosers. The most interesting finding of that study was that when high disclosers were paired with low self-revealing peers, it was the low disclosers who changed in the direction of greater openness. Some research by Shapiro (1968) has yielded similar outcomes, namely that the low disclosers changed their behavior when paired with more highly disclosing partners for mutual interviewing.

As Jourard has already claimed in a large number of his writings, it appears as though men will show themselves most fully to men who can earn their trust through allowing themselves to be known. Needless to say this has a great deal of relevance for psychotherapy, but it is also important for anyone who is doing research since the experimenter's

own degree of transparency will determine how open the subject will be (Jourard, 1969).

#### Studies which Failed to Obtain Positive Results

While Jourard, in his series of studies, has been able to demonstrate construct validity for his scale, Himelstein and Lubin (1965) state that predictive or concurrent validity has proved difficult to demonstrate. For example, Lubin and Harrison (1964) gave a version of the self-disclosure scale to management-level participants in a group-process conference and found that ratings of each participant on self-disclosing behavior in twenty hours of conference were not significantly related to total score on the inventory. Then in a study by Himelstein and Kimbrough (1963), a non-significant correlation was obtained between total score on the original form of the Jourard scale and the amount of information revealed during self-introductions in a classroom situation.

Himelstein and Lubin (1965) attempted to validate the self-disclosure inventory by the peer-nomination technique. The Self-Disclosure Inventory was given to fraternity and sorority groups and they were also asked to make peer nominations for "most likely to confide in others" and for "most likely to tell my troubles to". Nonsignificant correlations were obtained between the score on the Inventory and the first nominations as well as for the relationships between the two peer nominations.

Since self-disclosure has been considered a symptom of

a healthy personality by Jourard and others, Stanley and Bownes (1966) decided to investigate if indeed there existed such a relationship. In order to do this they administered the Jourard and Lasakow (1958) Self-Disclosure Questionnaire and the Maudsley Personality Inventory (MPI) to college students. However, no consistent relationship between self-disclosure and neuroticism was found.

Vondracek (1969), in turn, was unable to obtain a significant correlation between a self-report measure of self-disclosure (Jourard's Self-Disclosure Inventory) and a behavioral measure (timing the actual verbalizations of each person). He concluded that a self-report measure of self-disclosure and a behavioral measure were probably assessing different variables. In an effort to explore further the construct validity of the JSDQ by comparing it with several independent measures of self-disclosure based upon information supplied by well-informed peers concerning how self-disclosing individuals were over a series of group-counseling sessions, Hurley and Hurley (1969) came up with results which demonstrated a sharp cleavage between the self-report JSDQ and all observer ratings of self-disclosure. However, Jourard claims that it was not surprising to him that the Hurleys as well as Himelstein and Kimbrough (1963) did not obtain the positive correlations they expected, since a subject's report of past disclosure to parents and closest friends is a far cry from disclosure to strangers encountered in the psychological

laboratory (Jourard, 1971b). There is a difference between past disclosure to significant others which took place in a dyadic relationship and the "broadcasting" type of self-disclosure which was called for in the classroom or in an encounter group. As he says, while there is a tendency for people to be characteristically open or reserved, the influence of the situation and the identity and number of confidants cannot be neglected.

Vondracek and Marshall (1971) had hypothesized that individuals who score high on interpersonal trust should also score high on self-disclosure. Statements by Jourard (1964) and Truax and Carkhuff (1965) supported the notion that an individual's ability to disclose, to "drop his mask", to be transparent, required some degree of trust in the target person, some feeling that the discloser would not be penalized or castigated for his willingness to disclose. They felt that the act of self-disclosure could therefore be viewed as willingness on part of the discloser to render himself more vulnerable. The rationale being that without some trust in the target individual, self-disclosure of intimate information would be an act of foolishness. However, the hypothesized correlation between self-disclosure scores and interpersonal trust did not materialize.

Nevertheless, Vondracek and Marshall (1971) come up with interesting comments in their discussion. They state that although it appears that most individuals can substantially

agree on the relative intimacy of self-disclosure items (Taylor and Altman, 1966; Vondracek, 1966, 1968), whether they actually disclose information about themselves depends on: (1) the nature of the target person (Jourard and Lasakow, 1958); (2) the relationship between the discloser and the target person (Levinger and Senn, 1967; Pedersen and Higbee, 1969); (3) the verbal and non-verbal behavior of the target person (Jourard and Jaffe, 1970; Shapiro, Krauss, and Truax, 1969; Worthy, Gary and Kahn, 1969); and (4) the category of information to be disclosed (Jourard and Lasakow, 1958; Taylor and Altman, 1966). They conclude that when self-disclosure is viewed in this context it can be conceptualized as a highly selective process, and it appears that any attempt to measure a generalized, global concept of self-disclosure may suffer from the influence of numerous uncontrolled sources of variation. Altman and Taylor (1973) also feel that it is unrealistic to expect to find specific trait-disclosure relationships. Their approach is to explore the relationship between personality and self-disclosure in the context of specific relationships and settings.

#### Self-Disclosure and Therapy

Truax and Carkhuff (1965) state that from the early work of Breuer and Freud (1957) to the recent work of Rogers (1951, 1958a), most clinical and theoretical descriptions of the psychotherapeutic process have focused upon the patient's progressive self-disclosure and self-

exploration as one of the central happenings in the patient's engagement in the process of psychotherapy. The work of all existential and humanistic psychotherapists is based on a relationship between psychological adjustment and ability to be aware of oneself and to disclose to others.

In view of the fact that it seems to be generally true that intimate self-disclosure begets intimate self-disclosure while impersonality begets impersonality (Jourard, 1971b, 1969), this leads us to consider possible important implications of therapist self-disclosure for psychotherapy. For example, Jourard (1971b) points out that it might prove to be true that therapists, in order to maximize disclosure in their patients, will be obliged to go beyond impersonal "technique" and "be themselves". That is, they would have to disclose to their patients what they themselves are experiencing during the therapy hour just as they expect their patients to disclose to them.

Such an approach has no doubt already been given serious consideration. Hurley and Hurley (1969) notes that psychotherapists are showing an increased concern for the related concepts of authenticity (Bach, 1966; Bugental, 1965), transparency (Rogers, 1961b; Truax and Carkhuff, 1965), and the open "confession" of wrongdoing (Mowrer, 1961, 1964). More recently, Shostrom (in Shostrom, Knapp and Knapp, 1976), in his book expounding his theory on "actualizing therapy", has emphasized the importance of openness on the part of the therapist. He wrote that, "A kinship between

two persons is established, and it is apparent that the therapist must be willing to risk vulnerability in the service of the therapeutic process" (Shostrom, Knapp and Knapp, 1976, p. 177). Shostrom also cites Rogers (1961) as having stated: "To be transparent to the client, to have nothing of one's experience in the relationship which is hidden...this is, I believe, basic to effective psychotherapy" (Rogers, 1961, pp. 5-7).

The study by Truax and Carkhuff (1965) on client and therapist transparency in the psychotherapeutic encounter is probably the research most often referred to when discussing the importance of client and therapist self-disclosure. The two major findings of this study were that (1) there is a significant relationship between therapist transparency or self-congruence and the patient's level of self-disclosure or self-exploration, and that (2) the greater the degree of self-exploration or transparency during psychotherapy, the greater the extent of constructive personality change in the patient.

Altman and Taylor (1973) remark that Rogerian and humanist-stimulated thought has emphasized the mutual quality of the therapeutic relationship and has come to view the therapist's genuine participation as critical to the process (Rogers, 1958; Jourard, 1959c, 1961c, 1971a; Truax, 1961, 1963, 1966; Truax and Carkhuff, 1965, 1967, Truax et al., 1965). Again, Shostrom (in Shostrom, Knapp and Knapp, 1976) writes that Hora (1960) described the existential

therapist as follows: "The existential therapist does not 'do' psychotherapy, he lives it. He meets his patient in the openness of an interhuman existential encounter" (Hora, 1960, pp. 498-499).

It is Jourard (1968) who has strongly emphasized that in true encounter there is a collapse of roles and self-concepts and that no one emerges from an encounter the same as he entered. He believes that authentic disclosure of self is a likely factor in the promotion of awakening, of authentication and validation of the other, and the emergence of independent learning.

Self-disclosure is not only a prerequisite for successful individual therapy but also for successful group therapy. In a study of group psychotherapy, Peres (1947) reported that successful patients in group therapy made significantly more personal references over the course of therapy when compared to unsuccessful patients.

Upon the examination of the influence of an interviewer's disclosure on the self-disclosing behavior of interviewees, Jourard and Jaffe (1970) found that there was a significant relationship between the length of time the experimenter spoke and the duration of the subjects' utterances regarding twenty different topics. Drag (1968) in turn, demonstrated that when an experimenter entered into self-revealing dialogue with a subject prior to the conduct of an experimental interview, the subject disclosed more to the experimenter

in the interview proper than occurred when the experimenter interrogated the subject, but revealed nothing of herself prior to the interview. Cozby (1973) remarks that in addition to eliciting greater disclosure from subjects (i.e., inducing a reciprocity effect), the interviewer or experimenter who discloses is rated as more trustworthy (Drag, 1968) and more positively in general (Jourard and Friedman, 1970) than the experimenter who does not self-disclose.

A rather interesting experimental study by Powell (1968) found that subjects disclosed more when the interviewer responded to the interviewee's self-references with open disclosure than when he used either approval-supportive or reflection-restatement techniques. This obviously provided good support for Jourard's notion of reciprocity or concept of "dyadic effect". Worthy, Gary, and Kahn (1969) obtained results consistent with these findings when they investigated the exchange of self-disclosures in groups of four subjects in a laboratory setting. Thus the intimacy of disclosures exchanged tended to follow the norm of reciprocity. That is, higher self-disclosures were made to those from whom the subject had received higher disclosures. What is more, Vondracek and Vondracek (1971) have also shown that sixth-grade children disclose more to an adult interviewer who discloses than to an interviewer who does not disclose.

#### Self-Disclosure and Physical and Psychological Well-Being

Jourard has stated that chronic self-concealment and

duplicity are factors in breakdown (Jourard, 1964). It seems to be a fairly common hypothesis in a large number of cases but nothing conclusive has yet been shown. Jourard believes that stress engendered by chronic false-self-being is a factor in just about every form of physical illness, even including cancer (Jourard, 1971a). The part played by self-concealment and misrepresentation in psychosis has also been commented upon by Mowrer (1961).

It is felt that the individual who never discloses may be unable to establish close relationships with others. A large portion of his self may be seen as threatening and repressed (Cozby, 1973). There is already some evidence that repressors talk less than sensitizers (Kaplan, 1967; Axtell and Cole, 1971). According to Jourard, accurate portrayal of the self to others is an identifying criterion of healthy personality, while neurosis is related to inability to know one's "real self" and to make it known to others (Jourard, 1971a).

To allow one's real self to be known to at least one "significant" other was already seen as a prerequisite for a healthy personality by Jourard over fifteen years ago (Jourard, 1959b). Along the lines of Maslow's concept of self-actualization, Jourard proposed that low disclosure is indicative of a repression of self and an inability to grow as a person (Jourard, 1964). As Jourard himself wrote:

Self-disclosure, or should I say "real"

self-disclosure, is both a symptom of personality health and at the same time a means of ultimately achieving healthy personality. The discloser of self is an animated "real self be-er". This, of course, takes courage--the "courage to be" Tillich, 1954 . (Jourard, 1959b. p. 503)

Jourard states that he has known people who would rather die than become known, and in fact some did die when it appeared that the chances were great that they would become known. The essence of his theoretical approach to health transpires in what he then writes:

When I say that self-disclosure is a symptom of personality health, what I mean really is that a person who displays many of the other characteristics that betoken healthy personality (Jourard, 1958b; Maslow, 1954) will also display the ability to make himself fully known to at least one other significant human being. When I say that self-disclosure is a means by which one achieves personality health, I mean something like the following: It is not until I am my real self and I act my real self that my real self is in a position to grow. One's self grows from the consequence of being. People's selves stop growing when they repress them. (Jourard, 1959b, p. 503)

The relationship between self-disclosure and self-actualization should now gradually emerge. Neurotic and psychotic symptoms are seen as devices to avoid becoming known. That is they might be viewed as "smokescreens" interposed between the patient's real self and the gaze of the onlooker (Jourard, 1959b). It is stressed that a self-alienated person--one who does not disclose himself truthfully and fully--can never love another person nor

can he be loved by the other person. It is noted that effective loving calls for knowledge of the object (Fromm, 1956; Jourard, 1958b).

Even though Jourard is a strong believer in self-disclosure, he is still quite aware of the need for a certain amount of privacy and times where discretion in one's self-disclosure is recommended (Jourard, 1971a). Simmel (1964) has written about the importance of discretion. He has talked about "the feeling that an ideal sphere lies around every human being" (p. 321), and that "although differing in size in various directions and differing according to the person with whom one entertains relations, this sphere cannot be penetrated, unless the personality value of the individual is thereby destroyed" (p. 321). In this sense, Cozby (1973) remarks that self-concealment (not lying or misrepresenting one's self, but maintaining a private area of the self) may have functional significance in giving a person a sense of "individuality". Simmel (1964) notes that a complete lack of discretion in disclosure can paralyze the vitality of a relationship and make its continuation really appear pointless. Thus, he says:

It is highly probable that many marriages founder on this lack of reciprocal discretion--discretion both in taking and in giving. They lapse into a trivial habituation without charm, into a matter-of-factness which has no longer any room for surprises. (Simmel, 1964, p. 329)

As has already been mentioned, Jourard believes that in the effort to avoid becoming known, a person provides

for himself a cancerous kind of stress; the individual is usually largely unaware of the presence of this stress but Jourard felt that it can be responsible in producing not only the assorted patterns of unhealthy personality that psychiatry talks about, but also the wide array of physical ills that have come to be recognized as the stock in trade of psychosomatic medicine (Jourard, 1959b). For example, psychosomaticists recognized long ago that ulcer patients, asthmatic patients, patients suffering from colitis, migraine and the like, are chronic repressors of certain needs and emotions, especially hostility and dependency (Alexander, 1950). What happens is that whatever you repress is not only taken away from your awareness but also from the scrutiny of others. It should therefore not be surprising that the means by which repressions are overcome in the therapeutic situation is through relentless disclosure of self to the therapist (Jourard, 1959b).

Selye has studied extensively the effects of stress on the body and came to the conclusion that illness is a consequence of stress applied to the organism (Selye, 1946, 1956). Jourard is of the opinion that unhealthy personality has a similar root cause, and one which is related to Selye's concept of stress. Thus Jourard has claimed:

Every maladjusted person is a person who has not made himself known to another human being, and in consequence does not know himself. Nor can he find himself. More than that, he struggles actively to avoid becoming known by another human being. He works at it ceaselessly, twenty-four hours daily, and it is work! (Jourard, 1959b, p. 503)

Along those lines Jourard points out that if a person struggles to avoid becoming known by other persons then he must construct a false public self (Jourard, 1958b). The greater the discrepancy between one's unexpurgated real self and the version of oneself presented to others, the more dangerous will other people become for him. Thus if becoming known by another person is a source of danger, then it follows that merely the presence of the other person can serve as a stimulus to evoke anxiety, heightened muscle tension and all the assorted visceral changes which occur when a person is under stress (Jourard, 1959b). Several studies have already demonstrated the tension-evoking powers of the other person through the use of such instruments as are employed in the lie detector, the measurement of muscle tensions with electromyographic apparatus and so on (Davis and Malmo, 1951; Dittes, 1957; Lawrence, 1972). This is all related to the fact that if a person is not ashamed of his real self, then disclosure of self should not be highly threatening either (Jourard, 1971a).

Mayo (1968) found that "normals" reported higher self-disclosure than "neurotic in-patients" and "normals with neurotic symptoms". Another interesting finding was that, in all groups, other-disclosure (that is how much other people disclose to the individual in question) was positively correlated with self-disclosure. In another study by Taylor, Altman and Frankfurt (1965) with 100 male naval recruits, the authors report that "personal adjustment"

on the scales of MMPI Hysteria (Hy), Hypochondriasis (Hs), and Social Introversion (Si), and Schizophrenia (Sc) was correlated with self-disclosure to best friends. It would therefore appear that there is a trend for those higher in social adjustment to be more willing to reveal themselves, especially to close friends. Some more supporting evidence was obtained by Jourard (1971b) who also looked at the correlation of MMPI profiles to self-disclosure.

From the administration of the Edwards Personal Preference Schedule (EPPS), Taylor, Altman, and Frankfurt (1965) were able to observe that certain traits reflecting positive social orientation, such as affiliation, succorance, nurturance, and heterosexuality were associated with greater self-disclosure. Then Pedersen and Higbee (1969), upon analyzing correlations for males and females separately, found significant negative relationships of self-disclosure with both neuroticism and cycloid disposition for females. This finding was obviously consistent with Jourard's theory that failure to disclose may result in psychological maladjustment. But then one may ask which comes first, the failure to disclose or the psychological maladjustment.

#### Summary

As can be judged by the different studies related to self-disclosure, the concept of self-disclosure has already led to a fair amount of research. This chapter presented a number of studies which appear to be in line with the main hypothesis of this study, i.e., that the

more self-actualized individuals (individuals who live up to their potential, who continuously strive towards greater development, and who as a consequence tend to be more healthy psychologically and physically) will show greater amounts of self-disclosure.

Several studies are reported which ascertain the equivalence of different methods for determining self-disclosure. The popular Self-Disclosure Inventory used by Jourard has shown to be quite reliable. What is more, the questionnaires for measuring self-disclosure appear to be significantly correlated to behavioral measures of self-disclosure.

A few general factors related to self-disclosure such as nationality, religion, certain occupations, age and physical attraction, have also been examined. An important aspect of self-disclosure, one which has already received a large amount of attention, is the dyadic effect of self-disclosure, i.e., a person on the receiving end of self-disclosure (from another person) will tend to self-disclose more.

An attempt has also been made to try and determine the significance of self-disclosure for psychotherapy. It seems to be more pertinent for existential and humanistic psychotherapists who emphasize the relationship between psychological adjustment and the ability to be aware of oneself and to disclose to others. In view of the studies reporting the dyadic effect of self-disclosure, it is

suggested that self-disclosure on the part of the therapist might be an important factor in accelerating the process of therapy. This view has been strongly held by Jourard (1968). It has also been shown that in addition to eliciting greater disclosure from subjects (i.e., inducing a reciprocity effect), the interviewer or experimenter who discloses is rated as more trustworthy and regarded more positively in general than the experimenter or interviewer who does not self-disclose.

Self-disclosure is regarded by Jourard (1959) not only as a symptom of personality health but also as a means of ultimately achieving healthy personality. It is along the lines of Maslow's concept of self-actualization (and along the lines of this thesis), that Jourard (1964) proposed that low disclosure is indicative of a repression of self and an inability to grow as a person. Jourard goes as far as to state that stress engendered by chronic false-self-being is a factor in just about every form of physical illness (Jourard, 1971a). A number of studies are also reported which examined the amount of self-disclosure in different levels of personal adjustment.

With the large number of studies carried out it is not unusual to expect a number of them reporting failure to obtain positive results. These studies are presented along with some arguments as to why the results might be negative. Nevertheless, one is reminded that in the end it has not yet been determined which comes first, the failure to disclose

or the psychological maladjustment, or conversely, "the self-disclosure or the self-actualization".

The next chapter will be taking a closer look at positive mental health and self-actualization.

## CHAPTER III

### POSITIVE MENTAL HEALTH AND SELF-ACTUALIZATION

One of the reasons why "positive mental health" is so hard to define is that standards of healthy or normal behavior vary with the time, place, culture, and expectations of the social group in which the individual finds himself. In other words, different people have different standards. Rogers (1963), upon discussing the concept of "positive mental health", stated, "I suspect that the Menninger Clinic and the Counseling Center of the University of Chicago would define it rather differently. And I am sure that the Soviet state would have still another definition" (p. 17).

Nevertheless, it appears that there are certain core aspects which are given particular attention whenever we refer to positive mental health. For example, many scientific investigators have thought about the psychological content of positive mental health, and Ewolt (Jahoda, 1958) reports that a review of their contributions reveals six major approaches to the subject.

- a. Attitudes of the individual toward himself
- b. Degree to which person realizes his potentialities through action
- c. Unification of function in the individual's personality

- d. Individual's degree of independence of social influences
- e. How the individual sees the world around him
- f. Ability to take life as it comes and master it

(Jahoda, 1958, p. XI)

A number of authors consider the essence of mental health as an ongoing process variously called self-actualization, self-realization, growth, or becoming (Jahoda, 1958, p. 30). The term self-actualization seems to have originated with Goldstein (1940). He argued that the only drive by which the life of the organism is determined is the single drive of self-fulfillment (Hallman, 1966). This drive involves the creation and organization of tension rather than its reduction. It moves the organisms by means of goods which lie in the future rather than by its infantile past and it unfolds toward psychological health rather than toward guilt and neurosis.

Later on, Maslow (1954) wrote:

Various recent developments have shown the theoretical necessity for the postulation of some sort of positive growth or self-actualization tendency within the organism, which is different from its conserving, equilibrating, or homeostatic tendency, as well as from the tendency to respond to impulses from the outside world. (p. 124)

Maslow noted that this kind of tendency to growth or self-actualization, in one or another vague form, has been postulated by thinkers as diverse as Aristotle and Bergson, and by many other philosophers. Maslow (1954) also reports

that among psychiatrists, psychoanalysts, and psychologists, such a concept has been found necessary by Goldstein, Rank, Jung, Horney, Fromm, May, and Rogers.

Jahoda (1958) reports that the various authors who regard self-actualization as a criterion of positive mental health seem to emphasize one or more of the following aspects: (1) self-concept; (2) motivational processes; and (3) the investment in living, referring to the achievements of the self-actualizing person as demonstrated in a high degree of differentiation, or maximum development, of his basic equipment.

In this framework, mental health is best viewed along a continuum. In this respect, Taylor (1970) points out quite appropriately that self-destruction and self-creation may be viewed as being distributed along a continuum. Thus, at one extreme self-destruction takes the form of suicide and, at the other extreme, self expression is manifested as experiences of rebirth, of creation of art, poetry, mathematics, literature and science. Taylor notes that sprinkled along the intervening band or continuum between these two extremes are all the various states in which the person is to a greater or lesser degree realizing his potential--his potential for self-fulfillment and for creativity. A notion closely related to the one just stipulated is that mental health criteria have an optimal rather than a maximal degree (Jahoda, 1958).

The multiple criterion approach seems to be rather appropriate to such a broad area. In this respect, Jahoda (1958) notes that some authors regard a multiple criterion as composed of the various ways in which the underlying quality of mental health can manifest itself. She feels that, of this type, Maslow's idea of self-actualization is the outstanding example. She describes it in the following manner:

A self-actualizing person not only is motivated to strive for always higher goals but also has an adequate self-image, is autonomous, creative, and spontaneous, has a reality-oriented perception of the world, enjoys love, work, and play, and has a well-developed individualistic ethic. In this sense, the multiple criterion approach is similar to the notion of a syndrome--as used in medicine, for example, when one speaks about the TB syndrome. (Jahoda, 1958, p. 71)

#### Maslow and Self-Actualization

Maslow believed that Goldstein, as well as psychologists in general, were too concerned with the diseased, the neurotic, and the stunted personality. He has attempted to broaden organismic theory by extending it to the study of "fine, outstanding and healthy individuals" (Chaplin and Krawiec, 1968). To this effect, Shostrom (1969) has quite appropriately stated:

Humanistic psychologists talk not only how people ARE but also about how and what people might become. For such psychologists, the discovery by Maslow has proved very fruitful, namely, that one of the best ways of understanding people is not to study those who are barren and joyless, but rather to study those who are not. (Shostrom, 1969, p. 183)



Maslow has based much of his work on the hypothesis that the average healthy individual is functioning at only a fraction of his potential. This hypothesis was apparently first formulated by William James at the turn of the century (1917). James has said, "...the plain fact remains that men the world over possess amounts of resource which only very exceptional individuals push to their extremes of use" (James, 1917, pp. 41-42). Today a considerable number of other behavioral scientists such as Gardner Murphy, Erich Fromm, Carl Rogers, Gordon Allport, and Margaret Mead subscribe to this hypothesis (Otto, 1968).

The unifying principle of Maslow's theory is that actualization of his potential is every man's life-long adventure. Maslow (1968a) notes that for most writers in this area, the terms growth, individuation, autonomy, self-actualization, self-development, productiveness, and self-realization are all crudely synonymous. In fact Maslow believes that it is not possible to define this area sharply at the present time. It is felt that its meaning can be indicated rather than defined, partly by positive pointing, partly by negative contrast, i.e., what it is not. For example, it is not the same as equilibrium, homeostasis, tension-reduction, etc. (Maslow, 1968a).

Maslow distinguishes deficiency motivation from growth motivation which leads to self-actualization. Healthy people have sufficiently gratified their basic needs for

safety, belongingness, love, respect and self-esteem so that they are motivated primarily by trends to self-actualization which is defined as ongoing actualization of potentials, capacities and talents, as fulfillment of mission (or call, fate, destiny, or vocation), as a fuller knowledge of, and acceptance of, the person's own intrinsic nature, as an unceasing trend toward unity, integration or synergy within the person (Maslow, 1968a). Growth or self-actualization is seen then not only as progressive gratification of basic needs to the point where they "disappear", but also in the form of specific growth motivations over and above these basic needs, e.g., talents, capacities, creative tendencies, or constitutional potentialities (Maslow, 1968a).

In order to arrive at this basis for self-actualization, Maslow examined the characteristics that he discerned as shared among 51 public or historical figures, contemporaries, and carefully screened young people who seemed to him to exemplify or to approach the ideal of psychological health. Among the individuals studied were Whitman, Thoreau, Beethoven, Lincoln, Einstein, Spinoza, Jefferson, Jane Addams, William James, Albert Schweitzer, and Fritz Kreisler. A holistic analysis of the personalities and achievements of such individuals showed that healthy people, or more specifically self-actualizers, show the following characteristics:

1. They demonstrate an efficient perception of reality and acceptance of it
2. They accept themselves and others

3. They show a high degree of spontaneity
4. They have a problem-centered orientation to life rather than a self-centered orientation
5. Such individuals have a need for privacy and detachment.
6. They are autonomous or relatively independent of their environments
7. They appreciate the "basic goods of life" with continued freshness and pleasure
8. They show, at times, profound mysticism
9. They are able to identify with mankind
10. They develop deep interpersonal relations with others
11. They are democratic
12. They keep means and ends distinguishable
13. They possess a well-developed and unhostile sense of humor
14. They are creative
15. They tend to be nonconformists  
(Chaplin and Krawiec, 1968)

Maslow states that every human being has two sets of forces within him. One set of forces pertains to safety and tries to maintain a status quo. It clings to safety and defensiveness out of fear, tending to regress, hanging onto the past, afraid to take chances, afraid to jeopardize what he already has, afraid of independence, freedom and separateness. The other set of forces, on the other hand, impel him forward toward wholeness of Self and uniqueness of Self, toward full functioning of all his capacities, toward confidence in the face of the external world at the same time that he can accept his deepest, real, unconscious

Self (Maslow, 1956a).

Maslow has stated that it is his strong impression that there is not a sharp line between his subjects chosen as self-actualizing and other people. He believes that each self-actualizing subject with whom he has worked fits more or less the description he has given. He feels that some percentage of other, less healthy people also are metamotivated to some degree by the B-values, especially individuals with special talents and people placed in especially fortunate circumstances (Maslow, 1967a). He has postulated that the B-values or metamotivations are instinctoid in nature, and that without some "gratification" the person becomes ill and does not achieve full-humanness. He felt that the metaneeds are equally potent among themselves, on the average. That is, he could not detect a generalized hierarchy of prepotency. However, in any given individual they may be and often are hierarchically arranged according to idiosyncratic talents and constitutional differences (Maslow, 1967a).

Maslow (1967a) claims that it is socially realistic today to bet that most newborn babies will never actualize their potentiality, and will never rise to the highest levels of motivation because of poverty, exploitation, prejudice, etc. He felt it was wise to say of adults that prognosis varies for each of them, depending on how and where they live, their social-economic-political circumstances,

degree and amount of psychopathology, etc.

Self-actualization need not, however, as pointed out by Chaplin and Krawiec (1968), take the form of creative activity characteristic of genius. A fine mother, an athlete, a good workman may be actualizing their potential abilities in doing well what they can do best. It is nevertheless true, as they again point out, that self-actualizers are comparatively rare and disproportionately represented among the gifted. It appears that most people are seeking the satisfaction of lower order needs. Maslow (Hallman, 1966) concludes that all psychologically healthy people are self-actualizing and that all are creative. However he notes that their creativeness differs from the special talent creativeness of genius and is rather more akin to the "naive and universal creativeness of unspoiled children" (Maslow, 1956b, p. 186).

Maslow finds that creative individuals are precisely those whose behaviour exhibits qualities of integration, wholeness, and self-acceptance. He feels that because healthier people can make use of their unconscious without fearing it and can accept their impulses without defending against them, they can release their energies into formal patterns of enjoyment. Thus, the aesthetic urge becomes a major force in adult, healthy human living (Hallman, 1966).

It is important to note that Maslow himself has written that "Self-actualization is not only an end state but also the process of actualizing one's potentialities at any time, in any

amount" (Maslow, 1971, p. 47). Otto (1968), in turn, states that there appears to be a periodicity in the motivation to actualize one's potential. It is felt that at certain periods in life individuals seem to be more open to growth and self-actualization. Adolescence and post adolescence seem to be one such period. Then, for women the mid- or upper-thirties, when children for the most part are in school, is the period when they are motivated to do something about their potentialities. For men it appears that the mid-forties, fifties, and immediately preceding and following retirement finds them highly motivated in relation to their individual potential.

Maslow (1956a) talks about "growth-through-delight" and in spite of some differences he finds it possible to tie his theory with:

- 1) the dynamic theories of Freud, Horney, Jung, Fromm and Rank
- 2) the Self theories of Rogers, Angyal, Allport, and Goldstein
- 3) the Growth-and-Being school of Dewey, Rasey, Moustakas, Wilson, Perls, Lee, Mearns, etc...

#### Rogers and the Fully Functioning Person

In an article dealing with motivation and human potentialities, Otto (1968) reports that Rogers is in close agreement with Goldstein in seeing that the organism has one basic tendency, namely, to maintain, actualize and enhance the experiencing organism with behavior moving in the direction of increasing self-regulation, greater independence, self-responsibility, and self-government. He notes that Rogers also sees self-actualization as the major human motivation: "The organism has one basic tendency and striving--to actualize, maintain and enhance the

experiencing organism" (Rogers, 1951, p. 356).

Rogers (1963) has emphasized three characteristics of the fully functioning person, or the person at the end-point of optimal psychotherapy. These are:

1. This person would be open to his experience. It is the polar opposite of defensiveness.
2. This person would live in an existential fashion.

This would mean living in the moment and is characterized by an absence of rigidity, of tight organization, and of the imposition of structure on experience. There is instead a maximum of adaptability, a discovery of structure in experience, a flowing, changing organization of self and personality (Rogers, 1963).

3. This person would find his organism a trustworthy means of arriving at the most satisfying behavior in each existential situation. He would do what "felt right" in this immediate moment and he would find this in general to be a competent and trustworthy guide to his behavior.

Rogers elaborates on this and says that since that person would be open to his experience he would have access to all of the available data in the situation on which to base his behavior. Data consisting of things such as the social demands, his own complex and possibly conflicting needs, his memories of similar situations, and his perception of the uniqueness of this situation, etc.

Thus the fully functioning person is able to live fully in and with each and all of his feelings and reactions. He is making use of all his organic equipment to sense, as accurately as possible, the existential situation within and without (Rogers, 1963). He places a great deal

of confidence in the wisdom of his organism to select that behavior which in this moment of time will be most generally and genuinely satisfying. He has learned to experience all of his feelings and is not afraid of anyone of them. He is his own sifter of evidence but remains open to evidence from all sources. Most important of all, we can say that he is completely engaged in the process of being and becoming himself.

Rogers is quite aware that this type of person is indeed creative. He expressed this quite clearly in the following:

This person at the hypothetical end point of therapy could well be one of Maslow's "self-actualization people". With his sensitive openness to his world, his trust of his own ability to form new relationships with his environment, he would be the type of person from whom creative products and creative living emerge. He would not necessarily be "adjusted" to his culture, and he would almost certainly not be a conformist. (Rogers, 1963, p. 23)

One implication of the view Rogers has presented, an aspect which he points out himself, is that the basic nature of the human being, when functioning freely, is constructive and trustworthy. He feels that when we are able to free the individual from defensiveness so that he is open to the wide range of his own needs, as well as the wide range of environmental and social demands, his reactions may be trusted to be positive, forward moving, constructive. An important aspect for the present investigation is that Rogers claims we do not have to worry about who will socialize him for one of his own deepest needs is for affiliation with and communication with others. Thus, when

he is fully himself he cannot help but be realistically socialized (Rogers, 1963).

If we consider Rogers' view of the fully functioning person as described globally in the following endpoint of therapy we can see basic similarities with Maslow's self-actualized person:

Here then is my theoretical model of the person who emerges from therapy--a person functioning freely in all the fullness of his organismic potentialities; a person who is dependable in being realistic, self-enhancing, socialized and appropriate in his behavior; a creative person, whose specific formings of behavior are not easily predictable; a person who is ever-changing, ever developing, always discovering himself and the newness in himself in each succeeding moment of time. (Rogers, 1963, p. 26)

#### Therapy and Self-Actualization

Von Eckartsberg (1970) claims that the problem of change is tied to individual existence and that all growth and change is initiated by the action of individuals or groups of individuals. He goes on to say:

As Merleau-Ponty (1945, p. 111) has stated, "...I am the absolute source..." or as I would formulate it, I CAN BE the absolute source if I dare risk becoming more fully myself. There is no way around this personal and painful decision. (von Eckartsberg, 1970, p. 90)

Dreikurs (1957) has stated that contrary to the assumptions to which the patient is exposed in his environment, he learns in psychotherapy to trust his emotions, his unconscious processes, to accept his inevitable subjectivity, and to enjoy both the freedom and the obligation to choose and to prefer. Indeed, he stops trying to "control himself",

as he has been advised to do since early childhood, by realizing that he is going to do what he decides anyhow, regardless of how much he may pretend to object to his actions.

Needless to say, most therapists would probably agree that one of their goals is to initiate the whole process of self-actualization in their clients, even though they might go about it differently. It was Shoben (1964) who said:

While psychotherapists may sometimes accept the limited goals of simply trying to inhibit pathological processes, there are certainly those (Fromm, 1955; May, 1953) who take the position that therapy is to be judged more in terms of how much it contributes to a patient's ability to achieve adult gratifications rather than its sheer efficiency in reducing symptoms or shoring up pathological defenses. (p. 151)

Dreistadt (1971) defines as psychopathological, "anything that disturbs or frustrates or twists the course of self-actualization" (p. 98). Therefore, even though every organism has a natural tendency to actualize itself it can easily be sidetracked for various reasons. As Dreistadt (1971) puts it:

This inner nature is not strong and overpowering and unmistakable like the instincts of animals. It is weak and delicate and subtle and easily overcome by habit, cultural pressure and wrong attitudes toward it. Even though weak, it never disappears in the normal person, perhaps not even in the sick person. It persists, even though denied, underground. (p. 98)

Thus the therapist's role is to help the person get back in the right direction, that is, finding oneself. Maslow

also considers all metapathologies in any person to be "frustrated idealism". He feels that it is reasonable to postulate that metapathologies will result from self-deprivation (e.g., Jonah syndrome; humility and a sense of unworthiness) as from externally imposed deprivation (Maslow, 1967a).

Maslow was referring to this aspect when he wrote the following:

Recovering the ability to perceive one's own delights is the best way of rediscovering the sacrificed self even in adulthood. The process of therapy helps the adult to discover that the childish (repressed) necessity for the approval of others no longer need exist in the childish form and degree, and that the terror of losing these others with the accompanying fear of being weak, helpless and abandoned is no longer realistic and justified as it was for the child. (Maslow, 1956a, p. 46)

One must remember that self-actualization is not a lack or deficiency or something extrinsic to the organism that the organism needs for health. Rather, it is intrinsic growth of what is already in the organism, or more accurately of what IS the organism itself (Maslow, 1954). It is felt that one must learn to drop inhibitions, self-consciousness, acculturation, and dignity since these get in the way of the organism's healthy state. As has already been mentioned, the neurotic organism is more dependent on the environment and is less autonomous and self-determined. In other words, it is more shaped by the nature of the environment and less shaped by its own intrinsic nature.

Maslow has paid particular attention to the therapeutic

growth relationship. As he says:

Much has been written about transference, encounter, unconditional positive regard, and the like, but all have in common the explicit awareness of the necessity of a particular kind of relationship that dispels fear, that permits the one receiving therapy to see himself more truly and thus gives him control over self-approved and self-disapproved aspects of himself. (Maslow, 1966, p. 104)

Thus to the extent that growth consists in peeling away inhibitions and constraints and then permitting the person to "be himself", to emit behavior rather than to repeat it, and to allow his inner nature to express itself, to this extent the behavior of self-actualizers is not learned, it is created and released rather than acquired, it is expressive rather than coping (Maslow, 1968a).

Foulds (1969a) reports that theorists, researchers, and practitioners of counseling and psychotherapy have suggested a positive relationship between the ability of the counselor to facilitate constructive change or positive gain in his clients and his level of "wholeness" (Carkhuff and Berenson, 1967), personal adequacy (Combs, 1962), humanness (Dreyfus, 1967), authenticity (Bugental, 1965; Jourard, 1964, 1966), self-actualization (Maslow, 1962, 1967b), psychological openness (Allen, 1967; May, 1967), and fully functioning (Rogers, 1958b, 1962, 1963). The findings of his study carried out with thirty graduate students (Foulds, 1969a), suggest that the ability to sensitively and accurately perceive the inner "being" or experiencing of another human being and to communicate this

understanding to him, and the ability to be authentically real in a genuine encounter without defensive phoniness or without hiding behind the mask or facade of a professional role seems to be related to psychological well-being or self-actualization, as measured by the Personal Orientation Inventory (POI) (Shostrom, 1964, 1966).

In another study by Foulds (1970), the results indicated that a personal growth group experience appears to be an effective method for fostering increased self-actualization and the personal growth process in normal college students. Experimental group mean scores changed in a positive direction following the group experience on all 12 POI scales, and statistically significant changes ( $p < .05$ ) were observed on 8 of 12 scales. On the other hand no significant changes occurred in control group mean scores.

If we consider that therapy, either individual or group, usually requires that the person talk about himself in order to gain from the experience and bring about constructive personality change, we can see that this has some relevance to Jourard's hypothesis that a person characterized by positive mental health will self-disclose more. Self-disclosure would be the natural means of providing a better awareness of the significance of one's experiences by sharing it with someone else, and would facilitate the attainment of a greater knowledge of one's basic self and its various aspects such as needs, desires, strivings, and so forth. If we consider self-actualization as a process

rather than an end state we would expect that a general open self-disclosure would characterize the self-actualized person. In other words, the less actualized individual might be somewhat more defensive and would be keeping "more to himself" which could make it more difficult for him to integrate different aspects of his "self" and benefit from his experiences. In fact, Jourard (1964) has suggested that verbal disclosure of personal beliefs is an important indicator of the general life style of an individual. He has differentiated the open, revealing, self-disclosing person from the closed, quiet, and hidden personality (Shapiro, 1968). The former person is more relaxed and generally is happier and more creative.

A study by Shapiro (1968) also suggests that individuals who are more open linguistically are more consistent in their emotional expression of their whole self. Shapiro notes that the concepts of disclosure and consistency have interesting parallels to Rogers' (1957) concepts of congruence, and Truax and Carkhuff's (1967) genuineness. This same study by Shapiro suggested that the individual who is most open with his relatives and close friends is most emotionally consistent in interviews. Lesh (1970) also reports that empathic ability is related to the degree of self-actualization a person has achieved in himself. The more self-actualizing (the more one depends on his own feelings and value system), the more he is willing to be himself, the more empathic he is also.

### Self-Actualization and Creativity

It seems appropriate to maintain that anything which a person does which is self-actualizing is also creative, since it implies authenticity and is an expression of a person's inner feelings and desires. Whalley (1970) has stated, "Everyone who tries to cope effortfully and consciously with the 'developmental tasks' of his particular stage of maturity is engaged in a creative task--the work of SELF-creation" (p. 99). Indeed, all our engagements with reality and our external creating depends on the successful accomplishment of this inner self-creation.

Whalley also reminds us that development of new external realities (music, art, poetry, science, philosophy, religious ideas and so on) is an extraordinary creativity in which only some are privileged to participate. On the other hand, all of us must necessarily partake of this everyday creativity which results in a new subjective reality, new "selves". It is noted that anyone who watches and may even assist another who is struggling to change, to create a new self, cannot remain insensitive to and unimpressed by the strength and persistence of these forces of self-creativity which inhere in the human condition (Whalley, 1970).

Thus, Whalley differentiates between two kinds of creativity--a very ordinary but fundamental creativity in which we must all participate and a less common kind which is reserved for a few.

Maslow (1962) has indicated that he discovers the esthetic drive in the personality structures of all creative, self-actualizing people. It is felt that because they can employ their unconscious without fearing it and can accept impulses without defending against them, they can release their energies into formal patterns of enjoyment. It was Rollo May (1966) who considered that a powerful statement of his thesis was namely that "a sine qua non of creativity is the freedom of the artist to give all elements within himself free play" (p. 299). Since you would expect such a person to be more open to his environment you would expect him to be less defensive and more likely to self-disclose. Maslow argues that the esthetic urge is central in all creative living, "Esthetic perceiving and creating and esthetic peak-experiences are seen to be a central aspect of human life and psychology and education rather than a peripheral one" (Maslow, 1962, p. 195). Barron (1958), Barron and Taylor (1963), and Arnold (1962) also make very similar analyses (Hallman, 1968).

Creative people tend to be more open in their feelings and emotions, and are more sensitively aware of themselves and others. Their values, as would be expected, are more esthetic and theoretical, as opposed to economic, political, social and religious values (Basescu, 1968). Actually, certain values such as truth, justice, goodness, beauty, order, unity, and comprehensiveness become defining characteristics of the self and can now be considered metaneeds

(Maslow, 1966). Maslow (1966) reports that Richard Craig (1966) has demonstrated an almost complete overlap between the personality characteristics of creative men listed by Torrance (1962) and those that he had listed for self-actualizing people. He concludes that the two concepts seem in fact to be almost the same.

#### Other Characteristics of Self-Actualization

Maslow (1968a) points out that people who are engaged in the process of self-actualization become far more self-sufficient and self-contained. Indeed the determinants which govern them are now primarily inner ones, rather than social or environmental.

Since they depend less on other people, self-actualizers are less ambivalent about them; they are less anxious and also less hostile. They are less needful of other people's praise and affection and are less anxious for honors, prestige, and rewards. The sources of their actions become more internal than reactive.

Such a person is not threatened by emotions, impulses or cognitions. To this effect, Shostrom (1969) notes that self-aware or self-actualizing people can be silly, thoughtless, cruel, dense and thoroughly stubborn and irritating. He claims that they are able and willing, however, to make room in some larger, securer understanding of themselves for the fact that they "can be" and "will be" cruel, lazy, inattentive, stupid, or weak. In an article dealing with

emotional blocks to creativity, Maslow (1958) states that it seems true that the most mature human beings are child-like and that the most mature people are also the ones who can have the most fun.

Mention should be made of the presence frequently of peak experiences amongst self-actualizers. Maslow has discovered that outstanding or creative individuals have mystical experiences. He defined them as moments of great awe, moments of most intense happiness, or even rapture, ecstasy, or bliss. During such experiences the individual tends to lose his self-consciousness and becomes one with the world. Maslow points out, however, that peak experiences are not supernatural and are not limited to highly creative people. For example a mother may experience a peak when she sees her children playing happily with their father. The essence of peak experiences is that they "transcend" ordinary selfhood, which they temporarily obliterate.

Smith (1973a) notes that Maslow employs the term "transcendence" in still another sense when he writes:

Self-actualizing people are, without one single exception, involved in a case outside their own skin, in something outside themselves. They are devoted, working at something which is very precious to them--some calling or vocation in the old sense, the priestly sense...so that the work-joy dichotomy in them disappears. (Maslow, 1971, p. 43)

According to Maslow not only do self-actualizing people tend to be altruists, but he states that "the basic needs can be fulfilled ONLY by and through other human beings,

i.e., society" (Maslow, 1971, p. 347).

Otto (1968) points out that there are indications that well articulated motivational patterns of curiosity, and a tendency to explore, foster the actualization of human potential. The rationale behind this is that the more curious we are about ourselves and all that is around us and the more we have the courage to explore, the greater our chances that we shall uncover and make better use of the rich lode of our latent powers and abilities (Otto, 1968). Actualizing human potential is seen to a considerable extent as an adventure of exploration.

The openness to new experience, which Rogers has talked about, referred to such things as curiosity and play--the spontaneous tendency of the organism to seek stimulation and to produce a difference in the stimulus field. Otto (1968) again thinks that it is of interest that "curiosity and a tendency to explore are present even in the lowly laboratory rat who prefers a more richly stimulating setting to an impoverished one" (p. 297). In that same line, Butler and Rice (1963) proposed that self-actualization generally reflects the person's ability to create new experience and change for himself via his own cognitive functioning. In a study by Wexler (1974) it was found that the more self-actualized the person, the greater the tendency to engage in a mode of processing where new experience is created.

I would like to end this section by bringing attention to what Lynd (1956) was saying about the theories of growth. She wrote the following:

Human beings in these alternate views appear as naturally and primarily interested in other persons and in the non-personal world. They are curious, inquiring, sympathetic. Their drives and desires go beyond the satisfaction of specific needs, the fending off of danger to get security, the release of tension to re-establish a state of rest. Goals instead of being only specific objects to release tension become purposes in which the whole personality may be involved. It is characteristically human to have expanding purposes which discover and create new relationships with other persons and new ways of seeing the world. Curiosity, interest, thought, sympathy, trust, love are primary human attributes, not simply secondary, derived, or detour processes or sex-inhibited aims. Reality becomes something capable of bringing about wonder, knowledge, interest, and fulfillment instead of being primarily a threat.  
(Lynd, 1956, p. 7)

Lynd (1956) reminds us that for the normal human being it is not necessary to be "conflict-free" and that conflict, tension, and anxiety is a part of life. Such a person also seems to learn wisdom rather than hostile bitterness or pathologically frightened withdrawal from whatever disappointments or suffering may be his lot (Shoben, 1964).

#### Summary

Agreement amongst psychologists as to what optimal positive mental health and self-actualization consist of is somewhat difficult to come by. Nonetheless, anyone working in the field of mental health, and particularly psychotherapists operate on the basis of certain assumptions

as to what characterizes a happy and fulfilling life. It was also observed that there are certain aspects which are generally given more attention; one of these seems to be that the essence of mental health is seen as an ongoing process variously called self-actualization, self-realization, growth, or becoming, and is not considered simply an end state.

Special attention has been paid to Maslow who has written quite extensively on the subject of self-actualization. He has emphasized the distinction between deficiency motivation and growth motivation, the latter leading to self-actualization. Rogers has also provided viewpoints which are consistent with the idea that there is a basic orientation towards self-actualization in every individual. In fact he sees self-actualization as the major human motivation. As in the previous chapter, a section was devoted to therapy and its relation to self-actualization. It was noted that one of the goals of most therapists would appear to be to initiate the process of self-actualization in their clients, even though they might go about it differently. Maslow paid particular attention to the therapeutic growth relationship. The client eventually comes to grip with his life, and frees himself of overwhelming conflicts and anxiety through a general self-disclosure as he examines different aspects of his life.

Because of the importance of the notion of creativity in self-actualization, a brief review of its relationship to self-actualization was also presented. The following

section considered a number of characteristics of self-actualized individuals, such as the common experience of "peak experiences", a general openness to the world, a high level of curiosity and a need to explore, as well as the presence of high ethical standards.

As a conclusion, attention should be drawn to three aspects of self-actualization. First of all, Jahoda's (1958) report that the various authors who regard self-actualization as a criterion of positive mental health seem to emphasize one or more of the following aspects: (1) self-concept; (2) motivational processes; and (3) the investment in living, referring to the achievements of the self-actualizing person as demonstrated in a high degree of differentiation, or maximum of development, of his basic equipment. Secondly, that the multiple criterion approach (which is similar to the notion of a "syndrome" in medicine) is best suited for an appraisal of self-actualization; and thirdly, that self-actualization remains idiosyncratic since every person is different.

In view of the fact that self-actualization is often considered a relatively "slippery" concept, the next chapter shall be devoted to an examination of the major measure of self-actualization which will be used in this study, namely The Personal Orientation Inventory (POI). It will look at the development of the POI, as well as review the validity and reliability of this instrument.

## CHAPTER IV

### A MEASURE OF SELF-ACTUALIZATION: THE PERSONAL ORIENTATION INVENTORY

#### Introduction

In view of the fact that self-actualization is such a difficult concept to define, not only because of the broadness of its scope but also because of some of the problems which arise (such as the value problem), it was decided that a chapter should be devoted to an examination of the major measurement of self-actualization to be used in this study, namely The Personal Orientation Inventory (POI). Shostrom (1964, 1966) has constructed the Personal Orientation Inventory (POI) which is designed to assess the values and self-percepts believed to be associated with self-actualization (Foulds, 1970).

With the emphasis having been on the measurement of pathology in the past, it should not be too surprising that there is really no other significant assessment technique which concerns itself with psychological health. The Personal Orientation Inventory has already been used extensively in doing research and has already proven its validity, reliability, and usefulness (Shostrom, 1964, 1966; Knapp, 1965, 1976; Shostrom and Knapp, 1966; Shostrom,

Knapp and Knapp, 1976; Grossack, Armstrong and Lussiev, 1966; Fisher and Silverstein, 1969; Fisher, 1968; LeMay and Damm, 1968; Graff et al., 1970; Foulds, 1969a, 1969b, 1970; Fox, Knapp, and Michael, 1968; Warehime and Foulds, 1973; McClain, 1970; Kimball and Gelso, 1974; Wise and Davis, 1975).

#### Development of the POI

The POI was developed by Shostrom (1964) and is an outgrowth of a series of writings by Maslow (Motivation and Personality, 1954), Rogers (On Becoming a Person, 1961), Shostrom and Brammer (Dynamics of the Counseling Process, 1952), Reisman, Glaser, and Denney (1950), as well as from the research and theoretical formulations of many writers in humanistic, existential, or Gestalt therapy, such as Horney, Fromm, May, Perls, Ellis, and Buhler. Within this body of literature and research evolved the concept of the positively functioning, well-integrated, self-actualized person. This individual is one who utilizes his talents and capacities to a full extent, uses his time effectively, lives in the present, is comparatively innerdirected, has a generally benevolent outlook on life and human nature, and is free of the inhibitions and emotional turmoil of those less self-actualized. The POI, indeed, purports to measure various aspects of self-actualization.

The items from the POI, as well as being derived from the research and theoretical formulations of these many writers concerned with positive mental health or

self-actualization, were also empirically chosen from significant value judgement problems seen by therapists at the Institute of Therapeutic Psychology over the five previous years. As Fox et al. (1968) remark, "It is based on the assumption that a mentally healthy individual is self-actualized and that this self-actualization expresses itself in his system of values" (p. 565). The items which were chosen were selected because they reflect value orientations which are commonly held, and which are held to be significant to one's approach to living. In the discussion of the development of the POI items, Shostrom (1966) reminds us that Buhler (1962) has suggested that value orientations are definite existential judgements. In that same discussion, Shostrom states:

A value orientation may be defined as a generalized and organized conception, which influences behavior and which is a conception of nature, of man's place in it, of man's relation to man, and of the desirable and nondesirable as they may relate to--and of the desirable and nondesirable as they may relate to man-environment and inter-human relations. (Shostrom, 1966, p. 25)

The POI is a 150-item, two-choice questionnaire, which has 12 sub-scales and requires about 30 minutes to complete. Each pair of items are constructed such that the particular continuum or end-poles of the dichotomy in question are made explicitly clear. All the items are scored twice. The first scoring provides two basic

ratio scales of personal orientation: inner-directed support (127 items) and time competence (23 items). The second scoring is for the 10 subscales which consist of from 9-32 items. It should be noted that each scale measures a conceptually-relevant aspect of self-actualization.

Shostrom (1966) briefly describes the essence of the scales for the POI in the following manner:

Time Ratio (TR) -- Time Incompetence/Time Competence -- measures the degree to which one is present-oriented (23 items).

Support Ratio (SR) -- Other/Inner -- measures whether reactivity orientation is basically towards others or self (127 items).

Self-Actualization Value (SAV) measures agreement with a primary value of self-actualizing people (26 items).

Existentiality (Ex) measures ability to react situationally or existentially without rigid adherence to principles (32 items).

Feeling Reactivity (Fr) measures sensitivity of responsiveness to one's own needs and feelings (23 items).

Spontaneity (S) measures freedom to react spontaneously or to be one's self (18 items).

Self-Regard (Sr) measures affirmation of self because of worth or strength (19 items).

Self-Acceptance (Sa) measures affirmation or acceptance of self in spite of weaknesses or deficiencies (26 items).

Nature of Man (Nc) measures degree of the constructive view of the nature of man, seeing him as essentially good (16 items).

Synergy (Sy) measures ability to be synergistic, to transcend dichotomies (9 items).

Acceptance of Aggression (A) measures ability

to accept one's natural aggressiveness as opposed to defensiveness, denial, and repression of aggression (25 items).

Capacity for Intimate Contact (C) measures ability to develop meaningful and intimate relationships with other human beings, unencumbered by expectations and obligations (28 items).  
(p. 6)

There are also norms available based on the responses of 2,607 college freshman, as well as norms for several occupational and clinical samples.

#### Validity of the POI

Several validity studies on the POI, as already indicated, have been reported. Shostrom (1966) has stated that perhaps its most important test of validity is that it should discriminate between individuals who have been observed in their life behavior to have attained a relatively high level of self-actualization from those who have not so evidenced such development. This in fact has been shown, based primarily upon clinically judged self-actualized vs. non-self-actualized subjects (Shostrom, 1966). The nominations of the individuals to these groups were made by qualified clinical psychologists. It was found that all except one scale (Nature of Man) significantly discriminated in the expected direction between the clinically judged self-actualized (N = 29) and the non-self-actualized individuals (N = 34).

Other studies report the test's ability to differentiate between various things such as a) pre- and post-sensitivity training (Shostrom, 1964; Foulds, 1969a, 1970; Culbert,

Clark and Bobele, 1968; Kimball and Gelso, 1974; Guinan and Foulds, 1970), b) stages of psychotherapy involvement (Shostrom and Knapp, 1966), c) levels of performance on scales of psychopathology (Knapp, 1965; Shostrom and Knapp, 1966) and other scales (Dandes, 1966; Shostrom, 1966), d) achieving vs. underachieving college freshman (LeMay and Damm, 1968), e) counselors level of empathy (Foulds, 1969a), f) different identified groups in our society (Fox, Knapp and Michael, 1968; Zaccaria and Weir, 1967; Fisher, 1968; Fisher and Silverstein, 1969; Shostrom, 1966), g) different levels of psychosocial maturity (Olczak and Goldman, 1975), h) such things as dormitory assistants' effectiveness (Graff et al., 1970), "teacher concern for students" (Murray, 1966), and creative thinking (Maul, 1971). The following sections will look a little more closely at some of these studies:

1. The POI and Therapy Groups.

It has often been claimed that while previous diagnostic instruments -- e.g., the MMPI and Rorschach Test -- utilize criteria of psychopathology for describing the individual and provide a negative approach to therapy, the POI has been developed to provide a positive diagnostic approach and a basis for therapy that suggests a positive direction for growth.

Shostrom and Knapp (1966) designed a study to investigate further the sensitivity of the POI in clinical settings. It was administered to two groups of outpatients

in therapy, one a group of 37 beginning patients entering therapy and the other a sample of 39 patients in advanced states of psychotherapeutic progress. The latter group had been in therapy from 11 to 64 months with a mean time in therapy of 26.6 months. They were seen by eight therapists with different theoretical orientations (3 eclectic, 2 Gestalt, 1 nondirective, 1 reichian, 1 adlerian). It was interesting to see that all 12 POI scales differentiated between the criterion groups at the .01 confidence level or higher, indicating that the advanced group was indeed healthier.

As a brief aside I would like to mention a discussion which appeared in Shostrom and Knapp's (1966) conclusions section. They argue that although the conclusion may be warranted that self-actualization increases as mental illness decreases, it may also be assumed that something is necessary to replace the patient's pathology. They note that for some therapists the main purpose of therapy is to eliminate the symptoms of the patient and they state that in many therapies (Eysenck and Rachman, 1965; Wolpe, 1958) there is little doubt that this goal is the only necessary one. However, other therapists, such as Rogers, Maslow, and others, say that therapy must do more than eliminate symptoms and that therefore psychotherapy should assist the patient in developing a workable value system. Shostrom states that the difference between these two approaches might be best stated as "cure" versus "growth".

He assumes that such a value system is nonpathologic, is nondenominational in a psychotherapeutic sense, and is also akin to the values measured by the POI. He feels that whether we like it or not it seems that we must accept the fact that many therapies "do teach" values, and the only question is whether we are going to make such values explicit or implicit. This sounds much like what Smith (1973) had to say about making more explicit the therapist's value system, especially that underlying his notion of self-actualization or positive mental health.

## 2. Correlations With Other Scales

When the MMPI was administered to Shostrom and Knapp's (1966) beginning and advanced therapy groups it was found that four scales (Depression, Psychopathic Deviate, Psychasthenia, and Schizophrenia) significantly differentiated between the two groups at the .01 level of confidence and three additional scales (Hypochondriasis, Hysteria, and Paranoia) differentiated between the two groups at the .05 confidence level. Thus 7 of the 13 MMPI scales were significantly less pathological for the advanced therapy group compared with the beginning therapy group. It is with much interest that Shostrom and Knapp note that other significant relationships were obtained for POI scales correlated with the MMPI scale. They report that the Si scale (Social Introversion) has been found to distinguish college populations who engage in many extracurricular activities from those not so

inclined. They conclude that "the obtained correlations appear to support the notion that the POI is measuring attributes which are also important in developing harmonious interpersonal relationships among 'normal' populations" (Shostrom and Knapp, 1966, p. 199).

Knapp (1965) examined the relationships between the measures of self-actualization and neuroticism amongst a sample of 136 undergraduate students. He related the personality construct of neuroticism as measured by the Eysenck Personality Inventory (EPI) to the self-actualization construct of the POI. He not only found that 8 of the 12 POI scales were significantly negatively correlated with the neuroticism dimension of the EPI but furthermore, that extreme highs and lows (top and bottom 27%) on the neuroticism dimension of the EPI made significantly different scores on each of the POI scales. Self-actualization can therefore be considered to be positively and significantly related to the lack of neurotic symptoms and tendencies. This finding is very much consistent with the finding by Shostrom (1963, 1964) that clinically nominated groups of self-actualized individuals are higher on each of the POI scales than a similarly nominated group of non-self-actualized individuals.

The relationship of the POI scales to the extraversion-introversion dimension as measured by the EPI was also examined by Knapp (1965). All correlations except one chance level (No,  $r = -.05$ ) correlation were

positive. Seven of them were significant but with not as great a magnitude as was the case with the neuroticism dimension. It was nevertheless felt that this positive relationship to extraversion might suggest that extraverted temperaments in general are more self-actualized. Interestingly enough, it was found that among low neurotics self-actualization is seen to be unrelated to extraversion-introversion but that the high neurotic extravert is seen to be relatively more self-actualized than the high neurotic introvert.

Shostrom (1966) reported that in a study attempting to relate psychological health to teacher effectiveness, Dandes (1966) obtained a multiple correlation of .54 between POI scales and the Minnesota Teacher Attitude Inventory in a sample of 128 teachers. Dandes reports significant correlations of the POI scales with attitude and value scales including the California F-Scale, the Dogmatism Scale and a measure of liberalism obtained from An Inventory of Opinions on Educational Issues.

Shostrom also presents relationships of the POI scales to dimensions measured by the Sixteen Personality Factor Questionnaire and the Guilford-Zimmerman Temperament Survey based on a sample of 159 college students. He states that significant correlations against the major POI scale of Inner Direction suggest that the self-actualizing student might be described as comparatively more assertive, happy-go-lucky, expedient, venturesome and self-assured. On the other hand, correlations against G-Z factors

depict the self-actualizing students as active, ascendant, sociable, emotionally stable and objective, or "thick-skinned".

In a study by Olczak and Goldman (1975) the hypothesized relationship between self-actualization (The Personal Orientation Inventory) and psychosocial maturity (Inventory of Psychosocial Development) based on Eriksonian principles was easily supported by the data obtained on 155 lower-level undergraduate students. The same authors also report that Simmons (1970) has shown a significant relationship between identity achievement status and the degree of self-actualization as measured by the POI.

### 3. The POI and Different Groups

Fox, Knapp and Michael (1968) tested the hypothesis that a sample of people requiring psychiatric hospitalization should score lower on the POI than a relatively self-actualized group, or a normal adult group. The results showed that a population hospitalized for psychiatric impairment scores significantly lower in self-actualization than do a relatively self-actualized group and a normal adult group. All POI scales significantly differentiated the hospitalized population from the normal and self-actualized samples. Furthermore, all differences but one between the hospitalized sample and a clinically nominated non-self-actualized but non-hospitalized sample were in the expected direction. The differences were

however not as large as between the hospitalized sample and the normals or the group of self-actualized individuals.

The POI appears to differentiate not only between groups of alcoholics and self-actualized individuals but also between alcoholics and normal individuals. In a study of seventy alcoholics and their spouses participating in an alcoholic treatment program, Zaccaria and Weir (1967) found that all mean POI scores for this sample were significantly lower than the original validating, clinically nominated, self-actualized sample. Not only that, but all except one scale showed the experimental treatment sample to be significantly lower than the normal adult sample reported by Shostrom. They also report that the Time Competence scale was significantly lower for the alcoholic treatment group than the non-self-actualized sample. It is felt that the alcoholic is likely to be the type of person who dwells on past or future events, lacking the full awareness, contact and feeling reactivity of the more time competent person (Shostrom, 1966). Shostrom also notes that this same pattern showing a marked depression of the Time Competence scale can be seen in the profile of a young delinquent sample (Shostrom, 1966). Zaccaria and Weir (1967) conclude that their findings are consistent with theory that suggests that there is, in effect, a continuum of relative self-actualization to relative non-self-actualization, with alcoholism representing one form of non-self-actualization. It is

Maslow who has suggested, that self-actualization is a matter of degree and of frequency rather than an all-or-none affair, and this makes it more amenable to available research procedures (Foulds, 1971).

Fisher (1968) administered the POI to 150 male psychopathic felons and reports that the Time and Support Ratio scores indicated incompetent use of time and other-directedness. The sample actually scored lower on nine of the twelve POI scales than did a normal group, but higher on all scales than did a psychiatric group. Similarly, Fisher and Silverstein (1969) report that when the scores from a group of felons were compared with Shostrom's normal adults, lower scores were obtained on 11 of the 12 scales. An interesting finding was that when felons were asked to simulate good adjustment they tended to give lower scores than under control instructions. Fisher and Silverstein (1969) feel that this suggests that they conceive of society as possessing a value system that is less self-actualized than they themselves are. Thus they would possess a distorted view of the normative degree of self-actualization in the culture.

#### 4. Growth Groups and the POI

In a study of the effects of a personal growth group on a measure of self-actualization, Foulds (1970) notes that significant positive changes in mean scores on several scales of the POI have been reported for groups of college students following sensitivity training

(Culbert, Clark and Bobele, 1968), and a weekend marathon group (Guinan and Foulds, 1970). In this particular study with 20 undergraduate students, after nine weekly sessions of four hours each, Foulds (1970) reports that the experimental group mean scores changed in a positive direction following the group experience on all 12 POI scales, and statistically significant changes were observed on 8 of the 12 scales. Foulds states that the results indicate that a personal growth group experience seems to be an effective method for fostering positive mental health and the process of personal growth and learning in relatively healthy, growth-seeking college students.

Kimball and Gelso (1974) also report a study looking at the effects of a marathon growth group on self-actualization of college students using the POI as a measurement administered one and four weeks following their group experience. The results indicate that generally, the group experience did increase self-actualization and the effects persisted through the fourth week after the group. Foulds (1971) argues that since POI scale scores are unlikely to be inflated by the conscious or unconscious attempts of naive subjects to make a good impression (Foulds and Warehime, 1971) and are unrelated to social desirability responding (Warehime and Foulds, 1973; Warehime, Routh and Foulds, 1974), these findings pertaining to the effect of personal growth groups on self-actualization are especially meaningful. He states that the evidence

suggest that a group experience which focuses on expanded awareness, authenticity, and more effective interpersonal communication may be a fruitful method of fostering increased self-actualization and the personal growth of participants (Foulds, 1971).

#### 5. Counseling and the POI

A study by Foulds (1969a) was undertaken to investigate the relationship between self-actualization, as measured by the POI, and ability to communicate the facilitative conditions of empathic understanding, respect or positive regard, and facilitative genuineness during counseling. It was hypothesized that a positive association exists between the counselor's level of personal functioning, psychological well-being, or self-actualization and his ability to communicate the "therapeutic triad" in counseling. More specifically, it was hypothesized that the scales of the POI can effectively differentiate between beginning counselors with respect to the level of interpersonal functioning along the dimension of ability to provide a combination of empathic understanding, respect or positive regard, and facilitative genuineness for their clients (Foulds, 1969b). Judges had to rate the levels of empathic understanding (E), respect or positive regard (R), and facilitative genuineness (G) provided by 30 graduate students to clients during a beginning counseling practicum experience, and these ratings were then related to scores on the 12 scales of the POI. It is quite

interesting to see how the results indicate that the counselor's ability to sensitively and accurately understand the client and his "inner world" and to respond to him empathically in a way that communicates this understanding, to communicate positive regard, respect, valuing, a deep caring, and a nonpossessive warmth, and to communicate his own congruence, genuineness, authenticity, nondefensiveness, or integration to the client seems to be related to his own level of personal functioning or self-actualization (Foulds, 1969b). Foulds concludes that, "Particular positive personality characteristics of counselors appear to be significantly associated with their level of interpersonal functioning and their ability to provide the overall conditions of the 'therapeutic triad'" (Foulds, 1969b, p. 91).

Lesh (1970) hypothesized that there is a relationship between self-actualization and affective sensitivity. He states that the acceptance of this hypothesis would mean, generally, that people who are more self-actualizing, who have realized their own potentials more than others, are also more able to exercise greater empathic understanding for others (Lesh, 1970). The results of his study did indeed support his hypothesis.

A rather impressive study was carried out by McClain (1970) with a sample of normal adults, namely school counselors. It was an attempt to validate the POI as a means of differentiating levels of self-actualization

among normal adults. The personalities of thirty counselors were studied in depth by staff members, who rated each counselor for self-actualization according to criteria found in the writings of Maslow. A composite self-actualization score for each counselor was derived from the extensive evaluations of the three staff members who knew him most intimately. One of these was his practicum supervisor, another one was the group process leader, and the third one was a clinical psychologist who studied each of the thirty counselors by means of a large battery of personality assessment devices, both self-report and projective instruments. What is more, the psychologist who did the assessment, using a battery of tests, also had two sessions with each counselor during which he reviewed the assessment data. These composite scores were then correlated with the POI scores. The correlations were significant in 11 out of 14 measures and the author concluded that these significant correlations with the highly reliable judges' ratings are offered as evidence that the POI does measure self-actualization among normal adults (McClain, 1970).

#### 6. POI Ratings and other Normal Groups

Graff et al. (1970) examined the relationships between the POI scales and dormitory assistant effectiveness as evaluated by students (2963) using a semantic differential questionnaire consisting of six pertinent areas. A high relationship between certain POI variables and the criterion

measures was obtained.

Other significant findings were obtained by Murray (1966) who investigated the relationships of teacher success in self-actualization as measured by the POI. In this study, teacher success was measured by ratings of "teacher concern for students" made by the teachers' students (2,333 students, 26 teachers, grades 7-12). The implication was that the more self-actualized the teacher, the more the students sense that he or she is concerned for them. Actually, a marked difference in self-actualization was found between teachers with high ratings and those with low ratings, with the more successful teachers being more self-actualized. When analyzed by grade, it was shown that teacher effectiveness between those relatively more self-actualized and those less self-actualized were in a consistent direction (i.e., the more self-actualized being the more successful teachers) and were significant for grades 7, 8, 9, and 10. The differences for grades 11 and 12, however, did not reach statistical significance.

A study designed to determine empirically the presence and extent of the overlap between self-actualization and creative thinking processes was undertaken by Maul (1971). A basic goal of this research was to test directly some of the theories of Maslow and Rogers about the nature of creative behavior. The Torrance Tests of Creative Thinking (TTCT) -- Verbal Form A and the POI were used as

the primary measures of creative thinking and self-actualization respectively. Maul also administered an additional battery of questions which he developed and used as a secondary measure of self-actualization. The tests were administered to 137 college students, and the results indicate that numerous statistically significant moderate relationships exist between the subscales of the TTCT and the POI, as well as between the TTCT and the new measure of self-actualization. Maul reports that this was interpreted to mean that there were a number of important specific relationships between creative thinking and self-actualization processes, as operationally defined by performance on the three tests used.

On the other hand, Braun (1969) reports that in a study using 39 undergraduates as subjects, no evidence was found to support the hypothesis that self-actualization was related to ability to make auditory discriminations, to superior performance on a critical thinking test, or to a preference for ambiguous vs. structured line drawings. It should be noted, however, that abbreviated versions of the Seashore Measures of Musical Talents, of the Watson-Glaser Critical Thinking Appraisal, and the Barron-Welsh Art Scale were the measurements utilized.

Another dimension which has been examined in relationship to the POI is the repression-sensitization (R-S) dimension. For instance, Foulds and Warehime (1971) investigated the relationship between R-S and scores on

the POI and found that repressors appeared to be better adjusted on all 12 POI scales than sensitizers. Then, using the Marlowe-Crowne Social Desirability scale (M-CSD) to distinguish between nondefensive and defensive repressors and sensitizers, Ginn (1974) investigated the relationship between repressors and sensitizers and adjustment as measured by the POI. Repressors were again found to be basically better adjusted than sensitizers but differences were found between nondefensive and defensive repressors. The nondefensive repressors scored higher than the defensive repressors.

#### Reliability of the POI

Klavetter and Mogar (1967) examined the test-retest reliabilities and intercorrelations of the 12 separate subscores. The POI was administered twice, one week apart, to 48 undergraduate college students who were told that it was part of the experiment to take the Inventory twice. The reliability coefficients for the two major scales of Time Competence and Inner Direction were .71 and .84 respectively, and coefficients for the subscales ranged from .55 to .85 (only three scales fell below .71). Shostrom (1966) claims that in general the correlations obtained in that study are at a level as high as that reported for most personality measures. Klavetter and Mogar also report moderate to high correlations between most of the subscales. The most striking finding was the consistently high correlations with Inner Direction and

to a somewhat lesser degree with Time Competence and the Self-Actualization subscale (Klavetter and Mogar, 1967). They remark that since 127 of the 150 items are scored for the Inner Direction scale, these findings are not surprising.

Ilardi and May (1968) administered the POI to a group of entering female nursing students during their first week in school and again approximately fifty weeks later. With this sample of 46 students, the product-moment correlations for the 12 sub-scales varied from .32 to .71 (median  $r = .58$ ), with the major scales of Time Competence and Inner-Direction yielding correlations of .55 and .71 respectively. The authors report that all but one of these correlations are significant. Again it is felt that the findings reported on the POI are well within the ranges of somewhat comparable MMPI and EPPS test-retest reliability studies.

In a review of the POI, Knapp (1976) indicates that Kaats (1973) has reported internal consistency coefficients based on Cronbach's alpha of .80 for the Inner-Directed scale and .65 for the Time Competence scale. In a more recent study, Wise and Davis (1975) obtained test-retest coefficients of .75 and .88 for the Time Competence and the Inner-Directed scales respectively, based on readministration of the POI following a two-week interval to a sample of 172 university students. They also report internal consistency coefficients (with the Kuder-Richardson Formula

20) of .52 and .83 for the Time Competence (23 items) and the Inner-Directed (127 items) scales respectively. The split-half coefficients were .50 and .84 respectively for both scales.

After examining overall measures of self-actualization derived from the POI, Damm (1969) concluded that an overall measure of the POI can probably be best obtained by using the raw score of the Inner-Direction scale, or by combining the raw scores of the Inner Direction and Time Competence scales. He claims that no significant increase in predictability is obtained by converting raw score data to standard scores for combining scales. In their study of the internal consistency and stability of the POI, Wise and Davis (1975) also concluded that their data supported and extended previous findings which show "the Personal Orientation Inventory to be a fairly stable and reliable instrument, especially when only the Time Competence and Inner Direction scales are considered".

#### Social Desirability and the POI

Warehime and Foulds (1973) report that the results of their study indicated that high M-CSD (Marlowe-Crowne Social Desirability Scale) scorers, who have been found to successfully dissimilate in other evaluation situations, were not successful in obtaining higher POI scores than low M-CSD scorers. The authors state that the POI may be more resistant to faking good than previous personality inventories because its items are not keyed to cultural

standards but to the self-actualization model of behavior. Thus, although the M-CSD scale has been found to be a useful measure of the tendency to dissimulate in other evaluation situations (Crowne and Marlowe, 1964), it would appear to be of little value in assessing the fakability of an instrument when that instrument is keyed to other than what is considered socially desirable behavior in our culture (Warehime and Foulds, 1973).

In a later study, Warehime, Routh and Foulds (1974), examined the "knowledge about self-actualization and the presentation of self as self-actualized", using a sample of 276 college students. They concluded that the Inner-Direction scale of the Personal Orientation Inventory is more resistant to dissimulation than are many other self-report personality inventories. They go on to say that "their results strongly suggest that the Personal Orientation Inventory measure of self-actualization previously found to be negatively affected by fake-good instructions (Foulds and Warehime, 1971), is remarkably unsusceptible to dissimulation" (Warehime, Routh and Foulds, 1974).

Shostrom (1964) also states that Knapp has found very low order correlations between the POI and the L (Lie) scale of the Eysenck Personality Inventory using a college population. Similar evidence was reported by Shostrom and Knapp (1966) who note that regarding evidence of "deliberate" distortion of higher POI responses, none of the scales was significantly related to the L (Lie)

scale of the MMPI. It can therefore be concluded with reasonable assurance that the POI scale scores are indeed unlikely to be inflated by the conscious or unconscious attempts of naive individuals to make a good impression (Foulds and Warehime, 1971) and are unrelated to social desirability responding (Warehime and Foulds, 1973; Warehime, Routh and Foulds, 1974).

### Conclusion

The large number of studies having utilized the POI appear to show a definite trend in being able to discriminate self-actualized, normal, and non-self-actualized groups on the different dimensions of the POI. The scores on the two major scales, particularly the one for Inner-Direction, seem to be particularly dependable in making assessments of the level of self-actualization of different individuals. The value of such an Inventory is no doubt being recognized if we judge by the number of studies making use of it and coming up with significant findings.

## CHAPTER V

### BRIEF RECAPITULATION AND RESTATEMENT OF THE THESIS

At this point I would like to briefly reconsider the relevance of self-disclosure and self-actualization in the field of mental health. Simonson and Bahr (1974) note that during the past decade a variety of studies of the effect of self-disclosing statements by an interviewer or therapist offered by an interviewer or patient have been reported (Jourard, 1971b; Powell, 1968; Truax and Carkhuff, 1965). In a more recent study, Simonson and Bahr (1974) have found, in an investigation of self-disclosure by the professional and paraprofessional therapist, that the correlations between willingness to disclose, attraction to the therapist, and actual interviewer disclosure were rather high. They note that the high correlation between willingness to disclose and actual disclosure during the interview suggests that within the paradigm generated for their study, there is substantial evidence for the predictive validity of Jourard's Self-Disclosure Questionnaire.

In a review of the investigations pertaining to self-disclosure, Jourard (1971b) notes that in human affairs a distinction is usually drawn between interrole relations,

where the participants can be unknown one to the other, and personal relations, where each lets the other know something about him as a unique individual (Jourard, 1963).

He goes on to state:

Mutual self-disclosure is the most direct means by which strangers performing roles in relation to one another transmute their relationship to one that is more "personal" where increased "closeness" is tolerated if not welcomed. Previous research has shown that a person is most willing to disclose personal information to another person who has shown willingness to reciprocate.  
(Jourard, 1971b, p. 140)

Shostrom (1969) has brought our attention to a mode of functioning which is rather self-destructive and which he calls manipulation. He considers it a pervading style of one's life which frequently coexists with a profound distrust of oneself and of others and which contributes to a great "dislike" of oneself. He remarks that Jourard talks about "closed" vs. "transparent" selves, analysts about "fantasy-oriented" vs. "reality-oriented" personalities, Glasser about "irresponsible" vs. "responsible" individuals, and even the callowest hippy about "uptight" vs. "groovy" ways of relating to a nonsolipsistic world.

In considering the significance of having much unexpressed self, Jourard (1971b) notes that we know that more self-disclosure is exchanged between spouses than occurs within any other everyday relationship. What is particularly intriguing is that "we also know that morbidity rates for most illnesses, as well as suicide rates, are the highest

among unmarried people" (Jourard, 1971b). Jourard goes on to say "This would suggest that there is a correlation of some kind, possibly curvilinear, between the amount of self-disclosure and variables from the fields of mental and physical health" (Jourard, 1971b, p. 49).

In another respect, Otto (1968) notes that Gellerman (1963) reports that thirty percent of the average employed person's time is available for whatever constitutes his leisure. Gellerman states that with increasing automation more leisure time can be expected. In view of this he comments:

Should this time be devoted to more passive participation pursuits, such as TV watching, spectator sports, or increased attendance at bars? Or should a part of this time be devoted to the development and actualization of individual potential? (Otto, 1968, p. 304)

At this point I would like to quote a statement by Otto which I find most appropriate:

...it will ultimately be recognized that "lack of an ongoing program and process of self-actualization and self-realization is responsible for much of what we today call illness and premature death and deterioration due to advanced age".

Self-actualization is self-regeneration and is at the very core of the process we call health. In years to come self-realization and the realization of potentialities will be recognized both as a preventive factor as well as a road to health. The physician of the future will treat the whole man utilizing holistic principles and prescribe programs of self-realization and actualization along with his chemical and surgical intervention. (Otto, 1968, pp. 303-304)

As was mentioned earlier, Jourard (1964) proposed that low disclosure is indicative of a repression of self and

an inability to grow as a person. His writings indicate that disclosure should be negatively related to "clinical" maladjustment and also positively to "positive" mental health (e.g., self-actualization). In this study it is expected that self-actualized individuals will disclose more in their interactions (and relationships) with other people. They will be less defensive and more spontaneous, freer to let others see them and know them as they really are. The theoretical implications for such a view are derived largely from the writings of Maslow and Rogers.

Thus the main hypotheses for this thesis are aimed at investigating the relationship between self-disclosure and self-actualization or positive mental health. It is therefore hypothesized that the individual's level of self-actualization will be reflected in his degree of self-disclosure.

Subjects were paired in order to provide four different possible combinations of self-actualized (SA) and non-self-actualized (NSA) individuals in which one of them was assigned the role of Interviewer. Thus each pairing consisted of an Interviewer and an Interviewee. The four possible groups on the basis of level of self-actualization consisted of the following:

<u>Group</u>	<u>Interviewer</u>	<u>Interviewee</u>	
I	Self-actualized	Self-actualized	(SA-SA)
II	Non-self-actualized	Non-self-actualized	(NSA-NSA)
III	Self-actualized	Non-self-actualized	(SA-NSA)
IV	Non-self-actualized	Self-actualized	(NSA-SA)

As a result of the ancillary factor (self concept) introduced in order to provide an internal check on the relative importance of self-actualization, by taking into consideration another important element in positive mental health, each pairing consisted of two subgroups; i.e., a high self concept subgroup and a low self concept subgroup. This accounted for eight distinct groups, with the restriction that each pairing was composed of same level scores for self concept.

The level of self-actualization and self concept was determined prior to each pairing, by means of The Personal Orientation Inventory (Shostrom, 1964) and the Tennessee Self Concept Scale (Fitts, 1965).

Following the 20-minute interview, the Interviewer and Interviewee both filled out a 60-item Self-Disclosure Questionnaire (see Appendix A and Methodology chapter), an Activity Scale (see Appendix B and Methodology), a Trust Questionnaire (See Appendix C and Methodology), and an Impression Scale (see Appendix D and Methodology). The order of the questionnaires was varied at random for each particular pairing.

Each interview was then rated for amount of self-disclosure by each member. The two raters scored the topics discussed, the number of self-disclosure statements, a global rating of intimacy, and the amount of time each member spent talking. (These measurements will be discussed in the Methodology chapter which follows.)

The following hypotheses were tested:

- (1) Self-disclosure of self-actualized interviewees and of self-actualized interviewers will be greater than the self-disclosure of non-self-actualized interviewees and interviewers respectively.
- (2) The greatest amount of self-disclosure for both members of a pair will be provided by the SA-SA pairing, followed by the NSA-SA pairing, and then the SA-NSA pairing. The NSA-NSA pairing will show the least amount of self-disclosure.
- (3) The self-actualized subjects will score higher on the trust scale than the non-self-actualized subjects. That is they will show greater trust of their partners in the interview.
- (4) The self-actualized subjects will also be rated as more "trustworthy" than the less self-actualized.
- (5) It is expected that the more self-actualized persons will be given a higher positive rating on the Impression Scale.
- (6) It is also hypothesized that the individuals who self-disclose more will be given a higher positive rating on the Impression Scale.

The experiment was designed such that there would be a self-report measure of both self-disclosure (a 60-item Self-Disclosure Questionnaire) and self-actualization (The Personal Orientation Inventory), as well as a more behavioral measure of both self-disclosure (different ratings of the taped interviews) and self-actualization (an Activity Scale). This would enable us to examine the correlation of self-report measures with behavioral measures of self-disclosure and self-actualization. This would also permit the examination of cross correlations between these two areas of interest

(self-disclosure and self-actualization) regarding the use of self-report and more behavioral measures.

The investigations in this study were carried out primarily to see if self-disclosure and self-actualization do indeed go hand in hand as purported by Jourard. It would also examine the relationship between the amount of self-disclosure and respective evaluations of partners (e.g., elements of trust and general impression).

## CHAPTER VI

### METHODOLOGY

The study consisted of two parts. The first part required that students fill out, in groups, "The Personal Orientation Inventory" and the "Tennessee Self Concept Scale". Subjects were then selected on the basis of their scores, to participate in the second part of the study. They were contacted by telephone and scheduled to meet in pairs for approximately an hour. The first 20 minutes consisted of an interview by one of the Subjects, and this was followed up with a number of questionnaires.

#### Measures

The measurements consisted of questionnaires and ratings of taped interviews by two trained judges who were blind to the object of the study.

The questionnaires used in the study consisted of:

- A. Self-Actualization
  - (1) The Personal Orientation Inventory
  - (2) An Activity Scale
- B. Self Concept
  - (1) The Tennessee Self Concept Scale
- C. Self-Disclosure
  - (1) A Sixty-Item Self-Disclosure Questionnaire

#### D. Trust and General Impression

- (1) A measure of Trust
- (2) An Impression Scale

The Subjects' self-disclosure was also measured through Tape Ratings of a 20-minute interview by two trained judges. The raters assessed (1) the category of topics discussed, (2) the number of self-disclosure statements based on Haymes Technique (see Appendix E), (3) a global rating of disclosure intimacy based on Chaikin et al's "Scoring System for Rating Disclosure Intimacy" (see Appendix F), and (4) the amount of time each member spent talking during three 2-minute segments of the interview (minutes 5-6, 11-12, and 17-18).

#### The Self-Actualization Measurements

##### a) The Personal Orientation Inventory

The major measurement for self-actualization, The Personal Orientation Inventory, was administered during the first part of the study. As reported previously, the POI is made up of twelve scales and consists of 150 items (each item presenting a choice between two questions which pertain to the opposite poles of a continuum). It provides, therefore, 150 two-choice comparative value and behavior judgments. Studies have shown this questionnaire to be both highly reliable and valid (see Chapter IV). It was developed by Shostrom (1964) and is an outgrowth of a series of writings by Maslow (1954), Rogers (1961), Shostrom and Brammer (1952), and Reisman (1950), as well

as from the research and theoretical formulations of many writers in humanistic, existential, or Gestalt therapy. The items were also empirically chosen from significant value judgment problems encountered by numerous practicing therapists. In short, the POI is designed to assess the values and self-percepts believed to be associated with self-actualization (Foulds, 1969b).

#### b) An Activity Scale

Another measurement of self-actualization was based on the student's activity level (See Appendix B). The Leisure-Time Activities Scale (Miller, 1970) was utilized for this purpose. A few items were added and a few of the items were modified in order to adapt the scale to the present study.

The Activity Scale includes 50-items that are activities in which one might be expected to participate. Each item is ranked on a five-point scale (from "Never" to "Very Frequently") and the Subject's score was obtained by simply adding the scores for each item. Since several items appeared to be of a more "passive" nature, two separate major scores were obtained: a "Passive" score (5 items) and an "Active" score (45 items). These two scores were used as dependent variables in the multivariate analysis.

Furthermore, the activity scale was also analyzed on the basis of clusters of similar activities, i.e., the scores of certain items were combined in order to make up

"subscales" for the Activity measures. These consisted of drama (3 items), art (6 items), music (3 items), reading (4 items), conventions and lectures (2 items), sitting and thinking (1 item), traveling and touring (1 item), radio and T.V. (2 items), movies (1 item), hobbies (5 items), volunteer work (2 items), organizations and clubs (2 items), social activities (11 items), and sports (7 items).

Miller (1970) reports that Leisure participation correlated .019 with income, .40 with a sociocivic activities scale, and .039 with cultural status.

The use of this scale was an effort to develop a more behavioral scale of self-actualization. It was administered following the interview. The scale is actually the result of the emphasis of Maslow's writings of "self-creation" through activity. The rationale behind such a scale is that the more involved in different activities a person is, the freer that person will tend to be, the more he will be taking advantage of life, and the greater the possibility for that person to develop his potentialities.

Basically the scale is a list of activities to which the person is asked to respond as to whether or not the different activities are characteristic of him, and to what degree.

#### The Self Concept Measurement

The Tennessee Self Concept Scale (Fitts, 1964) is reported (Wylie, 1974) to be one of the more frequently

used self concept instruments. This scale consists of 100 self-description items, of which 90 assess the self concept and 10 assess self criticism. The respondent has to mark each item on a 5-step scale from "completely true" to "completely false". The 90 items selected to assess self concept are equally divided as to positive and negative items in order to control for acquiescence response set. The test-retest reliability coefficients for "Total Positive" score (the self concept score) for 60 college students over a two-week period was reported to be .92 (Fitts, 1965). In reviewing the scale, Bentler (1972) in Buros' Seventh Mental Measurements Yearbook (1972) writes that its retest reliability is sufficiently large to warrant confidence in individual difference measurement. Bentler also reports that several scores from the scale have remarkable high correlations with other measures of personality functioning. For example, he reports that the Taylor Anxiety Scale correlates  $-.70$  with the Total Positive score.

Suinn (1972) in his review of the Tennessee Self Concept Scale in Buros' Seventh Mental Measurements Yearbook (Buros, 1972) also maintains that the TSCS ranks among the better measures of self concept.

#### Self-Disclosure Measurements

##### a) A Sixty-Item Self-Disclosure Questionnaire

This was the self-report measure of each individual's self-disclosure. After the interview, each Subject was asked to indicate the items on the questionnaire which he

would be willing to confide to his partner (See Appendix A). The items on this questionnaire were used by Jourard and Richman (1963) in a study designed to measure self-disclosure outputs of college students to parents and closest friends and disclosure-intake from those target-persons. Thus, only the instructions have been changed.

#### b) Tape Ratings of Interviews

A more empirical or behavioral measurement of each individual's level of self-disclosure was provided by two judges, based on the ratings of a twenty minute interview, where one of the Subjects acted as Interviewer and the other Subject acted as Interviewee. This measurement was based primarily on Haymes Technique for measuring self-disclosure from tape-recorded interviews (Haymes, 1969) (See Appendix E) and provided one score of self-disclosure dependent on the number and level of self-references. Inter-rater reliability for this technique was reported to be .98 (Jourard, 1971b).

Haymes technique for measuring self-disclosure takes into account four major categories of response:

1. Expressions of emotion and emotional processes.
2. Expressions of needs.
3. Expressions of fantasies, strivings, dreams, hopes.
4. Expressions of self-awareness.

A score of 2 points is given to disclosures of such a nature when they are first person references and a score

of 1 point is given for disclosures of the same types when they are reflexive third person references. That is, those statements in the third person in which the word "you" is an obvious substitution for saying "I". More complete instructions and examples are found in Appendix E (taken from Jourard, 1971b).

Inter-rater reliability for the two independent judges (two graduate students in psychology, one male and one female) using this technique for six twenty-minute interview practice tapes was .80.

The two judges also assessed the category of topics being discussed during each 30-second segment. There were six possible categories (based on a list of suggested topics given to the Interviewer before the interview). These were: 1) Attitudes and Opinions, 2) Tastes and Interests, 3) Work and Studies, 4) Money, 5) Personality, 6) Body. A seventh category "Others" was added to account for comments and discussions not covered by the above topics. Inter-rater reliability for the two judges on the 6 practice tapes for the above topics were (1) Attitudes and Opinions .96, (2) Tastes and Interests .96, (3) Work and Studies .90, (4) Money .71, (5) Personality .96, (6) Body .45, and (7) Others .80.

As mentioned previously, the raters also ascribed a global rating score for disclosure intimacy based on Chaikin et al.'s Technique (Appendix F). In doing so for the Interviewer, they took into consideration the type of questions asked and

his general style for asking them, as well as his disclosure intimacy. The inter-rater reliability for the two judges on the 6 practice tapes for this measure was .82.

The fourth measure taken from the taped interviews by the judges was based on a sample (cf. Kiesler et al., 1964) of three 2-minute segments (minutes 5 and 6, 11 and 12, 17 and 18) from each interview. These three segments were timed in order to obtain a measure of participation from each member during the interview. Inter-rater reliability for the two judges on the 6 practice tapes was .99.

See Note I for more details on the training procedure and the possible range of scores on the different measures.

#### Measurement of Trust

A 15-item Interview Questionnaire first used by Drag (1968) (See Appendix C) was administered to both Interviewee and Interviewer (with slight modification) following the interview. Its purpose, of course, was to measure the amount of trust between the pair of subjects. This questionnaire was selected to provide a self-rating of each member's feelings of trust in his partner for each pair and feelings relating to their discussion during the interview.

#### Overall Impression Rating

An Impression Scale consisting of 30 items, each of which contains two adjectives at opposite extremes, was also administered following the interview. The subjects were simply asked to indicate their impression of the other participant (See Appendix D). The scale provides for a relative evaluation of the interview partner for each of

the items (from undecided, to low, medium, and high). This "30-item polar-adjective impression scale" was first used by Rubin (1968) who investigated impression change as a function of level of self-disclosure.

### Subjects

Subject participation booklets entitled "Hi-2-U" (for males between the ages of 17-25) were circulated in all of the 29 introductory psychology classes at the University of Manitoba during the first two weeks of October 1976. It was indicated on the booklet that students who volunteered for the study would receive one credit towards fulfillment of their experimental course requirement for participating in the first part of the study, and another credit if they were chosen to participate in the second part of the study. Of the 525 students who signed up for the study, 432 showed up at one of the initial sessions during which "The Personal Orientation Inventory" and the "Tennessee Self Concept Scale" were administered. There were 10 such sessions and the size of the groups varied between 30 and 53 students.

Four students were subsequently eliminated from the sample due to irregularities on answer sheets (misunderstanding of instructions or too many unanswered items). Subjects were then selected for the second part of the study if their score on The Personal Orientation Inventory was in the upper or lower quartile of this sample of 427 students. This score consisted of the combined raw scores from the two major scales of The Personal Orientation

Inventory, i.e., Inner-Directedness and Time Competency.

The scores on The Personal Orientation Inventory for the total sample of students ranged from 63 to 129 and its mean was 94.7 with a standard deviation of 11.6. The scores of the students selected from the lower quartile ranged between 63 and 86 (Mean = 79.5, std. dev. = 5.5), and those of the upper quartile between 103 and 129 (Mean = 109.1, std. dev. = 5.2). Those in the lower quartile made up the NSA (non-self-actualized) sample group and those in the upper quartile the SA (self-actualized) sample group.

192 Subjects (96 from each quartile) were contacted by phone to participate in the second part of the study. At that point they were grouped in pairs on the basis of belonging to the SA or NSA group and also on the basis of their self concept score (Total Positive score on the Tennessee Self Concept Scale). Each SA and NSA group was subdivided into high and low self concept groups on the basis of each Subject's self concept score relative to its group. This provided a sample of high self concept SA's and NSA's and a sample of low self concept SA's and NSA's.

The scores for the high self concept SA's ranged from 343 to 417 and its mean was 361.9. The scores of the high self concept NSA's ranged between 321 to 400 and its mean was 343.5. The scores of the low self concept SA's ranged between 265 to 342 and its mean was 321.5. The scores of the low self concept NSA's ranged between 237 to 320 and its

mean was 294.7. The mean of the combined groups of high self concept was 352.7, while the mean of the combined low self concept groups was 308.1. It should be noted that the mean of the initial sample of 427 students was 334.3 with a standard deviation of 31.2.

#### Experimental Room

An effort was made to try and create a relatively pleasant atmosphere in the room used for the experiment proper, i.e., the second part of the study where students met in pairs. The room was eight feet by eight feet with a small table (two and a half feet by four feet) on which was placed two cassette tape recorders, a small plant and a table lamp. Three relatively comfortable chairs and a cabinet made up the rest of the furniture. One wall was covered with a colorful cloth while the other walls were adorned with a few scenic posters. Thus an attempt was made to create an atmosphere of intimacy.

#### Experimental Design

Subjects took part in the experiment in pairs. The pairs were made up of the four possible combinations of self-actualized and non-self-actualized subjects (i.e., SA-SA, SA-NSA, NSA-SA, NSA-NSA). Furthermore each pair was subdivided into two groups, one of which was composed of high self concept Subjects and the other one of low self concept Subjects. The self-actualized and non-self-actualized groups were therefore subdivided into high level and low level self concept on the basis of their scores on

the Tennessee Self Concept Scale in order to allow the introduction of this ancillary factor in the study. Thus 8 distinct groups (each group consisting of each of the four possible pairings, with the added constraint that both members be from the same level of self concept) were formed. Since each member was also assigned a role for the 20-minute interview, the study constituted a four-factor factorial design with two levels for each factor: level of Subject's self-actualization (SA or NSA), level of partner's self-actualization (SA or NSA), level of self concept (High or Low), and Role (Interviewer or Interviewee).

Schematically this 2x2x2x2 factorial design can be represented by the diagram shown on the next page.

#### Procedure

After the first stage of the study was completed, that is when The Personal Orientation Inventory and the Tennessee Self Concept Scale had been scored for the sample of 427 students, the respective groups of self-actualized and non-self-actualized, and the subgroups of high self concept and low self concept were formed (see section on Subjects above). Students who were selected in this way were contacted by telephone and asked to participate in the experiment. They were told that it would consist of an interview with another university student taking Introduction to Psychology, where one of them would be acting as Interviewer and the other one as Interviewee, and that the 20-minute interview would be followed by a few questionnaires.

Self Concept	Role	Level of Subject's Self-Act.	Level of Partner's Self-Act.	
H 1	ER	SA	SA	
			NSA	
			NSA	SA
				NSA
	EE		SA	SA
				NSA
		NSA	SA	
			NSA	
L o	ER	SA	SA	
			NSA	
			NSA	SA
				NSA
	EE		SA	SA
				NSA
		NSA	SA	
			NSA	

They were also told that the experimenter was interested basically in seeing how well people can get to know each other in twenty minutes. As it had been indicated during the first stage of the study, they were reminded that this would enable them to acquire another experimental credit towards fulfillment of their course requirement. They were then randomly assigned to one of the pairs for which they had the proper qualifications with regards to self-actualization and self concept.

Subjects were asked to come to the Subject Waiting Room which was adjacent to the experimental room. When both Subjects had arrived, the Experimenter greeted them, and introduced them to each other. The Subject who had been assigned (randomly as pairings were formed) to be the Interviewer, was asked to come to the next room and the other Subject was told that the Experimenter would be back for him in a few minutes.

As the Interviewer entered the experimental room the experimenter indicated where he should sit. He was then told, "What is being asked of you today, is that you interview another student to see how well you can get to know him in 20 minutes. You should tell him, essentially, what I have just told you and which you find written on this sheet." The sheet (see Appendix G) was handed over to him. As the Interviewer was looking at it the experi-

menter added, "There is also a list of suggested topics as you can see. I will give you a minute to look at them and then I will ask (PARTNER'S NAME) to come in." After approximately a minute, or as the Interviewer indicated he was ready, the experimenter would say, "Okay?" The experimenter then got up and went to ask the other Subject to come in.

When both students were in the experimental room, sitting approximately 4 to 5 feet from each other, the experimenter would say: "As (INTERVIEWER'S NAME) will tell you this will consist of a 20-minute interview. The interview will be tape recorded. The reason for the two recorders is simply to guard against the possible malfunction of one of them. You can be reassured that the tapes will remain confidential and used solely for the purpose of this study. The results will be presented anonymously and the tapes will be erased following completion of the study."

After a brief pause the experimenter went on to say, "I will leave now but I will be back in 20 minutes with some questionnaires I would like you to fill out after this interview. You are likewise assured of strictest confidentiality and professional use of these

questionnaires. I should also remind you that you may at any time leave this experiment if you find it offensive. I will now start the tape recorders and I will be back in 20 minutes." As the experimenter left he would say, "See you later" and started his stopwatch after closing the door behind him.

When 20 minutes had elapsed the experimenter knocked on the door and said, as he walked in, "Okay, this is the end of the interview. Thank you", and stopped the tape recorders. He then said, "Now for the questionnaires", and handed a folder to each Subject. The folder contained (presented in a random order for each pair) the following questionnaires: (1) A Sixty-item Self-Disclosure Questionnaire (2) An Activity Scale (3) A 15-item Trust Scale, and (4) a 30-item Impression Scale. This was always followed by a Final Questionnaire (see Appendix H) which contained three questions pertaining to each Subject's hypotheses about the study, important recent events in the Subject's life which could have a bearing on his performance during the experiment, and any comments about participating in the experiment.

As the Subjects were opening their folder the experimenter would add, "Please fill them

out in the same order they are presented in this folder. Of course, the most important thing is that you be as honest as you can. When you are all done, simply bring them over to the next room, and I will sign your experimental card. If you are not sure about some of the instructions, or the meaning of some items or words, simply ask the experimenter."

After a brief pause the experimenter would then say, "One more thing, I usually put this partition in between to allow for more privacy in filling out the questionnaires." (The partition was a piece of plywood 2 feet wide and 2½ feet high). As the experimenter left the room he would say, "Thank you", and "I will leave the door open."

When the Subjects brought back their questionnaires, the experimenter would sign their experimental card, have them read the debriefing sheet (see Appendix I) and answered any questions they had.

It was decided before the experiment was conducted, that in order for a tape to be valid for analysis there had to be at least 15 minutes of conversation during the 20 minutes of the interview. None of the tapes failed to reach this criterion.

## CHAPTER VII

### RESULTS

The hypotheses stated at the onset of this study were:

- (1) Self-disclosure of self-actualized interviewees and of self-actualized interviewers will be greater than the self-disclosure of non-self-actualized interviewees and interviewers respectively.
- (2) The greatest amount of self-disclosure for both members of a pair will be provided by the SA-SA pairing, followed by the NSA-SA pairing, and then the SA-NSA pairing. The NSA-NSA pairing will show the least amount of self-disclosure.
- (3) The self-actualized subjects will score higher on the trust scale than the non-self-actualized subjects. That is they will show greater trust of their partners in the interview.
- (4) The self-actualized subjects will also be rated as more "trustworthy" than the less self-actualized.
- (5) It is expected that the more self-actualized persons will be given a higher positive rating on the Impression Scale.
- (6) It is also hypothesized that the individuals who self-disclose more will be given a higher positive rating on the Impression Scale.

The effects of the four independent variables, (1) the level of self-actualization of Subject (SA or NSA), (2) the partner's level of self-actualization (SA or NSA), (3) the Subject's level of self concept (High or Low), and (4) the Subject's role (Interviewer or Interviewee), on eleven dependent variables were analyzed using a multivariate analysis of variance procedure (Finn, 1976). This type of analysis was warranted considering the large number of dependent variables and the inevitable correlations which arise when they are of a related conceptual nature (Harris, 1975; Tatsuoka, 1971; Gabriel and Hopkins, 1974). Thus it was possible to control for experiment-wise Type I error rate (set at the .05 level for all tests in this study) while testing for main and interaction effects across the "package" of dependent variables considered simultaneously.

The univariate F's (also provided by Finn's computer program) corresponding to each dependent variable were then considered if the multivariate F was found to be significant. Furthermore, emphasis was placed on the standardized discriminant function coefficients (another multivariate procedure) following each significant multivariate F. This would provide a better understanding of the importance of each dependent variable in the "package" considered significant in differentiating the groups being tested (cf. Stevens, 1972; Gabriel and Glavin, 1976).

In order to test for specific group differences, as

hypothesized initially, t statistics were computed for these contrasts, and the Bonferroni procedure was applied to nonorthogonal comparisons. In the latter case, the conceptual unit for error rate was the error rate per hypothesis (Kirk, 1968).

#### Dependent measures

The 11 dependent variables consisted of the scores from the following measures:

1. Self-Disclosure Rating (from tape ratings; inter-rater reliability = .78 for the two raters)
2. SDQ Questionnaire (the 60-item self-disclosure questionnaire following the interview)
3. High Topics (combined scores of (1) Money, (2) Personality, and (3) Body from the tape ratings; inter-rater reliability = .84)
4. Global Intimacy Rating (overall level of intimacy rating; inter-rater reliability = .60)
5. Impression (26 items from the Impression scale following interview)
6. At Ease (2 items on the 15-item Trust questionnaire pertaining to (1) anxiety and tension, and (2) reaction to the presence of tape recorders)
7. General Trust (13 items from the Trust questionnaire filled out immediately after the interview)
8. Activity (45 items from the 50-item Activity scale filled out following the interview)
9. Passive (5 items from the 50-item Activity scale)
10. Low Topics (combined scores of (1) Attitudes and Opinions, (2) Tastes and Interests, and (3) Work and Studies taken from the tape ratings; inter-rater reliability = .83)

11. Time (the amount of time each Subject spent talking during the interview, based on three 2-minute segments; inter-rater reliability = .98)

The two variables "High Topics" and "Low Topics" were formed by combining its respective categories of topics in a fashion consistent with the reported level of intimacy of these topics in the literature (cf. Jourard 1971). The inter-rater reliability coefficients (Pearson product-moment r's; Hays, 1963) for each independent topic, for the self-disclosure rating, and for the global intimacy rating by the two raters for the 192 Subjects were:

(1)	Attitudes and Opinions	.89
(2)	Tastes and Interests	.86
(3)	Work and Studies	.88
(4)	Money	.67
(5)	Personality	.87
(6)	Body	.81
(7)	Others	.76
(8)	Self-Disclosure Rating	.78
(9)	Global Intimacy Rating	.60
(10)	Time	.98

The two scores from each rater were combined to obtain the unit of analysis for the (a) Self-Disclosure Rating, (b) Global Intimacy Rating, (c) Time measure, (d) Low Topics, and (e) High Topics (i.e., the ratings used as dependent variables).

The Analysis of Self-Actualization: Multivariate F,  
Univariate F's, and the Discriminant Function

Table I summarizes the findings related to the effects of self-actualization on the eleven dependent variables in the study. As the table indicates, the multivariate test of the main effect due to self-actualization is highly significant ( $F = 2.7991$ ,  $df = 11, 166$ ,  $p < 0.0023$ ). Thus, as predicted, self-actualization has a definite effect on the package of dependent measures.

In the context of this study, the univariate tests (when the multivariate F is significant) will serve as indicators of the variables which are possibly the most potent in differentiating between the groups. In this particular analysis for the main effect of self-actualization, we can see that the univariate F's of two variables stand out as being most significant. These are the Self-Disclosure Questionnaire ( $F = 9.43$ ,  $df = 1, 176$ ,  $p < 0.0025$ ) and how "at ease" the Subjects were ( $F = 9.36$ ,  $df = 1, 176$ ,  $p < 0.0026$ ). The Means for the two groups of self-actualization and non-self-actualization on these two dependent measures are listed in Table 2, along with the Means of all the other variables.

The self-actualized (SA) Subjects were more at ease during the interview ( $\underline{M} = 1.68$ ) than the non-self-actualized (NSA) Subjects ( $\underline{M} = 1.40$ ), and were also more willing to self-disclose to their "partners" as indicated by the SDQ questionnaire ( $\underline{M}$  of SA group = 45.11 vs.  $\underline{M}$  of NSA group =

TABLE 1

MULTIVARIATE AND UNIVARIATE ANALYSIS OF VARIANCE  
FOR SELF-ACTUALIZATION

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
<b>Self-actualization</b>				
Multivariate	(11,166)	--	2.7991	0.0023
<b>Univariate</b>				
Passive	1	24.08	1.80	0.1813
Active	1	1710.04	3.16	0.0773
At Ease	1	3.79	9.36	0.0026
General Trust	1	10.54	1.89	0.1714
Impression	1	157.68	0.44	0.5101
SDQ Questionnaire	1	1210.02	9.43	0.0025
Self-Disclosure Rating	1	9.29	1.16	0.2820
Global Intimacy Rating	1	4.60	2.69	0.1027
Low Topics	1	55.79	1.60	0.2071
High Topics	1	20.34	1.33	0.2512
Time	1	967.50	0.35	0.5545
<b>Error Terms</b>				
Passive	176	13.37		
Active	176	541.48		
At Ease	176	0.40		
General Trust	176	5.59		
Impression	176	361.82		
SDQ Questionnaire	176	128.34		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	1.71		
Low Topics	176	34.79		
High Topics	176	15.35		
Time	176	2757.72		

TABLE 2  
 Means for the Two Groups  
 of Self-Actualization and Non-Self-Actualization

	<u>Self-Actualized Group</u>	<u>Non-Self-Actualized Group</u>
Passive	15.40	16.10
Active	87.96	81.99
At Ease	1.68	1.40
General Trust	10.30	9.83
Impression	137.40	139.20
SDQ Questionnaire	45.11	40.09
Self-Disclosure Rating	3.60	3.16
Global Intimacy Rating	3.54	3.23
Low Topics	35.02	36.09
High Topics	5.75	5.10
Time	144.60	149.10

40.09). An examination of the Means of the other variables also support (although not providing significant univariate F's) the general hypothesis that self-actualized individuals will tend to be more active (SA = 87.96, NSA = 81.99), less involved in passive activities<sup>1</sup> (SA = 15.40, NSA = 16.10), and be generally more trusting of others (SA = 10.30, NSA = 9.83). The two judges who rated the taped interviews also gave the self-actualized Subjects a higher global intimacy rating (SA = 3.54, NSA = 3.23) as well as a higher score for self-disclosure statements (SA = 3.60, NSA = 3.16). And, as expected, the judges scored fewer "low topics" of discussion for the self-actualized Subjects (SA = 35.02, NSA = 36.09) but a larger number of "high topics" for the self-actualized Subject (SA = 5.75, NSA = 5.10). The only two variables on which the scores might appear to be inconsistent with the study at hand, were the Impression Scale scores and the Time scores. The self-actualized Subjects were less impressed with their partners than were the non-self-actualized Subjects (SA = 137.40, NSA = 139.20). These scores will become more meaningful when the "Partner" independent variable is taken into consideration. As far as "Time" is concerned, the non-self-actualized Subjects spent more time talking during the interview than did the

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<sup>1</sup>The "Passive" score consisted of the scores on 5 items from the Activity Scale. These were items No. 28 - Spectator of Sports, No. 38 - Listening to radio, No. 39 - Watching T.V., No. 47 - Movies, and No. 50 - Sitting and thinking.

self-actualized Subjects (SA = 144.60, NSA = 149.10). It will again be necessary to look at the interaction with the "Partner" factor in order to better understand the reason for such a result.

Getting back to the univariate F's for the dependent variables, pertaining to differences in our two groups (SA vs. NSA), we can see that two more variables approached significance. These were the "Active" score ( $F = 3.16$ ,  $df = 1, 176$ ,  $p < 0.0773$ ) and the rating for "global intimacy" ( $F = 2.69$ ,  $df = 1, 176$ ,  $p < 0.1027$ ).

Except for two of the variables (Impression and Time), the other dependent variables provided "appreciable" F's even though they did not reach significance. The important thing here is that the  $p$  value for the estimate of probability of occurrence of such differences between the Means remained relatively small as a group (General Trust,  $p < 0.1714$ ; Passive,  $p < 0.1813$ ; Low Topic,  $p < 0.2071$ ; High Topic,  $p < 0.2512$ , and the Self-Disclosure Rating for Statements,  $p < 0.2820$ ). However, abiding by the rules set forth at the onset for Type I error, one cannot claim statistical support for these measures when they are analyzed independently as univariates... What is more, the large number of dependent variables makes it all the more probable that we have overlapping information (or "redundant differences", cf. Gabriel and Glavin, 1976). See Table 3 for intercorrelations of the dependent variables. On the

TABLE 3

## Within Group Correlations of Dependent Variables

	Passive	Active	At Ease	General Trust	Impression	SDQ Questionnaire	Self-Disclosure Rating	Global Intimacy Rating	Low Topics	High Topics	Time
Passive	1.00	.4429	-.0465	.0434	.0551	-.1248	.0406	.0133	.1388	-.0832	.0061
Active		1.00	.0387	.0745	.0191	-.0830	-.0816	.0001	.1652	-.1169	.1098
At Ease			1.00	.2171	.1400	.0992	.0410	.0762	-.0072	.0142	.0637
General Trust				1.00	.5295	.1459	-.0312	.0899	.1767	-.1988	.1204
Impression					1.00	.0297	.0348	.0586	.0165	-.0938	-.0047
SDQ Questionnaire						1.00	.1094	.1314	-.0488	.0907	-.0433
Self-Disclosure Rating							1.00	.7093	-.1171	.3515	.4672
Global Intimacy Rating								1.00	-.0597	.4846	.4309
Low Topics									1.00	-.5164	.2589
High Topics										1.00	.0893
Time											1.00

Correlations  $\geq 0.1422$  are significant at a  $p$  level of .05.

other hand, it has also been pointed out that looking only at the univariate F's in such a case does not necessarily indicate the extent to which our groups might differ, because of possible "suppressor-type" relationships among certain variables (cf. McNemar, 1969). This is explained succinctly by Gabriel and Glavin (1976) when they point out that "a predictor variable, while correlating zero with the criterion, can raise the multiple correlation dramatically if it correlates highly with the orthogonal (uncorrelated with the criterion) components of the other predictor variables, thereby making them more efficient predictors".

The above discussion, and the importance of taking into account the weights of each dependent variable in the criterion package which has served to maximally discriminate between our groups becomes more apparent as we examine the discriminant function of this particular analysis. A look at the standardized discriminant coefficients (standardized weights) as given in Table 4, shows that except for a few variables with slightly larger weights (Active  $B_2 = 0.57$ , At Ease  $B_3 = 0.44$ , Passive  $B_1 = -0.40$ ), most of the measures appear to be providing a relatively equal amount of discrimination between the groups, albeit none of them of a large nature. Considering the distribution of weights, it appears as though every variable, with the exception of "High Topics" which is highly correlated with some of the other variables (see Table 3:  $-0.51$  with Low Topics,  $0.48$  with Global Intimacy Rating, and  $0.35$  with Self-Disclosure Rating) and therefore already accounted for, is making some

TABLE 4

Raw and Standardized Discriminant Function Coefficients  
for Self-Actualization

<u>Variable</u>	<u>Raw Coefficient</u>	<u>Standardized Coefficient</u>
Passive	-0.1101	-0.4027
Active	0.0246	0.5730
At Ease	0.6852	0.4365
General Trust	0.1361	0.3219
Impression	-0.0191	-0.3642
SDQ Questionnaire	0.0337	0.3819
Self-Disclosure Rating	0.0426	0.2412
Global Intimacy Rating	0.0665	0.1742
Low Topics	-0.0128	-0.1516
High Topics	0.0011	0.0090
Time	-0.0034	-0.3652

worthwhile contribution in helping to differentiate between our two groups in the multivariate analysis. This seems to be consistent with the above discussion in the examination of the univariate F's which were obtained. It also appears plausible that one reason for lower weights assigned to the scores based on the tape ratings (i.e., Self-Disclosure, Global Intimacy, Low Topics, High Topics, and Time) is that they are all interrelated to some extent (see Table 3) and therefore share their discriminating power.

#### Step-Down F's and Self-Actualization

A look at the step-down F's (cf. Stevens, 1972 --- "a form of analysis of covariance in which the contribution of successive variates to rejection of the null hypothesis is tested, eliminating the contribution of all previous variates") in Table 5 sheds some more light on the ramifications dwelled upon in the previous section. It should be noted, however, that Table 5 represents only one order of introducing the variables and that because of the nature of such a test, the "order" in which the variables are tested "makes a difference" (Stevens, 1972). The order used consisted of entering the questionnaire variables first. The behavioral measures of self-disclosure were then entered, immediately following the SDQ questionnaire. The measures of a most similar nature were entered in succession, i.e., (Passive, Active), (At Ease, General Trust, Impression), (SDQ questionnaire, Self-Disclosure Rating, Global Intimacy Rating), (Low Topics, High Topics).

TABLE 5

Step-Down F Analysis of Variance  
for Self-Actualization

<u>Variable</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
Passive	1	24.08	1.8011	0.1813
Active	1	3014.46	6.8861	0.0095
At Ease	1	3.07	7.5447	0.0067
General Trust	1	2.20	0.4091	0.5234
Impression	1	575.00	2.1685	0.1427
SDQ Questionnaire	1	742.09	5.8969	0.0162
Self-Disclosure Rating	1	8.21	1.0289	0.3118
Global Intimacy Rating	1	0.16	0.1922	0.6618
Low Topics	1	56.11	1.6762	0.1972
High Topics	1	0.05	0.0074	0.9318
Time	1	3933.47	2.1731	0.1424
<b>Error Terms</b>				
Passive	176	13.37		
Active	176	437.75		
At Ease	176	0.40		
General Trust	176	5.39		
Impression	176	265.16		
SDQ Questionnaire	176	125.84		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	0.85		
Low Topics	176	33.47		
High Topics	176	8.01		
Time	176	1810.09		

Thus, the "step-down F" for "Activity" becomes highly significant ( $F = 6.8861$ ,  $df = 1, 176$ ,  $p < 0.0095$ ) after the variance accounted for in that variable by the "Passive" variable has been removed. The Active variable is also highly weighted (std. coeff. = 0.5730) in the discriminant function.

The redundancy of the variable General Trust with the variable At Ease becomes apparent when its common variance is excluded (the step-down F of General Trust drops from 1.885 to 0.409). There is a similar interaction between General Trust and the Impression variable, except that it operates in the opposite direction (i.e., the General Trust variable appears to act as a suppressor, thereby making the Impression variable more potent in discriminating between the groups when the General Trust variable is present).

Again, from the step-down F's it would appear as though the Global Intimacy Rating and the Self-Disclosure Rating are sharing a common variance, to no surprise. The step-down F for the Global Intimacy Rating becomes smaller as its common variance with the variables above it is eliminated; the most "damage" would appear to be caused by the Self-Disclosure Rating, which in turn was relatively unaffected by removal of the variables above it. Of course the interrelationship of the Low Topics and the High Topics variables becomes quite apparent, with practically no change in the step-down F for the Low Topics (see Table 5) but a drastic lowering of efficiency of the High Topics variable when its common variance with

the Low Topics variable (in particular) is eliminated. This is in agreement with the low weight given to the High Topics variable ( $B_{10} = 0.0090$ ) in the discriminant function.

The step-down F for the Time measure also benefits from removal of common variance with all the other variables. Thus it would appear to act as a suppressor variable for some of the other variables, i.e., making their presence more efficient as discriminators in the package of variables. This would also support the moderately important weight ( $B_{11} = -0.3652$ ) it is attributed in the composite of the 11 variables as they maximally differentiate between the two groups in question.

The Analysis of the "Partner" Factor: Multivariate F, Univariate F's, and the Discriminant Function

The "Partner" factor has to be considered one of the factors of most interest in this study. It refers to the partner's level of self-actualization, i.e., SA or NSA. A summary of the findings pertaining to the contribution of this factor is listed in Table 6. As the table indicates, the multivariate test of the main effect due to whether or not one's partner was self-actualized reaches marginal significance ( $F = 1.7019$ ,  $df = 11, 166$   $p < 0.0768$ ). In support of a non-chance significant F it was found that the multivariate F increased to 1.8743,  $df = 10, 167$ , and  $p < 0.0520$  when the Time variable (which has by far the largest variance, see Table 6) is not included in the multivariate analysis. Thus, as predicted, the status (SA or NSA) of a Subject's partner did make a difference re the composite scores of dependent variables. Table 7 provides a list of the group Means for each variable, the groups being formed on the basis of the level of self-actualization of the Subject's partner. As can be seen, the differences in Means, for the most part, are in the expected direction. Figures 1 and 2 make some of these interactions even more apparent.

A look at the univariate F's in Table 6 shows that two variables are significant at the .05 level when tests for main effects are based on the partner's level of self-actualization. These are (1) how "at ease" the Subjects

TABLE 6  
MULTIVARIATE AND UNIVARIATE ANALYSIS OF VARIANCE  
FOR THE PARTNER FACTOR

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
Partner				
Multivariate	(11,166)	--	1.7021	0.0726(a)
Univariate				
Passive	1	14.08	1.0533	0.03061
Active	1	605.63	1.1185	0.02916
At Ease	1	1.88	4.6336	0.0328
General Trust	1	18.13	3.2414	0.0735
Impression	1	38.52	0.1065	0.7446
SDQ Questionnaire	1	13.02	0.1015	0.7506
Self-Disclosure Rating	1	19.53	2.4468	0.1196
Global Intimacy Rating	1	4.60	2.6919	0.1027
Low Topics	1	25.88	0.7440	0.3896
High Topics	1	63.59	4.1425	0.0434
Time	1	3468.00	1.2576	0.2636
Error Terms				
Passive	176	13.37		
Active	176	541.48		
At Ease	176	0.40		
General Trust	176	5.59		
Impression	176	361.82		
SDQ Questionnaire	176	128.34		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	1.71		
Low Topics	176	34.79		
High Topics	176	15.35		
Time	176	2757.72		

(a) When the "Time" variable is not included in the multivariate analysis, the multivariate F becomes 1.8743, df = 10, 167,  $p < 0.0520$ . Note the large MS value for Time.

TABLE 7

Means for the Two Groups of Partners

<u>Variable</u>	<u>"Self-Actualized Partners" Group</u>	<u>"Non-Self-Actualized Partners" Group</u>
Passive	15.48	16.02
Active	83.20	86.75
At Ease	1.44	1.64
General Trust	10.37	9.76
Impression	138.70	137.80
SDQ Questionnaire	42.86	42.34
Self-Disclosure Rating	3.70	3.06
Global Intimacy Rating	3.54	3.23
Low Topics	35.19	35.92
High Topics	6.00	4.85
Time	151.10	142.60

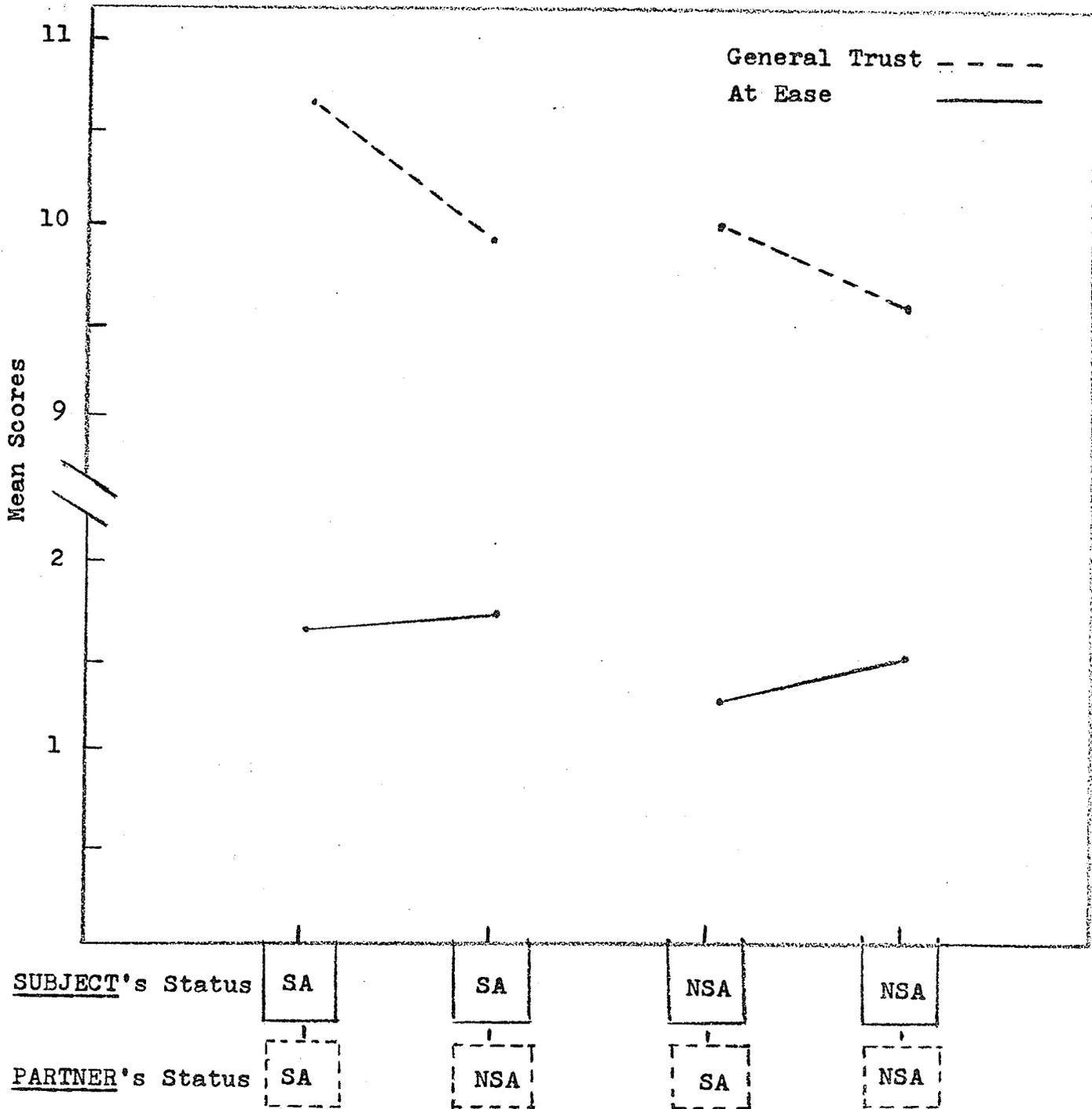


Figure 1. Interaction of Subject with Partner for General Trust and At Ease

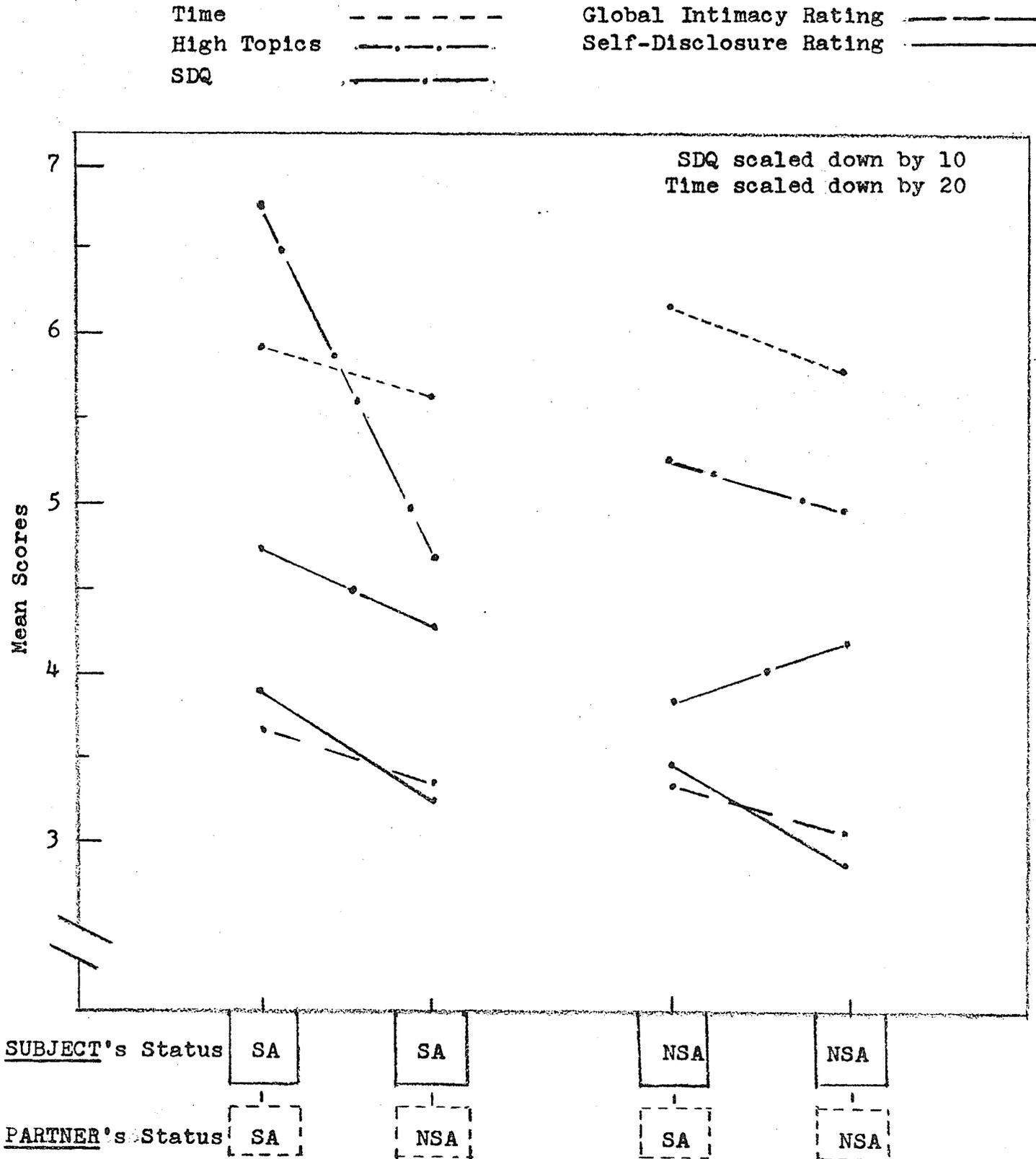


Figure 2. Interaction of Subject with Partner on Self-Disclosure Measures

were, depending on whether their partner was self-actualized or non-self-actualized ( $F = 4.6336$ ,  $df = 1, 176$ ,  $p < 0.0328$ ), and (2) the "high topics" variable, i.e., high level of intimacy topics ( $F = 4.1425$ ,  $df = 1, 176$ ,  $p < 0.0434$ ). A third variable, the "general trust" component approached significance ( $F = 3.2414$ ,  $df = 1, 176$ ,  $p < 0.0735$ ) and was clearly significant as a step-down F ( $F = 5.5487$ ,  $df = 1, 176$ ,  $p < 0.0197$ ) when its covariance with the "at ease" variable was partialled out, along with that of the "passive" and "active" variables (see Table 8). Amongst the other variables, the univariate F's which attract most attention are the "self-disclosure rating" ( $F = 2.4468$ ,  $df = 1, 176$ ,  $p < 0.1196$ ) and the "global intimacy rating" ( $F = 2.6919$ ,  $df = 1, 176$ ,  $p < 0.1027$ ).

Taking a closer look at the Means of these variables (Table 7) we can see that Subjects were more at ease with a non-self-actualized partner ( $\underline{M}$  for NSA partner = 1.635 vs.  $\underline{M}$  for SA partner = 1.437). On the other hand, they showed more trust for the self-actualized partner ( $\underline{M} = 10.370$  vs. 9.760) and discussed more topics of high intimacy value ( $\underline{M} = 12.000$  vs. 9.698). Subjects were also given higher self-disclosure and global intimacy ratings ( $\underline{M} = 3.698$  vs. 3.060, and  $\underline{M} = 3.544$  vs. 3.234 respectively) when their partner was self-actualizing. An interesting result is that Subjects spoke at greater length when their

TABLE 8

Step-Down F Analysis of Variance  
for the Partner Factor

<u>Variable</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
Passive	1	14.08	1.0533	0.3061
Active	1	195.73	0.4471	0.5047
At Ease	1	1.86	4.5859	0.0337
General Trust	1	29.92	5.5487	0.0197
Impression	1	100.17	0.3778	0.5397
SDQ Questionnaire	1	0.01	0.0001	0.9907
Self-Disclosure Rating	1	23.22	2.9097	0.0899
Global Intimacy Rating	1	0.22	0.2607	0.6104
Low Topics	1	29.44	0.8795	0.3498
High Topics	1	19.37	2.4173	0.1219
Time	1	145.18	0.0802	0.7774
<b>Error Terms</b>				
Passive	176	13.37		
Active	176	437.75		
At Ease	176	0.40		
General Trust	176	5.39		
Impression	176	265.16		
SDQ Questionnaire	176	125.84		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	0.85		
Low Topics	176	33.47		
High Topics	176	8.01		
Time	176	1810.09		

partner was self-actualized ( $\bar{M} = 151.1$  vs.  $142.6$ ). The univariate  $F$  of the "time" variable is, however, not significant ( $F = 1.2576$ ,  $df = 1, 176$ ,  $p < 0.2636$ )

The discriminant analysis (see Table 9) for the "partner" factor supports the results obtained with the univariate  $F$ 's. The largest discriminant weights were assigned to "general trust" ( $B_4 = -0.7872$ ), the "at ease" variable ( $B_3 = 0.6419$ ), and the "high topics" variable ( $B_{10} = -0.5251$ ). The "self-disclosure rating" was also weighted moderately ( $B_7 = -0.2712$ ) along with the "passive" score ( $B_1 = 0.2105$ ) and the "impression" score ( $B_5 = 0.1908$ ). The smallest weights in this discriminant function were given to the "low topics" variable ( $B_9 = 0.0179$ ), the SDQ questionnaire variable ( $B_6 = 0.0679$ ), the "time" variable ( $B_{11} = -0.0877$ ), and the "activity" variable ( $B_2 = 0.1030$ ).

TABLE 9

Raw and Standardized Discriminant Function Coefficients  
for the Partner Factor

<u>Variable</u>	<u>Raw Coefficient</u>	<u>Standardized Coefficient</u>
Passive	0.0575	0.2105
Active	0.0044	0.1030
At Ease	1.0076	0.6419
General Trust	-0.3328	-0.7872
Impression	0.0100	0.1908
SDQ Questionnaire	0.0059	0.0679
Self-Disclosure Rating	-0.0959	-0.2712
Global Intimacy Rating	0.0889	0.1164
Low Topics	0.0030	0.0179
High Topics	-0.1340	-0.5251
Time	-0.0016	-0.0877

The Importance of Self Concept: Multivariate F, Univariate F's, and the Discriminant Function

This ancillary factor turned out to be, not unexpectedly, a highly significant contributor to variability in the "package" of dependent variables. Thus the multivariate F (see Table 10) was highly significant ( $F = 2.4279$ ,  $df = 11$ ,  $166$ ,  $p < 0.0079$ ).

An examination of the group Means for high and low self concept (see Table 11) provides an interesting picture of the role played by this factor. The most obvious difference in Means is found in the "impression" scores where the high self concept group was by far more impressed with their partners than were the Subjects in the low self concept group ( $\bar{M} = 142.4$  vs.  $133.8$ ). This was supported by a highly significant univariate F ( $F = 10.6463$ ,  $df = 1$ ,  $176$ ,  $p < 0.0014$ ). A second large difference in Means occurred with the "Activity" variable where the high self concept individuals are much more active ( $\bar{M} = 89.67$  vs.  $80.28$ ).

Contrary to the self-actualized group case, however, the high self concept group scored higher than the low self concept group on the "passive" variable ( $\bar{M} = 16.24$  vs.  $15.26$ ). The univariate F for this variable reached marginal significance ( $F = 3.4418$ ,  $df = 1$ ,  $176$ ,  $p < 0.0653$ ). The only other variable which provided a univariate F of an appreciable value ( $F = 3.5077$ ,  $df = 1$ ,  $176$ ,  $p < 0.0628$ ) was the SDQ questionnaire. High self concept individuals were more willing to self disclose ( $\bar{M} = 44.14$  vs.  $41.07$ ) than low

TABLE 10

MULTIVARIATE AND UNIVARIATE ANALYSIS OF VARIANCE  
FOR SELF CONCEPT

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
<b>Self Concept</b>				
Multivariate	(11,166)	--	2.4279	0.0079
<b>Univariate</b>				
Passive	1	46.02	3.44	0.0653
Active	1	4228.13	7.80	0.0058
At Ease	1	0.01	0.01	0.9100
General Trust	1	2.75	0.49	0.4838
Impression	1	3852.08	10.64	0.0014
SDQ Questionnaire	1	450.18	3.50	0.0628
Self-Disclosure Rating	1	0.44	0.05	0.8136
Global Intimacy Rating	1	0.44	0.26	0.6107
Low Topics	1	54.72	1.57	0.2115
High Topics	1	6.93	0.45	0.5024
Time	1	121.92	0.04	0.8338
<b>Error Terms</b>				
Passive	176	13.37		
Active	176	541.48		
At Ease	176	0.40		
General Trust	176	5.59		
Impression	176	361.82		
SDQ Questionnaire	176	128.34		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	1.71		
Low Topics	176	34.79		
High Topics	176	15.35		
Time	176	2757.72		

TABLE 11

Means for the Two Groups of High Self Concept  
and Low Self Concept

<u>Variable</u>	<u>High Self Concept Group</u>	<u>Low Self Concept Group</u>
Passive	16.24	15.26
Active	89.67	80.28
At Ease	1.54	1.53
General Trust	10.19	9.948
Impression	142.70	133.80
SDQ Questionnaire	44.14	41.07
Self-Disclosure Rating	3.33	3.43
Global Intimacy Rating	3.34	3.44
Low Topics	36.09	35.02
High Topics	5.23	5.62
Time	146.10	147.70

self concept individuals. Once more the step-down F's (see Table 12) show that the SDQ variable supports this difference (step-down  $F = 4.7987$ ,  $df = 1, 176$ ,  $p < 0.0299$ ) when its covariance with the 5 variables above it has been taken out.

Although the univariate F's did not reach significance for the "low topics" variable and the "high topics" variable (see Table 10), the difference between Means for the two groups were in the opposite direction than was expected. The high self concept group discussed more topics of low intimacy value ( $M = 36.09$  vs.  $35.02$ ) and fewer topics of high intimacy value ( $M = 5.23$  vs.  $5.61$ ) than did the low self concept group.

Once more, the standardized discriminant coefficients (see Table 13) are in line with the findings established through scrutiny of the univariate F's, except for the "Passive" variable which is given little weight in the "composite" used to discriminate maximally between the two groups at hand. By far the largest discriminant variable for self concept appears to be the Impression scale ( $B_5 = -0.8201$ ). The Activity scale ( $B_2 = -0.5057$ ), along with the SDQ questionnaire ( $B_6 = -0.4720$ ), also classify as major discriminators as far as self concept is concerned. "General Trust" is not far behind with a standardized coefficient of  $0.3919$ . Appreciable standardized weights were also collected by the trio of "low topics" ( $B_9 = -0.3005$ ), "global intimacy rating" ( $B_8 = 0.2817$ ), and the "high topics" ( $B_{10} = -0.1610$ ) scores.

Variables which appear to provide insignificant discrimi-

TABLE 12  
 Step-Down F Analysis of Variance  
 for Self Concept

<u>Variable</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
Passive	1	46.02	3.4418	0.0653
Active	1	2066.74	4.7212	0.0312
At Ease	1	0.01	0.0028	0.9581
General Trust	1	1.19	0.2224	0.6379
Impression	1	2937.69	11.0789	0.0011
SDQ Questionnaire	1	603.89	4.7987	0.0299
Self-Disclosure Rating	1	1.78	0.2234	0.6371
Global Intimacy Rating	1	0.39	0.4586	0.4993
Low Topics	1	33.53	1.0017	0.3183
High Topics	1	2.28	0.2856	0.5939
Time	1	36.07	0.0199	0.8880
<b>Error Terms</b>				
Passive	176	13.37		
Active	176	437.75		
At Ease	176	0.40		
General Trust	176	5.39		
Impression	176	265.16		
SDQ Questionnaire	176	125.84		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	0.85		
Low Topics	176	33.47		
High Topics	176	8.01		
Time	176	1810.09		

TABLE 13

Raw and Standardized Discriminant Function Coefficients  
for Self Concept

<u>Variable</u>	<u>Raw Coefficient</u>	<u>Standardized Coefficient</u>
Passive	-0.0341	-0.1248
Active	-0.0217	-0.5057
At Ease	0.0773	0.0493
General Trust	0.1656	0.3919
Impression	-0.0431	-0.8201
SDQ Questionnaire	-0.0416	-0.4720
Self-Disclosure Rating	-0.0344	-0.0972
Global Intimacy Rating	0.2152	0.2817
Low Topics	-0.0509	-0.3005
High Topics	-0.0411	-0.1610
Time	0.0007	0.0374

minating power, as far as self concept is concerned, includes the "time" score ( $B_{11} = 0.0374$ ), and the "at ease" variable ( $B_3 = 0.0493$ ). Two other variables, the "self-disclosure rating" ( $B_7 = -0.0972$ ) and the "passive" score ( $B_1 = 0.1248$ ) also appear to provide very little discriminating power in this case (i.e., composite score of the present 11 predictor variables).

The Effects of "Role" on the Dependent Variables:  
Multivariate F, Univariate F, and the Discriminant Function

Table 14 summarizes the findings with respect to the multivariate analysis and the univariate analyses when the "role" played by the Subject during the interview is set as the independent variable. As expected, the multivariate F is highly significant ( $F = 12.9469$ ,  $df = 11, 166$ ,  $p < 0.0001$ ).

An examination of the group Means for the Interviewer and Interviewee for each of the 11 dependent variables (see Table 15) shows that the Interviewer only spoke about three-fifth of the time the Interviewee did ( $M = 109.3$  vs. 184.4). Such a difference in time scores would inevitably affect the scores for "high" and "global intimacy rating". A glance at Table 15 shows that this is indeed the case; Interviewers were credited with 1) fewer self-disclosure statements ( $M = 1.544$  vs. 5.214), 2) fewer low topics ( $M = 34.74$  vs. 36.36), 3) fewer high topics ( $M = 5.26$  vs. 5.59), and 4) a smaller global intimacy rating ( $M = 2.76$  vs. 4.02).

Highly significant univariate F's (see Table 14) were obtained for the "time" measure ( $F = 98.1788$ ,  $df = 1, 176$ ,  $p < 0.0001$ ), the "self-disclosure rating" ( $F = 80.9265$ ,  $df = 1, 176$ ,  $p < 0.0001$ ), and the "global intimacy rating" ( $F = 44.7142$ ,  $df = 1, 176$ ,  $p < 0.0001$ ). Significant univariate F's were also found with the "SDQ questionnaire" measure ( $F = 6.2359$ ,  $df = 1, 176$ ,  $p < 0.0135$ ), the "general trust" variable ( $F = 4.9622$ ,

TABLE 14

MULTIVARIATE AND UNIVARIATE ANALYSIS OF VARIANCE  
FOR ROLE

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
Role				
Multivariate	(11,166)	--	12.9469	0.0001
Univariate				
Passive	1	22.68	1.69	0.1944
Active	1	145.25	0.26	0.6052
At Ease	1	0.42	1.03	0.3092
General Trust	1	27.75	4.96	0.0272
Impression	1	234.08	0.64	0.4223
SDQ Questionnaire	1	800.33	6.23	0.0135
Self-Disclosure Rating	1	646.25	80.92	0.0001
Global Intimacy Rating	1	76.57	44.71	0.0001
Low Topics	1	125.93	3.61	0.0588
High Topics	1	5.50	0.35	0.5503
Time	1	270750.52	98.17	0.0001
Error Terms				
Passive	176	13.37		
Active	176	541.48		
At Ease	176	0.40		
General Trust	176	5.59		
Impression	176	361.82		
SDQ Questionnaire	176	128.34		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	1.71		
Low Topics	176	34.79		
High Topics	176	15.35		
Time	176	2757.72		

TABLE 15

Means for the Interviewers and the Interviewees

<u>Variable</u>	<u>Interviewers</u>	<u>Interviewees</u>
Passive	16.09	15.41
Active	85.84	84.10
At Ease	1.49	1.58
General Trust	10.45	9.69
Impression	139.40	137.20
SDQ Questionnaire	44.65	40.56
Self-Disclosure Rating	1.54	5.21
Global Intimacy Rating	2.76	4.02
Low Topics	34.74	36.36
High Topics	5.26	5.59
Time	109.30	184.40

$df = 1, 176, p = 0.0272$ ), and the "low topics" variable ( $F = 3.6196, df = 1, 176, p < 0.0588$ ). Thus it would appear that the Interviewers were more trusting ( $M = 10.45$  vs.  $9.687$ ) and were more willing to self-disclose to their partners ( $M$  of  $SDQ = 44.65$  vs.  $40.56$ ). The Interviewers were also slightly less "at ease" than the Interviewees ( $M = 1.490$  vs.  $1.583$ ) but this was not statistically significant (univariate  $F = 1.0397, df = 1, 176, p < 0.3092$ ). The Interviewers also rated their partners more highly on the Impression scale ( $M = 139.4$  vs.  $137.2$ ) but this was not statistically significant either (univariate  $F = 0.6470, df = 1, 176, p < 0.4223$ ). The section on interaction of "role" with "partner" will bring some light on some of these results.

The discriminant function multivariate analysis (see Table 16) supports the findings based on a study of the univariate F's. Most weight is given to the "time" measure ( $B_{11} = 0.5815$ ), and secondly to the "self-disclosure rating" ( $B_7 = -0.4618$ ). "General trust" and the "high topics" variable are moderately weighted ( $B_4 = -0.3200$  and  $B_{10} = -0.3138$  respectively). Thus, contrary to what was the case with the univariate analyses, the multivariate composite has given more weight to the "high topics" ( $B_{10} = -0.3138$ ) variable than the "low topics" variable ( $B_9 = -0.0214$ ). Again, the step-down F (see Table 17) showed the importance of the "high topics" variable as being able to maximize the discriminative function of the other variables when

TABLE 16  
 Raw and Standardized Discriminant Function Coefficients  
 for Role

<u>Variable</u>	<u>Raw Coefficient</u>	<u>Standardized Coefficient</u>
Passive	-0.0408	-0.1495
Active	-0.0014	-0.0335
At Ease	0.1502	0.0957
General Trust	-0.1353	-0.3200
Impression	0.0028	0.0536
SDQ Questionnaire	-0.0184	-0.2086
Self-Disclosure Rating	0.1634	0.4618
Global Intimacy Rating	0.1257	0.1646
Low Topics	-0.0036	-0.0214
High Topics	-0.0800	-0.3138
Time	0.0110	0.5815

TABLE 17  
 Step-Down F Analysis of Variance  
 for Role

<u>Variable</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
Passive	1	22.68	1.6967	0.1944
Active	1	1.86	0.0043	0.9481
At Ease	1	0.36	0.8983	0.3447
General Trust	1	31.26	5.7977	0.0171
Impression	1	49.38	0.1863	0.6667
SDQ Questionnaire	1	699.09	5.5552	0.0196
Self-Disclosure Rating	1	620.48	77.7290	0.0001
Global Intimacy Rating	1	0.28	0.3397	0.5609
Low Topics	1	235.41	7.0318	0.0088
High Topics	1	23.61	2.9470	0.0879
Time	1	32148.98	17.7609	0.0001
<b>Error Terms</b>				
Passive	176	13.37		
Active	176	437.75		
At Ease	176	0.40		
General Trust	176	5.39		
Impression	176	265.16		
SDQ Questionnaire	176	125.16		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	0.85		
Low Topics	176	33.47		
High Topics	176	8.01		
Time	176	1810.09		

its covariance was eliminated (univariate F with  $p < 0.5503$  becomes a step-down F with  $p < 0.0879$  with covariance of 9 variables partialled out). The SDQ variable ( $B_6 = -.2086$ ) and the global intimacy rating ( $B_8 = 0.1646$ ) are also given next to moderate weights.

The Interaction of the "Self-Actualization" Factor with the "Partner" Factor: Multivariate F, Univariate F, and the Discriminant Function

Impressive descriptive statistics are presented in Table 18, giving the Means for each variable when the groups are formed on the basis of the interaction between the Subject's level of self-actualization and that of his partner (SA or NSA). Figures 1 and 2 (presented previously) allow a good visual appreciation of the interaction effects for these two factors on various dependent variables. When these measures are subjected to a multivariate analysis of variance (see Table 19), the multivariate F reached statistical significance ( $F = 2.0328$ ,  $df = 11, 166$ ,  $p < 0.0283$ ).

There are, however, only two univariate F's which attain the significant level set for this study. These are the SDQ questionnaire ( $F = 6.7553$ ,  $df = 1, 176$ ,  $p < 0.0102$ ) and the "Active" variable ( $F = 4.5927$ ,  $df = 1, 176$ ,  $p < 0.0335$ ). The "high topics" variable which provided an appreciable univariate F of 2.4801 ( $df = 1, 176$ ,  $p < 0.1171$ ) reached marginal significance as a step-down F ( $F = 3.6545$ ,  $df = 1, 176$ ,  $p < 0.0577$ ) when its covariance with the 9 variables entered before it has been partialled out (see Table 20).

Simply looking at the Means in Table 18, we can see that although Subjects were less at ease with a self-actualized partner ( $\bar{M} = 1.625$  and  $1.250$  vs.  $1.729$  and

TABLE 18  
Means for the Four Groups  
based on the Interaction of the "Self-Actualization"  
by "Partner" Factors

<u>Variable</u>	(S)* (P)* <u>SA by SA</u>	(S) (P) <u>SA by NSA</u>	(S) (P) <u>NSA by SA</u>	(S) (P) <u>NSA by NSA</u>
Passive	15.42	15.37	15.54	16.67
Active	82.58	93.33	83.81	80.17
At Ease	1.63	1.73	1.25	1.54
General Trust	10.69	9.92	10.06	9.60
Impression	137.20	137.60	140.30	138.10
SDQ Questionnaire	47.50	42.73	38.23	41.96
Self-Disclosure Rating	3.93	3.27	3.46	2.85
Global Intimacy Rating	3.71	3.38	3.38	3.09
Low Topics	34.69	35.34	35.69	36.50
High Topics	6.77	4.73	5.23	4.97
Time	148.60	140.70	153.70	144.60

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\*S = Subject

\*P = Partner

TABLE 19

MULTIVARIATE AND UNIVARIATE ANALYSIS OF VARIANCE  
FOR THE INTERACTION OF SELF-ACTUALIZATION BY PARTNER

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
<b>Self-Actualization by Partner</b>				
Multivariate	(11,166)	--	2.0328	0.0283
<b>Univariate</b>				
Passive	1	16.33	1.22	0.2705
Active	1	2486.88	4.59	0.0335
At Ease	1	0.42	1.04	0.3092
General Trust	1	1.17	0.21	0.6478
Impression	1	80.08	0.22	0.6387
SDQ Questionnaire	1	867.00	6.76	0.0102
Self-Disclosure Rating	1	0.03	0.01	0.9441
Global Intimacy Rating	1	0.01	0.01	0.9233
Low Topics	1	0.29	0.01	0.9270
High Topics	1	38.07	2.48	0.1171
Time	1	18.75	0.01	0.9344
<b>Error Terms</b>				
Passive	176	13.37		
Active	176	541.48		
At Ease	176	0.40		
General Trust	176	5.59		
Impression	176	361.82		
SDQ Questionnaire	176	128.34		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	1.71		
Low Topics	176	34.79		
High Topics	176	15.35		
Time	176	2757.72		

TABLE 20

Step-Down F Analysis of Variance  
for the Interaction of Self-Actualization by Partner

<u>Variables</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
Passive	1	16.33	1.2215	0.2705
Active	1	3726.84	8.5135	0.0040
At Ease	1	0.61	1.5091	0.2209
General Trust	1	0.52	0.0978	0.7549
Impression	1	273.08	1.0299	0.3115
SDQ Questionnaire	1	702.12	5.5792	0.0193
Self-Disclosure Rating	1	2.49	0.3124	0.5770
Global Intimacy Rating	1	0.01	0.0111	0.9164
Low Topics	1	1.56	0.0466	0.8294
High Topics	1	29.28	3.6545	0.0577
Time	1	261.22	0.1443	0.7045
<b>Error Terms</b>				
Passive	176	13.37		
Active	176	437.75		
At Ease	176	0.40		
General Trust	176	5.39		
Impression	176	265.16		
SDQ Questionnaire	176	125.16		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	0.85		
Low Topics	176	33.47		
High Topics	176	8.01		
Time	176	1810.09		

1.542), they trusted him more ( $\underline{M} = 10.690$  and  $10.060$  vs.  $9.917$  and  $9.604$ ) and self disclosed more to him ( $\underline{M} = 3.932$  and  $3.464$  vs.  $3.266$  and  $2.854$ ) than to his counterpart the non-self-actualized partner. Subjects also discussed more "high topics" ( $\underline{M} = 6.771$  and  $5.229$  vs.  $4.729$  and  $4.969$ ) and were given a higher "global intimacy rating" ( $3.708$  and  $3.380$  vs.  $3.380$  and  $3.089$ ) when they were paired with a self-actualized Subject.

An interesting finding is that Subjects also spoke at greater length ( $\underline{M} = 148.6$  and  $153.7$  vs.  $140.7$  and  $144.6$ ) when paired with a self-actualized Subject. Another interesting result was that the self-actualized Subjects were much more willing to self-disclose (SDQ questionnaire) to a self-actualized partner ( $\underline{M} = 47.50$  vs.  $42.73$ ) but the non-self-actualized Subject was more willing to self-disclose to a non-self-actualized Subject ( $\underline{M} = 38.23$  vs.  $41.96$ ). This would ascribe to a "similar dyad" (vs. complementary) pairing effect.

A result which can be somewhat confusing has to do with the "Activity" score. The self-actualized Subjects scored almost 11 points higher when paired with a non-self-actualized partner ( $\underline{M} = 93.33$ ) than when paired with a self-actualized partner ( $\underline{M} = 82.58$ ). Non-self-actualized Subjects, on the other hand, scored higher on the Activity Scale ( $\underline{M} = 83.81$ ) when paired with a self-actualized partner than when paired with one of his own kind ( $\underline{M} = 80.17$ ).

Now that an exposition of the multivariate F, univariate

F's, and the Means of the groups has taken place, it is time to examine the weights attributed to each dependent variable in bringing about the significant multivariate F statistic. The standardized discriminant function coefficients are presented in Table 21. Consistent with the univariate F's, we can see that the Activity variable and the SDQ variable are credited with sizable weights ( $B_2 = 0.6947$  and  $B_6 = -0.5344$  respectively). Also consistent with the step-down F for the "high topics" variable, as already reported above, a very sizable weight is given to this variable ( $B_{10} = -0.5934$ ). Moderate weights have been assigned in the discriminant function to both the "global intimacy rating" ( $B_8 = 0.2994$ ) and the "low topics" variable ( $B_9 = -0.2922$ ).

Smaller weights were given to the "at ease" variable ( $B_3 = -0.2173$ ), the "impression" variable ( $B_5 = 0.1770$ ), the "general trust" variable ( $B_4 = -0.1628$ ), and the self-disclosure rating" ( $B_7 = 0.1369$ ). The smallest weight in this discriminant function belonged to the "time" measure and was still somewhat appreciable ( $B_{11} = -0.1087$ ) considering the large number of variables.

TABLE 21

Raw and Standardized Discriminant Function Coefficients  
for the Interaction of Self-Actualization by Partner

<u>Variable</u>	<u>Raw Coefficient</u>	<u>Standardized Coefficient</u>
Passive	-0.1723	-0.6319
Active	0.0298	0.6947
At Ease	-0.3411	-0.2173
General Trust	-0.0688	-0.1628
Impression	0.0093	0.1770
SDQ Questionnaire	-0.0471	-0.5344
Self-Disclosure Rating	0.0484	0.1369
Global Intimacy Rating	0.2288	0.2994
Low Topics	-0.0495	-0.2922
High Topics	-0.1514	-0.5934
Time	-0.0020	-0.1087

The Interaction Effect of Subject's Role and Partner's Level of Self-Actualization: Multivariate F, Univariate F's, and Discriminant Function

Apart from the "Subject" by "Partner" interaction (previous section), this is the only other interaction of independent variables where the multivariate analysis of the data reaches some significant level (marginal significance in this case). The multivariate F due to the interaction of these two factors is 1.6510 with  $df = 11, 166$ , and  $p < 0.0890$ . One of the univariate F's (the SDQ questionnaire) attained a significant probability level ( $p < 0.0238$ ). Table 22 provides a summary of the multivariate and univariate results pertaining to the F value for each variable.

A summary of the Means for the four groups (Table 23) indicates that the Interviewers were more willing to self-disclose (re SDQ questionnaire) to self-actualized Interviewees ( $\underline{M} = 46.77$  vs. 42.52) but that the Interviewees were more willing to self-disclose (re SDQ questionnaire) to non-self-actualized partners ( $\underline{M} = 42.17$  vs. 38.96). However, looking at the Means for the self-disclosure rating on the taped interviews shows exactly the opposite results; i.e., Interviewers self-disclosed more to non-self-actualized Interviewees ( $\underline{M} = 1.578$  vs. 1.510) and Interviewees self-disclosed more to self-actualized Interviewers ( $\underline{M} = 5.885$  vs. 4.542). The univariate F for the "self-disclosure rating" failed to reach significance ( $F = 2.9937$ ,  $df = 1, 176$ ,  $p < 0.0854$ ) but its step-down F did so ( $F = 4.2994$ ,  $df = 1, 176$ ,  $p < 0.0397$ ) after having partialled out its covariance with the variables above it (see Table 24).

TABLE 22

MULTIVARIATE AND UNIVARIATE ANALYSIS OF VARIANCE  
FOR THE INTERACTION OF ROLE BY PARTNER

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
Role by Partner				
Multivariate	(11,166)	--	1.6510	0.0890
Univariate				
Passive	1	7.52	0.56	0.4544
Active	1	97.75	0.18	0.6715
At Ease	1	.42	1.04	0.3092
General Trust	1	11.50	2.06	0.1533
Impression	1	368.52	1.02	0.3142
SDQ Questionnaire	1	667.52	5.20	0.0238
Self-Disclosure Rating	1	23.90	2.99	0.0854
Global Intimacy Rating	1	1.37	0.80	0.3715
Low Topics	1	2.87	0.08	0.7741
High Topics	1	0.01	0.00	0.9780
Time	1	1479.63	0.54	0.4649
Error Terms				
Passive	176	13.37		
Active	176	541.48		
At Ease	176	0.40		
General Trust	176	5.59		
Impression	176	361.82		
SDQ Questionnaire	176	128.34		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	1.71		
Low Topics	176	34.79		
High Topics	176	15.35		
Time	176	2757.72		

TABLE 23  
Means for the Four Groups  
based on the Interaction of Role by Partner

<u>Variable</u>	(R)* <u>Ier* by SA</u>	(P)* <u>Ier* by SA</u>	(R) <u>Iee* by SA</u>	(P) <u>Iee* by SA</u>	(R) <u>Ier by NSA</u>	(P) <u>Ier by NSA</u>	(R) <u>Iee by NSA</u>	(P) <u>Iee by NSA</u>
Passive	16.02		14.94		16.17		15.87	
Active	83.35		83.04		88.33		85.17	
At Ease	1.44		1.44		1.54		1.73	
General Trust	11.00		9.75		9.90		9.63	
Impression	141.20		136.20		137.50		138.10	
SDQ Questionnaire	46.77		38.96		42.52		42.17	
Self-Disclosure Rating	1.51		5.89		1.58		4.54	
Global Intimacy Rating	2.83		4.26		2.69		3.78	
Low Topics	34.50		35.87		34.99		36.85	
High Topics	5.82		6.18		4.69		5.01	
Time	116.40		185.90		102.30		183.00	

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\*R = Role

\*P = Partner

\*Ier = Interviewer

\*Iee = Interviewee

TABLE 24

Step-Down F Analysis of Variance  
for the Interaction of Role by Partner

<u>Variable</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
Passive	1	7.52	0.5625	0.4544
Active	1	309.35	0.7067	0.4019
At Ease	1	0.49	1.2183	0.2712
General Trust	1	8.11	1.5053	0.2215
Impression	1	9.91	0.0374	0.8470
SDQ Questionnaire	1	543.94	4.3223	0.0391
Self-Disclosure Rating	1	34.32	4.2994	0.0397
Global Intimacy Rating	1	0.04	0.0584	0.8095
Low Topics	1	0.01	0.0002	0.9881
High Topics	1	4.87	0.6087	0.4364
Time	1	8172.46	4.5149	0.0351
<b>Error Terms</b>				
Passive	176	13.37		
Active	176	437.75		
At Ease	176	0.40		
General Trust	176	5.39		
Impression	176	265.16		
SDQ Questionnaire	176	125.16		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	0.85		
Low Topics	176	33.47		
High Topics	176	8.01		
Time	176	1810.09		

An examination of the group Means for the other dependent variables in Table 23 suggest other interesting interaction effects but none of their univariate F's (see Table 22) was significant. Another step-down F, that of "time" measure, reached significance ( $p < 0.0351$ ) when covariance with all the other variables was partialled out. The Means in Table 23 show that the Interviewers (as a group; i.e., SAs & NSAs) spoke at greater length with a self-actualized partner ( $\underline{M} = 116.4$ ) than with a non-self-actualized partner ( $\underline{M} = 102.3$ ). Likewise, the Interviewees (as a group again) spoke longer with a self-actualized partner ( $\underline{M} = 185.9$ ) than with a non-self-actualized one ( $\underline{M} = 183.0$ ).

The discriminant function multivariate analysis (Table 25) presents results consistent with the findings observed by looking at the univariate F's and the step-down F's. The three largest weights in the composite of the eleven variables which maximally differentiates between the groups was given to the "self-disclosure rating" ( $B_7 = 0.8230$ ), the "time" measure ( $B_{11} = -0.6585$ ), and the SDQ questionnaire ( $B_6 = -0.6280$ ). Moderate weights were also ascribed to the "passive" variable ( $B_1 = -0.4665$ ) and the "activity" variable ( $B_2 = 0.3667$ ). Looking at their respective means in Table 23 shows us that both the Interviewers and Interviewees, when paired with a non-self-actualized partner, had higher passive scores ( $\underline{M} = 16.17$  and  $15.87$  vs.  $16.02$  and  $14.94$ ) and higher scores on the activity measure ( $\underline{M} = 88.33$  and

TABLE 25

Raw and Standardized Discriminant Function Coefficients  
for the Interaction of Role by Partner

<u>Variable</u>	<u>Raw Coefficient</u>	<u>Standardized Coefficient</u>
Passive	-0.1274	-0.4665
Active	0.0157	0.3667
At Ease	-0.2544	-0.1621
General Trust	-0.0287	-0.0681
Impression	-0.0102	-0.1945
SDQ Questionnaire	-0.0554	-0.6280
Self-Disclosure Rating	0.2912	0.8230
Global Intimacy Rating	0.0992	0.1299
Low Topics	0.0149	0.0883
High Topics	-0.0536	-0.2100
Time	-0.0125	-0.6585

85.17 vs. 83.35 and 83.04) than when paired with a self-actualized partner.

Appreciable weights were also given to the "high topics" variable ( $B_{10} = -0.2100$ ), the "impression" variable ( $B_5 = -0.1945$ ), the "at ease" variable ( $B_3 = -0.1621$ ), and the "global intimacy rating" ( $B_8 = 0.1299$ ). A discussion of the relative standardized coefficients along with the Means of the groups for the respective variables appears to be the most meaningful approach in this case.

Other Second-Order Interaction Effects and the Third-  
and Fourth-Order Interaction Effects

As mentioned in the previous section, no other second-order interaction effect provided a significant multivariate F. See Appendix J for a summary of these findings for the Subject (SA or NSA) by Self Concept (high or low) interaction effect and the Role (Interviewer or Interviewee) by Subject (SA or NSA) interaction effect multivariate and univariate analyses. The findings related to the Partner by Self Concept interaction are also presented in Appendix J along with those pertaining to the Role by Self Concept interaction.

The third-order interaction multivariate and univariate analyses are presented in Appendix K. The fourth order interaction is summarized in Appendix L.

Since none of the above multivariate F's reached the alpha level set for Type I error at the onset, presentation of the results pertaining to these interaction effects will limit itself to a listing of summary tables in the Appendix section. A number of univariate F's were statistically significant but will not be discussed, because in the present study establishing a significant multivariate F is a prerequisite for testing the dependent variables univariately. The same applies to the discriminant function analyses.

### Brief Summary of Major Analyses

The multivariate analyses indicated a main effect for each one of the four independent variables (Subject's level of self-actualization, Partner's level of self-actualization, level of self concept, and Role) on the package of the eleven dependent variables. Significant multivariate interaction effects were also found for Subject's level of self-actualization with Partner's level of self-actualization, as well as for Subject's Role with Partner's level of self-actualization.

The self-actualized Subjects were more at ease, and more willing to self-disclose as indicated by their scores on the 60-item Self-Disclosure Questionnaire following the interview. The self-actualized individuals also appear to be more active and less involved in activities of a more "passive" nature.

Subjects were less at ease with a self-actualized partner but trusted him more and dealt with topics of a more intimate nature when paired with a self-actualized individual. Although not statistically significant at the chosen alpha level, Subjects spoke at greater length with a self-actualized partner and were given higher self-disclosure scores and global intimacy ratings by the two judges.

High self concept Subjects received significantly higher impression ratings from their partners than did the low self concept Subjects. The high self concept Subjects are also much more active than the low self concept Subjects.

Although high self concept Subjects tended to show a greater willingness to self-disclose as shown by the SDQ questionnaire following the interview, they did not show this willingness to self-disclose during the interview. The high self concept individuals even tended to discuss more topics of low intimacy value and fewer topics of high intimacy value than did the low self concept individuals during the interview.

As was expected, the Interviewer spoke much less than the Interviewee and consequently received a much lower rating for self-disclosure and global intimacy. The Interviewers, however, indicated they were more willing (i.e., SDQ questionnaire) to self-disclose and were more trusting of their partners than were the Interviewees.

The significant multivariate interaction of the Self-Actualization factor with the Partner factor was primarily the result of a greater "willingness" (i.e. SDQ questionnaire post-interview) for self-actualized Subjects to self-disclose to self-actualized Subjects and for non-self-actualized Subjects to self-disclose to non-self-actualized Subjects. Another variable contributing highly to this significant multivariate value was the scores on the activity scale; self-actualized Subjects had higher scores when paired with a non-self-actualized, whereas the non-self-actualized had higher scores when paired with a self-actualized individual.

The interaction effect of Subject's Role by Partner's level of self-actualization was mainly due to the SDQ

questionnaire variable. Although the Interviewer showed greater willingness to self-disclose to a self-actualized partner, the Interviewee showed greater willingness to self-disclose to a non-self-actualized partner, as measured by the post-interview questionnaire.

### Item Analysis of the Personal Orientation Inventory

At the earlier stages of this study (i.e., proposal stage) it was impressed upon the author that an item analysis of the POI would be of some interest in differentiating the "good" from the "not so good" items, i.e., those items which are most selective of the differences between self-actualized and non-self-actualized individuals.

Previous studies on the internal consistency of the POI aimed at investigating each particular scale separately (i.e., the 12 scales provided by the POI). In line with other studies (Damm 1969, 1972) recommending the use of the combined raw scores for the Inner-Directed and Time Competence scales as the best predictor of an overall measure of the POI, the present research carried out an item analysis based on the combined raw scores for these two major scales. The method of analysis was based on Nelson's (1974) LERTAP computer program (Laboratory of Educational Research Test Analysis Package).

The internal consistency estimate utilized by LERTAP is Hoyt's (1941) method. This index is identical to Cronbach's coefficient alpha and is algebraically equivalent to the KR 20 alpha which are also estimates of internal consistency (Nelson, 1974).

Internal consistency is an estimate of the extent to which each test item taps whatever the test is measuring. In this case there are 150 items. Nelson (1974) notes

that we might consider each test item as a sample test from the total domain. The internal consistency is then roughly equivalent to the average correlation between all pairs of items.

Hoyt's estimate of reliability for the POI, when combining the raw scores of the two major scales (i.e., all 150 items) was 0.79 for the initial sample of 427 male university students in this study. The standard error of measurement was equal to 5.29.

Examining the biserial correlation for each item with total test score as the criterion, we find the following breakdown:

<u>Biserial Correlation</u>	<u>No. of items</u>	<u>Cumulative No. of items</u>
Above .50	3	3
Above .40	24	27
Above .30	33	60
Above .20	36	96
Above .10	26	122
Between .01 to .09	18	140
.00	1	141
Between -.01 and -.09	7	148
Between -.10 and -.20	2	150

Nelson (1974) writes that it is desirable that the correct choice has a high positive biserial correlation (.30 or greater) but that test length will have an effect on the size of the biserial correlation when total score on the test is the criterion. The longer the test (i.e., larger number of items) the smaller the correlations become since it is based on "part-whole correlations".

The results of this item analysis indicate that at

least 10 items have questionable value in differentiating between the self-actualized and non-self-actualized individuals in this study when the combined scores of the two major scales are utilized as the predictor of level of self-actualization. Another eighteen items (biserial correlations between .01 and .09 with total test score) also appear to have questionable value as predictors when the total score of items is used as the criterion measure.

### Tests of Specific Hypotheses

#### Self-Actualization and Self-Disclosure

This section will present the results for hypotheses 1 and 2. It will look at the dependent variables which pertain to self-disclosure, namely the SDQ questionnaire, the self-disclosure rating, the global intimacy rating, and the high topics score.

##### Hypothesis No. 1

A. It was hypothesized that self-actualized Interviewers would self-disclose more than non-self-actualized Interviewers. Table 26 provides a comparison of Means and the  $t$  values for self-actualized and non-self-actualized Interviewers on 4 self-disclosure measures. As predicted, the Means on all four measures are higher for the self-actualized group of Interviewers.

A  $t$  value of 1.910 ( $df = 176$ ,  $p < 0.029$ ) was obtained when comparing the two groups on the SDQ questionnaire (see Table 26). The self-disclosure rating, however, failed to support this hypothesis ( $t = 0.804$ ,  $df = 176$ ,  $p < 0.211$ ). The global intimacy rating also failed to support this hypothesis ( $t = 1.150$ ,  $df = 176$ ,  $p < 0.126$ ). The measure pertaining to "high topics" discussed by the Interviewers was also not significant when comparing the self-actualized and non-self-actualized Subjects ( $t = 0.664$ ,  $df = 176$ ,  $p < 0.253$ ).

B. It was also hypothesized that the self-actualized Interviewees would self-disclose more than their counterparts, the non-self-actualized Interviewees. The result of this comparison (Means and  $t$  values) on the SDQ questionnaire, the

TABLE 26

Comparison of Means  
for Self-Actualized and Non-Self-Actualized Interviewers  
on Self-Disclosure Measures

<u>Dependent Variable</u>	<u>Means Compared</u>		<u>df(b)</u>	<u>t</u>	<u>p</u>
	<u>SA(a)</u>	<u>NSA(a)</u>			
SDQ Questionnaire	46.85	42.44	176	1.910	0.029
Self-Disclosure Rating	1.78	1.31	176	0.804	0.211
Global Intimacy Rating	2.91	2.60	176	1.150	0.126
High Topics	5.52	4.99	176	0.664	0.253

(a) n = 48

(b) pooled-variance estimate

TABLE 27

Comparison of Means  
for Self-Actualized and Non-Self-Actualized Interviewees  
on Self-Disclosure Measures

<u>Dependent Variable</u>	<u>Means Compared</u>		<u>df(b)</u>	<u>t</u>	<u>p</u>
	<u>SA(a)</u>	<u>NSA(a)</u>			
SDQ Questionnaire	43.37	37.75	176	2.432	0.008
Self-Disclosure Rating	5.42	5.00	176	0.722	0.235
Global Intimacy Rating	4.18	3.87	176	1.170	0.122
High Topics	5.98	5.21	176	0.964	0.168

(a) n = 48

(b) pooled-variance estimate

self-disclosure rating, the global intimacy rating, and the high topics variable is presented in Table 27. Again the self-actualized Interviewees had higher Mean scores on all four measures.

As Table 27 indicates, however, only the SDQ questionnaire provided a significant difference between the means of these two groups ( $t = 2.432$ ,  $df = 176$ ,  $p < 0.008$ ).

#### Hypothesis No. 2

It was hypothesized that the greatest amount of self-disclosure for both members of a pair will be provided by the SA-SA pairing, followed by the NSA-SA pairing, and then the SA-NSA pairing. The NSA-NSA pairing is expected to show the least amount of self-disclosure.

For this hypothesis comparisons will be made by contrasting the means of pairs (i.e., where the scores of the Interviewer and Interviewee are combined).

- A. The SA-SA pairing will be compared to:
  - (1) the SA-NSA pairing
  - (2) the NSA-SA pairing
  - (3) the NSA-NSA pairing
- B. The NSA-SA pairing will be compared to:
  - (1) the NSA-NSA pairing
  - (2) the SA-NSA pairing
- C. The SA-NSA pairing is also compared to:
  - (1) the NSA-NSA pairing

The  $t$  values for these contrasts are listed in Tables 28, 29, 30, 31, 32, and 33 along with the respective means of the pairings.

- 1) The SA-SA pairing compared to the SA-NSA pairing.

As can be seen from Table 28 the SA-SA pairing is significantly more willing to self-disclose (SDQ questionnaire) ( $t = 3.973$ ,  $df = 176$ ,  $p < 0.001$ ) than the SA-NSA pairing. They also discussed more intimate topics ( $t = 2.305$ ,  $df =$

TABLE 28

Comparison of Means  
for the SA-SA Pairing with the SA-NSA Pairing  
on Self-Disclosure Variables

<u>Dependent Variable</u>	<u>Means Compared</u> ( <u>SA-SA</u> )(a) to ( <u>SA-NSA</u> )(a)		<u>df</u> (b)	<u>t</u>	<u>p</u>
SDQ Questionnaire	(50.33 + 44.67)	(43.37 + 33.25)	176	3.973	0.001
Self-Disclosure Rating	( 1.58 + 6.28)	( 1.97 + 5.49)	176	0.352	0.362
Global Intimacy Rating	( 2.98 + 4.44)	( 2.84 + 4.08)	176	0.916	0.180
High Topics	( 6.54 + 7.00)	( 4.50 + 5.35)	176	2.305	0.011

(a)  $n + n = 48$

(b) pooled-variance estimate

TABLE 29

Comparison of Means  
for the SA-SA Pairing with the NSA-SA Pairing  
on Self-Disclosure Variables

<u>Dependent Variable</u>	<u>Means Compared</u> ( <u>SA-SA</u> )(a) to ( <u>NSA-SA</u> )(a)		<u>df</u> (b)	<u>t</u>	<u>p</u>
SDQ Questionnaire	(50.33 + 44.67)	(43.21 + 42.08)	176	2.099	0.018(c)
Self-Disclosure Rating	( 1.58 + 6.28)	( 1.44 + 4.56)	176	1.616	0.054(c)
Global Intimacy Rating	( 2.98 + 4.44)	( 2.68 + 3.91)	176	1.540	0.062
High Topics	( 6.54 + 7.00)	( 5.10 + 4.96)	176	2.175	0.015

(a)  $n + n = 48$

(b) pooled-variance estimate

(c) Does not remain significant at the  $p = 0.05$  Type I error value when subjected to the more conservative Bonferroni procedure (dividing the  $p$  of Type I error by the number of comparisons for this particular hypothesis, which is 3).

TABLE 30

Comparison of Means  
for the SA-SA Pairing with the NSA-NSA Pairing  
on Self-Disclosure Variables

<u>Dependent Variable</u>	<u>Means Compared</u>		<u>df(b)</u>	<u>t</u>	<u>p</u>
	<u>(SA-SA)(a)</u>	to <u>(NSA-NSA)(a)</u>			
SDQ Questionnaire	(50.33 + 44.67)	(41.67 + 42.25)	176	2.396	0.009
Self-Disclosure Rating	( 1.58 + 6.28)	( 1.19 + 4.52)	176	1.869	0.031(c)
Global Intimacy Rating	( 2.98 + 4.44)	( 2.53 + 3.65)	176	2.320	0.010
High Topics	( 6.54 + 7.00)	( 4.88 + 5.06)	176	2.253	0.012

(a)  $n + n = 48$

(b) pooled-variance estimate

(c) Fails to remain significant when subjected to the more conservative Bonferroni procedure (dividing the p value of Type I error by the number of comparisons per hypothesis, which is 3 in this case).

TABLE 31

Comparison of Means  
for the NSA-SA Pairing with the NSA-NSA Pairing  
on Self-Disclosure Variables

<u>Dependent Variable</u>	<u>Means Compared</u>		<u>df(b)</u>	<u>t</u>	<u>p</u>
	<u>(NSA-SA)(a)</u>	to <u>(NSA-NSA)(a)</u>			
SDQ Questionnaire	(43.21 + 42.08)	(41.67 + 42.25)	176	0.297	0.383
Self-Disclosure Rating	( 1.44 + 4.56)	( 1.19 + 4.52)	176	0.253	0.400
Global Intimacy Rating	( 2.68 + 3.91)	( 2.53 + 3.65)	176	0.780	0.218
High Topics	( 5.10 + 4.96)	( 4.88 + 5.06)	176	0.078	0.469

(a)  $n + n = 48$

(b) pooled-variance estimate

TABLE 32  
 Comparison of Means  
 for the NSA-SA Pairing with the SA-NSA Pairing  
 on Self-Disclosure Variables

<u>Dependent Variables</u>	<u>Means Compared</u>		<u>df(b)</u>	<u>t</u>	<u>p</u>
	<u>(NSA-SA)(a)</u>	to <u>(SA-NSA)(a)</u>			
SDQ Questionnaire	(43.21 + 42.08)	(43.37 + 33.25)	176	1.874	0.031(c)
Self-Disclosure Rating	( 1.44 + 4.56)	( 1.97 + 5.49)	176	-1.264	0.104
Global Intimacy Rating	( 2.68 + 3.91)	( 2.84 + 4.08)	176	-0.624	0.266
High Topics	( 5.10 + 4.96)	( 4.50 + 5.35)	176	0.130	0.448

(a)  $n + n = 48$

(b) pooled-variance estimate

(c) Does not remain significant when subjected to the more conservative Bonferroni procedure, i.e., controlling for Type I error by dividing the  $p$  value (set at .05) by the number of comparisons per hypothesis, which is 3 in this case.

TABLE 33  
 Comparison of Means  
 for the SA-NSA Pairing with the NSA-NSA Pairing  
 on Self-Disclosure Variables

<u>Dependent Variables</u>	<u>Means Compared</u>		<u>df(b)</u>	<u>t</u>	<u>p</u>
	<u>(SA-NSA)(a)</u>	to <u>(NSA-NSA)(a)</u>			
SDQ Questionnaire	(43.37 + 33.25)	(41.67 + 42.25)	176	-1.577	0.058
Self-Disclosure Rating	( 1.97 + 5.49)	( 1.19 + 4.52)	176	1.517	0.065
Global Intimacy Rating	( 2.84 + 4.08)	( 2.53 + 3.65)	176	1.404	0.081
High Topics	( 4.50 + 5.35)	( 4.88 + 5.06)	176	-0.052	0.479

(a)  $n + n = 48$

(b) pooled-variance estimate

176,  $p < 0.011$ ). Both the self-disclosure rating and the global intimacy rating, however, failed to reach significance.

2) The SA-SA pairing and the NSA-SA pairing.

A first glance at the  $t$  values in Table 29 suggests that there are significant differences on all 4 variables. The picture is somewhat altered when the comparisons are subjected to the more conservative Bonferroni procedure for the control of Type I error (dividing the  $p$  of Type I error by the number of comparisons for the SA-SA pairing, which is 3 for this hypothesis, i.e., SA-SA--SA-NSA, SA-SA--NSA-SA, and SA-SA--NSA-NSA. In this case only the high topics measure ( $t = 2.175$ ,  $df = 176$ ,  $p < 0.015$ ) can be considered significant, with the SDQ questionnaire reaching marginal significance ( $t = 2.099$ ,  $df = 176$ ,  $p < 0.018$ ; the  $p$  value for significance being 0.016).

Thus Subjects of the SA-SA pairing discussed more topics of high intimacy value and appeared to be more willing to self-disclose than Subjects in the NSA-SA pairing.

3) The SA-SA pairing and the NSA-NSA pairing.

When the pairings being compared are respectively composed of Subjects from the same level of self-actualization (similar dyads), the differences in pairings become more definite. Thus, as can be seen from Table 30 the SA-SA

pairing showed greater willingness to self-disclose (SDQ questionnaire:  $t = 2.396$ ,  $df = 176$ ,  $p < 0.009$ ), self-disclosed more in the interview (self-disclosure rating:  $t = 1.869$ ,  $df = 176$ ,  $p < 0.031$ ), discussed more topics of high intimacy value ( $t = 2.253$ ,  $df = 176$ ,  $p < 0.012$ ), and were given a higher global intimacy rating ( $t = 2.320$ ,  $df = 176$ ,  $p < 0.010$ ). It must be noted, however, that when the more conservative Bonferroni procedure is applied, the  $p$  value for self-disclosure rating fails to remain significant.

4) The NSA-SA pairing and the NSA-NSA pairing.

It was expected that the NSA-SA pairing would produce higher self-disclosure scores due to the presence of a self-actualized member. Although the Means are in the expected direction (see Table 31) the  $t$  values do not support this hypothesis.

5) The NSA-SA pairing and the SA-NSA pairing.

It was also hypothesized that the NSA-SA pairing would bring about higher self-disclosure scores because the self-actualized member would be the Interviewee. Table 32 shows that the only measure for which the  $t$  value was initially significant was the SDQ questionnaire, willingness to self-disclose as determined by the 60-item questionnaire. When this  $t$  value ( $t = 1.874$ ,  $df = 176$ ,  $p < 0.031$ ) is subjected to the more conservative Bonferroni procedure it fails to remain significant.

6) The SA-NSA pairing and the NSA-NSA pairing.

Here again it was hypothesized that the SA-NSA pairing would allow for a more personal interaction due to the presence of a self-actualized Interviewer. As can be seen from Table 33 none of the  $t$  values reached significance and for two of them (SDQ questionnaire and High Topics) the difference between the means was in the opposite direction. However, the self-disclosure rating did provide an appreciable  $t$  value ( $t = 1.517$ ,  $df = 176$ ,  $p < 0.065$ ), but this becomes less impressive when subjected to the more conservative Bonferroni procedure.

Hypothesis No. 3

It was hypothesized that the self-actualized Subjects would show greater trust of their interview partners. Table 34 gives a summary of the group Means for the self-actualized Interviewers and Interviewees, along with the  $t$  values and probability levels for significance. Even though the self-actualized Subjects showed greater trust towards their partner, neither the Interviewers nor the Interviewees did so at a significant level ( $t = 0.820$ ,  $df = 176$ ,  $p < 0.206$ , and  $t = 1.22$ ,  $df = 176$ ,  $p < 0.131$ , respectively).

Hypothesis No. 4

It was also hypothesized that the self-actualized Subjects would be rated as more "trustworthy" than the less self-actualized. Table 35 presents a summary of the findings pertaining to how "trustworthy" the self-actualized and non-self-

TABLE 34

Comparison of Means  
for Self-Actualized and Non-Self-Actualized  
InterviewERs and InterviewEEs  
on the Trust Variable

<u>Role</u>	<u>Means Compared</u>		<u>df(b)</u>	<u>t</u>	<u>p</u>
	<u>SA(a)</u>	<u>NSA(a)</u>			
Interviewer	10.65	10.25	176	0.820	0.206
Interviewee	9.96	9.42	176	1.122	0.131

---

(a) n = 48

(b) pooled-variance estimate

TABLE 35

Comparison of Mean Trust scores  
elicited by Self-Actualized and Non-Self-Actualized Partners

<u>Means Compared</u>		<u>df</u>	<u>t</u>	<u>p</u>
<u>SA Partner(a)</u>	<u>NSA Partner(a)</u>			
10.37	9.76	176	1.800	0.037

---

(a) n = 96

actualized Subjects were considered to be by their partners. The  $t$  value for this hypothesis concerning a higher rating of trust requested on the self-actualized partners did reach significance ( $t = 1.800$ ,  $df = 176$ ,  $p < 0.037$ ).

Subjects, as shown in Figure 3, were significantly more interested in having self-actualized partners as "close friends" ( $t = 1.769$ ,  $df = 176$ ,  $p < 0.039$ ). Although the item pertaining to "would want to interact with the other person again" (vs. "would not want") was not statistically significant ( $t = 0.938$ ,  $df = 176$ ,  $p < 0.174$ ) the trend favoring self-actualized partners was still apparent.

Likewise, Figure 4 indicates how the self-actualized partners tended to be considered better interviewers and interviewees. The only exception pertains to the case of the self-actualized Interviewers considering the non-self-actualized Interviewees slightly easier to interview than the self-actualized Interviewees.

#### Hypothesis No. 5

This hypothesis ascribed to the notion that self-actualized Subjects would be more "impressive" and therefore receive higher ratings on a polar-adjective rating scale. As the values in Table 36 show, the difference was not significant ( $t = 0.326$ ,  $df = 176$ ,  $p < 0.372$ ).

#### Hypothesis No. 6

This is an extension, to some extent, of the previous hypothesis. It was hypothesized that the individuals who self-disclose more will be given a higher positive rating

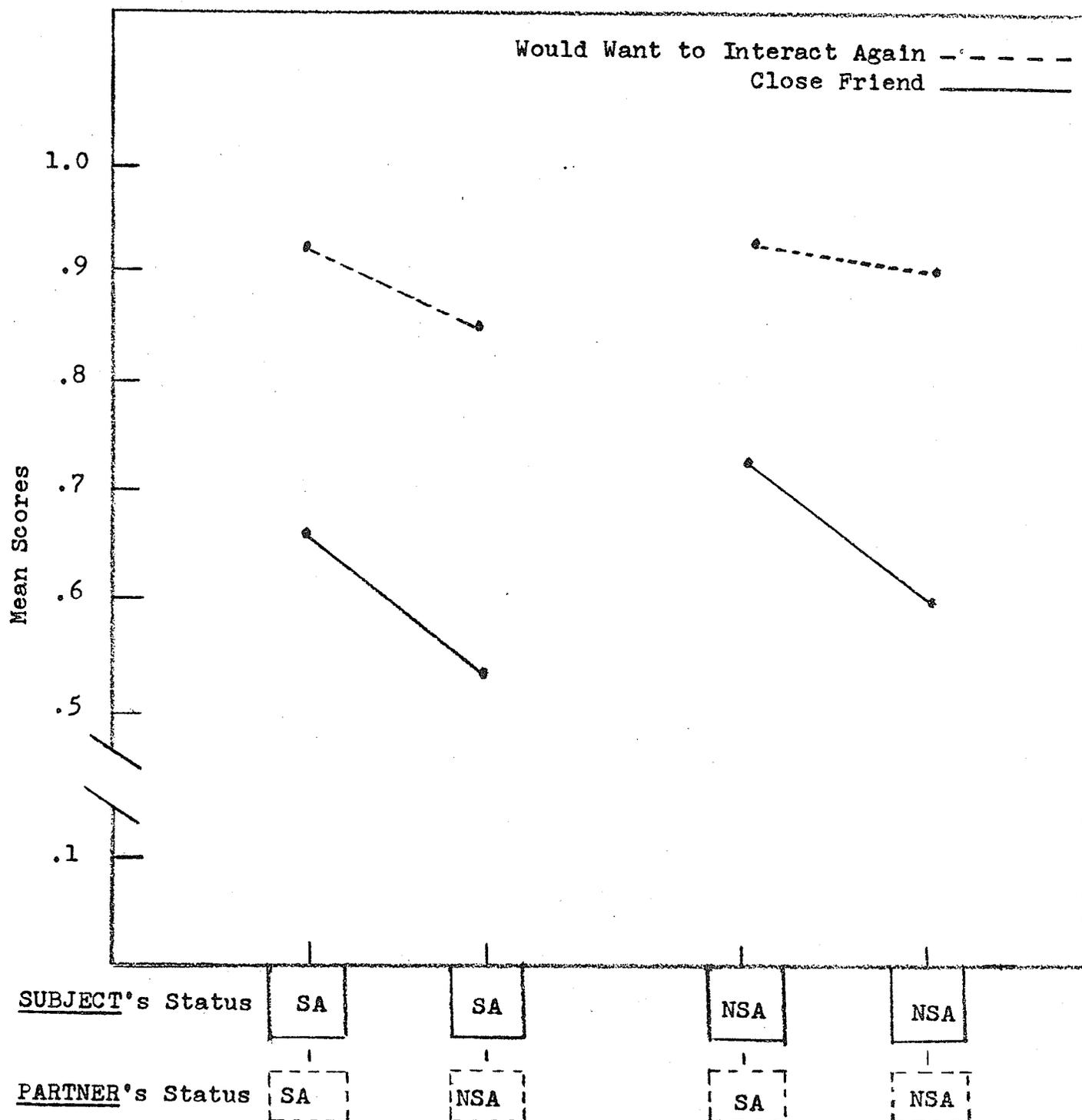


Figure 3. Interaction of Subject by Partner for "Close Friend" and "Wanting to Interact Again"

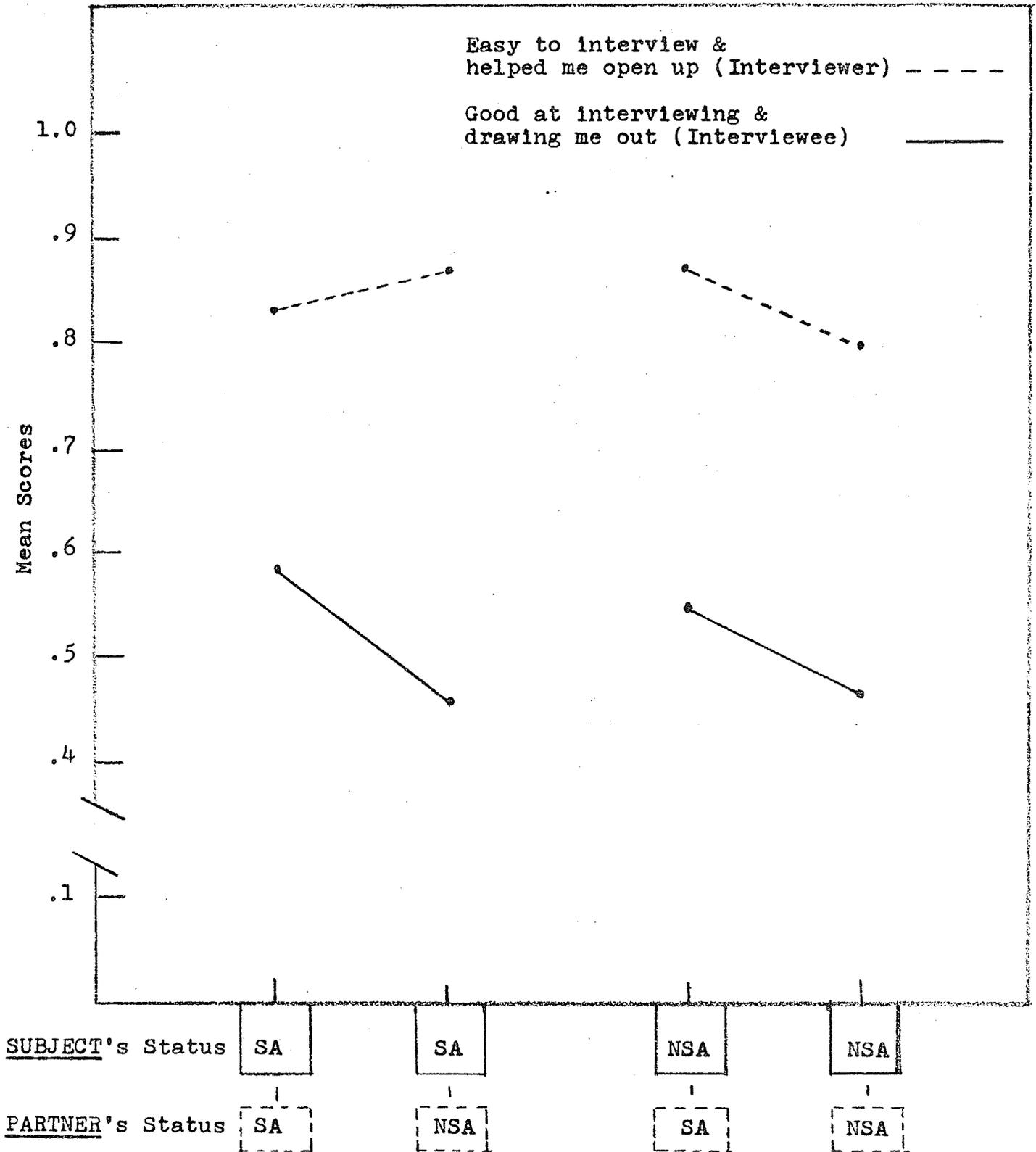


Figure 4. Subject by Partner Interaction for Evaluation of Interviewer and Interviewee

TABLE 36

Comparison of Impression scores  
elicited by Self-Actualized and Non-Self-Actualized Partners

<u>Means Compared</u>		<u>df</u>	<u>t</u>	<u>p</u>
<u>SA Partner(a)</u>	<u>NSA Partner(a)</u>			
138.7	137.8	176	0.326	0.372
<hr/>				
(a) n = 96				

TABLE 37

Comparison of Impression scores  
elicited by the Groups having the highest Self-Disclosure Ratings

<u>Means Compared</u>		<u>df</u>	<u>t</u>	<u>p</u>
<u>Groups with High Self-Disclosing Partners(a)</u>	<u>Groups with Low Self-Disclosing Partners(a)</u>			
138.55	137.99	176	0.205	0.419
<hr/>				
(a) n = 96				

on the Impression scale. Table 37 presents contrasts based on groups where partners had the highest self-disclosure ratings. (It should also be noted that these groups were the same when formed on the basis of partners with highest "global intimacy ratings".)

Since self-actualized Subjects were not given higher impressive scores (as seen in results for Hypothesis No. 5), subsequently it should not be surprising that those who self-disclosed did not receive significantly higher impression scores ( $t = 0.205$ ,  $df = 176$ ,  $p < 0.419$ ).

A consideration of individual items on the Impression scale did show that those who self-disclosed more (i.e., those belonging to the high self-disclosure groups) were seen as being more "deep" (vs. shallow) ( $t = 1.6722$ ,  $df = 176$ ,  $p < 0.048$ ), and as having a tendency to be more "quick-witted" (vs. slow-thinking) ( $t = 1.541$ ,  $df = 176$ ,  $p < 0.062$ ). The Interviewees also perceived the high disclosing Interviewees as more "forgiving" (vs. vengeful) ( $t = 1.757$ ,  $df = 176$ ,  $p < 0.040$ ).

Two of the items on the Trust questionnaire were likewise informative in regards to this hypothesis pertaining to the perception of high self-disclosers by their partners. The high self-disclosers were more often perceived as "good at interviewing and drawing me out" and "easy to interview and helped me open up" respectively for the Interviewer and the Interviewee ( $t = 1.650$ ,  $df = 176$ ,  $p < 0.050$ ). They were also credited with being "good listeners" by their partners significantly more often ( $t = 2.044$ ,  $df = 176$ ,  $p < 0.021$ ) than were the low disclosers.

### Brief Summary of Results for the Specific Hypotheses

Hypothesis No. 1 which predicted greater self-disclosure by the self-actualized Subjects was only partially supported due to interaction effects. Although the means on all four measures of self-disclosure were in the predicted direction, only the SDQ measure was statistically significant.

Hypothesis No. 2 comparing the self-disclosure scores of different "pairings" was also only partially supported. The most important comparison, that of the "SA-SA" pairing with the "NSA-NSA" pairing, indicated statistically significant differences in favor of the SA-SA pairing on three of the measures, with the other measure approaching statistical significance.

Two of the measures in the comparison of the "SA-SA" and "SA-NSA" pairings were also significant; the other two mean differences for the pairings were in the predicted direction. Again for the "SA-SA" pairing compared to the "NSA-SA" pairing, two of the self-disclosure measures can be considered to have provided support for the hypothesis.

Three comparisons (the "NSA-SA" pairing and the "SA-NSA" pairing to the "NSA-NSA" pairing, as well as the "NSA-SA" pairing to the "SA-NSA" pairing) failed to provide significant statistical differences. The mean differences, nonetheless, were for the most part in the predicted direction.

Although the mean differences were in the predicted direction for hypothesis No. 3, the self-actualized Subjects did not show statistically greater trust of their partners

than did the non-self-actualized. Nevertheless, hypothesis No. 4 was supported, i.e., self-actualized Subjects were seen as more trustworthy by their partners than were the non-self-actualized Subjects. Subjects were also more interested in having self-actualized partners as close friends.

The results failed to support hypothesis No. 5 which predicted that higher "impression" scores would be given to self-actualized Subjects. The mean difference was in the predicted direction but it was very small.

Hypothesis No. 6 was also not supported by the data. Thus the groups with the higher self-disclosure ratings did not receive significantly higher impression ratings by their partners. The high self-disclosers were seen, however, as both better interviewers and interviewees by their partners. They were also considered better listeners than the low disclosers.

### Ancillary Analyses

#### 1. The SDQ Questionnaire and its Relationship to other Measures.

One of the goals of this study was to examine the relationship between self-report measures (questionnaires) and more behavioral measures (i.e., ratings by judges and, to some extent, the Activity scale). The intercorrelations for the self-actualization and self-disclosure measures, as well as the self concept measure, are presented in Table 38.

The Table shows that although the SDQ questionnaire failed to correlate appreciably with any of the other self-disclosure measures, it appears to correlate about equally well with the POI ( $r = 0.1792$ ,  $p < 0.006$ ) and self concept measure ( $r = 0.1839$ ,  $p < 0.005$ ), which are also self-report measures.

Table 39 appears to shed some light on the differential effect of "mixed" dyads vs. the "pure" dyads on some of these correlations between measures. For instance we can observe a significant positive correlation between the SDQ measure and the High Topics measure for the "pure" dyad but a negative correlation for the "mixed" dyad. The mixed dyad produced negative correlations for the SDQ measure with all 3 self-disclosure ratings. It is also noteworthy that the POI score correlated significantly with all 3 self-disclosure ratings in the case of the "pure" dyads, while providing negative correlations (albeit very

TABLE 38

Product-Moment Correlation Coefficients  
for Self-Actualization, Self Concept, and Self-Disclosure Measures<sup>a</sup>

	POI	TSCS	Passive	Active	SDQ Questionnaire	Self- Disclosure Rating	Global Intimacy Rating	High Topics
POI	1.000	0.3714*** p=0.001	-0.1171* p=0.053	0.1171* p=0.053	0.1792** p=0.006	0.0785 p=0.139	0.1063 p=0.071	0.0604 p=0.203
TSCS		1.0000	0.0897 p=0.108	0.2445*** p=0.001	0.1839** p=0.005	0.0066 p=0.464	0.0119 p=0.435	-0.0264 p=0.358
Passive			1.0000	0.4207*** p=0.001	-0.0735 p=0.155	-0.0512 p=0.240	-0.0592 p=0.206	-0.0975 p=0.089
Active				1.0000	-0.0438 p=0.273	-0.0950 p=0.095	-0.0263 p=0.359	-0.1359* p=0.030
SDQ Questionnaire					1.0000	-0.0192 p=0.396	0.0421 p=0.281	0.1052 p=0.073
Self-Disclosure Rating						1.0000	0.7836*** p=0.001	0.3334*** p=0.001
Global Intimacy Rating							1.0000	0.4674*** p=0.001
High Topics								1.0000

<sup>a</sup>N = 192

\*significant at .05

\*\*significant at .01

\*\*\*significant at .001

TABLE 39

Product-Moment Correlation Coefficients  
for Self-Actualization, Self Concept, and Self-Disclosure Measures  
for Pure (SA-SA and NSA-NSA) and Mixed (SA-NSA and NSA-SA) Pairings (a)(b)

	POI	TSCS	Passive	Active	SDQ Questionnaire	Self- Disclosure Rating	Global Intimacy Rating	High Topics
POI	1.0000	0.3396*** (0.4030)***	-0.1352 (-0.1044)	0.0801 (0.1590)	0.1430 (0.2176)**	0.1619* (-0.0053)	0.2410** (-0.0185)	0.1696* (-0.0539)
TSCS		1.0000	-0.0176 (0.1797)*	0.1459 (0.3473)***	0.1728* 0.1950*	0.0992 (-0.0838)	0.1169 (-0.0766)	-0.1033 (0.0466)
Passive			1.0000	0.4144*** (0.4609)***	-0.0138 (-0.1546)	-0.0531 (-0.0506)	-0.0679 (-0.0547)	-0.1823* (-0.0428)
Active				1.0000	0.0177 (-0.0496)	-0.0233 (-0.1634)*	0.1498 (-0.1679)*	0.0335 (-0.2694)**
SDQ Questionnaire					1.0000	0.1129 (-0.1507)	0.1050 (-0.0116)	0.2580** (-0.0854)
Self-Disclosure Rating						1.0000	0.7822*** (0.7888)***	0.2857*** (0.3850)***
Global Intimacy Rating							1.0000	0.4871*** (0.4582)***
High Topics								1.0000

(a) N = 196  
(b) The correlations for the Mixed dyads are in parentheses  
\*significant at .05  
\*\*significant at .01  
\*\*\*significant at .001

small and nonsignificant) for the mixed dyads.

These findings again indicate the very strong interaction effects between the self-actualized and non-self-actualized when it comes to self-disclosure.

## 2. The Intercorrelations of the Self-Actualization Measures and the Self-Disclosure Measures.

A major interest of this study revolved around the importance of "Activity" in a self-actualized individual's life. Two types of activities were considered: the activities of a more "passive" nature vs. the activities usually characterized as having more "active" qualities.

Interestingly enough, the POI (see Table 38) correlated positively with the "Active" score ( $r = 0.1171$ ,  $p < 0.053$ ) and negatively with the "Passive" score ( $r = -0.1171$ ,  $p < 0.053$ ). The POI also correlated highly (in the context of the present low intercorrelations) with the self concept scale ( $r = 0.3714$ ,  $p < 0.001$ ) which in turn was also significantly correlated with the Activity score ( $r = 0.2445$ ,  $p < 0.001$ ).

The POI failed, however, to correlate significantly with the more behavioral measures of self-disclosure (i.e., tape ratings by judges) when combining the "pure" and "mixed" dyads. An even more disconcerting finding was that the activity scores, both the "active" and "passive" scores, were negatively correlated (albeit not at a significant  $p$  level, except for one of them) with the self-disclosure measures. However, as can be seen from Table

39 such is not the case when the correlations are computed separately for the "pure" and "mixed" dyads. The "active" score is positively correlated with all measures except one when considering only the "pure" dyads. For the "mixed" dyads, on the other hand, all 4 self-disclosure measures are negatively correlated with their "active" scores. What is more, the POI correlated significantly with all 3 behavioral measures of self-disclosure in the case of the "pure" dyads but provided negative correlations (albeit not at a significant  $p$  level) in the case of the "mixed" dyads.

Thus we can see, once again, that a strong interaction is taking place.

### 3. A Comparison of Self-Actualized and Non-Self-Actualized Subjects on individual items of the Impression Scale.

When the self-actualized Subject is compared to the non-self-actualized Subject on each item of the Impression scale, only 3 items significantly differentiate between the two. They pertain to: (intelligent--unintelligent), (firm--wishy-washy), and (large--small). The self-actualized partner is seen as being more firm ( $M = 4.8333$  vs.  $4.3958$ ,  $t = 2.261$ ,  $df = 176$ ,  $p < 0.012$ ), as being more intelligent ( $M = 5.7916$  vs.  $5.5104$ ,  $t = 1.899$ ,  $df = 176$ ,  $p < 0.029$ ), and somewhat "larger" ( $M = 4.9270$  vs.  $4.6146$ ,  $t = 1.968$ ,  $df = 176$ ,  $p < 0.025$ ) than his counterpart, the non-self-actualized partner.

Two other items approach statistical significance for this comparison. They are the (considerate--inconsiderate)

item, where the self-actualized partners are seen as less considerate of others ( $\underline{M} = 5.3750$  vs.  $\underline{M} = 5.7083$ ,  $t = -1.911$ ,  $\underline{df} = 176$ ,  $p < 0.058$ ), and the (easy to influence--difficult to influence) item, where the self-actualized is seen as more difficult to influence ( $\underline{M} = 3.9479$  vs.  $\underline{M} = 3.6354$ ,  $t = 1.723$ ,  $\underline{df} = 176$ ,  $p < 0.087$ ).

#### 4. The Activity Scale and Self-Actualization.

A summary of the results for a comparison of the scores on subgroupings (14) of particular activities for the self-actualized and non-self-actualized Subjects is presented in Table 40. Only a few of the  $t$  values reached significance. These were for the "Art" related activities consisting of 6 items (SA:  $\underline{M} = 6.667$  vs. NSA:  $\underline{M} = 5.396$ ,  $t = 1.984$ ,  $\underline{df} = 176$ ,  $p < 0.049$ ), the "social activities" grouping consisting of 11 items (SA:  $\underline{M} = 29.650$  vs. NSA:  $\underline{M} = 27.390$ ,  $t = 3.375$ ,  $\underline{df} = 176$ ,  $p < 0.035$ ), and the "sitting and thinking" item (SA:  $\underline{M} = 3.354$  vs. NSA:  $\underline{M} = 3.708$ ,  $t = -2.245$ ,  $\underline{df} = 176$ ,  $p < 0.026$ ). Thus it appears as though self-actualized individuals are more involved with "art-related" activities and social activities but spend less time simply "sitting and thinking" than does the non-self-actualized person.

#### 5. The Activity Scale and Self Concept

The preliminary multivariate and univariate analyses indicated very strong differences between the high self concept group and the low self concept group re the "Activity"

TABLE 40

Comparison of different Activity Means  
for the Self-Actualized and Non-Self-Actualized Subjects

<u>Activities(a)</u>		<u>Means</u>		<u>df</u>	<u>t</u>	<u>p(b)</u>
		<u>SA</u>	<u>NSA</u>			
Drama	(3)	3.698	3.646	176	0.140	0.889
Art	(6)	6.667	5.396	176	1.984	0.049*
Music	(3)	3.729	3.229	176	1.059	0.291
Reading	(4)	11.600	10.780	176	1.594	0.113
Conventions + Lectures	(2)	1.729	1.542	176	0.823	0.412
Sitting + Thinking	(1)	3.354	3.708	176	-2.245	0.026*
Traveling + Touring	(1)	2.594	2.500	176	0.478	0.633
Radio + T.V.	(2)	6.312	6.625	176	-1.064	0.289
Movies	(1)	2.729	2.708	176	0.132	0.895
Hobbies	(5)	6.479	5.885	176	0.962	0.337
Volunteer Work	(2)	2.125	2.229	176	-0.345	0.730
Organizations + Clubs	(2)	2.781	2.500	176	0.643	0.521
Social Activities	(11)	29.650	27.390	176	2.123	0.035*
Sports	(7)	19.890	19.960	176	-0.069	0.945

(a) The number in parentheses refers to the number of items which make up the score for each particular activity.

(b) two-tailed

\*  $p < .05$

scores. The Means and t values for each of the 14 sub-groupings of activities are presented in Table 41.

As can be seen, the t values for the comparisons between the two groups on the "Social" related activities and the "Volunteer Work" activities are highly significant. The high self concept people are more involved in general "social activities" (M = 30.310 vs. M = 26.730, t = 3.375, df = 176, p < 0.001) and also more involved in "volunteer work" (M = 2.594 vs. 1.760, t = 2.761, df = 176, p < 0.006).

The "Movies" item also differentiates between the high and low self concept groups (High self concept: M = 2.906 vs. Low self concept: M = 2.531, t = 2.369, df = 176, p < 0.019) while t values for drama, "sports" activities, and the "Radio + T.V." items are approaching significant p levels (p < 0.071, p < 0.074, and p < 0.078 respectively). The Subjects with higher self concepts would appear to be more involved with drama (M = 4.010 vs. M = 3.333), more involved in sports (M = 20.87 vs. M = 18.97) as well as spending more time watching T.V. or listening to the radio (M = 6.729 vs. 6.208).

TABLE 41

Comparison of different Activity Means  
for the High and Low Self Concept Subjects

<u>Activities(a)</u>		<u>Means</u>		<u>df</u>	<u>t</u>	<u>p(b)</u>
		<u>High Self Concept</u>	<u>Low Self Concept</u>			
Drama	(3)	4.010	3.333	176	1.814	0.071
Art	(6)	6.562	5.500	176	1.659	0.099
Music	(3)	3.354	3.604	176	-0.530	0.597
Reading	(4)	11.480	10.910	176	1.110	0.269
Conventions + Lectures	(2)	1.625	1.646	176	-0.091	0.927
Sitting + Thinking	(1)	3.521	3.542	176	-0.132	0.895
Traveling + Touring	(1)	2.677	2.417	176	1.327	0.186
Radio + T.V.	(2)	6.729	6.208	176	1.773	0.078
Movies	(1)	2.906	2.531	176	2.369	0.019*
Hobbies	(5)	6.385	5.979	176	0.658	0.511
Volunteer Work	(2)	2.594	1.760	176	2.761	0.006**
Organizations + Clubs	(2)	2.875	2.406	176	1.071	0.286
Social Activities	(11)	30.310	26.720	176	3.375	0.001**
Sports	(7)	20.870	18.970	176	1.798	0.074

(a) The number in parentheses refers to the number of items which make up the score for each particular activity

(b) two-tailed

\*  $p < .05$

\*\*  $p < .01$

### Brief Summary of Ancillary Analyses

An examination of the correlations of the SDQ questionnaire with the other measures has shown that it correlated positively with the POI and TSCS scales which are both self-report measures. It was also shown that the correlations for the behavioral ratings of self-disclosure with the SDQ questionnaire were very much affected by the interaction effects of Subject by Partner. Thus the SDQ questionnaire was positively correlated with the behavioral ratings in the case of the "pure" dyads but negatively correlated in the case of the "mixed" dyads.

The POI also correlated significantly with the three behavioral measures of self-disclosure in the case of the "pure" dyads but correlated negatively in the case of the "mixed" dyads. As expected, the POI was positively correlated with the "Active" score but negatively correlated with the "Passive" score. The POI was also highly correlated with the self concept scale which in turn was significantly correlated with the "Activity" score.

It is interesting to see that the self-actualized Subjects were perceived as more firm and more intelligent than the non-self-actualized Subjects. They were also perceived as being "larger", and there was a tendency to perceive them as being more difficult to influence than the non-self-actualized. On the other hand, there was a tendency for Subjects to perceive the non-self-actualized as more

"considerate of others" than was the case for the self-actualized.

The self-actualized individuals appear to be more involved with "art-related" activities and "social" activities but spend less time simply "sitting and thinking" than is the case for non-self-actualized individuals.

Individuals with a high self concept are also more involved with "social" activities than the low self concept individuals and are more into "volunteer work". It also seems that not only do high self concept individuals see more movies but they tend to be more involved with drama and sports activities, as well as spending more time watching T.V. or listening to the radio.

## CHAPTER VIII

### DISCUSSION AND SUMMARY

The present study was primarily interested in two core questions pertaining to the effects of self-actualization on self-disclosure. The first global hypothesis pertained to the expectation that self-actualized Subjects would self-disclose more as a function of being less defensive due to greater personal integration. The second question, the result of an interest in certain theories of psychotherapy (the process which revolves mainly around the client's progressive self-disclosure and integration), was that the self-actualized Subjects, because of greater self-disclosure, would also elicit a greater degree of self-disclosure.

A number of ancillary questions followed from the main hypothesis. As a result of their openness, it was expected that self-actualized individuals would be trusted more and create a better impression (i.e., be rated more highly by their partners). Another investigation of major interest was the expectation that self-actualized individuals would be more involved in different activities. This pertained to Maslow's "self creation through activity" postulation. Self concept was included as a subsidiary factor of self-

actualization mainly because of the importance of self acceptance in allowing a person to lead a happy and productive life. This would allow comparisons between two major measures of mental health.

The questions in this study were assessed by means of both self-report (i.e., questionnaires) and behavioral techniques (ratings of taped interviews). The findings related to these and other related questions, are presented below and discussed. The previous chapter has, to a large extent, already summarized these findings but an attempt will be made at integrating these results with those of other studies. Some consideration will also be given to possible suggestions for future research.

#### Core Questions

1. The first hypothesis was formulated as an overall test of the value of self-actualization as a predictor of self-disclosure, i.e., the actual effects of self-actualization on self-disclosure. More precisely, it predicted that both self-actualized Interviewers and Interviewees would self-disclose more than non-self-actualized Interviewers and Interviewees.

The results indicated that the self-actualized individuals did indeed self-disclose to a greater extent on all four measures of self-disclosure, namely the SDQ questionnaire, the self-disclosure rating, the global intimacy rating, and the high topics measure. However, only

the SDQ questionnaire reached statistical significance. Thus the main hypothesis, "as stated", was only partly supported.

There are, more likely than not, a number of reasons why the self-disclosure ratings failed to differentiate at a significant level in this experimental context. In view of apparent differences in mean scores across all measures, with the differences in the right direction for the most part, it appears plausible that the ratings for the taped interviews contained too large a degree of error variability. This would render these measurements less sensitive to the differences indicated by the questionnaires.

It should also be noted that the range of scores on the tape ratings were rather small. Thus twenty minutes of conversation, especially for a first encounter, might not be quite enough to allow for a valid comparison of self-actualizers and non-self-actualizers on the self-disclosure variable. The significant scores on the Self-Disclosure Questionnaire are an indication that this might indeed be the case. But then, we also have to take into consideration the partner effect brought about as a result of different types of pairings. Although only one of the self-disclosure measures (the High Topics measure) significantly differentiated between the two groups of partners, two other measures (the Self-Disclosure Rating and the Global Intimacy Rating) were approaching statistical significance.

This indicated that both the self-actualizer and the non-self-actualizer tended to self-disclose more during the interview when paired with a self-actualizer than when paired with a non-self-actualizer. It would seem to suggest that the factor of whom one is talking to might override a "natural inclination" to self-disclose. The latter postulation (higher inclination for self-actualizers to self-disclose) appears to be supported by a comparison of the "pure" pairings (i.e., SA-SA and NSA-NSA). In the condition of "pure" pairings, significant differences are obtained with regards to self-disclosure, on three of the four measures (with the other measure approaching significance). Thus, the self-actualized individuals in such a pairing self-disclosed much more than the non-self-actualized individuals.

Therefore, if we take into consideration the results pertaining to type of pairings (and control for the partner factor), it becomes more apparent that self-actualized individuals have a tendency to self-disclose more than non-self-actualized individuals. Nonetheless, it is still possible to argue that what really accounts for these differences could be due to an element associated with the partner one has, rather than a characteristic of the self-actualizer.

2. The second hypothesis also aimed at providing support

for the effect of self-actualization on self-disclosure. Its main goal was to show that self-actualized partners not only self-disclose more but that "they will bring about more self-disclosure than will a non-self-actualized partner".

This hypothesis called for a comparison of scores obtained by the different "pairings". As mentioned in the previous section, when the two "pure" pairings (i.e., SA-SA and NSA-NSA) were compared, significant differences were obtained on three of the four self-disclosure measures, with the fourth measurement approaching significance. This seems to suggest that self-actualizers not only self-disclose more (as indicated by the results of the Global Intimacy Rating and the High Topics score) but would also be more willing to self-disclose as indicated by a post-interview self-disclosure questionnaire. Figure 2 allows us to appreciate such differences along with those of "mixed" pairings.

It is quite interesting to see that in "mixed" dyads (i.e., SA-NSA and NSA-SA), the self-actualizers paired with non-self-actualizers tended to self-disclose less than the self-actualizers paired with other self-actualizers, and that the non-self-actualizers paired with self-actualizers tended to self-disclose more than non-self-actualizers paired with other non-self-actualizers. This would suggest that one's partner could determine, to a large extent, whether or not a person will self-disclose. The self-actualizer appears

to be hampered by a non-self-actualizer whereas a non-self-actualizer tends to be more open with a self-actualizer.

Thus, when a self-actualizer and a non-self-actualizer are paired together it would seem that they will meet half-way as far as self-disclosure is concerned, i.e., the self-actualizer will not capitalize on his "potential" for self-disclosure (potential indicated by the SA-SA pairing), whereas the non-self-actualizer will increase his self-disclosure from what could be considered his "baseline" for disclosure (as indicated by the NSA-NSA pairing).

It is, however, not possible to tell whether in the case of "mixed" pairings the relative increase in self-disclosure for non-self-actualizers and the relative decrease for self-actualizers is the result of a "reciprocity effect" or merely the result of each Subject's perception of how trustworthy his partner is, or some other related variable. As Worthy, Gary, and Kahn (1969) have suggested, reception of self-disclosing information from another person is quite rewarding since reception of such information implies that one is trusted. They also felt that more intimate information represents greater reward for the receiver and would bring about more intimate self-disclosure from the receiver. In this present study it was found that the self-actualizers tended to be less at ease with other self-actualizers than with non-self-actualizers, and yet tended to trust self-actualizers more than they did non-self-actualizers.

Similarly, non-self-actualizers tended to be less at ease with self-actualizers than with non-self-actualizers but tended to perceive the self-actualizer as more trustworthy than the non-self-actualizer.

A study which appears to tie in with the results of this research was reported by Foulds (1969). He found a high correlation between facilitative genuineness (the equivalent, to some extent, to self-disclosure in this study) in counselors and self-actualization as measured by the POI. Powell (1968) also found that Subjects disclosed more when the interviewer responded to the interviewee's self-references with "open disclosure" than when he used either "approval-supportive" or "reflection-restatement" techniques.

An examination of Figures 1 and 2 provides other interesting findings. It shows that in mixed dyads the self-actualized individual listened more to his partner (i.e., spoke less than his non-self-actualized partner), and yet spoke more intimately in a shorter amount of time. This also ties in well with Foulds' study where he found that the POI scores of counselors were significantly correlated with their empathy scores received from counseling sessions.

Figures 1 and 2 also show that contrary to Chaikin et al's (1975) results with neurotics, the non-self-actualized did not tend to overdisclose to non-self-actualized partners. Chaikin et al. reported that while "normal males reciprocated disclosure at a level of intimacy similar to

the confederates", the "neurotics disclosed at a moderate level regardless of whether the confederate's initial disclosure was intimate or superficial". Thus they felt that neuroticism (as measured by Eysenck's Maudsley Personality Inventory) may be related to inappropriate or nonnormative disclosure, rather than characteristically high or low levels of disclosure. There was no similar indication in the findings of the present study with self-actualized and non-self-actualized male Subjects. Of course, non-self-actualization is not necessarily equated with neuroticism.

As expected, the non-self-actualized increased their level of self-disclosure when paired with a self-actualized partner. However, the self-actualized Subject decreased his level of self-disclosure when paired with a non-self-actualized Subject. The latter was not expected, but again it seems to reflect the importance of the partner variable. With high self-disclosing self-actualized individuals, self-actualized partners also self-disclose to a high degree. On the other hand, NSAs increased self-disclosure with SAs while maintaining a low level of self-disclosure with NSAs. This is in line with social penetration theory (Taylor, 1968; Altman and Taylor, 1973) and social exchange theory (Homans, 1961; Thibaut and Kelley, 1959) which suggest that self-disclosure is rewarding and thus has a spiraling effect in development of relationships.

Hekmat and Theiss (1971) also report on a study of self-actualization and modification of affective self-disclosure during a social conditioning interview. They found that self-actualizers had a higher initial rate of affective self-disclosure but a non-significant gain during conditioning. The self-actualizers were also more resistant to extinction.

3. As it was expected that the self-actualized person would self-disclose more, it was hypothesized that such a person would be more trusting of his partner.

In this study, the self-actualized person did show greater trust than the non-self-actualized but the difference was not large enough to be statistically significant. Several studies (Rubin, 1975; Johnson and Noonan, 1972; Williams, 1974) have already shown the importance of trust for self-disclosure. Trust normally determines the amount of self-disclosure that will occur. Self-disclosure, in turn, seems to elicit greater trust from the recipient. Social penetration theory (Altman and Taylor, 1973) as well as social exchange theory (Thibaut and Kelley, 1959) have emphasized the development of trust with self-disclosure.

In the present study it would seem that even though there was a trend for the self-actualized person to self-disclose more, it was more a function of greater openness (i.e., less defensiveness due to a smaller feeling of

threat) than to a general element of trust. This would appear to be indicated by the fact that self-actualized individuals were much more "at ease" than were the non-self-actualized individuals. Yet the "at ease" variable is not necessarily a function of trust as can be seen from Figures 1 and 2.

4. Another hypothesis concerned with trust and of even greater interest than the preceding one was the following hypothesis that self-actualized individuals would be rated more "trustworthy" by their partners than would be the non-self-actualized individuals. Drag (1968) found that the interviewer or experimenter who self-discloses was rated as more trustworthy than the one who does not self-disclose.

The results of this study supported this hypothesis. Chaikin et al. (1975) have also reported that "Ss trusted a confederate more in their high-intimacy condition than in their low-intimacy condition". Although the present study was not set up as a "high" vs. "low" intimacy condition we have seen that these conditions arose out of having set the experimental conditions on the basis of self-actualization and non-self-actualization.

5. Along with the expectation that self-actualized partners would be rated as more trustworthy, it was hypothesized that they would be given higher positive "impression" scores.

The results indicate that the self-actualized were not given a significantly higher "overall" impression rating than were the non-self-actualized. They were, however, seen as being more firm and more intelligent, as well as being "larger".

Jourard and Friedman (1970) found that the interviewer or experimenter who discloses is rated more positively. The "impression scale" did not provide much support for this contention in the present study.

It was also pointed out by Thibaut and Kelley (1959) that one who provides positive outcomes (e.g., self-disclosure) tends to be liked, and likewise one tends to extend more positive outcomes (e.g., self-disclosure) to those whom one likes. One of the items on the "Trust" questionnaire pertained to "would like (vs. would not like) to have the other person (partner) as a close friend". The results have shown that Subjects were significantly more interested in having self-actualized partners as close friends. We cannot tell, however, if the interest for "close friend" preceded self-disclosure or vice versa. What is more, this apparent interest in having self-actualizers as close friends does not appear directly related to the "overall" impression rating.

Nonetheless, as in Worthy, Gary, and Kahn's (1969) study, there appears to be a positive relationship between self-disclosure received and liking (in this case defined as an interest in developing a relationship with one's partner).

They had found that most was disclosed to the most liked other and least was disclosed to the least liked other. While holding level of self-actualization for Subject constant in Figures 2 and 3, we can perceive the same pattern of interaction between self-disclosure and an interest in forming future friendships. Once again we do not know which came first, and if indeed these two factors are directly interrelated. A pretest for the measure of "close friend" and liking in general, at the onset of the study, might have shed some light on this issue for this particular study.

6. It was also hypothesized that the individuals who self-disclose more would be given a higher "overall" positive rating on the 30-item polar-adjective impression scale.

This hypothesis was included in the study mainly to evaluate the effects of self-disclosure per se on impression ratings independently of level of self-actualization. A study by Rubin (1968) indicated positive impression change on this scale as a result of self-disclosure. Jourard and Friedman (1970) also report a significant positive impression change (using the same scale) as a result of self-disclosure on the part of the experimenter.

This hypothesis was not supported. The higher self-disclosers were, nonetheless, seen as being more "deep" (vs. shallow), a tendency to be more "quick witted" (vs. slow thinking) and having a tendency to be more "forgiving" (vs. vengeful).

Two particular items of interest on the Trust questionnaire also supported the general hypothesis that those who self-disclose more would be given a higher rating. Not only were the high self-disclosers considered better listeners by their partners but also better interviewers and interviewees, respectively.

### Ancillary Questions

#### 1. Self-Actualization and Self Concept.

It would seem that a good self concept is a prerequisite for self-actualization. Maslow (1954) has noted that man's basic motivation to maintain and enhance self-esteem is a prerequisite for achieving self-actualization. This becomes apparent in his hierarchy of needs. Rogers has likewise emphasized that a healthy self concept plays a vital role in the "fully functioning person". A good self concept, however, does not necessarily entail a high level of self-actualization. Thus self-actualization would encompass the phenomenological notion of self concept (i.e., all that any individual perceives or conceives himself to be -- his abilities, faults, accomplishments, values, etc; cf. Guardo, 1968).

Jourard (1963) stated that a person's self-structure influences his experiencing and his behavior. He felt that a healthy self-structure is one in which the components are congruent with one another and with the real self. He perceived "self-consciousness" and a "chronic sense of threat"

as indicants of an unhealthy self-structure.

In a study by Mullaney (1964) with Low, Medium, and High self-disclosure groups as determined by Jourard's Self-Disclosure Questionnaire, it was found that the Low group, unlike the Medium and High group of disclosers, was characterized by the fact that the discrepancy between self-appraisal and social ideal was significantly greater than the discrepancy between self-appraisal and self-ideal. Thus there was a lower level of self-acceptance for the Low self-disclosure group.

The results of the present study confirm the importance of self concept. First of all, it is significantly correlated with self-actualization. Then, more clearly than what happened in the case of the self-actualization factor, members of the high self concept group were significantly more impressed with their partner (a high self concept person) than were the low self concept persons (their partner being a low self concept person). They rated them more highly on the polar-adjective impression scale. The high self concept Subject's scores for different activities were also significantly higher. As was the case with high self-actualizers, high self concept individuals were more active socially than the low self concept persons. The high self concept individuals were also more involved with volunteer work.

Mullaney (1964) administered the MMPI to his three

groups (N = 196) of self-disclosure and found that the Low disclosure group was more socially introvertive (the S1 scale on the MMPI) than the High group. This is in agreement with the results of this study where the high self-actualized group and the high self concept group were found to be more active than the non-self-actualized and low self concept groups respectively.

In a study of personality variables for groups differing in level of self-actualization, Wills (1974) tried to determine if groups of college freshmen who differed in level of self-actualization could be discriminated by variables which measured dimensions of self concept, values, and achievement motivation. He concludes that his study indicates that a close relationship may exist between self-actualization and self concept.

It is of interest, nonetheless, to see that self-actualization is much more related to self-disclosure than is the case of self concept with self-disclosure.

## 2. Self-Actualization and Activity.

One of the goals of this study was to establish a more empirical measure of self-actualization through the measure of activity during leisure time. The self-actualized group did indeed indicate that they spend more time at activities involving more of themselves than did the non-self-actualized group. As was the case with the high self

concept group, the self-actualized individual is more involved with general "social" activities, thus more involved socially, than his counterpart the non-self-actualized person. He also spends less time simply "sitting and thinking". It would appear that, consistent with the general hypothesis of this thesis, the self-actualizer is more of a "doer".

An interesting finding is that the self-actualizer is more involved with artistic activities. This upholds Wills' (1974) results. His group of high self-actualized male subjects were classified as significantly more "aesthetic" on the Differential Value Profile as compared to the Low and Medium groups of self-actualization.

### 3. Intercorrelations of the Self-Report and the more Behavioral Measures.

Due to constant indications in the literature (cf. Cozby, 1973; Goodstein and Reinecker, 1974) that self-report and behavioral measures pertaining to the same concept might actually be measuring different things, it seemed important to use these two types of measures and examine the relationship between the two.

It became obvious that the product-moment correlations between the measures were very much affected by the type of pairings (i.e., pure dyad vs. mixed dyad). Thus, computation of correlations done separately for the "pure" and the "mixed" dyads appeared to be most meaningful.

There were positive correlations, as hypothesized,

between the SDQ measure and all self-disclosure ratings in the case of the pure dyads, but negative correlations in the case of the mixed dyads due to interaction effects. The SDQ score was also positively correlated with the POI measure for both the "pure" and "mixed" dyads. For the more behavioral measures of self-disclosure, only the "pure" dyads provided significant positive correlations with the POI. The "mixed" dyads led to negative correlations in this respect.

As hypothesized, the "Active" score was positively correlated with the POI measure of both types of pairings and the "Passive" score, as expected, was negatively correlated with the POI scores. Although the "active" score was positively correlated with 3 of the 4 self-disclosure measures in the case of the "pure" dyads, none of them were positively correlated for the "mixed" dyads due to interaction effects.

It should be noted that the POI measure was highly correlated with the self concept measure which, in turn, was highly correlated with the "Active" score. The behavioral measures of self-disclosure were, in turn, highly correlated among themselves.

Brief Listing of Findings pertaining to Self-Actualization

- (1) The self-actualized was significantly more at ease during the interview. -- He was, therefore, probably more self confident and thus less defensive.
- (2) a. Both the self-actualized and the non-self-actualized Subjects were less at ease with a self-actualized partner.  
 b. Yet, both the self-actualized and the non-self-actualized tended to self-disclose more during the interview when paired with a self-actualized partner. -- This is very similar to the situation in psychotherapy where the client experiences more discomfort as he discloses personal information; in which case a certain amount of discomfort is expected and even desirable when therapy is being effected.
- (3) Both the self-actualized and non-self-actualized showed greater trust towards their partner when he was a self-actualized person.
- (4) a. The non-self-actualized spoke longer but tended to self-disclose less.  
 b. The self-actualized partner was seen, to some extent, as a better listener than the non-self-actualized.
- (5) a. The self-actualized did show significantly greater willingness to self-disclose, as was indicated by a post-interview self-disclosure questionnaire.  
 b. Although the behavioral ratings of self-disclosure during the interview showed a trend for higher disclosure by the self-actualized, these ratings were not statistically significant.
- (6) The self-actualized were significantly more preferred as "close friends".
- (7) a. The self-actualized Interviewers were considered better at "interviewing and drawing out" the Interviewee.  
 b. The non-self-actualized Interviewers also found the self-actualized Interviewees easier "to interview" and at "helping themselves open up".  
 c. The self-actualized Interviewer, however, found the non-self-actualized individual just slightly easier to interview. -- This could have been a result of being more at ease with the non-self-

actualized interviewee; it could have been the result of perceived "greater confidence" on his part, or even an element of "superiority" vis-à-vis his partner.

- (8) a. The self-actualized is more involved in different activities.
- b. There is a significant difference especially in regards to general "social activities" and "art-related" activities.
- c. The non-self-actualized spends more time simply "sitting and thinking".
- (9) a. There was no "overall" difference in scores on the Impression scale. There was, however, a few differences on particular items.
- b. The self-actualized was rated as being more firm, more intelligent and "larger". He was also seen as somewhat less considerate of others and more difficult to influence.

Thus, it appears that not only are self-actualizers more active and more inclined to self-disclose, but they seem to bring out the best in their partners, i.e., their partners will tend to talk at greater length, and to self-disclose more during a brief first encounter, as well as show significantly greater willingness to self-disclose as indicated by a post-interview questionnaire. Even though their partners will feel less at ease with them, they trust them more and would prefer them as close friends.

#### The Item Analysis of the POI

In the Handbook for the Personal Orientation Inventory, Knapp (1976) notes that Bloxom (1972) in his review of the POI suggested that because the scales of the POI use a broad range of content, indices of internal consistency should be presented. Knapp then goes on to say that Kaats (1973)

has, since then, reported internal consistency coefficients based on Cronbach's alpha of .80 for the Inner-Directed scale and .65 for the Time Competence scale. For some unknown reason, Knapp does not mention similar coefficients obtained by Wise and Davis (1975) with 172 university students. They studied test-retest, internal consistency (K-R 20) and the split-half reliability coefficients (as well as stability over 2 weeks) for every scale in the POI. The two major scales of Time Competence and Inner Direction provided test-retest coefficients of .75 and .88, K-R 20 coefficients of .52 and .83 and split-half coefficients of .50 and .84, respectively.

The results of the item analysis of the POI with the initial sample of 427 students in this study provided a similar coefficient of internal consistency. This was the first study where the two major scales were combined to produce a single unit for item analysis. In doing so, Hoyt's estimate of reliability for the POI was .79. Although not as high as one would like it to be, this internal consistency coefficient can nonetheless be considered acceptable considering the nature of this measure.

The item analysis did indicate that some items have questionable value in differentiating between the self-actualized and non-self-actualized individuals when the unit of analysis is the sum of the two major scales. Thus, further studies utilizing this same unit of analysis appear

warranted in order to justify the use of all 150 items in the POI when a single score (the sum of the two major scales) is utilized as the criterion of self-actualization.

#### Considerations and Suggestions for Future Research

Having found some differences in self-disclosure for male subjects from the extreme groups on the self-actualization dimension, it would seem worthwhile to replicate this type of study with refinements on the dependent measures, as well as inclusion of the middle group. We should expect a gradual increase in self-disclosure for members of the middle group compared to the group of non-self-actualizers. In some ways the middle group can be conceptualized as the "normal" group.

Judging from the rather small range of scores provided by the ratings in this study, it would appear worthwhile to train judges to become highly sensitive to differences in the quality or intimacy value of self-disclosure. For instance, the self-disclosure ratings, as specified by "Haymes Technique" could be further evaluated on a nine-point scale (i.e., each self-disclosure statement would be given a different value, for example as determined by "Chaikin et al.'s Technique"). This technique would incorporate the two ratings already used in this study.

Contrary to the way the present research was set up, pairings could be given a different set of instructions. It might be more informative to set it up as a more natural

situation by having both members of the pairing meet on an equal basis (i.e., no Interviewer and Interviewee). This way, the expectations, or lack of them, would remain the same for both members.

A more involved study could be carried out by having Subjects meet over a number of weeks in order to examine differences of self-disclosure over time for different levels of self-actualization. Derlega et al. (1976) have pointed out that one problem with almost all experimental studies on self-disclosure is that they have been limited to observing the phenomenon between strangers who are meeting each other for the first (and usually last) time. A worthwhile endeavor would be an analysis of positive and negative self-disclosures over time.

Such a study should also be carried out with females. We know that females have somewhat different self-disclosure levels and likewise different expectations with regards to self-disclosure. Studies by Rubin (1975) and Chelune (1976) have already indicated interesting differences. Groups of low, medium, and high self-actualization for males and females could be formed and comparisons made on the basis of different combinations of pairings.

Studies need to be undertaken with different groups in our society. This has already been stressed by Derlega and Chaikin (1975). The "golden age" group would be fairly accessible and would most likely provide valuable information

with regards to the effect of self-actualization on self-disclosure.

More studies with regards to the differential effectiveness on the part of the therapist with different types of clients (e.g., clients very low on the self-actualization dimension versus the more self-actualized individual) will have to be carried out. Hekmat and Theiss (1971) postulated that therapists with high levels of genuineness, authenticity, and self-disclosure may achieve the most effective behavior modification with the high self-actualized clients.

An in-depth study of the "activities" of self-actualizers should be pursued. Again, the "golden age" group would be a good source of information in this regard. The present study did indicate differences at the college level, but this needs to be researched in greater depth. The intensity as well as breadth of activities will have to be investigated more thoroughly.

Studies taking into consideration the nonverbal aspects of self-disclosure would be most fascinating and would likely provide different patterns and means for individuals to self-disclose. Nonverbal disclosure probably has a more powerful effect than verbal disclosure. The nonverbal disclosure would undoubtedly be highly correlated with "empathy" and "warmth" measures. Derlega and Chaikin (1975) have also alluded to the importance of nonverbal disclosures.

Of probably even greater importance than the above

considerations for the next stage of research in this area would be an evaluation of the quality of self-disclosure in order to differentiate good or appropriate self-disclosure vs. inappropriate self-disclosure. Research on the quality of the self-disclosure by non-self-actualized or neurotics self-disclosing at a high level, compared to the self-disclosure of self-actualized individuals, would help us understand important differences between appropriate and healthy vs. inappropriate self-disclosures.

Self-Actualization and Self-Disclosure: Implications for Mental Health.

The results of this study seem to justify the conclusion that self-actualization does have certain effects on self-disclosure, i.e., the self-actualized individual is more inclined to self-disclose. As Jourard had advanced in his theoretical framework for mental health, self-disclosure does appear, to some extent, to be more prevalent amongst people characterized by positive mental health. Cozby (1973) had indicated that a good test for this hypothesis would entail the use of a measure such as the Personal Orientation Inventory. This has now been undertaken and the results appear promising.

Hekmat and Theiss (1971) have also reported that high self-actualizers have a higher level of affective self-disclosure. The fact that these researchers were unable to significantly modify this behavior in high self-actualizers by using a "social conditioning" technique seems to be an

indication of the internalization of this characteristic, i.e., self-disclosure has become intrinsic to the self-actualizer.

Research by Swensen (1968) and by Shapiro and Swensen (1977) has indicated that high self-disclosers most likely have a positive opinion of themselves, are extraverted, and have grown up in a "close and open" family. Two of these characteristics, positive opinion and extraversion have been clearly prominent amongst the self-actualizers in this study. They tended to have a higher self concept and were more involved in different social activities.

This is in line with Gunnison's (1965) findings that high self-actualizing community college students tended to be more liberal in outlook and preferred a more active life than low self-actualizers. The study by Wills (1974) of the personality variables which characterize the self-actualized person also indicated that the high self-actualizing males were more open to self-criticism and felt better about themselves as individuals than did the low self-actualizing males. Wills concluded that the variables which contributed to the discrimination between the low and high self-actualizers was consistent with a number of variables which Maslow (1954) has identified as characteristic of self-actualizers. He felt, therefore, that the results of his study tended to support Maslow's hypotheses.

The author contends that self-disclosure is not necessarily what brings about self-actualization, even though it appears to be an attribute of its emergence, but that self-actualization most likely thrives on an element of self-disclosure. An individual will have difficulty maintaining a high level of positive mental health without a certain amount of self-disclosure, and self-actualization, in turn, appears to accelerate the amount of self-disclosure.

The author feels compelled to deal with the "strangers vs. friends" situation as a factor in self-disclosure studies. It has been pointed out by several researchers (Chelune, 1976, Chaikin and Derlega, 1974) that disclosure of highly intimate information to a stranger was seen as more maladjusted than nondisclosure. Chelune (1976) states that the relationship between self-disclosure and mental health appears to be complex, depending on the ability to differentiate contextual variables, that is, who, when, and where, and the ability to adapt one's disclosure pattern accordingly. He claims, along with Cozby (1973), that high disclosure to a stranger violates the norms of social penetration which suggest that relationships proceed from nonintimate to intimate areas of exchange via verbal disclosure, activities engaged in, and nonverbal communication. Chelune (1976) notes further that Chaikin and Derlega (1974) have suggested that violation of such social norms "may reflect inadequate socialization or maladjustment".

The present author has to agree essentially with these comments but would like to add to, or qualify, these statements. On the basis of the present study of self-actualization and self-disclosure, it would appear that the "stranger vs. friend" consideration becomes less of an issue for the self-actualized individual who has come to a high level of integration of his experiences and acceptance of self. Thus, other people are not seen as "threats" and their reactions, even if negative, will not be catastrophic for the self-actualizer. Thus, it is more a matter of differential disclosure to strangers on the basis of one's personal integration, acceptance, attitudes, and general outlook on life. Of course, this still entails a certain amount of tact and discretion. It is known, nonetheless, that the self-actualizer tends to be a nonconformist and does not necessarily abide by the "rules of expectations" in society. For instance, Hekmat and Theiss (1971) have reported that "Maslow's assertion that the high self-actualizing individuals are "resistant to enculturation" was empirically supported by their study". There is, of course, always the case of the maladjusted person who will self-disclose indiscriminately at a very high level. . .

We all know that people search out high-level persons (persons being most understanding, warm, and genuine) in their environment and interact freely with them, revealing about themselves both the pleasant and the unpleasant (cf.

Shapiro, Krauss and Truax, 1969). These researchers found that just as those therapists who offer the highest conditions are given most disclosure, so individuals outside the consulting room differ in their level of therapeutic conditions, and elicit differing responses from their companions.

Self-Actualization and Self-Disclosure: Implications for Psychotherapy

Jourard (1959, 1961, 1963, 1964, 1967, 1968, 1971) felt very strongly about the importance of self-disclosure in attaining and maintaining positive mental health. Truax and Carkhuff (1965) have noted that clinical observations suggest that in successful psychotherapy the patient is indeed involved in a "process of self-disclosure and self-exploration -- a process of coming to verbalize and to know one's beliefs, values, motives, perceptions of others, relationships, fears and life choices". Jourard also considered self-disclosure on the part of the therapist as a most effective therapeutic agent in the psychotherapeutic relationship.

The results of this study appear to provide partial support for the presence of a higher level of self-disclosure amongst self-actualizers. They are also perceived as better candidates for close friends; they bring about more trust, and are able to elicit a greater amount of self-disclosure.

An early study by Truax, Tomlinson and van der Veen (1961) found that more successful patients showed greater

self-exploration and self-disclosure during psychotherapy. This was supported by Truax and Carkhuff's (1965) later study with hospitalized neuropsychiatric patients.

A study by Foulds (1969) investigating the relationship between self-actualization and the ability to communicate facilitative conditions during counseling, provided some interesting results. He reports that the findings of his study suggest that the "ability to sensitively and accurately perceive the inner "being" or experiencing of another human being and to communicate this understanding to him, and the ability to be authentically real in a genuine encounter without defensive phoniness or without hiding behind the mask or façade of a professional role, seems to be related to psychological well-being or self-actualization, as measured by the POI" (Foulds, 1969, p. 134).

A number of studies (Powell, 1968; Jourard and Jaffe, 1970; Drag, 1968; Truax and Carkhuff, 1965; Bundza and Simonson, 1973) have also shown the influence that self-disclosure from a therapist or an interviewer can have in bringing about higher levels of self-disclosure from the patient or interviewee. A study of group therapist self-disclosure (Dies, 1973) demonstrated that self-revealing therapists were judged as more friendly, disclosing, trusting, intimate, helpful, and facilitating. Another study by May and Thompson (1973) supported these results. They found that perceptions of group leader self-disclosure, mental health, and helpfulness were all

positively correlated. On the other hand, no differences occurred in the perceptions of group leaders as a result of the members' ranked levels of self-disclosure and mental health.

Some studies, however, have shown that self-disclosure "per se" on the part of the therapist is not necessarily effective. Simonson and Bahr (1974) in a psychotherapy analogue study found that although subjects exposed to personal disclosure by the paraprofessional therapist displayed greater attraction and disclosure than those exposed to demographic disclosure, subjects exposed to personal disclosure by professional therapists demonstrated less attraction and disclosure than those exposed to demographic disclosure by a professional therapist. This would point to the importance of timing and level of self-disclosure depending on different contexts. Again, Derelga and Chaikin have made a most succinct appraisal of the situation when they wrote that "Given the variety of patients that therapists see, it is impossible to make a blanket statement about the effectiveness of therapist self-disclosure. It's usefulness depends on its timing, the specific problem of the patient, and the content of the self-disclosure" (Derlega and Chaikin, 1975, p. 106).

The present author would like to emphasize that self-disclosure as a therapeutic agent for a therapist is not the "end-all" or ultimate model but has to be considered as one of the most influential or effective approaches to therapy when used judiciously. Just as for everything else,

too much of anything at the wrong time can be destructive. The present study appears to provide some support for the "intrinsic" value of self-disclosure and its influence on others.

The results of this study suggest that it is quite important that therapists be self-actualizing. There also appears to be evidence from other studies (for example, Shapiro and Swensen) along with this one, that a high self concept is an important factor in the area of self-disclosure, and therefore that it is important for therapists to maintain a high level of self concept.

In view of the apparent importance of self-disclosure in one's life, it appears rather crucial that a therapist's colleagues also be self-actualizing. As the present study demonstrated, people self-disclose more to self-actualizers and prefer them as close friends. Thus the presence of self-actualizing colleagues would not only provide better "health insurance" but allow for greater personal and professional growth.

#### Summary

The author set out to determine the importance of self-disclosure in self-actualization as purported by Sidney Jourard. The results from 96 interviews involving different combinations of non-self-actualized and self-actualized male university students appear to provide partial confirmation of such a hypothesis.

A significant self-disclosure interaction effect (pertaining to "willingness" to self-disclose as indicated by a post-interview questionnaire) was observed between the self-actualized and non-self-actualized individuals when they formed different pairings. This finding, along with partial support for the Partner factor, made it possible to discredit the effects as being a case of indiscriminate self-disclosure.

The study also investigated the role of self concept in self-disclosure. Under the conditions of this study it was found that even though self concept and self-actualization are interrelated, self concept did not appreciably affect the level of self-disclosure.

An activity scale was analyzed and given consideration for its value as a more behavioral indicator of an individual's self-actualization. The self-actualized do appear to be more active, especially with regards to general social activities and more aesthetic or artistic pursuits.

As was expected, due to findings from other studies on self-disclosure, the self-actualized tended to elicit more self-disclosure. There was also a trend for the self-actualizer to self-disclose to a greater extent, even though he spent less time talking and thus appeared to "listen more". A larger amount of general trust was instilled in their partners, and their partners would prefer them as "close friends" over the non-self-actualized individual.

## NOTE I.

Training Procedure

The two judges (independent raters) consisted of two graduate students in psychology, one male and one female. They were trained over a period of two weeks. After the judges had studied the different rating techniques, the experimenter met with them for six sessions in order to discuss further the rating techniques and their ratings on seven practice tapes of twenty minutes each. The actual "practice tape ratings", for the most part, were done between sessions. The overall training period involved approximately 16 hours.

The judges were trained to rate the tapes for Topics and Self-Disclosure (Haymes technique) for each 30-second segment as they listened to the 20-minute taped interview, and to rate for Global Intimacy (Chaikin et al.'s technique) when the 20 minutes had elapsed. This was followed by a separate rating for the Time measure. The Time measure consisted of listening once more to 3 two-minute segments of the tape and measuring the amount of time spoken by each member of the pair. See Appendix M for format of scoring sheets utilized for ratings.

Differences encountered in ratings by the two independent judges were discussed during the training sessions in order

b.

to arrive at an "agreed upon method" of rating some of the more difficult issues. Seven practice tapes were utilized in this fashion. The interrater reliability for these practice tapes (excluding the first tape because ratings were done separately for the Topics and Self-Disclosure Ratings, i.e., listening to the tape twice) reached the expected criterion level of at least .80 for each measure to be used for statistical analyses in the study.

The 96 experimental tapes were then rated separately by each judge. These tapes were randomized and therefore rated in a separate order by the two judges in order to counteract possible practice effects.

#### Possible Range of Scores on the Different Measures

1. The Personal Orientation Inventory  
Scores could range between 0 and 150.
2. The Tennessee Self Concept Scale  
Scores could range between 0 and 450.
3. The Activity Scale
  - a) Active Score: scores could range between 0 and 225.
  - b) Passive Score: scores could range between 0 and 25.
4. The SDQ Questionnaire  
Scores could range between 0 and 60.
5. The Self-Disclosure Ratings (Haymes Technique)  
Scores could range between 0 and 40.
6. The Global Intimacy Ratings (Chaikin et al.'s Technique)  
Scores could range between 1 and 9.
7. Impression Scores  
Scores could range between 26 and 182.
8. General Trust Score  
Scores could range between 0 and 13.

- 9. The "At Ease" Score  
Scores could range between 0 and 2.
  
- 10. The "Topics" Scores  
The raters scored all topics discussed during each 30-second segment of the 20-minute interview, with the restriction that each topic could only be scored once per 30-second segment. Theoretically, therefore, each topic could receive a score ranging between 0 and 40.
  
- 11. Talk Time  
Scores could range between 0 and 60.

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**APPENDIX A**

THE SIXTY-ITEM SELF-DISCLOSURE  
QUESTIONNAIRE

Introduction

People differ in the extent to which they let other people know them. We are seeking to investigate what people tell others about themselves. Some of the things about yourself you will regard as more personal and private than others; people differ widely in what they consider appropriate to let others know, and what they consider is nobody's business but their own.

Instructions

Below there is a list of topics that pertain to you. We want you to CIRCLE the numbers of the items which you would be willing to let your partner in this interview know about you (If you have already disclosed this information to him during the interview, also circle the item number).

Attitudes and opinions

1. What I think and feel about religion; my personal religious views.
2. My personal opinions and feelings about other religious groups than my own, e.g., Protestants, Catholics, Jews, atheists.
3. My views on communism.
4. My views on the present government -- the prime minister, government policies, etc.
5. My views on the question of racial integration in schools, transportation, etc.
6. My personal views on drinking.
7. My personal views on sexual morality -- how I feel that I and others ought to behave in sexual matters.
8. My personal standards of beauty and attractiveness in women -- what I consider to be attractive in a woman.
9. The things that I regard as desirable for a man to be -- what I value in a man.
10. My feelings about how parents ought to deal with children.

## Tastes and interests

1. My favorite foods, the ways I like food prepared, and my food dislikes.
2. My favorite beverages, and the ones I don't like.
3. My likes and dislikes in music.
4. My favorite reading matter.
5. The kinds of movies that I like to see best; the TV shows that are my favorites.
6. My tastes in clothing.
7. The style of house, and the kinds of furnishings that I like best.
8. The kind of party, or social gathering that I like best, and the kind that would bore me, or that I wouldn't enjoy.
9. My favorite ways of spending spare time, e.g., hunting, reading, cards, sports events, parties, dancing, etc.
10. What I would appreciate most for a present.

## Work (or studies)

1. What I find to be the worst pressures and strains in my work.
2. What I find to be the most boring and unenjoyable aspects of my work.
3. What I enjoy most, and get the most satisfaction from in my present work.
4. What I feel are my shortcomings and handicaps that prevent me from working as I'd like to, or that prevent me from getting further ahead in my work.
5. What I feel are my special strong points and qualifications for my work.
6. How I feel that my work is appreciated by others (e.g., boss, fellow-workers, teacher, wife, etc.)
7. My ambitions and goals in my work.
8. My feelings about the salary or rewards that I get for my work.
9. How I feel about the choice of career that I have made -- whether or not I'm satisfied with it.
10. How I really feel about the people that I work for, or work with.

## Money

1. How much money I make at my work, or get as an allowance.
2. Whether or not I owe money; if so, how much.
3. Whom I owe money to at present; or whom I have borrowed from in the past.

4. Whether or not I have savings, and the amount.
5. Whether or not others owe me money; the amount, and who owes it to me.
6. Whether or not I gamble; if so, the way I gamble, and the extent of it.
7. All of my present sources or income -- wages, fees, allowance, dividends, etc.
8. My total financial worth, including property, savings, bonds, insurance, etc.
9. My most pressing need for money right now, e.g., outstanding bills, some major purchase that is desired or needed.
10. How I budget my money -- the proportion that goes to necessities, luxuries, etc.

#### Personality

1. The aspects of my personality that I dislike, worry about, that I regard as a handicap to me.
2. What feelings, if any, that I have trouble expressing or controlling.
3. The facts of my present sex life -- including knowledge of how I get sexual gratification; any problems that I might have, with whom I have relations, if anybody.
4. Whether or not I feel that I am attractive to the opposite sex; my problems, if any, about getting favorable attention from the opposite sex.
5. Things in the past or present that I feel ashamed and guilty about.
6. The kinds of things that just make me furious.
7. What it takes to get me feeling real depressed and blue.
8. What it takes to get me real worried, anxious, and afraid.
9. What it takes to hurt my feelings deeply.
10. The kinds of things that make me especially proud of myself, elated, full of self-esteem or self-respect.

#### Body

1. My feelings about the appearance of my face -- things I don't like, and things that I might like about my face and head -- nose, eyes, hair, teeth, etc.
2. How I wish I looked: my ideals for overall appearance.
3. My feelings about different parts of my body -- legs, hips, waist, weight, chest, face, etc.
4. Any problems and worries that I had with my appearance in the past.

5. Whether or not I now have any health problems -- e.g., trouble with sleep, digestion, heart condition, allergies, headaches, piles, etc.
6. Whether or not I have any long-range worries or concerns about my health, e.g., cancer, ulcers, heart trouble.
7. My past record of illness and treatment.
8. Whether or not I now make special efforts to keep fit, healthy, and attractive, e.g., calisthenics, diet.
9. My present physical measurements, e.g., height, weight, waist, etc.
10. My feelings about my adequacy in sexual behavior -- whether or not I feel able to perform adequately in sex-relationships.

APPENDIX B



	Never					Very Frequently
14. Art work in general (individual)	0	1	2	3	4	5
15. Card playing	0	1	2	3	4	5
16. Dancing	0	1	2	3	4	5
17. Dates	0	1	2	3	4	5
18. Entertaining at home	0	1	2	3	4	5
19. Fairs, exhibitions, etc.	0	1	2	3	4	5
20. Informal contacts with friends	0	1	2	3	4	5
21. Informal discussions, e.g., "bull sessions"	0	1	2	3	4	5
22. <u>Indoor team</u> recreation or sports -- basketball, volleyball, etc.	0	1	2	3	4	5
23. <u>Indoor individual</u> recreation or sports - bowling, gym, pool, billiards, etc.	0	1	2	3	4	5
24. <u>Outdoor individual</u> sports -- golf, riding, skating, tennis, skiing, etc.	0	1	2	3	4	5
25. <u>Outdoor team</u> sports -- hockey, baseball, football, soccer, lacrosse, etc.	0	1	2	3	4	5
26. Camping, canoeing, hiking	0	1	2	3	4	5
27. Fishing or hunting	0	1	2	3	4	5
28. Spectator of sports	0	1	2	3	4	5
29. Picnics	0	1	2	3	4	5
30. Playing musical instrument or singing	0	1	2	3	4	5
31. Symphony or concerts as <u>spectator</u>	0	1	2	3	4	5
32. Symphony or concerts as <u>performer</u>	0	1	2	3	4	5
33. Theater attendance	0	1	2	3	4	5
34. Traveling or touring	0	1	2	3	4	5
35. Using public library	0	1	2	3	4	5
36. Visiting museums, art galleries, etc.	0	1	2	3	4	5
37. Volunteer work -- social service, etc.	0	1	2	3	4	5
38. Listening to radio	0	1	2	3	4	5

	Never	1	2	3	4	Very Frequently
39. Watching T.V.	0	1	2	3	4	5
40. Developing and printing pictures	0	1	2	3	4	5
41. Mechanical work	0	1	2	3	4	5
42. Electronical work	0	1	2	3	4	5
43. Special hobbies -- stamps, photography, shopwork, gardening, crafts, etc.	0	1	2	3	4	5
44. Organizations or club meetings as a <u>member</u>	0	1	2	3	4	5
45. Organizations or club meetings as a <u>leader</u>	0	1	2	3	4	5
46. Church and related organizations	0	1	2	3	4	5
47. Movies	0	1	2	3	4	5
48. Telephone visiting	0	1	2	3	4	5
49. Parties	0	1	2	3	4	5
50. Sitting and thinking	0	1	2	3	4	5
Other activities characteristic of you (please specify)						
_____	0	1	2	3	4	5
_____	0	1	2	3	4	5
_____	0	1	2	3	4	5
_____	0	1	2	3	4	5

What would you consider are YOUR VALUES in life (i.e., what you really know is of importance and worth in your course through life; that which normally guides your life in terms of what you do with yourself).

What are your AMBITIONS in life (e.g., achievements, career, goals...).

**APPENDIX C**

MEASURE OF INTERVIEWER'S TRUST  
OF INTERVIEWEE

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Put a circle around each of the phrases (1 through 15) that best describes your experience with the person you have just met.

- |  |   |
|--|---|
| 1. Felt at ease  | Felt tense, anxious   |
| 2. Felt that I made myself known to the other person                     | Did not feel that I made myself known to the other person                                     |
| 3. Bored by other person   | Interested by other person  |
| 4. Held back a lot, and was careful of what I revealed                   | Talked fully and freely   |
| 5. Liked the other person  | Disliked the other person   |
| 6. Felt the other person was interested in me                            | Felt the other person was not very interested in me   |
| 7. The other person was easy to interview and helped me open up          | Felt the other person was not a very good interviewee and made it difficult for me to open up |
| 8. Wouldn't want to interact with the other person again                 | Would want to interact with the other person again  |
| 9. Didn't mind the tape recorder   | Was bothered by the tape recorder   |
| 10. Felt the other person could describe me effectively to a third party | Did not feel the other person could describe me effectively to a third party                  |
| 11. Felt the other person was a good listener                            | Did not feel the other person was a good listener   |
| 12. Felt the other person made himself known to me                       | Did not feel the other person made himself known to me  |
| 13. Did not feel the other person could be trusted                       | Felt like the other person could be trusted   |
| 14. Would like to have the other person as a close friend                | Would not like to have the other person as a close friend                                     |
| 15. Felt like the other person was judging me                            | Did not feel like the other person was judging me   |

MEASURE OF INTERVIEWEE'S TRUST  
OF INTERVIEWER

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Put a circle around each of the phrases (1 through 15) that best describes your experience with the person you have just met.

- |  |  |
|--|--|
| 1. Felt at ease  | Felt tense, anxious  |
| 2. Felt that I made myself known to the other person                     | Did not feel that I made myself known to the other person                    |
| 3. Bored by other person   | Interested by other person   |
| 4. Held back a lot, and was careful of what I revealed                   | Talked fully and freely  |
| 5. Liked the other person  | Disliked the other person  |
| 6. Felt the other person was interested in me                            | Felt the other person was not very interested in me                          |
| 7. The other person was good at interviewing and drawing me out          | Felt the other person was not very good at interviewing and drawing me out   |
| 8. Wouldn't want to interact with the other person again                 | Would want to interact with the other person again                           |
| 9. Didn't mind the tape recorder   | Was bothered by the tape recorder  |
| 10. Felt the other person could describe me effectively to a third party | Did not feel the other person could describe me effectively to a third party |
| 11. Felt the other person was a good listener                            | Did not feel the other person was a good listener                            |
| 12. Felt the other person made himself known to me                       | Did not feel the other person made himself known to me                       |
| 13. Did not feel the other person could be trusted                       | Felt like the other person could be trusted                                  |
| 14. Would like to have the other person as a close friend                | Would not like to have the other person as a close friend                    |
| 15. Felt like the other person was judging me                            | Did not feel like the other person was judging me                            |

APPENDIX D

## IMPRESSION SCALE

Your Name \_\_\_\_\_

Date: \_\_\_\_\_

Below are 30 items, each of which contains two adjectives at opposite extremes. In each of these items, you are to indicate your impression of the other participant. For example, on item 1, if the person strikes you as being incompetent, then place a check mark in one of the spaces to the right of center. The more incompetent you believe him to be, then the farther to the right you would want to check.

The same thing applies if you regard him as competent -- only you then check to the left of center. If you feel you have absolutely no idea one way or the other concerning his ability, then you would mark the center of the line. The same rules apply to the other items. Try to be as frank and sensitive as you can be in your ratings and be certain that every item is checked.

- |     |                        |                 |                           |
|-----|------------------------|-----------------|---------------------------|
| 1.  | competent individual   | : : : : :   : : | incompetent individual    |
| 2.  | inactive               | : : : : : : : : | energetic                 |
| 3.  | considerate of others  | : : : : : : : : | inconsiderate of others   |
| 4.  | stubborn               | : : : : : : : : | pliable                   |
| 5.  | self-respecting        | : : : : : : : : | self-debasing             |
| 6.  | slow-thinking          | : : : : : : : : | quick-witted              |
| 7.  | competitive individual | : : : : : : : : | noncompetitive individual |
| 8.  | warm person            | : : : : : : : : | cold person               |
| 9.  | obstinate              | : : : : : : : : | flexible                  |
| 10. | vengeful               | : : : : : : : : | forgiving                 |
| 11. | intelligent            | : : : : : : : : | unintelligent             |
| 12. | easy-going             | : : : : : : : : | hard-driving              |
| 13. | not very likeable      | : : : : : : : : | likeable                  |
| 14. | firm                   | : : : : : : : : | wishy-washy               |



APPENDIX E

HAYMES (1969) TECHNIQUE FOR MEASURING  
 SELF-DISCLOSURE FROM TAPE-RECORDED  
 INTERVIEWS

Code and Scoring Manual for Self-Disclosure

Self-disclosure will include four major categories of response:

1. Expressions of emotion and emotional processes.
2. Expressions of needs.
3. Expressions of fantasies, strivings, dreams, hopes.
4. Expressions of self-awareness.

Self-disclosure will specifically exclude opinions about objects other than self unless the person obviously intends the opinion to be saying something about himself. Since this experiment deals with the acquaintance process, it is only rarely that one comes across such inferential statements without their being followed up by a clarifying remark which is scorable under one of the categories below.

Although much self-disclosure of the types described below is stated in the first person singular, it is possible to make self-disclosing statements in the third person. Examples of both types are included below.

Scoring Procedure

A score of 2 point will be given to disclosures of the defined types when they are first person references.

A score of 1 point will be given to the disclosures of the same types when they are reflexive third person references. These statements in the third person in which the word "you" is an obvious substitution for saying "I".

Non-reflexive third person references, such as "people always..." in which the person is not really revealing any information about himself will not be scored.

For this experiment, ratings will be given for each 30 seconds of interaction. In any 30-second segment, only the score for the maximally disclosing statement will be used. In other words, if a person makes 1, 2, or 10 2-point disclosures in any 30-second segment his score is 2 points for that segment. This avoids inaccurately scoring for speech pattern repetitions. Similarly,

if a person makes a 1-point statement, and a 2-point statement in the same 30-second segment, his score is 2 points for that segment.

### Examples

#### 1. Expressions of emotions and emotional processes:

Irritation--"It really bugs me..." "You get peeved at..." "It makes me sick when..." "It drives me crazy..." Also references to being agitated, irritated, testy, etc.

Anger, rage, hostility, hate, bitterness, resentment-- "It gets me very angry when..." "You (I) just naturally hate people like her."

Excitement, involvement, concern, etc.--"I get all caught up in..." "It gets to me..." "It gets me goin'" "I'm really close to my father." "I'm excited by..." Also the opposite of involvement. "I can't seem to get into the material." "Boredom is one of my big problems."

Sad, blue, apathetic, cheerless, depressed, grief, mournful, pensive, gloomy, etc-- "It depresses me when..." "I get blue frequently."

Happy, contented, delighted, feeling great, secure, feeling well (strong, confident, etc.), assured, pleased, jovial, elated, euphoric, merry--"I feel great when she..." "You really feel good when..." (Also the opposite of feeling well and strong, i.e., discussion of health problems, physical complaints, expression of general lack of the feeling of well being.) Expressions which have been leached of their emotional content are not scored.

2. Expressions of needs, demands made upon others in contact with self: "I demand a great deal of attention." "I don't feel too motivated to do much of anything." "All I want is..." These will frequently be expressed in statement of self-awareness (see below).

3. Expressions of fantasies, hopes, strivings, long-range plans, etc. "I've wanted to be a doctor since I was five years old." "I frequently dream that I'm..." "I dream of the day when..."

4. Expressions of self-awareness, internal forces, processes, capabilities, and/or the lack of them. "You (I) tell yourself that..." "I rationalize that by..." "That's one of my handicaps." "I don't panic easily." "I get mad at myself..." "I have the worst time with writing." "It's not a natural thing for me..." "It's easy for me to..." "It's really bad for me when I..." "I'm torn between..." "I'm not mature." "I'm not too hot at..." "I can't possibly integrate all that stuff." "You (I) adjust to things..." "I can think logically but math is impossible." "I identify with people who..." "I get very sentimental when..." "I'm a night-time person."

Additional examples of expressions of emotions and emotional processes:

Surprise, shock, astonishment, amazement. "She really shocked me terrifically with her openness." "I love being surprised.

Sorry, repentent, ashamed, guilty, etc. "I feel very guilty about..." "I always feel sorry when..."

Pride, self-esteem, feelings of fulfillment, self-confidence. "I felt good about what I did for her." "I've been feeling great lately."

Confused, perplexed, puzzled, cloudy, incoherent, disoriented, uncertain, etc. To be scored the statement must indicate some emotional disorientation or confusion. (i.e., "My math homework confuses me" is not scored.) "Situations like that puzzle the hell out of me." "I just don't know how I feel about it."

Anxious, tense, afraid, on-edge, overrought, upset, distressed, worried, etc. "I get really tense in situations like this." "It worries me when..." "She scares me." "You (I) get frightened when..."

Love, tenderness, affection, warmth, caring-for another, passion, arousal (sexual), etc. "I loved her before she..." "I was so hung up on her that I couldn't even..." (Colloquial).

APPENDIX F

SCORING SYSTEM FOR GLOBAL RATING  
OF DISCLOSURE INTIMACY\*

Instructions. Use the scale below to rate the most intimate material which the subject talked about. In other words, how personal was the information which the individual revealed.

1	2	3	4	5	6	7	8	9
little information given		superficial information	midpoint		moderately intimate information		extremely intimate information	

In explaining the scoring system to the judges, the experimenter emphasized that "intimacy" reflects two major criteria. First, emphasis should be placed on the uniqueness of the material disclosed. Demographic information, for example, where one is born, major subject in school, numbers of brothers and sisters, was to be considered as being less intimate than a description of personal feelings, for example, anxieties, difficulties with parents, views on issues. Second, emphasis should be placed on how guarded one might be in divulging material to various people. Would the subject want most people to know about the information; or would he be embarrassed to divulge this material to anyone but a trusted associate?

Examples of the major scoring categories:

1. The person refuses to talk about himself; continually asks the other person to talk about himself; sits quietly, rarely says anything.
  
3. The person talks the entire length of time about superficial content. For instance, he mentions what movies he has seen, what classes he is taking, where he works part-time, superficial description of siblings.

---

\*Scoring system taken from Chaikin, Derlega, Bayma, and Shaw, in Journal of Consulting and Clinical Psychology (1975) (pp. 19-20)

5. The individual talks about personal feelings but not at an intimate level. For instance, he talks about career goals, what his girlfriend is like, views on dating, and the value of an education. This category is appropriate when it is difficult to decide if the person talks intimately or not.
7. The person talks at a moderately intimate level. For instance, the person might go into details about problems in getting dates, nervousness when speaking in class, problems about being too fat, feelings of guilt.
9. The person talks about material which is very personal, embarrassing, or emotional. For instance, the person mentions specific details about sexual experiences, wanting to commit suicide, details of family disruption because of an alcoholic parent, or descriptions of homosexual feelings.

N.B. The global rating of disclosure intimacy for the Interviewer should be based on:

- a) intimacy of Questions and style
- b) intimacy of Statements

APPENDIX G

## INSTRUCTIONS FOR INTERVIEWER

"I have been asked to interview you to see how well I can get to know you in 20 minutes."

"I have also been given a list of suggested topics."

Suggested topics for interview:

1. ATTITUDES and OPINIONS
2. TASTES and INTERESTS
3. WORK or STUDIES
4. MONEY
5. PERSONALITY
6. BODY

APPENDIX H



APPENDIX I

## DEBRIEFING

This study has focused on the examination of interpersonal relationships. We are interested in how much private information people share in a first interview, as well as the respective perception of each other. Another dimension of this study is the activity level of each student and the relationship this might have in their interaction with other people.

Thus, this experiment is essentially a study of interactions between people. Students have been randomly assigned to the role of interviewer or interviewee and paired on the basis of their scores on the first part of the study. The experiment was prepared with the goal of making it relatively non-threatening and creating a relatively pleasant atmosphere.

If you are interested in finding out more about the study you can contact René in F225. He will be able to tell you more about it once the experiment is completed.

Thank you very much for your cooperation.

**APPENDIX J**

MULTIVARIATE AND UNIVARIATE ANALYSIS OF VARIANCE  
FOR SECOND-ORDER INTERACTION EFFECTS

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
<b>Self-Actualization</b>				
<b>by Self Concept</b>				
Multivariate	(11,166)	--	0.9410	0.5029
Univariate				
Passive	1	3.52	0.26	0.6085
Active	1	103.54	0.19	0.6625
At Ease	1	0.13	0.32	0.5719
General Trust	1	16.92	3.02	0.0837
Impression	1	682.52	1.88	0.1714
SDQ Questionnaire	1	21.33	0.16	0.6841
Self-Disclosure Rating	1	1.73	0.21	0.6418
Global Intimacy Rating	1	1.29	0.75	0.3863
Low Topics	1	73.13	2.10	0.1489
High Topics	1	3.38	0.22	0.6392
Time	1	888.38	0.32	0.5711
<b>Role by Self-Actualization</b>				
Multivariate	(11,166)	--	0.9581	0.4869
Univariate				
Passive	1	46.02	3.44	0.0653
Active	1	0.04	0.00	0.9926
At Ease	1	0.88	2.16	0.1426
General Trust	1	0.25	0.04	0.8312
Impression	1	31.68	0.08	0.7677
SDQ Questionnaire	1	17.52	0.13	0.7123
Self-Disclosure Rating	1	0.02	0.00	0.9543
Global Intimacy Rating	1	0.00	0.00	0.9891
Low Topics	1	23.73	0.68	0.4100
High Topics	1	0.68	0.04	0.8326
Time	1	3640.08	1.32	0.2521

(Cont. . .)

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
Partner by Self Concept				
Multivariate	(11,166)	--	0.9787	0.4680
Univariate				
Passive	1	4.68	0.35	0.5547
Active	1	854.29	1.57	0.2107
At Ease	1	0.13	0.32	0.5719
General Trust	1	2.75	0.49	0.4838
Impression	1	77.52	0.21	0.6441
SDQ Questionnaire	1	33.33	0.25	0.6110
Self-Disclosure Rating	1	32.29	4.04	0.0459
Global Intimacy Rating	1	4.45	2.60	0.1085
Low Topics	1	79.43	2.28	0.1326
High Topics	1	18.43	1.20	0.2745
Time	1	5525.52	2.00	0.1587
Role by Self Concept				
Multivariate	(11,166)	--	0.9395	0.5042
Univariate				
Passive	1	1.33	0.09	0.7526
Active	1	112.54	0.20	0.6491
At Ease	1	0.04	0.11	0.7344
General Trust	1	16.92	3.02	0.0837
Impression	1	65.33	0.18	0.6715
SDQ Questionnaire	1	305.02	2.37	0.12
Self-Disclosure Rating	1	26.81	3.35	0.0686
Global Intimacy Rating	1	0.84	0.49	0.4830
Low Topics	1	0.06	0.00	0.9659
High Topics	1	0.06	0.00	0.9487
Time	1	4.68	0.00	0.9672
Error Terms				
Passive	176	13.37		
Active	176	541.48		
At Ease	176	0.40		
General Trust	176	5.59		
Impression	176	361.82		
SDQ Questionnaire	176	128.34		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	1.71		
Low Topics	176	34.79		
High Topics	176	15.35		
Time	176	2757.72		

APPENDIX K

MULTIVARIATE AND UNIVARIATE ANALYSIS OF VARIANCE  
FOR THIRD-ORDER INTERACTION EFFECTS

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
Self-Actualization by Partner by Self Concept				
Multivariate	(11,166)	--	0.64	0.7848
Univariate				
Passive	1	7.52	0.56	0.4544
Active	1	550.13	1.01	0.3148
At Ease	1	0.25	0.62	0.4288
General Trust	1	0.13	0.02	0.8790
Impression	1	6.75	0.01	0.8916
SDQ Questionnaire	1	13.02	0.10	0.7506
Self-Disclosure Rating	1	2.81	0.35	0.5535
Global Intimacy Rating	1	0.27	0.15	0.6899
Low Topics	1	3.93	0.11	0.7370
High Topics	1	20.34	1.32	0.2512
Time	1	3588.02	1.30	0.2556
Self-Actualization by Partner by Role				
Multivariate	(11,166)	--	0.53	0.8786
Univariate				
Passive	1	7.52	0.56	0.4544
Active	1	24.79	0.04	0.8309
At Ease	1	0.04	0.11	0.7344
General Trust	1	0.04	0.00	0.9272
Impression	1	184.08	0.50	0.4767
SDQ Questionnaire	1	114.08	0.88	0.3472
Self-Disclosure Rating	1	5.75	0.72	0.3970
Global Intimacy Rating	1	0.02	0.01	0.9015
Low Topics	1	2.18	0.06	0.8023
High Topics	1	0.01	0.00	0.9780
Time	1	1906.38	0.69	0.4070

(Cont. . .)

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
<b>Self-Actualization by Self Concept by Role</b>				
Multivariate	(11,166)	--	0.35	0.9698
Univariate				
Passive	1	0.33	0.02	0.8748
Active	1	86.67	0.16	0.6896
At Ease	1	0.25	0.62	0.4288
General Trust	1	0.25	0.04	0.8312
Impression	1	266.02	0.73	0.3925
SDQ Questionnaire	1	8.33	0.06	0.7992
Self-Disclosure Rating	1	1.05	0.13	0.7164
Global Intimacy Rating	1	0.09	0.05	0.8150
Low Topics	1	32.09	0.92	0.3383
High Topics	1	2.40	0.15	0.6927
Time	1	10.08	0.00	0.9519
 <b>Role by Partner by Self Concept</b>				
Multivariate	(11,166)	--	0.38	0.9608
Univariate				
Passive	1	3.00	0.22	0.6364
Active	1	6.38	0.01	0.9137
At Ease	1	0.13	0.32	0.5719
General Trust	1	7.92	1.41	0.2356
Impression	1	46.02	0.12	0.7219
SDQ Questionnaire	1	96.33	0.75	0.3876
Self-Disclosure Rating	1	12.12	1.51	0.2195
Global Intimacy Rating	1	1.13	0.66	0.4172
Low Topics	1	20.34	0.58	0.4456
High Topics	1	7.72	0.50	0.4793
Time	1	249.79	0.09	0.7638
 <b>Error Terms</b>				
Passive	176	13.37		
Active	176	541.48		
At Ease	176	0.40		
General Trust	176	5.59		
Impression	176	361.82		
SDQ Questionnaire	176	128.34		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	1.71		
Low Topics	176	34.79		
High Topics	176	15.35		
Time	176	2757.72		

APPENDIX L

MULTIVARIATE AND UNIVARIATE ANALYSIS OF VARIANCE  
FOR FOURTH-ORDER INTERACTION EFFECTS

<u>Source</u>	<u>df</u>	<u>MS</u>	<u>F</u>	<u>p less than</u>
Self-Actualization by Partner by Self Concept by Role				
Multivariate	(11,166)	--	1.22	0.2720
Univariate				
Passive	1	0.00	0.00	1.0000
Active	1	12.50	0.02	0.8794
At Ease	1	1.50	3.70	0.0557
General Trust	1	0.63	0.11	0.7376
Impression	1	0.00	0.00	1.0000
SDQ Questionnaire	1	72.52	0.56	0.4534
Self-Disclosure Rating	1	10.66	1.33	0.2494
Global Intimacy Rating	1	3.32	1.93	0.1655
Low Topics	1	5.50	0.15	0.6914
High Topics	1	2.18	0.14	0.7062
Time	1	26719.92	9.68	0.0022
Error Terms				
Passive	176	13.37		
Active	176	541.48		
At Ease	176	0.40		
General Trust	176	5.59		
Impression	176	361.82		
SDQ Questionnaire	176	128.34		
Self-Disclosure Rating	176	7.98		
Global Intimacy Rating	176	1.71		
Low Topics	176	34.79		
High Topics	176	15.35		
Time	176	2757.72		

APPENDIX M

TAPE # \_\_\_\_\_

(Scaled down from 8 1/2" X 14" sheets)

	<u>ER</u>		<u>EE</u>		
	TOPIC	SD	TOPIC	SD	
I					
2					
3					
4					
5					
6					
7					
8					
9					
I0					
II					
I2					
I3					
I4					
I5					
I6					
I7					
I8					
I9					
20					

ER \_\_\_\_\_

TAPE # \_\_\_\_\_

EE \_\_\_\_\_

Global Rating For DISCLOSURE INTIMACY-----  
I INTERVIEWEE

I    2    3    4    5    6    7    8    9

-----  
II INTERVIEWER(a) re Nature of QUESTIONS and STYLE

I    2    3    4    5    6    7    8    9

(b) re Intimacy of STATEMENTS

I    2    3    4    5    6    7    8    9

-----  
TOPICS

	<u>ER</u>	<u>EE</u>		<u>ER</u>	<u>EE</u>
A&O	_____	_____	<u>SD</u>		
T&I	_____	_____			
W&S	_____	_____	<u>I</u>	_____	_____
M	_____	_____	<u>2</u>	_____	_____
P	_____	_____	<u>3</u>	_____	_____
B	_____	_____	<u>4</u>	_____	_____
Total	_____	_____	Total	_____	_____

OTHERS \_\_\_\_\_

Grand Total \_\_\_\_\_

Time Ratings

(Scaled down from 8 1/2" X 14" sheets)

Tape # \_\_\_\_\_

ER: \_\_\_\_\_ EE: \_\_\_\_\_

I \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

Tape # \_\_\_\_\_

ER: \_\_\_\_\_ EE: \_\_\_\_\_

I \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

Tape # \_\_\_\_\_

ER: \_\_\_\_\_ EE: \_\_\_\_\_

I \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

Tape # \_\_\_\_\_

ER: \_\_\_\_\_ EE: \_\_\_\_\_

I \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

Tape # \_\_\_\_\_

ER: \_\_\_\_\_ EE: \_\_\_\_\_

I \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_

Tape # \_\_\_\_\_

ER: \_\_\_\_\_ EE: \_\_\_\_\_

I \_\_\_\_\_

2 \_\_\_\_\_

3 \_\_\_\_\_