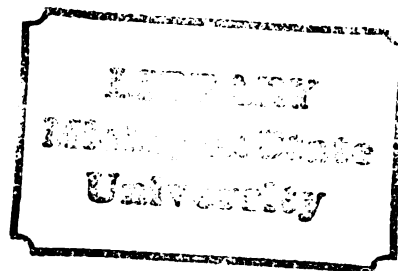





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SELF-DISCLOSURE AND MENTAL HEALTH: AN ATTEMPT AT A CLARIFICATION

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SELF-DISCLOSURE AND MENTAL HEALTH:
AN ATTEMPT AT A CLARIFICATION

By

Bram Haver

A THESIS

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ABSTRACT

SELF-DISCLOSURE AND MENTAL HEALTH:
AN ATTEMPT AT CLARIFICATION

By

Bram Haver

This study was designed to explore the relationship between self-disclosure and mental health or competence within an interview situation designed to encourage self-disclosure.

Twenty-three subjects who had been separated into Competent, Normal, and Problem groups were interviewed at six monthly sessions. Two low- and two high-intimacy topics were selected for content analysis based upon the subjects' ratings.

It was predicted that Competents would be more self-disclosing, in number and degree of intimacy and congruence. It was also predicted that all groups would increase their self-disclosures over time.

None of the predicted increases over time were supported. Competents, however, were more self-disclosing overall, and spoke more on the intimate topics. They were also rated as being more intimate in their general disclosures.

Results were discussed in terms of the demand characteristics of the interview situation and possible differences between self-disclosure and self-exploration.

Approved by:

Committee Co-Chairperson Committee Co-Chairperson Date

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Finally, my thanks and appreciation to me--for getting it together and finishing this thesis, regardless of its relationship to my education and training.

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INTRODUCTION

The history of theoretical and empirical investigation of the relationship between self-disclosure and mental health* is long and confusing. On the theoretical side, there seems to be general agreement, among contemporary theological and psychological thinkers, that self-disclosure is important--if not necessary--for mental health. Martin Buber (1937) writes that one's relationship with God derives from the progressively more intimate relationships one has with others. Paul Tillich (1952) argues that the "courage to be" one's real self in the presence of others is a primary value. For Carl Rogers (1961), willingness to be open and disclosing is an important characteristic of the fully functioning person. Rogers further suggests that the process of becoming more self-disclosing is central to self-acceptance and mental health.

Mowrer (1961) holds that feelings of guilt over failure to disclose one's perceived transgressions are the primary underlying factor in psychopathology. Fromm (1955) refers to self-disclosure as a means of avoiding the "marketing personality" and the resultant alienation from both oneself and others. Sidney Jourard (1959), the person most responsible for establishing self-disclosure as a viable area of research, states that the ability to allow one's real self to be known to at least one significant other is a prerequisite for

¹The terms "mental health" and "competence" will be used interchangeably in this paper.

a healthy personality. In a more recent work (Jourard, 1964), he argues that "no man can come to know himself except as an outcome of disclosing himself to another person." (P. 5)

The combined thinking of the above theorists, with its generally consistent set of conclusions, stands in stark contrast to the varying and even contradictory results of empirical attempts to delineate the relationship between self-disclosure and mental health. Various reviews of the literature (Cosby, 1973; Goodstein and Reinecker, 1974; Chelune, 1975; Chelune et al., 1979) have indicated that the evidence for a positive relationship between mental health and self-disclosure is equivocal at best. The failure to establish a definite relationship has led a number of authors to suggest that it is fruitless to search for personality variables that are closely related to self-disclosure; they argue that psychologists should instead concentrate on the conditions that either increase or decrease self-disclosure in general. This argument is bolstered by the inconsistent results of the 30-odd published studies that have attempted to relate self-disclosure to mental health.

Nonetheless, a number of factors--chiefly the weight of theoretical support for a relationship between disclosure and mental health--lead to the conclusion that abandonment of the search for personality variables closely related to disclosure would be premature. The rationale for this position lies in two interrelated aspects of the published studies: methodological difficulties, and confusion about the concept of self-disclosure. The methodological problems will be discussed in the review of the literature which follows; the concept of self-disclosure, especially in regard to

mental health, is discussed below.

The Concept of Self-Disclosure

Jourard's definition of self-disclosure--as "my communication of my private world to you in language that you clearly understand" (Jourard, 1964, p. 5)--has been generally accepted. However, there remains a predilection toward viewing self-disclosing behavior as a general personality characteristic separate and isolated from one's social situation. The problem to which this leads is commented upon by Goodstein and Reinecker (1974):

One problem which seems to permeate the literature, especially the theoretical literature, on self-disclosure is the tendency to view self-disclosure as a unitary phenomenon which is manifested with unfailing regularity in all situations. There is now ample evidence which supports exactly the opposite point of view. Self-disclosure is a function of certain characteristics of the discloser, of the recipient, of the prior relationship between discloser and recipient, of the disclosing situation, and [of] a variety of interactions among these variables. (P. 71)

The position quoted above has some empirical support. In a study involving a confederate modeling either high or low self-disclosure, Chaidin et al. (1975) found that healthier people, as measured by the Maudsley Personality Inventory, varied their disclosure in accordance with the modeled behavior significantly more than did their more-neurotic counterparts. Chelune (1976, 1979) developed and refined a Self-Disclosure Situations Survey, an attempt to isolate specific interpersonal situations which facilitate self-disclosing behavior in all people. Other studies have shown that people tend to be more self-disclosing when

1. they are being disclosed to: the "dyadic effect"
- (Jourard, 1959)

2. they like the person to whom they are disclosing (Certner, 1970; Fitzgerald, 1963; Jourard, 1959, 1964, 1971; Jourard and Landsman, 1960; Jourard and Lasakow, 1958; Worthy et al., 1969);

3. the relationship between the two has a longer history (Taylor, 1968); and

4. the discloser feels a greater degree of trust towards the listener (Wheless, 1976; Wheless and Grotz, 1977; Johnson and Noonan, 1972)

The degree of empirical support for each of the above statements varies, but there is no contradictory evidence for any of them. Nonetheless, the variations among these results, although the findings are all positive and non-contradictory, have led many researchers (e. g., Chelune, 1979) to conclude either that there is no relationship between mental health and self-disclosure or that such a relationship may exist but is impossible to define using empirical methods. At best, this position seems premature; at worst, it may reflect a tendency to value "clean" positive results over the less clear-cut findings that result from the investigation of complex relationships.

The position taken in the present study will fall between the opposing views just presented. It will not be assumed that self-disclosure is a simple character trait--something that people possess more or less of; nor will it be assumed that self-disclosure is unrelated to personality and determined solely by circumstances at any given moment.

This position can be considered to be the next logical step in the empirical study of mental health and self-disclosure. It builds upon previous research on factors that seem to affect self-disclosing behavior (reviewed below), while remaining cognizant of

the "larger picture"--i. e., the relationship, if any, between mental health and self-disclosure.

REVIEW OF THE LITERATURE

Studies Showing a Positive Relationship Between Mental Health and Self-Disclosure

Lombardo and Fantasia (1976)

Lombardo and Fantasia (1976) attempted to show that self-disclosure is related to mental health. They also investigated the possibility that the relationship is curvilinear rather than simply linear. Using college students as subjects and administering the tests during class time, they applied a series of measures of self-actualization, including the Personal Orientation Inventory, with one group of subjects, and a battery including the Social Avoidance and Distress scale, the Fear of Negative Evaluation scale, the Alienation scale and the Repression-Sensitization scale with a second group of subjects. To measure self-disclosure, they asked their subjects to rank various topics in terms of how intimate they considered the topics to be. (The investigators had previously established predictive validity for this method of rating self-disclosure.)

The results show strong positive correlations between mental health and self-disclosure. However, an ANOVA test for a curvilinear relationship was negative. The researchers interpreted their results as strongly supporting the hypothesis that self-disclosure is positively related to mental health.

This study is of special interest for two reasons:

1. The researchers used a validated measure of self-disclosure which did not require the subjects to actually be self-disclosing in a classroom situation; and

2. the measures used to define mental health were designed to assess positive mental health (self-actualization) rather than negative mental health (neuroticism).

Halverson and Shore (1969)

Halverson and Shore (1969) hypothesized that more "socially accessible" people---i. e., those who self-disclose more---would be more conceptually complex because their information-processing abilities would enable them to deal with a greater number of interpersonal situations in an open and positive manner. For similar reasons, they suggested that people who were authoritarian and tended to view others as untrustworthy would be less self-disclosing. A further hypothesis was that more self-disclosing persons would be seen as more flexible and generally adaptable. They also predicted that there would be a positive relationship between self-disclosure and being liked by others.

The subjects of this study were Peace Corps trainees. The researchers administered the Jourard Self-Disclosure Questionnaire (a self-report measure), the California F Scale (to measure authoritarianism), the Paragraph-Completions Inventory (to measure conceptual complexity), and the Polarity Scale (to measure the subjects' general attitude on the basic goodness or evil of human nature). They also administered two peer-nomination measures, for which all subjects were asked to list the members of the group with whom they would most

like to be stationed, after two days and again after six weeks. Assessment-board ratings of the trainees by their instructors were also used. Each trainee was rated along a five-point scale for "interpersonal flexibility and general adaptability"; general aptitude and intelligence tests were also administered to each trainee.

The results were quite conclusive. Self-disclosure was significantly related in the predicted direction to each of the measures. It was unrelated to the initial peer nominations (after two days), but strongly related to the peer nominations after six weeks. There were strong positive relationships between self-disclosure and the assessment board's ratings of general adaptability and interpersonal flexibility. Although there was no measure that specifically examined mental health, the combined measures clearly establish the general interpersonal competence or mental health of the subjects.

The authors interpreted their findings as providing strong evidence of a positive relationship between mental health and self-disclosure.

Mayo (1968)

Mayo (1968) investigated amounts of self-disclosure (as measured by a modified Jourard Self-Disclosure Questionnaire) in three groups of women: inpatients at a mental hospital diagnosed as neurotic; normals with symptoms as determined by the Symptom-Sign Inventory; and normals without symptoms, according to the same measure.

The results showed a significant difference between the normal

groups and the inpatients. The normal group without symptoms was determined to be the most self-disclosing. The normals with symptoms were less so, and the inpatients were considerably less disclosing. The Hysteroid-Obsessoid Questionnaire was also administered, and a correlation was performed with the self-disclosure scores within each group. With the inpatient and normals-with-symptoms groups, significant positive correlations were found between hysterical personality and self-disclosure.

An interesting aspect of this study was the attempt to be sensitive to the conditions under which the subjects were asked to be self-disclosing. The author states:

Aware of the difficulties involved in using self-report measures, the author took considerable trouble in obtaining Ss' confidence and active cooperation. The majority were seen on at least two occasions and always with sufficient privacy to ensure that other patients would not overhear their replies. (Mayo, 1968, p. 141)

Other Studies

A number of other studies show some positive relationship between various measures of mental health and self-disclosure. Dutton (1963) found negative correlations between self-reported self-disclosure scores and scores on the F, D, Pt, Sc, and Si scales of the MMPI. On the same instrument, Jourard (1971) reported negative correlations between self-disclosure and scores on the Sc and Si scales.

Komaridis (1965) showed that the amount of self-reported self-disclosure was related positively to the degree of adjustment, as measured by the California Personality Inventory, for women; there was no relationship for men. Carpenter and Freese (1979), on

the other hand, found a positive relationship between adjustment on the California Personality Inventory and actual intimacy and inwardness of self-disclosure for men, but not for women. A major difference between the two studies is that Komaridis (1965) used a self-report questionnaire to measure self-disclosure and did not ask subjects to disclose to the experimenter, while Carpenter and Freese (1979) required subjects to write a twenty-sentence essay during a psychology class describing what they are really like as people.

Pederson and Higbee (1969), using the Pederson Personality Inventory and a self-report questionnaire, found negative correlations between self-disclosure and both neuroticism and Cycloid Disposition (a measure of emotional instability) for women. The only significant result for men was a positive correlation between self-disclosure and Thinking Introversion (a measure of introspection).

Two studies used the Tennessee Self-Concept Scale as a measure of adjustment or mental health. Jourard (1971) found positive relationships between reported self-disclosure and attitudes of self-acceptance. Shapiro (1968) reported a positive correlation between actual self-disclosure and self-acceptance scores. Further, among the same subjects he found a negative relationship between self-disclosure and neuroticism as measured by the Maudsley Personality Inventory.

Finally, it has been shown that people who have a more-accepting attitude towards their own death tend to be more self-disclosing to others. (Graham, 1970)

Studies Showing No Relationship or a Negative Relationship
Between Self-Disclosure and Mental Health

Numerous investigators have reported results which either directly or indirectly conflict with the findings summarized above. As is the case with the researchers whose work is reviewed above, those who found no relationship, or a negative relationship, between self-disclosure and mental health employed a multitude of different measures to determine both the subjects' levels of mental health and their levels of self-disclosing behavior. All of the studies in this area, however, were conducted either partly or entirely during class periods. Another unifying--and methodologically disturbing--factor is that none of the studies attempted to provide subjects with an environment conducive to self-disclosure.

A typical example is the study reported by Pederson and Breglio (1968). They administered the Pederson Personality Inventory to students during an Introductory Psychology class period. Eleven weeks later, they administered a self-disclosure questionnaire which required subjects to write essays about themselves on five topics ranging from their interests to their feelings about their bodies and personalities. The authors state that "to minimize the association by S between the initial administration of the Personality Inventory and the later administration of the Self-Disclosure Questionnaire, different examiners were used on the two occasions." (Pederson and Breglio, 1968, p. 497) The results showed no relationship between self-disclosure and mental health for women, but significant positive correlations between the rated depth of self-disclosure and scores on the neuroticism and Cycloid Disposition scales for men.

Men who chose to be disclosing were therefore assessed as more emotionally unstable. (Interestingly, these men were significantly more self-disclosing on the more-intimate areas of personality and body than they were on other, less-intimate topics.)

A similar study was conducted by Stanley and Bownes (1966). They first administered Jourard's self-report self-disclosure questionnaire and later administered the Maudsley Personality Inventory. Both measures were taken during class periods. The results showed no relationship between self-disclosure and neuroticism.

Kopfstein and Kopfstein (1973) found no relationship between self-esteem, as measured by Marlowe Crowne, and self-disclosure. However, they did find that need for approval was positively correlated with evasive, impersonal and generally favorable self-disclosure. The measure for self-disclosure was a written disclosure task, administered in class, containing a series of seven questions calling for an unusual depth of openness.

Similarly, Fitzgerald (1963) found no relationship between self-disclosure and self-esteem in a college population. However, she used an unknown measure of self-esteem and did not report on the validity or reliability of the measure.

Using a shortened form of Jourard's self-disclosure questionnaire and the Pederson Personality Inventory, Pederson and Higbee (1969) found that for men there was a positive relationship between self-disclosure and neuroticism, while there was a significant negative relationship for women.

Results which are almost the direct opposite to those found by Pederson and Higbee (1969) were reported by Carpenter and Freese

(1979). In a classroom situation, where the students had been informed that the materials were for an experiment and told that participation was entirely voluntary, they administered the Jourard Self-Disclosure Questionnaire, a sentence-completion test, the California Personality Inventory, and a task in which the students were to write twenty sentences with the instructions, "say what you are really like as a person." Over 200 students were in the class when the measures were administered. Scoring methods for both the sentence-completion test, which was designed to measure intimacy of disclosure, and the 20-sentence essay, which was scored to evaluate the inwardness of self-disclosure, were reliable and validated.

Neither of the rated actual self-disclosure measures correlated with the self-report measure. Among the males, the rated self-disclosure scores showed positive relationships between inwardness of self-disclosure and measures of (a) flexibility, (b) responsibility, (c) socialization, (d) self-control, (e) tolerance, and (f) achievement via independence. Among the females, however, negative relationships were found between intimacy of self-disclosure and scales generally indicative of good interpersonal adjustment.

Chaikin, et al. (1975) suggested that mental health is unrelated to self-disclosure. They hypothesized that neurotics may be less able to discriminate between the "social cues" indicating the degree of intimate disclosure that is appropriate in a given situation. Using college students as subjects, they administered the Maudsley Personality Inventory (which measures neuroticism) to students in class to develop a group of normals and a group of neurotics. They then separated each group into two sub-groups and exposed one sub-group

of each group to a confederate modeling intimate self-disclosure and the other sub-group to a confederate modeling superficial disclosure. The subjects were then asked to disclose in return, and their self-disclosure was rated along a single nine point intimacy scale.

The researchers found no significant overall difference in self-disclosure between normals and neurotics. However, they did report a significant interaction between confederate intimacy and neuroticism, with normal students varying the intimacy of their disclosure in accordance with the model more than did the neurotic students. They interpreted their data to suggest that neuroticism is related to inappropriate disclosure (and health to appropriate disclosure), rather than to either characteristically high or characteristically low self-disclosure levels.

Chelune (1977) reported similar findings. He classified observers into groups with high or low degrees of self-disclosure flexibility according to an instrument which he devised. He had the subjects rate a tape recording of a person exhibiting high or low amounts of self-disclosure. (They were told that the interviewer of the person on the recording was a stranger to the discloser.) The ratings were along four dimensions: likable/not likable; emotionally unstable/emotionally stable; exciting/dull; and weak personality/strong personality.

There were no differences between groups for either the exciting/dull or likable/unlikable dimensions. However, the more-flexible disclosers felt that the highly disclosing recorded interviewees were more unstable and weaker personalities than did the less-flexible disclosers. Chelune interprets his data in a manner similar

that of Chaikin, et al. (1975): Chelune feels that his results indicate that a person's ability to vary his or her self-disclosing in response to accurate perception of the social situation is more indicative of mental health than is a person's overall disclosing behavior.

Studies using the MMPI with either reported or rated self-disclosure have yielded contradictory results. With reported self-disclosure, Dutton (1963) found low negative correlations between the F, D, Pt, Si and Sc scales, and a positive correlation with the K scale. Himelstein and Lubin (1966) interpreted the K scale as measuring defensiveness, and suggested that self-disclosure should have an inverse relationship with it; they found, however, that females showed no significant correlations with reported self-disclosure and males showed low (but significant) negative correlations. (The subjects were reporting self-disclosure to their best male friend and best female friend.) Mullaney (1964) reported no significant differences between groups of high and low self-reported self-disclosers on any of the MMPI scales, with the exception that low disclosers scored higher on the Si scale. This last result is the only consistent finding emerging from the MMPI research on reported self-disclosure.

Vondracek (1969) reported no significant relationship between either verbalization time or judges' ratings of the intimacy of disclosure in actual interviews and in scores on either the K or the Si scale.

METHODOLOGICAL CRITIQUE OF THE LITERATURE

Most of the published studies exhibit two basic problems concerning the measurement of self-disclosing behavior. The first problem concerns the validity of the Jourard Self-Disclosure Questionnaire (JSDQ) (Jourard and Lasakow, 1958). The second problem is the almost complete disregard for Demand Characteristics (Orne, 1962) in the studies which utilize the measurement of actual disclosing behavior as either dependent or independent variable.

Predictive Validity of the JSDQ

All of the studies reviewed above which used a self-report measure of self-disclosure employed either the JSDQ or a modification of it. The JSDQ (Jourard and Lasakow, 1958) is a 60-item questionnaire in which students are asked to indicate whether they have disclosed nothing, partial information and/or feelings, or total information and feelings about each item to each of four people: mother; father; best same-sex friend; and best opposite-sex friend. The 60 items are sorted into six general categories of ten items each. Jourard's (1958) initial research indicated that these six general categories produced two clusters of self-disclosure: a high-disclosure (less-intimate) cluster--information about one's attitudes and opinions, tastes and interests, and work; and a low-disclosure cluster--information about one's finances, personality and body. These clusters or patterns of self-disclosure

have been shown to be very similar over sex, race, and several national groups. (Jourard and Lasakow, 1958; Jourard, 1959, 1961; Melikian, 1962)

While satisfactory reliability (Jourard and Lasakow, 1958; Panyard, 1971) and discriminant validity (Halverson and Shore, 1969; Lombardo and Fantasia, 1976) as well as construct validity (Jourard, 1971) have been reported for the JSDQ, there have been conflicting and contradictory findings in attempts to establish predictive validity. Some studies have used the JSDQ to differentiate high and low disclosers and then compare their actual levels of disclosure. Taylor (1968), Krause (1969), and Jourard and Resnick (1970) have all shown that dyads of self-reported high disclosers actually did disclose more than dyads of self-reported low disclosers. Pederson and Breglio (1968) found that self-reported high disclosers wrote longer and more disclosing essays than did the self-reported low disclosers on five questions related to the areas covered by the JSDQ. Conversely, Burhenne and Mirels (1970), in a study quite similar to that of Pederson and Breglio, obtained a zero correlation between the JSDQ and judges' ratings of disclosure on an essay. In addition, Vonderacek (1969), Ehrlich and Graeven (1971), and Himelstein and Lubin (1965) reported nonsignificant correlations between scores on the JSDQ and actual levels of self-disclosure.

In a study by Doster and Strickland (1971), self-reported low disclosing subjects were more self disclosing in a dyadic interview than were subjects who reported themselves to be high disclosers. The authors suggest, however, that subjects with high JSDQ scores (more self-disclosing) may be more realistic about the nature of the interview interaction, on the basis of their greater interactional histories,

and consequently may be less willing to take risks in an experimental situation. A somewhat-related and perhaps more-accurate explanation is that the JSDQ measures self-disclosure to significant others, while measurement of actual self-disclosure in experimental situations is measurement of self-disclosing behavior to a stranger (Cozby, 1973; Lombardo and Fantasia, 1976).

A number of attempts have been made to relate JSDQ data to actual disclosure in group situations. Lubin and Harrison (1964) failed to find a significant relationship between a modified form of the JSDQ and the rated amount of actual disclosure in a sensitivity-training program for industrial managers. Hurley and Hurley (1969), in a very similar study with college students, also failed to find a positive relationship between the JSDQ and actual self-disclosure. At the conclusion of the sensitivity group, several subjects in the study noted that their original descriptions of themselves were "inauthentic."

Jourard (1971, p. 171), however, has noted that there is a clear difference in self-disclosure in dyads and self-disclosure in group settings, particularly those of an encounter or sensitivity-training nature. He argues rather cogently that self-report measures of self-disclosure are not intended to predict disclosure in such situations, and research on the relationship between JSDQ scores and behavior in encounter groups has little or no bearing on the validity of self-report measures in dyadic situations.

At present, the reported studies seem to indicate that the JSDQ has predictive validity in certain situations and does not in others. Unfortunately, no evidence exists to suggest how to differentiate between situations in which the JSDQ is predictive and those in

which it is not. The result is that one is forced to question the overall predictive validity of the JSDQ and the findings of the studies which rely upon it.

Methodological Problems in "Actual"

Disclosure Experimentation

The methodological problems with the myriad ways investigators have devised for evoking "actual" self-disclosing behavior, unfortunately, are at least as serious as are the problems with the validity of self-report measures. In the vast majority of the "actual"-disclosure studies there is an almost total disregard for the social environment, the person to whom the subjects are being asked to disclose, or both. One is almost forced to the conclusion that the investigators assumed that their subjects had no control over their self-disclosure--that, once asked to disclose, subjects would automatically do so at their "normal" levels. Martin Orne (1962) has noted that the underlying assumption in such experimental designs is that the experimental model employed in the physical sciences can be used in behavioral sciences with only minimal modifications.

There has been a tendency in the behavioral sciences to follow precisely a paradigm originated for the study of inanimate objects, i. e., one which proceeds by exposing the subject to various conditions and observing the differences in reaction of the subject under different conditions. However, the use of such a model with animal or human subjects leads to the problem that the subject of the experiment is assumed, at least implicitly, to be a passive responder to stimuli--an assumption difficult to justify. (Orne, 1962, p. 776; emphasis in original)

Orne argues that subjects must be seen as active participants in any experiment and that their behavior must be seen as a function of the totality of the situation.

I would suggest that a major element of the totality of the

experimental situation, in most of the actual-disclosure studies, is the classroom environment in which students are asked to reveal intimate aspects of their lives. While there has not been any response to this problem in terms of experimental design, several investigators have shown that the experimental environment is an important determinant of elicited self-disclosure (Chelune, 1975, 1976; Carpenter and Freese, 1979). Carpenter and Freese state:

The situation in which observed disclosure has been elicited may have differed in the extent to which subjects construed them as appropriate arenas for self-disclosure. Self-disclosure in a normatively appropriate context has been found to relate differently to level of adjustment than disclosure in a normatively inappropriate context. (Chaikin and Derlenga, 1974; Chaikin, et al., 1975; Cozby, 1972; Truax, Altman, and Wittmer, 1973) (Carpenter and Freese, 1979, p. 80)

THEORETICAL REFORMULATION OF THE PROBLEM

The methodological difficulties of accurately measuring self-disclosure, along with the milieu of conflicting studies attempting to relate self-disclosure to mental health, have led many investigators to argue that this line of research should be abandoned. (Cozby, 1973; Chelune, 1975) I would suggest that, while the identified problems are serious, their solution lies in a better understanding of self-disclosure, not in a narrowing of the area of study.

Both Jourard (1964) and Rogers (1961) have written eloquently about the importance of self-disclosure for the achievement of mental health or a "healthy personality" (Jourard, 1959). The genesis of the conflicting empirical results of attempts to relate self-disclosure to mental health is, I believe, a result of a basic misunderstanding or oversimplification of Jourard's and Rogers's theories. The hypothesis behind all attempts to validate (or invalidate) the theories is that healthier people will be more self-disclosing. The unstated assumption that must be added to this hypothesis is that healthier people will be more self-disclosing, regardless of the circumstances. Clearly, this is a statement with which neither Rogers nor Jourard would agree. Both, but especially Rogers (1961; Rogers and Stevens, 1967), identify self-disclosure as a behavior exhibited by the healthy person; however, one of the reasons why healthier people are generally more self-disclosing is that they tend to form relationships with others within which it is safe to be mutually self-disclosing.

It follows that valid attempts to relate self-disclosure to mental health must be more complex than simply giving two tests to subjects, or giving people a test and some type of disclosure task.

There is a small body of research which provides indirect empirical support for this position. As noted in the review of the literature, a number of authors have found that healthier people tend, more than less-healthy people, to vary the amount and depth of their disclosing depending upon the disclosing situation. Generally, the authors of the studies interpret such data as showing that self-disclosure per se is unrelated to mental health, but that the ability to vary one's disclosures is a function of one's mental health (e. g., Carpenter and Freese, 1979; Chelune, 1976; Chaikin et al., 1975). This position seems to be an overinterpretation of the data when considered in light of the reformulation presented above.

Thus, in any attempt to relate mental health to actual or observed self-disclosure (as opposed to self-reported self-disclosure), the investigators must be sensitive to the disclosure situation. If the basic hypothesis is--as in the present study--that healthier people will be more self-disclosing, then the disclosure situation must be as facilitative of self-disclosure as is practical given the limits and resources of the investigator.

Another issue in the measurement of self-disclosure must be addressed: the question of what constitutes actual disclosure. Jourard's definition--"my communication of my private world to you in language that you clearly understand" (Jourard, 1964, p. 5)--has been taken by many investigators to be sufficient. One question that arises is whether a factually accurate statement of a particularly painful event, when presented in a humorous manner, is true self-disclosure.

(Chelune, 1975) A somewhat similar question is raised by a person who communicates his/her feelings in a complaining manner, attributing blame for the existence of those feelings to others.

Finally, the question of risk-taking, or intimacy of the material being disclosed, must be addressed. For instance, is there a difference between being completely open and self-disclosing (to, e.g., a stranger) about one's feelings about an instructor of a course, and being similarly open in disclosing one's sexual problems?

A number of investigators (Jourard, 1958, 1971; Lombardo and Fantasia, 1976; Cosby, 1972) have made the intuitive assumption that there would be less disclosure on more-intimate topics. In two studies, lists of topics scaled for intimacy have been developed (Taylor and Altman, 1966; Worthy, Gary and Kahn, 1969); however, both studies used highly selected populations as judges. Goodstein and Reinecker (1974) argue that the intimacy value is a major factor in determining the content of self-disclosure and suggest use of the subjects' individual intimacy ratings to determine the intimacy value of their self-disclosure. Finally, massive amounts of clinical experience--to the point of establishing a truism--indicate that, as compared to less healthy persons, healthier individuals would self-disclose more on intimate topics, and that being open about intimate topics indicates greater intrapersonal or ego strength.

Both Jourard (1964) and Chelune (1975), in theoretical writings, argue that affective congruence is an important aspect of self-disclosure. Within the area of psychotherapy research, Rogers (1951; Walker, Rablen and Rogers, 1960) has empirically

and theoretically demonstrated that affective presentation of self-disclosure is a significant indicator of both psychological health and the process of becoming healthier.

GENERAL PREDICTIONS FOR THE CURRENT STUDY

The general prediction of the present study is that, given the optimal disclosing situation (as defined, in part, by previous research), healthier people will be able to be more disclosing--and therefore will be more self-disclosing--both in general, and specifically in more intimate topics, in a more-affective manner. Thus, in accordance with both Rogers's (1951, 1961) and Jourard's (1964) theories, healthier people will more often take the opportunity to be their "real selves" (Jourard, 1964, p. 5) and will be more willing and/or able to self-disclose to another.

(The specific experimental hypotheses are presented after the METHOD section.)

METHOD

Subjects

Twenty-three subjects (8 males and 15 females) were chosen from the 59 active subjects in the Michigan State University Competence Project (see below). The basis for this selection was the completion of all inventories both for the Competence Project and specifically related to this study. An additional requirement for selection was that each subject had six consecutive monthly interviews with the same interviewer.

Michigan State University Competence Project

The Michigan State University Competence Project is a large-scale longitudinal study of undergraduates at Michigan State University designed to identify, and study the functioning of, fully-functioning (Rogers, 1961) or self-actualized (Maslow, 1962) persons. The general design and specific stimulus for the study was provided by Maslow when he proposed

for discussion and eventually for research the use of selected good specimens (superior specimens) as biological assays for studying the best capability that the human species has. To give examples: I have discovered in exploratory investigations that self-actualizing people, that is psychologically healthy, psychologically "superior" people are better cognizers and perceivers. This may be true even at the sensory level itself; for example, it would not surprise me if they turned out to be more acute about differentiating fine hue differences, etc. An uncompleted experiment that I once organized may serve as a model for this

kind of "biological assay" experimentation. My plan had been to test the whole of each incoming freshman class at Brandeis University with the best techniques available at the time--psychiatric interview, projective tests, performance tests, etc. --and select the healthiest 2% of our population, a middle 2%, and the least healthy 2%. We planned to have these three groups take a battery of about 12 sensory, perceptive, and cognitive instruments, testing the previous clinical, personological finding that healthier people are better perceivers of reality. I predicted these findings would be supported. My plan then was to continue following these people not only through the four years of college where I could then correlate our initial test ratings with actual performance, achievement, and success in the various department of life in a university. I also thought that it would [be] possible to set up a longitudinal study carried out by a longitudinally organized research team that would exist beyond our lifetimes. The idea was to seek the ultimate validations of our notions of health by pursuing the whole group through their entire lifetimes. Some of the questions were obvious, for example, longevity, resistance to psychosomatic ailments, resistance to infection, etc. We also expected that this follow-up would reveal unpredictable characteristics as well. (Maslow, 1969, p. 725)

Briefly, each student in the incoming freshman class of 1978 at Michigan State University (approximately 6,000 students) was invited, via a letter outlining the study, to participate. From the volunteers, groups of Highly Competent, Normal, and Problem students were established. The students were not informed that such classifications would be made, but were simply told that "the greater the number of persons completing the tests the greater the possibility of obtaining the widest and most diverse sample of possible participants." (For a description of the method used to establish the groups, see below.) The general goals of the research were stated as follows:

During the study of the lives of these students we will be seeking the "ultimate validations of our notions of

health." More specifically, by comparing behaviors of "highly competent" students to those of students in the other two groups, we expect to obtain significant information that could be related to the development of future educational and therapeutic intervention efforts and programs. We hypothesize that the "highly competent" students solve problems and conflicts regarding school and personal life "efficiently" and more "skillfully" than "normals" and "problem students." (Stollak, Personal Communication, 1980)

Identification of Competence or Mental Health

A large pool of initial items were selected from a number of psychological inventories which cover a broad range of empirical and theoretical frameworks, encompassing psychodynamic, phenomenological, social learning theory as well as the more traditional trait-theoretic measures (Stollak, Personal Communication, 1980). A group of graduate and undergraduate psychology students were then asked to respond as they felt a "highly competent" person would be writing true or false for each item. The result was a 165 item instrument containing only those items that over 90% of the males and 90% of the females agreed upon. (See Appendix A for the instrument.) The responses from approximately 1700 students who completed the questionnaire provided the data for factor-analytic and clustering procedures which revealed six factors or aspects of competence. They were: Depression; Empathy; Confidence; Distractability; Need Approval; and Individualism. (See Appendix B for the specific items for each factor.) Students were each assigned to one of four groups, on the basis of their scores on the factors. The groups were: Highly Competent (scores above the 80th percentile on Empathy, Self-Confidence, and Individualism, and below the 30th percentile on Depression, Need Approval, and Distractability; Problem (percentile scores on each factor were opposite those of the Highly

Competent group); Normal (scores between the 40th and 60th percentile on all six factors; and a Randomly selected group from the remainder of the potential subjects. (Stollak, Personal Communication, 1981) For the purposes of this study, subjects were drawn from only the first three groups.

Intimacy Value of Interview Topics

As noted in the review of the literature, the intimacy value or "riskiness" of an area of discussion is an important aspect of self-disclosure and a crucial issue when attempting to relate self-disclosure to mental health or competence. In order to assess the intimacy value of each of the topics on which subjects were asked to disclose, the headings from the example sheet given to each subject during the first interview were combined with the three additional topics introduced by the interviewer and presented to each subject via mail as a Rating sheet. (See Appendix C.) Subjects were asked to rank each of the topics according to its intimacy or how personal it was for them. Intimacy was defined as being "a topic that you would likely (or perhaps only) discuss with a very close friend, lover or family member whom you typically discuss 'important' or 'meaningful' topics with." In addition, subjects were asked to "check the topics that you've had difficulty discussing with your interviewer and would not voluntarily discuss with either an acquaintance or a close friend."

The ratings for each topic (low = low intimacy value; high = high intimacy value) were summed across students and the mean and standard deviation were computed. Four topics, the two rated the lowest and the two highest, were chosen for the study. (See Table 1

TABLE 1

MEAN AND STANDARD DEVIATION OF INTIMACY RATING FOR EACH INTERVIEW TOPIC
 (Higher numbers signify topics judged more intimate by subjects;
 highest possible rating equals 14)

<u>Topic</u>	<u>\bar{X}</u>	<u>S.D.</u>
Dealing with campus red tape*	1.65	1.06
Study habits	4.55	2.54
Balance between studying and relaxation	3.65	1.82
Handling difficult course material	4.85	2.24
Relationships with instructors regarding academic matters	3.95	2.33
Selecting major and career	5.00	2.76
Relationships with hallmates	7.20	2.64
Relationship with roommate(s)	9.30	3.08
Relationship with opposite sex*	12.50	2.27
Relationship with parents*	10.34	2.29
Thought, affect and somatic concerns	9.65	3.64
Other negative experiences	8.30	3.30
Positive experiences	6.85	3.13
Other significant experiences	7.65	3.44

*Indicates topics sampled for present study

for means and standard deviations of Intimacy Ratings for each topic.)

The topics selected and their mean rating and standard deviation were: "Dealing with campus red tape," $x = 1.65$, $S.D. = 1.06$; (possible range was 1 to 14) "Balance between study and relaxation," $x = 3.65$, $S.D. = 1.82$; "Relationship with parents," $x = 10.34$, $S.D. = 2.29$; and "Relationships with the opposite sex," $x = 12.5$, $S.D. = 2.27$. The standard deviations of the four topics were judged to be sufficiently low to indicate general agreement among students about the relative intimacy of the topics. It was therefore decided to use the four topics for all subjects.

Procedure

Once prospective subjects were each assigned to one of the three groups (Highly Competent, Normal, or Problem), an interviewer was instructed to telephone them and solicit their participation. If a student agreed to participate, the interviewer set up a meeting to interview the student about his/her life at Michigan State University. At the interview, the student was given a list and examples of 11 possible problem areas: dealing with campus red tape; study habits; balance between studying and relaxation; handling difficult course material; relationships with instructors regarding academic matters; selecting major and career; relationships with hallmates; relationship with roommates; relationships with opposite sex; relationship with parents; and thought affect and somatic concerns. (See Appendix D for a copy of the list and examples.) After the 11 areas were covered, the interviewer asked about three other topics: other negative experiences; positive experiences; and other significant experiences in general.

The interviewers were either advanced undergraduate or graduate students. Each interview was conducted either as part of a research assistantship or for research credit. Training for interviewers was accomplished via a five-page written set of instructions. (See Appendix E.) In addition, the interviewers were verbally instructed to elicit information only by making general empathic comments. They were specifically instructed not to offer advice, ask specific questions, "push" the student to disclose more than s/he was readily willing to, or identify feelings.

The interviewers were supervised by a graduate student in Clinical Psychology who listened to portions of the tape-recorded interviews and, if problems with interviewing technique became apparent, met individually with the interviewer to correct his/her technique.

Setting

The interviewers were instructed to "schedule the interviews in a place which will be quiet and in which you will be undisturbed." Upon meeting the student they were instructed to "shake hands, smile and introduce yourself, using only your first name." The interviewer brought a tape recorder to the meeting and openly explained its usage: "Only your student number will be noted on the tape, and I'll be only using your first name during our discussion. All of this is to preserve confidentiality." They were also instructed to write down the digital-counter numbers at the beginning and end of the discussion of each topic, explaining that the number would allow the two of them to return to a specific area later.

Measurement of Self-Disclosure

In this study the amount and dimensions of self-disclosure was determined by the content analysis of the tape recorded monthly interviews. The segments of the tape analyzed were determined by the ratings of intimacy. Four topics were rated for each interview: the two rated most intimate and the two rated least intimate were analyzed in their entirety for each subject. These analyses were performed using the first and sixth interview for each subject.

The method of content analysis was a modification of the Self-Disclosure Coding System developed by Chelune (1976). (See Appendix F for Coder's Manual.) The system as modified by the author yields scores on the number of self-references (SRs) and of complaints (Cs) for each topic area. (See Table 2 for a list of the scoring categories used in the study.) In addition, the amount of time spent on each topic was recorded, allowing the computation of the percentage of time spent on complaints and self-disclosure (SRs) for each topic. An individual SR or C is defined as consisting of a single thought unit or sentence--i.e., a single statement that has meaning and by itself is descriptive of the person (SR) or places blame for a thought, feeling, or event on one or more others (C). (For more complete definitions of SR, C, and categories which follow, see Appendix F.) The SRs are further analyzed to sort them into positive self-references (SR+s), negative self-references (SR-s), and neutral self-references (SRos). SR+s are statements which are judged to be favorable to the person doing the disclosing based upon the rater's perception of whether the subject considered the statement to be a positive, or ego syntonic, description of himself/herself. SR-s are

TABLE 2

SCORING CATEGORIES USED IN CONTENT ANALYSIS*

<u>Category</u>	<u>Description</u>
SR	A verbal response which describes the subject in some way, tells something about the subject, or refers to some affect or feeling that the person experiences.
+, -, or o	Subscripts for SRs which are based upon the person's frame of reference, whether the subject considers the SR to be positive, negative or neutral in regard to him/herself.
Complaint	Statements which attribute blame or control to another person, institution or supernatural entity, e.g., God or fate.
Intimacy	The ego relevance or intimacy of the content revealed by an individual in each SR. "Ego relevance" should be interpreted to mean how personal or important a statement is to a person.
Congruence	The extent to which there is an appropriate affective charge attached to the disclosure of information . . . the matching between what the person is experiencing and the representation of this in his/her verbal behavior.

*For a more complete description, see Appendices F and G.

the exact opposite: an item is recorded as an SR- when the rater thinks the subject is describing a negative attribute or feeling about himself/herself. An item is judged to be an SRO when the rater feels that the statement has neither a positive nor a negative valence for the discloser.

Each SR is also rated for Intimacy (I) and Congruence of Affective Manner of Presentation.

Intimacy was rated along a five-point scale, with descriptions and examples given for the first, third and fifth point on the scale. Intimacy is defined by Chelune (1976) as the depth or ego relevance of the content revealed by the individual. The scale runs from "absence of personal involvement" to "response has a non-defensive quality so that one gets the impression that the person is allowing the subject aspects of himself to be seen."

Congruence of Affective Manner of Presentation is scored along a similar scale with the two end-points being "manner of presentation is very defensive and mechanistic" and "manner of presentation is open and the individual is clearly expressing feelings and inner experiences."

Chelune (1976) was able to demonstrate construct validity through the use of other measures and the replication of consistent findings--e.g., women disclose more than men--for the system. He was also able to demonstrate internal consistency ranging from .83 to .97 through the odd-even method.

Training of Raters and Inter-Rater Reliability

Raters were trained through the use of the Coding Manual (see Appendix F) and practiced on actual interview tapes involved in the

Competence Project, but not in the current study. Inter-rater reliability was established using Pearson Product-Moment Correlations. After two weeks of training and practice coding on non-experimental tapes, it was decided that the guidelines for scoring self-references (SRs) were overly broad and vague for the raters. A revision of the guidelines was given to the raters (see Appendix G) and an additional week of training and practice rating provided. Raters were then instructed to code independently three new non-experimental tapes. Correlations were computed for each scoring category among every possible pair of raters for each tape. Means and standard deviations of correlations for each category were computed and are presented in Table 3 with Chelune's (1976) reports of inter-rater reliability using this system. Because of the similarity of results, inter-rater reliability was judged satisfactory.

Two raters were then assigned to code each tape; such that each rater was paired with each other an approximately equal number of times. Reliability was spot-checked with the stipulation that each pair of raters was checked at least once so as to maintain the reported levels of inter-rater reliability. The checks revealed that each pair were within plus or minus .1 of the reported correlations for each category. For each tape, the scores of the two raters were averaged to provide the data used for statistical analysis.

Hypotheses

1. The Highly Competent (HC) group will have more Self-References (SRs) than the Normal (N) group, which will show more SRs than the Problem (P) group.
2. The same relationship will exist for SR%.

TABLE 3

COMPARISON OF INTER-RATER RELIABILITY FOR THE PRESENT STUDY
WITH CHELUNE'S (1976) STUDY

<u>Scoring Category</u>	<u>Present Study</u>	<u>Chelune's Study</u>
SR	.82	.85
C	.78	*
+	.792	.84
-	.811	.78
o	.745	.68
Intimacy	.845	.65
Congruence	.848	.63

*The category of Complaints was not used in Chelune's study.

3. HCs will have less of a difference between SR+ and SR- than either Ns or Ps.
4. Ps will have more Complaints (Cs) than the Ns which will show more Cs than HCs.
5. The same relationship will exist for C%.
6. HCs will have more SRs while discussing more intimate topics than either Ns or Ps.
7. The same relationship will exist for SR% in more intimate topics.
8. HCs will be rated higher in Affective Manner of Presentation (Af) than Ns which will be rated higher than Ps.
9. HCs will be rated higher in Intimacy (I) than Ns which will be rated higher than Ps.

Over Time

10. The number of SRs will increase for all groups; the increase will be greater for HCs than Ns, and greater for Ns than Ps.
11. HCs will increase SRs more in more intimate topics than in less intimate topics.
12. HCs will increase both AF and I ratings.
13. HCs increase in AF and I ratings will be greater than any increase of these categories for Ns or Ps.
14. HCs will increase their Af and I ratings to a greater extent while discussing more intimate topics than while discussing less intimate topics.

RESULTS

Overview

The averaged self-disclosure scores were analyzed using a subjects within groups by conditions design (Winer, 1962). Multiple

Linear Regression (Cohen and Cohen, 1975) analyses were used for hypothesis testing. This method of hypothesis testing was selected in order to detect departures from linearity. Although a curvilinear relationship between mental health and self-disclosure has been suggested by a number of investigators (Cosby, 1973; Chelune, 1980) to account for the disparate results in the literature, no significant curvilinear relationship was found in the present study.

The complete results are presented in Table 4. Five of the fourteen hypotheses were supported by results that either reached or approached significance. This section, therefore, will be limited to the detailed results of the above hypotheses.

Specific Hypotheses

Hypothesis One was partially confirmed. Competent students (C's) were more self-disclosing $x = 8.53^*$ than Normal students (N's), $x = 5.92$, who were more self-disclosing than Problem students (P's) $x = 4.48$. However, only the difference between C's and P's reached significance ($df = 1/20$, $F = 5.46$, $p = .03$).

Hypothesis Two was not confirmed. The average SR%, a measure designed to control for length of speaking time ($SR\% = \text{SRs per topic} / \text{speaking time in seconds per topic}$) did not differ between groups ($SR\% = .056$, $.054$, and $.056$ for C's, N's and P's, respectively). The unexpected lack of difference indicates that differences in the amount of self-disclosure between the groups can be completely accounted for by the average amount of time each group spent talking.

*Unless otherwise stated, all reported scores are per topic, averaged across subjects in each group.

TABLE 4
OVERALL RESULTS OF SCORING CATEGORIES BY GROUP

<u>Category</u>	<u>Competent</u>	<u>Normal</u>	<u>Problem</u>
Intimacy	2.47*	2.47	2.14*
Congruence	3.47	3.48	3.47
Means Per Segment			
SR	8.53*	5.92	4.48*
Intimate topic SR	6.23*	4.42	3.44*
SR%	.028	.027	.028
SR+ - SR-	.375	1.17*	-.297
Complaints	4.11	3.25	2.13
C%	.014	.013	.014

*p \leq .05

Hypothesis Three was not confirmed. P's said slightly more negative things about themselves ($SR_{pos} - SR_{neg} = -.297$), while C's disclosed slightly more positive items about themselves ($SR_{pos} - SR_{neg} = .357$). Unexpectedly, N's presented themselves in the most positive light ($SR_{pos} - SR_{neg} = 1.17$). The difference between N's and P's almost reached significance; $df = 1/20$, $F = 4.0396$, $p = .058$.

Hypothesis Four was not confirmed. The data, however, do show a trend opposite to the predicted direction with the average number of complaints being 4.11 for C's, 3.25 for N's and 2.12 for P's. The trend did not approach significance; $p > .1$ in all cases.

Hypothesis Five was not confirmed. C%, an analog of SR% ($C\% = \text{Complaints/time speaking}$), showed results similar to its counterpart. C% was .028, .026, and .028 for C's, N's, and P's, respectively.

Hypothesis Six was not confirmed. The data, however, show a strong trend in the predicted direction. On the two highly intimate topics C's were more self-disclosing ($X = 6.28$) than N's ($X = 4.14$) who were more disclosing than P's ($X = 3.45$). The difference between C's and P's approached significance; $df = 1/20$, $F = 3.21$, $p = .088$.

Hypothesis Nine was partially confirmed. While there was no difference in the average intimacy ratings of self-disclosures between C's and N's (average rating for each group was 2.47), the difference between each group and P's (average rating of 2.14) was significant ($df = 1/20$, $F = 4.56$, $p = .045$), indicating that the coders judged the problem group as disclosing less intimate information on all topics.

DISCUSSION

The present experiment was designed to explore the relationship between self-disclosure and mental health or competence, given an interview situation designed to encourage self-disclosure. Early research on self-disclosure utilizing self-report measures of questionable validity (Jourard, 1959a, 1959b, 1961) suggested a positive relationship between self-disclosure and mental health. These studies were criticized on methodological grounds. When subsequent research using actual self-disclosure measures failed to replicate these results, a number of authors (Cosby, 1973; Goodstein and Reinecker, 1974) argued for abandoning the line of study in favor of investigating the situational and interpersonal factors affecting self-disclosure. Considerable work has been done in this area. (See Chelune, 1980, for several reviews.)

This study is an attempt to integrate the two lines of research by the use of a validated measure of actual self-disclosure within a context encompassing many of the factors that have been shown to promote self-disclosure. In addition to the basic hypothesis of a positive relationship between competence and self-disclosure, it was predicted that the number of self-disclosures would increase over time and that the increase would be greater for Competent students than for Normal or Problem students. It was further hypothesized that the Competent students would, over time, increase the intimacy and congruence of their self-disclosures as well as taking more responsibility for their thoughts, feelings and actions.

These predictions were based upon Rogers' (1951, 1961) theories that healthier people would find self-disclosing inherently gratifying

and would use the interviews as an opportunity to explore and communicate their experience of the world.

Although only two of the twelve hypotheses were even partially confirmed while two others approached significance, the results of this study shed some light on the relationship between mental health and self-disclosure and suggest some important directions for further exploration. As hypothesized, Competents were more self-disclosing than Problem students. The trend of the data suggests that the small sample size account for the failure of the differences between Competents and Normals, and Normals and Problem students to reach significance.

There seem to be two basic reasons for the positive relationship found here between competence and self-disclosure while other studies have shown either no relationship or a negative relationship: the demand characteristics (Orne, 1962) of the disclosing situation; and the attempt to identify a "competent" or healthy group of subjects separate from a normal group. The issue of the demand characteristics of the disclosing situation was discussed in some detail in the introduction. Both Rogers (1961) and Jourard (1971) clearly posit that a major determinant of a healthy person's decision to self-disclose is the presence of an interested, concerned and accepting listener. In addition, Jourard (1971, pp. 17-19) cogently argues that in order to obtain valid information from subjects in any type of self-report experiment, i.e., where the researcher is dependent upon the subject for an honest report of the latter's experience, the researcher must be respectful and honest in return. These issues were taken into account in the design of the present study, both in terms of the

investigator's communications with the students as well as in the interviews. Students were solicited for the larger study which generated the interview data by an accurate written description of the tasks that would be asked of students. Each task clearly related to the stated purpose of studying college students' experiences at college. Each research instrument was mailed to each participant accompanied with a letter from the primary investigator (a professor at the University attended by the students) explaining the purpose of the instrument and reiterating the importance of the study and expressing his appreciation for the student's continuing participation. Sensitivity to and respect for the student were expressed by conducting the interviews at a time that was mutually acceptable to both participants and at a location of the student's choice. In addition, sensitivity was shown by a guarantee of and demonstration (by instructions and use of first name only on the tape) of confidentiality. A final component of this aspect of the experiment was the assignment of a single interviewer who conducted all the interviews with a particular student.

The second basic reason for the difference between this study and others was the separation of a competent or healthy group from a normal group. The concept that psychological health differs from psychological normalcy is basic to the thinking of a number of theorists, including Rogers and Jourard. The distinction would seem to be necessarily inherent in any attempt to test their theories of self-disclosure. This, however, was one of the very few studies in the literature that attempted to make such a distinction. Interestingly, each of these studies (Mayo, 1968; Halverson and Shore, 1969; Lombardo and Fantasia, 1976) resulted in a positive relationship between mental

health and self-disclosure. It is possible that Competents have had more mutually disclosing relationships and, having thus learned greater sensitivity to interpersonal cues, react differently than do Normals to different disclosing situations (Chaikin, et al., 1975; Chelune, 1975; Thelen and Brooks, 1976). A possible result is an interaction between competence or health and the demand characteristics of the disclosing situation which would result in competent subjects being the least disclosing in studies where little attention was given to the disclosing situation. This issue would seem to deserve further study as a possible explanation of the disparate results in the literature.

While the present study provides global support for Rogers' and Jourard's theories of the existence of a positive relationship between psychological health and self-disclosure, the results did not support several of their more specific ideas. Contrary to Rogers and Jourard's theoretical positions, and contrary to several hypotheses which were based upon their thinking, there was no change in the amount or nature of self-disclosures for any of the groups over the five interviews. For Rogers, self-disclosure is not only a method of achieving, and a sign of, mental health, it is also inherently gratifying--within a healthy relationship--for the fully-functioning person (Rogers, 1961). He postulates that as people get healthier their disclosures will move from rigidity and stasis of experience toward greater openness, congruence, willingness to experience and feelings orientation (Walker, Rablen and Rogers, 1960).

Jourard, while in general agreement with Rogers, places more emphasis on the interpersonal nature of disclosure. A person becomes

increasingly self-disclosing to another, he says, as the other self-discloses. He has termed this phenomenon the "dyadic effect" (Jourard, 1959) and it has received considerable empirical support (Jourard and Landsman, 1960; Levinger and Senn, 1967; Jourard and Resnick, 1970; Ehrlich and Graeven, 1971; Derlega, Harris and Chaikin, 1973; Cosby, 1973; Chaiken and Derlega, 1974).

While the concept of reciprocity is not relevant to the present study--interviewers were instructed not to self-disclose to interviewees--Rogers' predictions would still seem to apply. Central to Rogers' thinking about the amount and types of self-disclosure healthy people engage in is the concept of context. According to Rogers, a fully-functioning person will become increasingly disclosing and congruent about his or her experience in the context of a mutually sharing, ongoing relationship. In relationships where the amount of disclosing is not equal between participants, as in the present study and in psychotherapy, Rogers implies that the desire for and the expectation of some type of personal benefit must exist (Rogers, 1961, p. 67). This condition did not exist in this study: while subjects were told that the interviewer was interested in their thoughts and feelings, this was within the context of the stated purpose of the interviews--to find out what college life was like for them. It is quite possible that the impact of this statement is quite different from a message that the interviewer is interested in the student per se, as a result of personal regard and/or a desire to help the student. Such a distinction would explain the lack of change for Competent students (and, to a lesser extent, for all students) in amount and types of self-disclosure. In addition, it would explain the unexpected finding that differences in

the amount of time spent talking account completely for differences between groups in amount of self-disclosure.

A second, and non-conflicting, possible explanation for the lack of increases in self-disclosures over time is a potential ceiling effect. The present study sampled only four of the thirteen topics covered in each interview. With very few exceptions, the total interview time ranged from 50 to 90 minutes. It is quite conceivable (and understandable) that any given interviewer and/or interviewee was unwilling to continue beyond a certain, but unspecified point and subtly communicated this fact to the other. Such communication would discourage further disclosures, yet not provide the incentive to dispense with "small talk" (as is frequently the case in psychotherapy) because of the absence of overt time limits.

The presence of a ceiling effect for self-disclosure does not, however, account for the failure of the Competent group to be rated as being more congruent in their disclosures or the unexpected result that they had more complaints than Normals or Problem students.

The hypothesis that the competent group will be increasingly congruent and therefore self-exploratory in their self-disclosures over time is based upon Rogers' thinking. However, Competents were neither more congruent in general, nor over time, than the normal or problem groups. A possible explanation for the lack of difference is the students' perceived purpose of the interviews. If the purpose of the interview was perceived as being the transmitting of information about one's life, as opposed to sharing how one experiences life, healthy students, being more sensitive to interpersonal cues, would be expected to openly and honestly describe their life experiences

rather than engage in more personal self-exploration.

This distinction also explains the failure to find the hypothesized results within the complaint category. Complaints were defined as "statements which attribute blame or control to another person, institution or supernatural entity, e.g., God or fate." In accord with Rogers and Jourard, it was predicted that Problem students would have the most complaints and Competent students the least. While the differences failed to reach significance, the reverse was found. The hypothesis was based on Jourard's and Rogers' theories that Competents will be more willing and/or able to engage in self-exploration which entails taking "ownership" or responsibility for one's feelings and actions (Walker, Rablen and Rogers, 1960; Rogers, 1961; Jourard, 1971). However, if the disclosure situation was not seen as being appropriate for self-exploration, but as one appropriate solely for transmitting information, the quantity of complaints for each group may simply be a function of their overall tendency for self-disclosure per se. Any differences between groups of their propensity for self-exploration may not have been elicited within the context of the interviews.

Under this assumption, the finding that Competent students were more self-disclosing reflects the fact that they were willing to be more open and complete than students in either the Normal or Problem groups. This is supported both by the intimacy ratings of self-disclosures and the amount of self-disclosures on the intimate topics. While there was no difference between competent and Normal students in intimacy ratings, both groups' average self-disclosures were rated significantly more intimate than were those of the Problem group. In addition, there was a strong, but not significant, trend in the data

suggesting that on the more intimate topics, the Competent group was more disclosing than were Normals who, in turn, were more disclosing than the Problem group. The former measure, rated by the coders, was designed to assess the ego-relevance or relative importance of each self-disclosure to the person speaking. Compare, for example, the statements, "I like to date blondes" with "I don't think girls find me attractive or interesting." While both fall into the intimate topic of relationships with the opposite sex, the latter statement would be judged as being significantly more important to the person speaking than the former and would be rated as more intimate.

Taken together, the two measures suggest that Competent students were more open and complete in terms of reporting events, thoughts and feelings that they considered intimate or personal than either the Normal or Problem groups.

Although further interpretation must be considered very tentative, the theoretical consistency of the groupings of partially supported hypotheses and those receiving no support, seem to permit some speculation on the reasons for the present results. In a sense, the present experiment provides considerable support for the hypothesis of a positive relationship between competence and self-disclosure, given a context conducive to disclosing. However, the results do not support Rogers' (1961, pp. 344-345) assertion that this relationship is a result of Competent students' increased ability and desire to risk being increasingly congruent in disclosing their here and now experience. Without exception, the hypotheses predicting aspects of self-exploration (Competents increasing disclosures over time, having less complaints, showing more congruence, etc.) were not supported. Conversely, hypo-

theses suggesting that Competents were simply more willing to describe themselves in general (more self-disclosures overall) as well as revealing more personal aspects of their lives (higher average intimacy ratings) and be more open about topics generally considered private (more self-disclosures on intimate topics) were supported.

Thus the current finding of a positive relationship between competence and self-disclosure seem to simply be a result of the Competent students' greater willingness to be open about their lives. This conclusion is in accord with Rogers (1961) and Jourard's (1958, 1971) theories of the healthy personality or fully-functioning person. They argue that an integral--if not causative--aspect of psychological health is a person's acceptance of his or her thoughts, feelings and actions. The result of self-acceptance is an increased willingness and ability to be revealing to others (Horney, 1936; Rogers, 1951; Fromm, 1955; Mowrer, 1961; Jourard, 1971).

CONCLUSION

The finding that within a context designed to evoke self-disclosure the Competent group was most disclosing overall, as well as being both more intimate in their self-disclosures and more disclosing on intimate topics supports the hypothesis of a positive relationship between mental health and self-disclosure. In addition, the present study provides support for Jourard's and, to a lesser extent, Rogers' theories of self-disclosure. The support is partial for two reasons: 1) the failure of the differences in overall self-disclosures between the Competent and Normal as well as the Normal and Problem groups to reach significance; and 2) the lack of change over time in amounts of self-disclosure and, with the exception of rated intimacy, the lack of

differences between groups in the characteristics of their self-disclosures; both of which would have been predicted by Rogers.

The failure to reach significance seems attributable to the small sample size. Both for overall self-disclosure and for disclosures on the intimate topics the data show strong trends in the predicted directions with the differences between Competents/Normals and Normals/Problem being roughly equal. Regardless of the likelihood that the lack of significance of these differences is a result of sample size, the interpretation must be seen as very tentative. Further research utilizing Competent or healthy as well as Normal and Problem groups within a context designed to encourage self-disclosure is necessary.

The second group of difficulties is more interesting from a theoretical point of view. The hypotheses that Competent students would increase their number of self-disclosures, take more responsibility for their feelings and actions, i.e., have less complaints, show more congruence between the affect and content of their disclosures, and present more nearly equal numbers of positive and negative self-disclosures were based on Rogers' (1961) theories. For Rogers, an integral aspect of a healthy person is his or her ability to engage in increasingly accepting and honest self-exploration as well as communicating the experience of that process in an increasingly open and congruent manner.

The lack of support for the above hypotheses strongly suggests that this type of self-exploration did not occur in the interviews. While the possibility of a ceiling effect based on interview length could account for the lack of increase in overall self-disclosures,

it cannot account for the failure to find other indications of self-exploration. Other possible explanations lie within the area of methodology, i.e., the competent group was not healthy enough to engage in self-exploration and/or the coding system was not sufficiently sensitive to these variables. However, it seems more likely that competent students, in accord with the stated purpose of the interview, were choosing to describe their experiences at college rather than exploring the meaning of those experiences for themselves. The results of competent students being more disclosing overall, willing to be more intimate in their self-disclosures, and tending to speak more on the intimate topics lend support to this explanation.

Toward Further Research

One of the difficulties of doing research in an area that is well populated with contradictory results is explaining why the present study differs from those reporting opposite results. There were two basic differences between this study and those reporting either a negative or no relationship between self-disclosure and mental health: the use of a disclosing situation designed to evoke and encourage self-disclosure; and the isolation of a healthy or competent group as well as a normal and problem group. If, as has been asserted here, these are the crucial differences, we would expect to find an interaction between mental health and the disclosure situation. Thus, in a disclosing situation that is overtly or covertly undesirable and/or unsafe, we would predict that healthy people would be among the least disclosing.

A related, and completely unexplored issue, is the impact of the subjects' perception of the purpose of the disclosure task. In

retrospect, the present study erred, albeit to a lesser degree, in a similar aspect as many of the studies presented in the Literature Review. While the environmental and interpersonal aspects of the disclosing situation were attended to, the students' intra-personal context was not considered. It seems likely that the subjects' perceived purpose of the disclosing situation will, especially for competent students, have a significant impact upon the amount and characteristics of the resulting self-disclosures. The need for research in this area seems clear.

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APPENDICES

APPENDIX A

QUESTIONNAIRE USED FOR ASSIGNING SUBJECTS TO GROUPS

QUESTIONNAIRE USED FOR ASSIGNING SUBJECTS TO GROUPS

QUESTIONNAIRE INSTRUCTIONS

Please read these instructions before reading the items in the QUESTIONNAIRE BOOKLET.

The enclosed answer sheet goes with the QUESTIONNAIRE BOOKLET.

First, put your student number on the answer sheet by filling in, in pencil (do not use a pen), the appropriate numbers in the space on the answer sheet that is marked STUDENT NO. Please write your Name on the answer sheet.

The items in the booklet are of several different kinds. Some are sentences that present a point of view—here we are interested in how much you agree with or believe in the statement. Others describe some kind of behavior or activity—here we'd like to know how much of the time you act this way or are this way. Still others are just an adjective or a descriptive phrase—for these items, we'd like to know how well you think that word or phrase describes you.

There are five spaces on the answer sheet. We only want you to use the spaces labeled 1 through 4. In all cases, the number 1 will be used to indicate that you strongly agree or that the statement is very characteristic of you. The number 4 means strong disagreement or that the item is not at all characteristic of you. You will use the numbers in between to indicate moderate levels of agreement or disagreement. Now we will go specifically through what each number means.

- A. Completely fill in the space, in pencil, that has the number 1 in it next to the item number on the answer sheet that corresponds to the questionnaire item, if you think the word, phrase or sentence is very characteristic or descriptive of you, or is something you believe in or agree with very strongly, or is the way you are almost all the time. For example, if questionnaire item 19 was "Energetic," and you feel that you are energetic almost all the time, next to item number 19 on the answer sheet you would fill in the space which includes the number 1.

e.g., 19 ☒ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5

- B. Completely fill in the space, in pencil, that has the number 2 in it if you think the word, phrase or sentence is somewhat characteristic or descriptive of you, or is something you believe in or agree with but not very strongly, or is the way you are sometimes. For example, if questionnaire item 19 was "Energetic," and you feel that you are energetic sometimes, next to item 19 on the answer sheet you would fill in the space which includes the number 2.

e.g., 19 ☐ 1 ☒ 2 ☐ 3 ☐ 4 ☐ 5

- C. Completely fill in the space, in pencil, that has the number 3 in it if you think the word, phrase or sentence is only rarely characteristic or descriptive of you, or is something you somewhat disagree with, or is a way you almost never are. For example, if questionnaire item 19 was "Energetic," and you feel that you are almost never energetic, next to item 19 on the answer sheet you would fill in the

space which includes the number 3.

e.g., 19 12345

- D. Completely fill in the space, in pencil, that has the number 4 in it if you think the word, phrase or sentence is never characteristic or not at all descriptive of you, or is something you strongly disagree with or do not at all believe in, or is a way you never are. For example, if questionnaire item 19 was "Energetic," and you feel that you are never energetic, next to item 19 on the answer sheet you would fill in the space which includes the number 4.

e.g., 19 12345

The number 5 should not be filled in at any time.

If necessary, refer to these instructions periodically to be clear which number you should be filling in.

Please remember that you must fill out the answer sheet with a pencil. If you need to erase a mark, erase the mark as completely as possible and make sure your new pencil mark completely fills in the space of the new number.

Please mail these QUESTIONNAIRE INSTRUCTIONS, the QUESTIONNAIRE BOOKLET, the INFORMATION SHEET, and the completed answer sheet to us in the enclosed addressed envelope. Again, mail the envelope to us through CAMPUS MAIL.

Thank you for your cooperation and interest.

QUESTIONNAIRE BOOKLET

1. Humorous
2. Being lazy
3. Distracts everybody
4. Compassionate
5. Curious
6. Loyal
7. Sensitive to the needs of others
8. Reliable
9. Able to take care of self
10. Sincere
11. Self-respecting
12. Self-confident
13. Thoughts of suicide
14. Self-reliant and assertive
15. Feeling inferior
16. Very anxious to be approved of
17. Artistic
18. Understanding
19. Independent
20. Spineless
21. Forgetting things
22. Feeling tired much of the time
23. Good leader
24. Likes responsibility
25. Having feelings of extreme loneliness
26. Kind and reassuring
27. Timid
28. Helpful
29. Cautious
30. Being careless
31. Unable to concentrate well
32. Failing in so many things I try to do
33. Easily distracted from my work
34. Poor memory
35. Getting into serious trouble

36. Losing my temper
37. Being too easily embarrassed
38. Having no one to tell my troubles to
39. Home life unhappy
40. Too easily influenced by friends
41. Talkative
42. Warm
43. Having bad luck
44. Feelings too easily hurt
45. Being left out of things
46. Considerate
47. Able to criticize self
48. Restless
49. Adaptable
50. Can be frank and honest
51. Absent-minded
52. Straightforward and direct
53. Can complain if necessary
54. Self-punishing
55. Cruel and unkind
56. Able to doubt others
57. Thinks only of self
58. Cold and unfeeling
59. Defends own beliefs
60. Truthful
61. Sometimes wishing I'd never been born
62. Sophisticated
63. Inefficient
64. Lacking self-control
65. Lacking self-confidence
66. Sometimes bothered by thoughts of insanity
67. Touchy and easily hurt
68. Conscientious
69. Unhappy too much of the time
70. Individualistic
71. Organized
72. Self-reliant

73. Too easily discouraged.
74. Willing to take a stand.
75. Feeling that no one understands me.
76. Respected by others.
77. I like to gossip at times.
78. I do not have an especially vivid imagination.
79. I never resent being asked to return a favor.
80. I don't seem to care what happens to me.
81. There have been times when I felt like rebelling against people in authority even though I knew they were right.
82. I am not afraid to be myself.
83. On the whole, I am satisfied with myself.
84. I have never felt that I was punished without cause.
85. I am often said to be hotheaded.
86. I am able to risk being myself.
87. No matter who I'm talking to, I'm always a good listener.
88. In most situations, I usually agree with the opinions of the group.
89. I am not an energetic person.
90. On occasion I have had doubts about my ability to succeed in life.
91. I have trouble working when someone is watching me.
92. I expect to succeed in things I do.
93. I have never deliberately said something that hurt someone's feelings.
94. It causes me a great deal of worry if I think that someone doesn't approve of me.
95. I feel like what happens in my life is mostly determined by powerful people.
96. Occasionally I feel so nervous that I begin to get all choked up.
97. I have a reputation for perseverance and hard work.
98. In order to help someone with a problem, I try to see the situation from their point of view.
99. I can remember "playing sick" to get out of something.
100. Sometimes I feel that I am about to go to pieces.
101. I'm always willing to admit it when I make a mistake.
102. I am quite confident when learning a new game or sport.
103. I wake up fresh and rested most mornings.
104. There have been occasions when I took advantage of someone.
105. My moral values are self-determined.
106. I would have pretty much the same personality that I have now if I had lived in another century.

107. When I get what I want, its usually because I'm lucky.
108. I have never been irked when people expressed ideas very different from my own.
109. I feel that I'm a person of worth, at least on an equal basis with others.
110. Sometimes I feel tempted to do something simply because I know others have failed at it.
111. I sometimes think when people have a misfortune they only got what they deserved.
112. I find that I can often predict a person's behavior by thinking of what I would do in a given situation.
113. I would never make a long trip without checking the safety of my car.
114. My opinion of myself changes from time to time.
115. I sometimes try to get even, rather than forgive and forget.
116. I like men and women who show masculinity as well as femininity.
117. I wish I could feel what it is like to be hypnotized.
118. I like to experiment with various ways of doing the same thing.
119. I work hard at a job.
120. I sometimes feel resentful when I don't get my way.
121. I like to accomplish tasks that others recognize as requiring skill and effort.
122. Almost everyday something happens to frighten me.
123. It often seems that my life has no meaning.
124. When I don't know something, I don't at all mind admitting it.
125. Most people inwardly dislike putting themselves out to help other people.
126. It is sometimes hard for me to go on with my work if I am not encouraged.
127. I have never intensely disliked anyone.
128. I practically never did any more school work than that which teachers assigned.
129. As life goes on, I continue to know more and more about my feelings.
130. On a few occasions, I have given up doing something because I thought too little of my ability.
131. I try to do my very best on work that I do.
132. There have been times when I was quite jealous of the good fortune of others.
133. Before making a decision, I often worry whether others will approve of it.
134. I take a positive attitude toward myself.
135. I am very concerned about my popularity.
136. When I make plans I am almost certain to make them work.
137. I am not afraid to be tender.
138. I get tired more easily than other people seem to.

139. I am always careful about my manner of dress.
140. If I could get into a movie without paying for it and be sure I was not seen, I would probably do it.
141. A person's social class makes no difference to me.
142. My table manners at home are as good as when I eat out in a restaurant.
143. I feel free to express both warm and hostile feelings to my friends.
144. I am always courteous, even to people who are disagreeable.
145. It's chiefly a matter of fate whether or not I have a few friends or many friends.
146. At times I have really insisted on having things my own way.
147. All in all, I am inclined to feel that I am a failure.
148. There have been occasions when I felt like smashing things.
149. I'm always trying to figure myself out.
150. I feel I do not have much to be proud of.
151. I have had moments of intense happiness when I felt I was experiencing a kind of ecstasy or bliss.
152. I always try to practice what I preach.
153. I wish I could live overseas for sometime.
154. I would never think of letting someone else be punished for my wrong doings.
155. Men and women must be yielding and assertive.
156. I don't find it particularly difficult to get along with loud mouthed, obnoxious people.
157. I don't think I'd like to live in the same place more than about three years.
158. When I get what I want it's usually because I work hard for it.
159. I welcome criticism as an opportunity for growth.
160. I have almost never felt the urge to tell someone off.
161. I am sometimes irritated by people who ask favors of me.
162. I never hesitate to go out of my way to help someone in trouble.
163. I like to be able to say that I have done a difficult job well.
164. I wish I could have more respect for myself.
165. Before voting I would thoroughly investigate the qualifications of all the candidates.

APPENDIX B

ITEM MAKE-UP OF EACH FACTOR

ITEM MAKE-UP OF EACH FACTOR

DEPRESSION

Thoughts of suicide
Feeling of extreme loneliness
Having no one to tell my troubles to
Sometimes wishing I'd never been born
Sometimes bothered by thoughts of insanity
Unhappy too much of the time
Feeling that no one understands me
I don't seem to care what happens to me
Sometimes I feel that I am about to go to pieces
It often seems that my life has no meaning
All in all, I'm inclined to feel that I'm a failure
I feel I do not have much to be proud of
I wish I could have more respect for myself
I take a positive attitude toward myself (negative endorsement)
On the whole, I'm satisfied with myself (negative endorsement)

EMPATHY

Compassionate
Sensitive to the needs of others
Sincere
Understanding
Kind and reassuring
Helpful
Warm
Considerate
Cold and unfeeling (negative endorsement)

CONFIDENCE

Able to take care of self
Self-confident
Self-reliant and assertive
Independent
Likes responsibility
Self-reliant
I expect to succeed in things I do
I have a reputation for perseverance and hard work
I work hard at a job
I like to be able to say that I have done a difficult job well

DISTRACTABILITY

Being lazy
 Being careless
 Unable to concentrate well
 Easily distracted from my work
 Poor memory
 Inefficient

NEED APPROVAL

Feeling inferior
 Very anxious to be approved of
 Being too easily embarrassed
 Feelings too easily hurt
 Lacking self-confidence
 Touchy and easily hurt
 It causes me a great deal of worry if I'm not approved of

INDIVIDUALISM

Can be frank and honest
 Straightforward and direct
 Can complain if necessary
 Defends own beliefs
 Individualistic
 Willing to take a stand
 I am able to risk being myself
 In most situations I agree with the opinions of the group (negative endorsement)
 Before making a decision, I often worry whether others will approve of it
 (negative endorsement).

APPENDIX C

RATING SHEET FOR DETERMINATION OF INTIMACY VALUE OF TOPICS

RATING SHEET FOR DETERMINATION OF INTIMACY VALUE OF TOPICS

RATING SCALE

The purpose of this scale is to determine how you feel about the topics you have been discussing with your interviewer. More specifically, we want to know how personal or intimate each of the topics is for you. Please rank order each of the 14 topics listed on the next page by writing a number from one to fourteen which would indicate how likely you would be to discuss this topic with an acquaintance 1, the next most likely, 2 and so on to 14 which would indicate the topic you would be least likely to discuss with an acquaintance.

By "acquaintance" we mean a person whom you see only from time to time and do not feel very close to.

By "personal" or "intimate" we mean a topic that you would likely (or perhaps only) discuss with a very close friend, lover or family member whom you typically discuss "important" and "meaningful" topics with. On the second column please check the topics that you've had difficulty discussing with your interviewer and would not voluntarily discuss with either an acquaintance or a close friend.

DATA SHEET

Student Number _____

Date _____

POSSIBLE PROBLEM AREAS	Rank order of intimacy (1-Not int- mate; 14- Very intimate)	Difficulty discussing (✓)
1. Dealing With Campus Red Tape	_____	_____
2. Study Habits	_____	_____
3. Balance Between Studying and Relaxation	_____	_____
4. Handling Difficult Course Material	_____	_____
5. Relationships With Instructors Regarding Academic Matters	_____	_____
6. Selecting Major and Career	_____	_____
7. Relationships with Hallmates	_____	_____
8. Relationship With Roommate(s)	_____	_____
9. Relationship With Opposite Sex	_____	_____
10. Relationship With Parents	_____	_____
11. Thought, Affect and Somatic Concerns	_____	_____
12. Other Negative Experiences	_____	_____
13. Positive Experiences	_____	_____
14. Other Significant Experiences	_____	_____

APPENDIX D

INTERVIEW TOPICS PRESENTED TO SUBJECTS AT EACH INTERVIEW^a

INTERVIEW TOPICS PRESENTED TO SUBJECTS AT EACH INTERVIEW

1. Dealing with Campus Red Tape. Examples: coping with problems of registering and finding a faculty advisor; obtaining required reading material when the library doesn't have the books on hand; coping with the administrative run-around you may experience with different offices on campus.
2. Study Habits. Examples: coping with the task of studying adequately before an exam; ignoring distracting thoughts or activities around you; having adequate course notes.
3. Balance Between Studying and Relaxation. Examples: coping with the task of keeping up with studies and also having time to relax, attend social events, etc.
4. Handling Difficult Course Material. Examples: coping with a test which is too advanced; an instructor who assumes you have already had some previous knowledge in the field; trying to get an idea for a paper on an overly-complex topic.
5. Relationships With Instructors Regarding Academic Matters. Examples: coping with instructors who are poor speakers; who give ambiguous assignments and/or quizzes on unassigned material; who grade inconsistently; or who frequently cancel scheduled classes.
6. Selecting Major and Career. Examples: coping with uncertainty surrounding choice of major, and subject matter which really interests you most, as well as questions of what career you wish to pursue.
7. Relationships with Hallmates. Examples: coping with hallmates who interrupt your studying or who are too noisy.
8. Relationship with Roommates. Examples: coping with a roommate who goes to bed early and won't let you study in the room; who refuses to keep the windows open (or closed) the way you like them; who talks with his/her friends in the room when you want to study; or who refuses to keep the room clean.
9. Relationships with Opposite Sex. Examples: coping with situations where you must carry on a conversation with a member of the opposite sex, or socialize at a party; getting a date with a person who may show some reluctance to go out with you, etc.
10. Relationship with Parents. Examples: coping with parents who nag you to study more, to go to bed earlier, to come home more often, or who insist that you must meet family obligations when you have other plans.
11. Thought, Affect and Somatic Concerns. Examples: coping with obsessive thoughts; fears; mood swings; body aches and pains; drug, alcohol or tobacco abuse; nightmares; frightening day dreams; loneliness.

APPENDIX E

INSTRUCTIONS TO INTERVIEWER

INSTRUCTIONS TO INTERVIEWER

1. Telephone call to prospective interviewee:

"Hello _____. My name is (first name only). During late September or early October you completed a questionnaire and information sheet and returned them to Dr. Gary Stollak of the Psychology Department. From the 1,500 persons who completed and returned the questionnaire, Drs. Stollak, Thompson, Hurley and Donelson have chosen a small group of persons whom we are hoping would like to help us, over the next four years, to learn more about life at MSU. You are one of the persons we would like to help us. Are you still interested in helping us?"

If No: "Thank you for completing the questionnaire. If you have any questions, call Dr. Stollak at 353-8877."

If Yes: "I would like to schedule an hour-and-a-half meeting with you as soon as possible for an interview concerning your life at MSU." Schedule the meeting in a place which will be quiet and in which you will be undisturbed.

2. Call Chet Mirman at 332-8722 or Gary Stollak at 353-8877 or 351-4791 to arrange picking up cassette tape recorder and cassette tape.

3. At interview: Shake hands, smile and introduce yourself. Use only your first name. Hand interviewee sheet of paper listing the eleven potential problem areas. Say: "We will be talking about several things during this interview. First, we would like to find out what kind of problems you've had since coming to Michigan State and this list will help us. We'll be talking about other things, too, after we've talked about possible problems you've had in these areas. I'm going to turn on this tape recorder to record our conversation." Turn on machine. "Only your student number will

be noted on the tape, and I'll be only using your first name during our discussion. All of this is to preserve confidentiality. I'll also be writing down the digital counter numbers at the beginning and end of the discussion of each possible problem area so that if we wish, we can go back to a specific area later. Do you have any questions?"

Refer them to Dr. Stoallak for answers to those questions you can't answer.

Make sure you fill in student number, interview number and date at the top of the Data Sheet. Write in the digital counter numbers on the cassette recorder next to 1. Dealing With Campus Red Tape.

"Let's talk about area 1. Since coming to MSU in September, did you have any problems in dealing with campus red tape? As you can see, we have listed some examples of possible problems. What specific kinds of problems did you have?" Discuss any problems the interviewee had. Again, we need details of the problem(s) or conflict(s) the person had, including, if remembered, specific dates, times, places, what might have led up to the problem, what happened exactly, what each person said and felt in the encounter, what happened immediately after the problem, and what the person thought and felt a day or two or a week after the problem was encountered. In brief, we want to know the thoughts, feelings, social and even somatic responses to the problems the person encountered in this (and each subsequent) problem area since coming to MSU, what strategies were employed to handle the problem, whether the person thought the strategies were effective or ineffective, why they were effective or ineffective, and what the person felt about the problem after some period of time. Of primary interest is the details and specific behaviors of all those involved in a problem or conflict in each of the areas.

If the interviewee had no problem "dealing with campus red tape" or after discussing several and then being unable to remember any other problems in this area, list the digital counter numbers on the Data Sheet under "Digital counter number at end of discussion" next to Dealing With Campus Red Tape. Then list digital counter numbers under "Digital counter number at beginning of discussion," next to Study Habits.

Say: "Now let's turn to Study Habits. What kinds of problems did you have concerning study habits since coming to MSU (or this past month)?" Discuss problems, if any. If the interviewee had no problems regarding "Study Habits" or after discussing several and then being unable to remember any other problems in this area, list the digital counter numbers on the Data Sheet under "Digital counter number at end of discussion" next to Study Habits. Then list the digital counter numbers under "Digital counter number at beginning of discussion" next to Balance Between Studying and Relaxation.

Say: "Now let's turn to Balance Between Studying and Relaxation. What kinds of problems did you have in this area since coming to MSU (or this past month)?" Discuss problems, if any.

Proceed as above through all eleven possible problem areas. List the digital counter numbers in the appropriate places and then at the conclusion of the discussion of the last possible problem area, ask, "Was there anything else since you came to MSU (or this past month) that made you sad, or unhappy, or anxious, or frightened, or guilty, or ashamed, or frustrated?" List the digital counter numbers in appropriate places.

After this discussion, the interviewer should state: "Let's turn now to your positive experiences since coming to MSU (or within this past month).

What happened since coming to MSU (or within this past month) that led you to feel happiness, or contentment, or have a feeling of excitement, of accomplishment, of competence, of pride, of achievement?" List the digital counter numbers in appropriate places. In brief, as opposed to a description of behaviors in problem situations, we are interested in the person describing what happened since coming to MSU (or the past month) that brought a great deal of joy and positive feelings in their lives. The discussion of the positive experiences should occur only after discussion of possible problems.

At the conclusion of this discussion: "Were there any other experiences you had since coming to MSU (or this past month), e.g., books you read or movies you saw, or something you saw happen to someone else, that have been significant, memorable and important to you?"

After this discussion: "Is there anything else you would like to share?"

After this discussion: "Do you have any questions?" Again, refer the interviewee to Dr. Stollak for answers to questions you cannot answer."

Say: "I'd like to schedule another interview in a month to talk about your experiences from now until then. What might be a good day and time for you?" Schedule meeting. Give interviewee a card with your first name, telephone number and day, time and place of next meeting.

Say: "I'll call you 2-3 days before our next meeting to remind you of it. Thank you again for sharing your life with us."

Questions to stimulate further comments during the interview might include "Tell me more." "What else happened?" "What happened next?" "What did you feel?" "What did the other (or others) feel or do?"

4. At end of interview: Make sure the student number, interview number and date are on both the tape itself and on the Data Sheet (use pencil). Return all material to Dr. Stollak's office, 129 Snyder Hall, or leave it with a secretary in the Psychology Department Main Office, 135 Snyder Hall, AS SOON AS POSSIBLE.

Thank you for your help.

APPENDIX F

THE SELF-DISCLOSURE CODING MANUAL

THE SELF-DISCLOSURE CODING MANUAL

You will be rating six (6) sections of each tape. The sections to be rated on each tape will be indicated by the numbers on the digital counter on the taperecorder. For example, if the numbers for one tape are: 5-17; 26-48; 92-107; 142-160 235-301; and 378-422, you would insert the tape into the recorder and push fast forward until the counter read five. You would then rate until the counter read 17 and press fast forward until the counter read 26. You would then code until the counter read 48 and press fast forward until the counter read 92. You are to continue in this fashion until the last section has been coded. You will find that the counter numbers do not always exactly mark the beginning or end of a section. If this happens, either start rating before the start number, continue rating until the end of the section or both, depending upon what is necessary.

Coding the tapes accurately is quite difficult any you will have to listen to each section at least twice and sometimes more than that. It will be easiest if you first listen to the section in order to score either SRs (including SR+, SR- and SRO) or Cs. Then you are ready to listen to the section again to determine Intimacy and Affective Congruence scores. If you are not sure of the correct rating feel free to listen to the tape again. Please continue until you have scored all the SRs and Cs for each section and have rated each SR for Intimacy and Affective Congruence.

Because this is difficult, we will take as much time as you need to practice on tapes that are not part of the experiment. All raters have questions when they are starting to use a new coding system. Please don't feel afraid to ask whatever questions you have.

It is quite likely that a question you have that sounds dumb to you will be something that other raters are unsure of as well. In addition, it is important that you fully understand the scoring sheet before you start. If you have questions, please ask.

Finally, it is important to remember that all tapes are confidential. You are not to discuss the contents of the practice or experimental tapes with either raters or your friends.

At this point we will get into the specific scoring categories. Complaints (C) and Self-Reference (SR) statements will be described first. We will then get to the question of how to tell how many Cs or SRs there are in a section. The basic unit that can be scored either a SR or C will be called a "thought unit". It will be fully explained after the section on Complaints. For now it may be helpful to think of a thought unit as any statement or sentence that expresses a complete idea.

Self-Reference (SR)

Not all information communicated by an individual belongs to the class of verbal behavior referred to as self-disclosure. True self-disclosure describes some personal aspect of the speaker. Thus, the amount of self-disclosure in a section will be scored in terms of the number of thought units which describe the speaker in some way. These thought units will be referred to as self-references (SR) and will be the basic index of the amount of self-disclosure. A self-reference (SR) will be operationally defined as a verbal response which describes the subject in some way, tells something about the subject, or refers to some affect or feeling that the subject experiences.

Examples of SRs

1. I've done well in school thus far.
2. I really enjoy hiking and camping
3. Living alone depresses me.

Special Note on SRs

Statements beginning with "I think..." or "I know..." must be judged carefully. Coders must evaluate whether the individual is expressing something about his/her self or about someone or something else.

Score only those expressions which describe the speaker.

1. I know the economy is in bad shape. (NOT scored as SR)
2. I don't think the reasons that they criticize are substantial"
(NOT scored as SR)
3. I started thinking that maybe it was my fault. (SCORE as SR)
4. I know what my strengths are. (SCORE as SR)

Reflexive third person references are scored as SRs. A reflexive third person statement occurs when the person says "you" when s/he clearly is referring to him/herself.

1. You (I) tell yourself (myself) that..." (SCORE as SR)
2. You (I) really feel good when..." (SCORE as SR)

SR: Positive (SR+), Negative (SR-), and Neutral (SRo)

A self-reference (SR) may be judged to be positive, SR+ (favorable); negative, SR- (unfavorable); or neutral, SRo (neither if no determination can be made between SR+ and SR-). These judgements will be based upon the subject's frame of reference, that is, whether or not the subject considers the reference to be positive or negative of him or her self.

For each section the total number of self-reference thought units will be recorded. These will then be broken into the sub-categories SR+, SR- and SRO according to their judged valence.

1. Little things make me happy. (Score SR+)
2. It depresses me to live alone. (Score SR-)
3. I'm pretty religious. (Score SRO)

Complaints (C)

One of the categories of information communicated by a person that is not self-disclosure (and, therefore not a Self-Reference) is complaints. Not all statements that a person may make describing his or her experiences are SRs. Statements which attribute blame or control to another person, institution or supernatural entity, e.g., God or fate, are Complaints and should be scored C. These will be statements where the person seems to be expressing some feeling but does not "own" the feeling or name it as something which the person felt. Thus, a complaint (C) should be scored for each thought unit in which the person attributes blame or fault to something other than themselves and does not identify or own the feeling being expressed.

1. That test was too hard.
2. How can anybody expect students to have a good time at this university?
3. My parents don't know what it's like to be in college- that's why I'm always broke.
4. If I had a better roommate I would have passed the test.

Special Note on Cs

C should be scored only if there is no SR in the same thought unit.

Thought units or statements which contain a Complaint and a Self-Reference should be scored SR.

1. Although it was his fault, I still felt bad. (Score SR)
2. This stupid school makes me mad. (Score SR)
3. How was I supposed to know? (Score C)
4. I went home and my parents treated me like a kid again-I hate that. (Score C and SR)
5. I get angry at my careless roommates. (Score SR)

Thought Units

Perhaps the most difficult aspect of coding the tapes is identifying the number of thought units in a section. A thought unit is any single statement that can be scored as either a SR or a C. Each thought unit is an independent clause or simple sentence that expresses a complete idea and is understandable by itself. Because you are coding tape recorded speech and not written statements, it will be difficult to separate and identify individual thought units that can be scored C or SR. With experience, however, it will become easier. It is important to remember that a thought unit is not the same as a sentence: many sentences contain more than one independent clause and therefore contain more than one thought unit.

Simple Sentences are Always Scored as One Unit

1. I am afraid of heights. (1 unit, SR)
2. I was mad. (1 unit, SR)
3. They don't know what they're doing. (1 unit, C)

Special Notes on Thought Units

Independent clauses may be joined by coordinating conjunctions (and, but, nor, or, for) or by conjunctive adverbs (accordingly, also, besides, consequently, hence, however, moreover, nonetheless, then, otherwise, therefore, thus, still) and each clause should be scored as a thought unit.

Occasionally words may be missing or implied in a subject's statements. A thought unit is scored when the subject of an independent clause is implied and conveys a thought different from the preceding clause. A common example is when the subject of the clause is implied by the preceding sentence or sentences.

e.g., "I don't worry if I make a mistake/ but (I) just try to do better the next time." (Score 2)

The subject of the second clause, "I" is missing but, if present, would convey an independent thought different from the first.

e.g., "I try to be understanding/ and don't tease people very often." (score 2)

"I" is implied in the second clause and conveys a different thought from the first.

e.g., "When I'm depressed I don't show people the full extent and mope around." (Score 1)

"...And mope around" is a continuation of the first thought and is therefore not scored as a thought unit.

Example Paragraph (Thought Units are underlined and scored either SR or C at the end of each unit.)

I guess I'm doing OK in that area. (SR) I mean, you know things could be better (C), but I'm not lonely too much of the time (SR) and that's pretty good considering how isolating and impersonal this school is. (SR) I guess I would like to find somebody to have a really close relationship with (SR), but I don't know. It's fun, you know, just being able to fool around with lots of people (SR) and besides, I need a lot of time to concentrate on my schoolwork. (SR) You know, all things considered I guess I'm about average in that area, (SR) probably it's my parents' fault that I'm not better looking, (C) but I'm also pretty shy most of the time (SR) and that's something that I would like to change about myself. (SR) I mean who knows maybe I'll get lucky and meet Ms. Right tomorrow (C) and that would make my life here really terrific. (SR)

Intimacy (I)

The depth or intimacy of each SR will be scored on a five-point scale. This coding procedure involves the subjective evaluation of the ego relevance or intimacy of the content revealed by an individual in each SR. For the purposes of this study "ego relevance" should be interpreted to mean how personal or important a statement is to a person. The following rating scale is a continuum from 1 to 5. The coder should feel free to use any number from 1 to 5 using the following three scale descriptions as guidelines:

1. Absence of personal involvement; superficial evaluation of the topic.

The respondent seems to be defensively guarding against having anything about him/herself known. His/her statements are cultural stereotypes, and s/he seems not to be "in touch" with his/her feelings.

e.g., "Aspects of the personality which you dislike or regard as a handicap? Well ... I don't know if I really consider the personality as something to worry about. (Score 1) You know, if there's an aspect of my personality that I would worry about then I would get up-tight about it." (score 1)

2. (SRs that are between 1 and 3.)

3. Equal attention to superficial and personal aspects of the topic.

The person clearly places him/herself in the context of his/her experiences, but information about the self is more oriented toward description rather than exploration or sharing of self. The individual speaks to the question in a direct manner, yet his/her answers seem vague and general with respect to him/herself so that one gets no real feeling about him/her. Content tends to be implicit rather than explicit.

e.g., Sometimes no response at all will hurt my feelings. (Score 3)
 Sometimes rudeness and inconsideration will hurt my feelings. (Score 3) In fact, most of the time ... if I'm with people, that's when my feelings get hurt (Score 3) ...when they don't consider how I feel. (Score 3) Depressed? I don't get depressed too often. (Score 3)

4. (SRs that fall between 3 and 5.)

5. The response has a non-defensive quality so that one gets the impression that this person is allowing the subjective aspects of his/her self to be seen. The individual expresses personal information about him/

herself in a way that the observer truly understands where the person stands in terms of his/her feelings and cognitions or thoughts regarding the topic. Content is explicit and personal.

e.g., I started feeling responsible (Score 5) because it seemed like nobody I'd known died, (Score 5) and then, as soon as my father died, everybody else started dying. (Score 5) I started feeling like a jinx for a while. (Score 5) You know, like maybe it was my fault but I couldn't have done anything about it. (Score 5)

Note: Intimacy (I) refers to the ego relevance, i.e., how important what the person is saying is to that person, of the content.

It should not be confused with the congruence of affective manner of presentation which refers to the way the person sounds in relation to the content.

Congruence of Affective Manner of Presentation (Af)

It has been noted that the disclosure of intimate information occasionally occurs in an intellectualized, non-emotional manner, or conversely, in an overly emotional manner. In both cases, the emotional manner of presentation is not appropriate to the content revealed. Congruence of affective manner of presentation (Af) implies that there is an appropriate affective charge attached to the revelation of intimate information. It is similar to Rogers' concept of congruence in that there is a congruence or matching between what the individual is now experiencing and the representation of this in his/her verbal behavior.

Congruence of affective manner of presentation must be distinguished from intensity of affect. An individual may describe the unhappiest moments of his/her life in a highly affective but jovial manner. While the responses are affectively intense, the jovial manner of presentation is clearly incongruent with the verbal content. Likewise, a statement with little affect regarding the weather may be of low intensity but affectively congruent with the content of the statement. The accurate portrayal of information via the paralinguistic affective manner of presentation is felt to be an important aspect of self-disclosing behavior. The manner of presentation provides a great deal of information about the individual in that a few highly congruent affective statements can convey as much information about a person as a large number of non-emotional or emotionally incongruent comments.

Each SR is to be scored for congruence of affective manner of presentation (Af). This affective dimension must be subjectively coded by the rater. Please remember that congruence of affective manner of presentation depends on how the person sounds in relation to the verbal content and may be independent of both the intimacy of the content and the intensity of the affect presented by the interviewee.

The scale for rating Congruence of Affective Presentation is similar to the scale for rating Intimacy. You should feel free to use any number from 1 to 5 using the following two scale descriptions as guidelines.

1. The manner of presentation is very defensive and mechanistic.

The individual is clearly suppressing (or exaggerating) his/her emotional experience of the content s/he is relating. Self-experience and verbal content are clearly incongruent.

e.g., From the individual's voice quality it seems evident that s/he is emotionally aroused but is attempting to deny this by expressing the opposite or neutral feelings--

"How do I respond to criticism? Usually it makes me hostile (laugh)."

In this example the individual's affect, laughing represents an attempt to express an emotion opposite to the one represented in the verbal content, hostility, and is therefore scored 1-incongruent. Note: The response is incongruent even though affectively intense.

e.g., From the individual's voice quality it seems evident that s/he is not emotionally aroused but is attempting to exaggerate his/her affect. The affect expressed is incongruent or an overstatement with respect to the verbal content--

"It was such a beautiful day!!!"

In this example the individual is incongruent because the affect expressed is an exaggeration with respect to the content and has a half-truth quality.

2. (Not as incongruent as 1, but still quite incongruent.)

3. (Halfway between 1 and 5)

4. (Not completely congruent, but close.)

5. The person is communicating openly and freely his/her feelings, both positive and negative, about the subject matter as s/he experiences it at that given moment.

e.g., Manner of presentation is spontaneous and affectively congruent with the subject matter. The individual is clearly expressing feelings and inner experiences and his tone of voice clearly conveys the feelings to the listener. The feelings are congruent and appropriate with respect to his/her verbal content--

How do I react to criticism? Usually it makes me hostile!!"

APPENDIX G

REVISED GUIDELINES FOR SRs

REVISED GUIDELINES FOR SRs

Because of the difficulties all of us have been having (including myself) in determining which statements are SRs, I have decided to change the criteria. Before I outline the new guidelines, I'll be explicit about the extent of the change. First, only the ways of determining SRs are changed, the criteria for Cs, +s, -s, and Os as well as those for Intimacy and Congruence remain the same. Secondly, the guidelines should be seen as being in addition to the manual. Anything in the manual that is not contradicted by the changes below is still to be used as a reference. Finally, please remember that while you may not agree with my definition of a SR, the guidelines are still to be used as the criteria for scoring SRs. They do not say anything about the nature of reality, simply about the measure used in this experiment. (However, if you want to discuss the reasons for these changes, I'll be happy to do so.

THE CHANGES

Starting immediately, every statement scored as a SR must fall into one or more of the following four (4) categories:

- 1) A statement of feelings
- 2) A statement of an event or number of events that have an overriding personal significance
- 3) A statement or description of personality
- 4) A statement of internal struggle or conflict.

Any statement not falling into one of the above categories is not scored as an SR.

NOTE: For an event to be considered of overwhelming personal importance, there must be no doubt about it. If you are in doubt, do not score it as an SR.