

SELF-DISCLOSURE COMMUNICATION PATTERNS AS A
FUNCTION OF DYADIC INTERPERSONAL NEED
COMPATIBILITY STATUS

By

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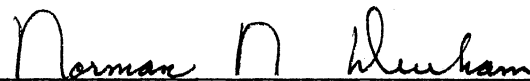
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CHAPTER I

INTRODUCTION

The present investigation is an attempt to more clearly identify a number of the regulatory variables of self-disclosing behavior. Self-disclosure may be defined as any information person A communicates verbally about self to person B (Cozby, 1973). Simmel (1964, p. 307) has adroitly conveyed the importance of this interpersonal phenomenon when he wrote: ". . . obviously, all relations which people have to one another are based on their knowing something about one another." The manner in which we gain information about others is an active process on the part of both interactants. Although our probes into the other's personal life are instrumental in gaining personal information, the latter plays an active role in that he or she controls to what extent they will allow themselves to become "socially accessible."

While many authors have argued that the outcomes of interpersonal interactions, in regard to self-disclosure, are determined to a great extent by traits or personality constructs (Cozby, 1973), others have contended that, in addition, a complex network of situational variables must be considered. The present investigation, in an attempt to develop a more comprehensive picture of self-disclosure, will consider both trait and process variables as "determinants" (presently of an unknowable extent) of our willingness to become accessible to others.

Research, especially in the past 10 years, in the area of self-disclosure, has been reported at a remarkable rate. This has no doubt been due to the close association of self-disclosure with recent encounter group movements, which emphasized the need to relate, communicate, and be honest and open to others. Thus, self-disclosure, when used discretely, has taken on a positive value, something which can foster mental health and closer interpersonal ties with others (Jourard, 1964).

But the manner in which research has been conducted has lacked cohesion and coordination. This has resulted in an inability to compare many results across different methodologies. In addition, a great deal of data has been generated by questionable means. A review and comparison of past research methodologies in the area of self-disclosure will clarify the issues that exist unresolved within this literature. With this retrospective advantage, the present author has designed and applied methods of investigating self-disclosure that will be described and compared to already existing methods.

The first issue to be discussed is the importance of choosing an appropriate parameter for measuring self-disclosure. It is now becoming apparent that a number of investigations have studied aspects of disclosure that are theoretically meaningless, while others have been able to identify and measure more significant parameters. A review of this issue is therefore called for.

A Review of the Literature

Parameters of Self-Disclosure

Cozby (1973) has indicated there are three basic parameters of self-disclosure: a) Breadth (or amount of disclosing units of information); b) Depth (or intimacy levels) of disclosures; and c) Duration (or time spent describing each item of information).

Amount of Self-Disclosure. The Jourard Self-Disclosure Questionnaire (JSDQ) measures the amount of information disclosed to specified target persons in six topic areas. This is accomplished by asking subjects to indicate they had disclosed nothing, disclosed in general terms, disclosed fully and completely, or lied to the specified target person.

Other measures of the amount of actual disclosure have been used by Chittick and Himelstein (1967), Powell (1968), Burhenne and Mirels (1970), Penderson and Breglio (1968) and Kohen (1975). Haymes (1967) has devised a technique of measuring disclosure from tapes which also considers amount of disclosure. These latter methods, which measure actual verbal behaviors, typically define what a unit of self-disclosure is. These units are recorded. Aggregates of this data are then formed for purposes of analysis.

Intimacy of Self-Disclosure. Initial studies using the JSDQ found consistent differences in amounts of disclosures between the six topic areas. Subjects revealed disclosing less information to target persons in the areas of "Body" and "Personality" than areas of "Work" and "Interests" (Jourard and Lasakow, 1958). The latter two topics

are less personal than the former, which indicates more willingness to disclose more superficial than very personal information. Thus, a need for differentiating levels of intimacy was indicated. Vondracek (1969) found an intercorrelation between measures of amounts and intimacy of disclosures to be $r=.42$. From this, Vondracek concluded that since this accounts for less than 25% of the variance, the separate measures of these two parameters is necessary.

Duration of Self-Disclosure. The amount of time spent disclosing information about oneself has been investigated by Himelstein and Kimbrough (1963) and Vondracek (1969). This temporal aspect of self-disclosure showed little relationship to amounts of self-disclosure in both studies. These findings were substantiated by Burhenne and Mirels (1970), who found no relationship between amounts of reported disclosure and the total number of words used in self-descriptive essays. It is evident from these studies that the duration of disclosure "has no necessary theoretical or empirical relationship to the quality or quantity of self-disclosure" (Block and Goldstein, 1971, p. 596).

Some Concluding Remarks. Amount, intimacy and duration comprise the manner in which self-disclosure has been operationalized in the past. Of these, amount and level of intimacy appear to be the most significant. The present investigation has operationalized self-disclosure in terms of amount of meaningful assertions (i.e., recorded units contain one complete idea) made by an individual about his or herself and the intimacy of the assertions. Intimacy was defined by the use of Lazarus' (1969) "Inner Circle Strategy" to help judges

obtain accurate and consistent accounts of the intimacy levels of disclosing behavior (see Methods Section). Questions asking for self-disclosure were recorded as well as the sequence of verbal emissions (i.e., what followed or preceded any question or assertion that was made). In this way, a more comprehensive and accurate analogue of the dyadic interaction was available in quantitative form for analysis.

Methods of Measuring Self-Disclosure

The various methodologies employed to generate self-disclosure data will now be reviewed. I have become more and more convinced (in reviewing this area) that many researchers in the area of self-disclosure have been "toying with meaningless data." Krippendorff (1970) has stated this issue very clearly:

The task of communication research is presumably one of providing conclusive evidence about the parameters according to which the process may be explained, predicted and/or controlled. However, there are virtually no limitations as to the number or kind of parameters that might be considered relevant for this purpose. Consequently, there is no upper limit as to the informational richness that communication data may exhibit. But there is a lower limit below which data remain meaningless as far as communication constructs are concerned. This seems to provide a more reasonable definitional criterion of communication data: communication data must provide explicit evidence at least about the existence or non-existence of communication processes (p. 246).

Krippendorff (1970), in effect, has made a request for a refinement in analytical tools. He goes on to argue that a "conceptual degeneration" in the area of communication research is presently occurring as a result of a heavy reliance upon inadequate data.

In the following section it will become apparent that the variability (from study to study) and inadequacy of methods used to capture

and analyze self-disclosing behavior are contributing to both a lack of comparability (of studies) and precision of analysis.

Throughout this paper I will refer to investigations and/or data as being "meaningless." This concept is used in a Krippendorffian sense (i.e., the data does not provide explicit evidence of communication processes) and/or to indicate inadequacies in basic assumptions and research design. The way in which the term "meaningful data" is intended will be apparent from the content of the discussion.

In any event, the major purpose of the present section is to compare and contrast various methodologies used by different researchers in the area of self-disclosure, and with the present investigations methods, in an attempt to solve the problem of what constitutes "meaningful data" based upon communication processes.

The Jourard Self-Disclosure Questionnaire. By far the most widely used method of measuring self-disclosure has been the use of the Jourard Self-Disclosure Questionnaire (JSDQ). This scale is at the basis of most investigations pertaining to self-disclosing behavior. The initial instrument described by Jourard and Lasakow (1958) consists of 60 items--ten items in each of six content areas: Attitudes and Opinions, Tastes, Work or Studies in school, Money, Personality and Body. Subjects were requested to fill out four of these JSDQ's in regards to four different target persons: Mother, Father, Best Same-Sex Friend and Best Opposite-Sex Friend.

This made a total of 240 items to be answered by each subject which measured the amount of information relating to the six categories he or she felt they had disclosed to the specified target persons.

Each item was scored as either 0-no disclosure to the target person, 1-disclosure only in general terms, 2-full and complete detailed disclosure about the item, and X-lied or misrepresented oneself to the target person (Xs were counted as 0). An example of an item from the topic area Body is: "My feelings about different parts of my body, legs, hips, waist, weight, chest or bust, etc." It would be the subject's task to indicate, with a 0, 1, 2 or X the level of disclosure he or she felt they had established in the past with the specified target person.

Validity of the JSDQ. Jourard developed a shorter version of the JSDQ covering the same topic areas. The 60-item, 15-item, 25-item, and 40-item versions of this test have all "enjoyed construct and concurrent validity" (Jourard, 1971; Pederson and Higbee, 1968). The JSDQ also appears to be independent of intelligence (Jourard, 1961, Halverson and Shore, 1969) which provides evidence for discriminant validity of the JSDQ. However, in the area of predictive validity, the evidence is not as conclusive. Jourard (1961) views the scores from his scale as:

. . . an index of a person's 'openness' or demonstrated readiness to disclose to the given target persons. This view rests on the assumption that, within limits [to be discovered], a person's past performance is a fair estimate of how he will behave in the present and future (p. 72).

However, predictive validity of actual disclosure using the JSDQ has not been established.

Researchers have been unable to find any systematic relationship between actual self-disclosure and subject's JSDQ scores (Ehrlich and Graeven, 1971; Himelstein and Kimbrough, 1963; Lubin and Harrison,

1964; Vondracek, 1969a, 1969b). Furthermore, Cozby (1973) points out that Pederson and Breglio (1969b) did find that amount and intimacy of disclosure on written self-descriptions were correlated with total scores on the 60-item JSDQ, but not on the 25-item JSDQ. Burhenne and Mirels (1970) found that rated disclosure on written self-descriptions correlated exactly .00 with the JSDQ.

Cozby has concluded that the JSDQ does not predict actual self-disclosing behavior in any given situation. He argues that the JSDQ is, at best, an index of past disclosing behavior to specified target persons whom the subject has established a relationship (best friend, mother, etc.). When actual self-disclosure is behaviorally measured, the subject is typically conversing with a stranger (experimenter, confederate, etc.). The two situations and tasks are clearly uncomparable.

An additional explanation for the inconsistency and lack of established predictive validity of the JSDQ may lie in what the JSDQ is asking the subjects to give as compared to what the scale is then asked to predict. That is to say, the JSDQ, like most self report questionnaires, is providing the subject with the opportunity to disclose something about his or her self to someone (Jourard, 1971). That something is his or her retrospective recollection of the amount of information the subject has disclosed to a given target person.

The person subjects are asked to disclose this information to is the person the subject thinks will see his questionnaire and analyze the data, usually the experimenter. This in itself represents a unique situation where the subject is responding to in a unique manner and must be considered as such. When compared to data acquired

from an actual dyadic interaction (usually an interview, an experimental situation, a classroom setting, etc.), it comes as no surprise that the JSDQ cannot consistently predict this behavior. Talking to another subject, an interviewer, or a confederate in an experiment represents a completely different set of circumstances, which are, in addition, usually accompanied by uncomparable instructions. This, coupled with the fact that interaction processes (i.e., eye-contact, physical proximity, etc.) and communication exchanges are totally absent when using the scalar methods of measures makes it all the more reasonable to expect inconsistent results when comparing the JSDQ with actual self-disclosure.

A Brief Summary. Thus, it might be concluded that scales such as the JSDQ measure a unique aspect of a person's verbal behavior, and what this is cannot be ascertained at this time. Jourard claims it is indicative of present and future behaviors (1970), while Cozby (1973) argues that the JSDQ is best interpreted as a measure of past behavior, and that is all. The present author contends that responses to the JSDQ could best be considered by themselves unique data, possibly independent of all actual behaviors (i.e., past, present and future). That is to say, subjects are responding to a scale in a contemporary manner as people respond to such devices, not as they do to each other. The lack of significant correlations between the JSDQ and measured actual self-disclosing behaviors testifies to such an assertion.

Other Measures of Self-Disclosure. Cozby (1973) has reviewed other scalar methods of measuring self-disclosure which have been

developed for specific purposes and types of subjects. These are listed briefly below:

- 1) West and Zingle (1969) describe a self-disclosure inventory for adolescents.
- 2) Vondrack and Vondrack (1971) have developed a system for scoring self-disclosure by preadolescents in interview settings.
- 3) The Social Accessibility Scale consisting of 25 items has been described by Rickers-Ovsiankina (1956). The scale differs from the JSDQ in that a) subjects are instructed to indicate what they would disclose rather than what they have disclosed, and b) the target persons are "strangers," "an acquaintance," and "best-friend." Pederson and Higbee (1968) correlated the 60-item and 25-item JSDQ with the 50-item SAS, and concluded that the two measures should not be considered equivalent.
- 4) Polansky's (1965) concept of "verbal accessibility" has been measured by the incomplete sentence method, degree of agreement with such statements as "the really smart guys keep their opinions to themselves," and reports of caseworkers (Polansky and Brown, 1967).
- 5) Taylor and Altman (1966) scaled 671 statements for intimacy value and topical category. These statements do not comprise a disclosure scale, but can be constructed into one.

Similar to the JSDQ, the above mentioned scales represent valid indices of self-disclosure in their own right. But the crux of the matter is, will the data generated by such measuring instruments generalize to the real world? When a person is responding to a questionnaire, all situational variables and communicational processes that make up the dyadic interaction are absent. While the JSDQ has advantages in that it is a relatively non-threatening instrument (Jourard, 1971) and has flexibility in gaining information about more than one target person, it is obviously insensitive to the situational variables that influence self-disclosing output to a large extent. More will be said about these

situational variables that influence the dyadic encounter in subsequent sections.

In an attempt to resolve these problems inherent in the use of scalar methods of research many investigators have opted for behavioral methods of measuring conversation to insure their data more closely parallels actual dyadic interactions. A brief review of these methods is in order.

Behavioral Methods of Measuring Self-Disclosure. One type of behavioral measure for self-disclosure is an open-ended questionnaire asking subjects to write about themselves. Pederson and Breglio (1968) developed such a scale which covered five of the six topic areas included in Jourard's JSDQ. Rather than measuring a retrospective account of self-disclosure to certain target persons (as in the JSDQ), Pederson, et al., were measuring actual self-disclosure or description from the written response to the questions in "depth" (i.e., level of intimacy as evaluated by judges) and "amount" (i.e., from the number of words used to answer each question).

The trouble with the above questionnaire is that many of the situational process variables that are present within the dyadic interaction are missing. Again, this scalar method generates data which must be considered in light of the methods used; i.e., subjects were responding to a questionnaire, not actually interacting with another person. Recently, a number of authors have reported many different "situational variables" that were found to be at least partially responsible for the amounts and levels of self-disclosure output within the dyadic interaction. These include: social approval (Taylor,

et al., 1969), liking the receiver of one's disclosures (Jourard, 1959; Jourard and Lasakow, 1958; Halverson and Shore, 1969; Fitzgerald, 1963; and Haythron, 1965), and the amount of disclosure received from the other, referred to as the "dyadic effect" (Jourard, 1959) or "reciprocity" (Kohen, 1975; Jourard and Landsman, 1960; Jourard and Richman, 1963; Leving and Senn, 1967; Worthy, Gary and Kahn, 1969; and Cozby, 1972).

In view of the vast amount of literature in favor of variables that just do not exist when a subject is responding to a paper and pencil scale, actual interacting dyads have been used as a data base for recent self-disclosure experimentation.

Actual Dyad Interactions. Self-disclosure has been studied experimentally by manipulating the amount of intimacy of self-disclosure on the part of a confederate or interviewer and observing the subsequent output of subjects under the experimental condition (Cozby, 1972; Ehrlich and Greven, 1971; Jourard, 1971; Levin and Gergen, 1969; Vondracek, 1966).

Ehrlich, et al., randomly assigned males to high and low intimacy experimental conditions. Within these conditions subjects were asked to talk about themselves with a confederate who used scripts controlling his intimacy level. Hypotheses were examined concerning reciprocity of self-disclosure, reciprocity of conversational topics and physical attractiveness effects upon subsequent self-disclosure.

Vondracek (1966) set up an interviewing situation whereby trained interviewers used either probing, reflecting, or revealing interviewing techniques with subjects. The techniques were defined by the

interviewer's verbalizations, and interviewers were trained in the use of these techniques prior to their first actual interview.

Vondracek (1966) attempted to measure two parameters, amount and intimacy of subject's disclosures, although intimacy failed to differentiate the interviewing techniques. Before ascertaining amounts and intimacy levels, the conversation was transcribed and disguised in written form so that the judges were unable to determine which interviewing technique had been used in any given interview. Vondracek also administered the JSDQ after each interview and found a rather low relationship between reported disclosing behavior on the JSDQ and actual disclosures in the interview.

Vondracek (1966), as well as the other above mentioned authors, all, through the use of confederates and structured interviews, designed experiments in which conversations were, for the most part, predetermined and non-contingent upon subject's output. For example, in the Vondracek study, interviewers were instructed to keep their verbalizations at a minimum for three minutes to establish a base rate. They were then to make their designated emissions (reflections, probes, or revealing assertions) only after every two or three subject statements.

In the Ehrlich and Graeven (1971) study, interactions were structured by having each person speak alternately for two minute periods. The confederate spoke first in all cases, then the experimental subject spoke for two minutes. This was done four times for a total of eight minutes of interaction by each subject. In order to achieve maximum control over the effects of non-verbal communications, the

experimenters seated the subjects at a circular table which had a partition running across it to separate the subject from the confederate.

In the above experiment, not only were non-verbal modes of communication eliminated, verbal communication avenues were also blocked. The subjects and confederates did not interact. Instead, they exchanged two minute narrations with one another. The point trying to be made here is that a great deal of conversational research, in an attempt to provide rigorous experimental control, became very far removed from the real world events they originally set out to investigate. When conversations are not spontaneous, but rather contrived, the resulting content of this one-sided interaction must be considered in light of its actual make up. Interaction analyses made by Jones and Gerard (1967) have relevancy to the present discussion.

Pseudo-Contingent Conversations. Jones and Gerard (1967) have pointed out that two people may appear to a third to be interacting with each other when in fact one or both dyad members may not be responding to each other. They may be following a predetermined script (as the above confederates). One person is responding "pseudo-contingently" (i.e., following the experimental design's instructions) while the other person is responding "mutual contingently" (i.e., the subject is responding partly to the other's behaviors and partly to internal stimuli such as attitudes, a plan, a characteristic mode of interacting, etc.).

Considering the dyad as a whole, when confederates are used to manipulate the conversation, the interaction is "asymmetrical." One person is responding to the situation and his internal frame of

reference while the other person is responding to only a predetermined script. When the experimental design calls for two naive subjects to make up the dyads, the interaction will be a "mutual contingent" encounter, both subjects responding partly to each other and partly to internal cues.

The resulting conversations from these two completely different types of interactions (mutual and asymmetrical) and methods of research (contrived vs. spontaneous) will no doubt be different. These differences must be taken into consideration when drawing conclusions and comparing results of various investigations. Although the use of confederates and predetermined conversation strategies contribute to the precision, control and identification of independent variables in experimental research, the present author contends that such rigorous experimental control smacks of artificiality when applied to conversational research.

Freely Interacting Dyads. Kohen (1975) eliminated the problem of artificiality by utilizing freely interacting, initially unacquainted heterosexual dyads (both members of the dyad were naive subjects) matched for physical attraction. The dyads interacted for 15 minutes; the first five minutes subjects were instructed to get to know each other while the latter ten minutes they were to prepare a two-minute lecture on one of a number of contemporary topics (abortion, interracial dating, etc.). The complete interaction was videotaped and judges recorded self-disclosing statements made by each subject. Verbal statements were defined as self-disclosing when the subjects mentioned biographical data, attitudes toward family, dating, self,

school, the research situation and/or partner, personal possessions, hobbies, past or future behavior, and feelings and emotions. A unit of disclosure was defined as the smallest segment of behavior to which the observer could assign a classification. Each unit of disclosure was tallied by laboratory conditions, minute, and words used. Kohen was able to reach an interjudge reliability coefficient for each five-minute interval above $r=.80$.

These methods employed by Kohen (1975) represent exquisite research design that deserves further use in the area of self-disclosure. By allowing two people to actually interact, freely responding to each other and the full complexities of the dyadic interaction, a more comprehensive and meaningful data base is available. Although "cause and effect" relationships are not as accessible to the analysis of such a "naturalistic observation," this precision is sacrificed in favor of a greater ability to move back to the real world from the experimental analogue. Furthermore, self-disclosure in the Kohen investigation was not ascertained indirectly, such as from retrospection (as in the JSDQ), nor from anticipation (as in the Worthy, et al. study). More will be said about the merit of reducing experimental constraints in conversational research following the report of a study performed by Sermat (1973).

The Use of the Teletype Machine. The teletype machine has been used to move closer to actual dyadic interactions while maintaining an exceedingly high amount of experimental control over extraneous variables. This method of investigation allows actual communication between a subject and a confederate while allowing the confederate

to manipulate the conversation as an independent variable. By physically separating subjects and the confederate, Sermat (1978) argues that unwanted variables such as physical attraction, eye-contact and other non-verbal behaviors can be eliminated and therefore controlled. The teletype machine has other advantages in that the total conversation is ready for analysis in the form of a written transcript.

Although Sermat (1973) claims his subjects were able to become "quite intensely and personally" involved in the interactions after participating for awhile (two hours), this highly controlled investigation has incorporated a certain amount of artificiality which doesn't do justice to the full richness of the dyadic interaction. While many "extraneous variables" are controlled by separating the interactants, these variables have been shown to play an important part in communicating information (Argyle and Dean, 1963; Haley, 1963). Once these factors are eliminated from the interaction, the present author can't help but think there is a profound effect upon the only line of communication left open to these dyad members, i.e., their written messages. In addition, written communications have been systematically shown to be substantially different from verbal means of communications (Allen, 1974).

Allen (1974) has argued that there are distinctive differences between oral and written speech, the latter having superior composition (Busnell, 1930), while the former typically contains a greater number of words, more difficult words, and more unique words, than the written form (Flea, 1953). Allen has concluded that analysis of speech relevant to social behaviors should concentrate on typical examples of oral speech. Allen is obviously in favor of the behavioral methods of

measuring self-disclosure (and conversation in general; he uses freely interacting dyads in his own research) by means of actual dyadic conversation.

Experimental Controls in Conversation in Research. To what extent conversational research should be structured and rigorously controlled is no small issue. To capture and reduce to the form of analyzable data conversation which has originated from artificially contrived interactions could very easily be meaningless. Yet to loosen up the constraints for purposes of maintaining mundane realism may be at the expense of precision in one's analysis. Argyle and Dean's (1963) affiliative conflict theory is relevant to the argument of analyzing more "natural" dyadic interactions.

Affiliative Conflict Theory. Argyle, et al. (1963) have asserted that an "equilibrium for intimacy" exists between dyadic members when they are interacting. This intimacy level is a joint product of eye-contact, physical proximity, amount of smiling, intimacy of topic (i.e., self-disclosure) and many other unspecified variables. Stated another way, what Sermat (1973) considers to be undesirable extraneous variables, Argyle and Dean consider essential in any comprehensive analysis of self-disclosure. Argyle, et al. (1963) have reported several investigations which substantiate their theory (Argyle and Dean, 1963; Exline, Gray and Schuette, 1965; Kendon, 1965).

From the above discussion, it appears that the most meaningful data base will be generated within the most natural setting which rigorous experimental design will allow. Relevant to such a "middle of the road" approach to research would be such variables as: the

setting where the dyads interact, the experimenter's mannerism and dress (formal, informal, authoritarian or permissive, etc.), the instructions given to the subjects on how they should conduct themselves, the manner in which confederates or interviewers conduct themselves in this approach is used, and any other aspects that the subjects might attend to that will affect their subsequent behaviors.

To what extent these experimental variables exert influence upon dyadic interactions is at present unknowable, but no doubt far reaching. The present investigation, in an attempt to generate the most meaningful data, attempted to put subjects at ease through the experimenter's mannerism, dress, instructions, and the lab setting (see Procedures Section). In addition, freely interacting heterosexual dyads were used. In this way, the subjects were responding to each other (in a mutually contingent manner) rather than to a rigidly interacting confederate. These considerations, taken as a whole, are believed to be fundamental in creating an experimental situation with a maximal mundane realism.

Many different attributional variables have been related to self-disclosure in an attempt to account for the variance which exists across people in their respective willingness to disclose personal information. Cozby (1973) has referred to this as a "personal construct model" of self-disclosure, whereby disclosing behavior is attributed to personal traits of an individual.

Both scalar and behavioral methods of measuring self-disclosure have been employed to correlate personality traits (Pederson and Higbee, 1969; Swesen, 1968; Taylor, Altman and Frankfurt, 1965; Taylor and Oberlander, 1969; Tukmen, 1966; and Worthy, Gary and Kahn, 1969),

mental health (Halverson and Shore, 1969; Jourard, 1969; Mayo, 1967; Taylor, et al., unpublished manual; Pederson and Marks, 1970; Simmons, 1970; Sousa-Po a, Romberg and Shulman, 1973; Stanley and Bownes, 1966; and Trua and Wittner, in press) and sex of the sender and/or receiver of the disclosures (Dimond and Mun, 1967; Himelstein and Lubin, 1965; Hood and Back, 1971; Jourard, 1961a; 1961b; Jourard and Lasakow, 1958; Jourard and Richman, 1963; Lewis, 1970; Kohen, 1975; Rivenbark, 1971; Vondracek and Marshall, 1971; Weigel, Weigel, and Chadwick, 1969).

Through a review of this literature it will become apparent that this "personal construct model" is an inadequate approach in that only one of many influential variables of self-disclosure is considered. This literature is typified by weak and inconsistent correlations (Cozby, 1973).

Self-Disclosure as a Personal Construct

Sex of the Sender. The most widely replicated finding in the area of self-disclosure has been sex differences. Females were found to have higher disclosure scores than males by Jourard and Lasakow in their initial study (1958). These findings have been demonstrated many times since (Dimond and Mun, 1957; Hood and Back, 1971; Jourard and Landsman, 1960; Jourard and Richman, 1963; and Pederson and Breglio, 1969).

Cozby (1973) points out that this phenomenon has been traditionally associated with males having less empathy and insight into others. Jourard has argued that men are more "socially competitive" than women and disclose less in order to "mystify" others, thereby retaining a competitive advantage over others.

However, a number of studies have reported no sex differences (Dimond and Hellkamp, 1969; Doster and Strickland, 1969; Kohen, 1975; Plow, 1965; Rickers-Ovsiankina and Kusmin, 1959; Vondracek and Marshal, 1971; Weigel, Weigel and Chadwick, 1969; and Zief, 1962). Jourard (1964) and Plog (1965) have both suggested that any inconsistencies concerning sex differences in self-disclosure may be attributed to geographic locations. Jourard collected the bulk of his data from Southeastern colleges while Rickers-Ovsiankina and Kusmin (1959) and Zief (1962) obtained their data from Connecticut and Harvard, respectively.

Jourard (1964) has argued:

It is tempting to suggest that in the southeast . . . the men are men and the women are women, whereas Harvard males and Radcliffe females, whom Zief tested, for example, may not be so different from one another (p. 71).

However, Cozby (1973) points out that upon closer scrutiny of the data, considering geographic locales and even the fact that different instruments of measurement were used, the results show no consistent patterns to lead one to believe Jourard's (1964) notion as cited above.

The present investigation, utilizing freely interacting heterosexual dyads, also analyzes sex differences in total self-disclosure output as well as intimacy of these verbal behaviors. In addition, sex differences in the number of questions asking for self-disclosure from the other is ascertained. This variable, to this author's knowledge, has never been analyzed within freely interacting dyads.

There have been a number of studies conducted in an attempt to associate self-disclosure with mental health (Cozby, 1973). The idea that mental health is accompanied by the ability to let others

know one's "real self" stems from one of Jourard's (1959) initial investigations into how self-disclosure relates to various personality variables.

Self-Disclosure and Mental Health. Jourard (1959) was actually looking for a relation between self-disclosure and cathexis (or liking for the recipient of disclosures). Eight members of a newly organized college of nursing served as subjects. Jourard interviewed each subject, asking them non-threatening demographic questions. The subjects were then asked to indicate to whom she had disclosed information about each item. This "output" of disclosure was cross-checked by asking each subject how much of the information they knew about each other by means of being directly told by the other. Each subject also indicated, in rank order, who they liked best to least.

Liking, self-disclosure and disclosure intake (knowing and being known) were all shown to be interrelated. The data did not show what preceded what, but interestingly, two subjects who did not show a significant relationship between cathexis for others and disclosure had unique strategies in dealing with their colleagues. Although these two girls both fell at the "least liked" end of the average cathexis rank, one was the highest discloser and the other the lowest discloser in the entire group of subjects. Jourard (1959) further noted, from direct observations, that these two subjects behaved consistently in most situations. The lowest discloser consistently withheld her personal life, even from the colleagues whom she indicated liking best, while the highest discloser constantly revealed much about herself without regard to "social context or the interest of the listeners."

Jourard concluded:

If being liked by others may be viewed as a rough index of interpersonal competence (c.f., Jourard, 1958, pp. 164-165) then perhaps failure of these subjects to vary self-disclosure with cathexis for others betokens contrasting forms in interpersonal (and personal) maladjustment (p. 430).

The idea of inappropriate disclosure of oneself being an index of "personal adjustment" deserves further examination.

The Transparent Way. Jourard (1964) has argued that to indiscreetly disclose oneself to others is an index of personal maladjustment. But, on the other hand, to not disclose to at least significant others is indicative of a repressed self and an inability to grow as a person (Jourard, 1964). What Jourard has suggested in his writings is a curvilinear relationship between self-disclosure and mental health. This concept will be elaborated upon later.

If we allow ourselves to be "transparent" (Jourard, 1964; 1970) when appropriate, and perceive others in the same fashion (i.e., just perceive their transmissions, suspending all preconceptions and interpretations) "self-actualization" (Maslow, 1962) will be facilitated and perceptions and cognitions will be more like what Maslow (1962) has called "B-cognitions."

If one presents his or herself to the other in a transparent manner, one's being is presented in a fashion beyond the obvious (Jourard, 1971), more than what is contained in the normal concept of oneself. In doing this, Jourard maintains, it is the aim of the discloser to let self be known to the other as to self, ever changing and in a constant flux not to be congealed in any oversimplified conceptualization (Jourard, 1964).

Jourard (1971) has contended that we seek to have our true being experienced by others under two conditions:

. . . when we experience it as safe thus to be known; and when we believe that vital values will be gained if we are known in our authentic being, or lost if we are not (p. 81).

If we choose to be transparent, Jourard proposes that we at the same time experience the other as a "person" rather than a "concept" and a "manipulandum." If there are no misrepresentations or concealments of ourself, we are "persons-for-him" and we are inviting the other to be a "person-for-us." But if we choose instead to misrepresent ourselves to him, we are reducing the other from the status of a "person" to the level of a manipulable being. We would then be striving to conceal our true being from him through manipulating his perceptions of us to some expedient range (Jourard, 1971).

The search for a disclosing "personality trait" has also been the topic of interest for many researchers. Although intuitively compelling, the identification of a relatively stable trait that covaries with high amounts of self-disclosure has not yet been accomplished. Nonetheless, a brief review of this literature will be presented due to its relevancy to the present investigation.

Personality Traits and Self-Disclosure. In the area of femininity, Swensen (1968) and Taylor (1965) both using the Guildford-Zimmerman with males, found a positive relationship with self-disclosure, while Pederson and Breglio (1968) and Pederson and Higbee (1969) found no significant results using the Gough Femininity Scale with both males and females.

Measuring authoritarianism and relating this to self-disclosing behavior, Taylor, et al. (1965) found positive correlations while Halverson and Shore (1969) failed to find any significant relationship between authoritarianism and willingness to disclose. Cozby (1973) has noted that research in the area of sociability and extroversion seems to produce the most consistent patterns of results in regards to predicting disclosure (Taylor, Altman and Frankfurt, 1965; Tukmen, 1966; Taylor and Oberlander, 1969). However, Frankfurt (1965), Pederson and Breglio (1968) and Pederson and Hignee (1969) reported no significant results in this area.

Criticism of Self-Disclosure as a Correlate of Traits. Altman and Taylor (1973) have argued that the search for self-disclosure and personality trait relations is unrealistic. They have proposed that self-disclosure be examined within the context of specific personal relations and social situations. Chelune (1975) cited numerous studies which support the notion that situational variables determine, to a large extent, how much a person is willing to reveal about his or herself (Himelstein and Kimbrough, 1963; Chittick and Himelstein, 1967; Powell, 1968; and Mebrabian, 1971).

Benner (1968) proposed that self-disclosure is a function of many situational variables as well as traits of the discloser. These include the topic of conversation, the social situation, the nature of the established relationship, and the target person's traits.

West (1971) states that it is the degree to which individuals can adequately differentiate interpersonal variables and change their disclosing behavior accordingly that is important. Chelune (1975)

refers to this as "flexibility" and considers it a key aspect to self-disclosure.

There have been a number of studies which have extended the investigation of self-disclosure and traits to the receiver as well as to the sender of disclosures. This approach is at least in the direction of a more comprehensive analysis of the variables involved in regulating self-disclosure within the dyadic interaction, although many situational and process variables may not be included with such an analysis.

Personality Measures of Both the Sender and Receiver of Disclosures. The most obvious prediction, that two persons who are characteristically high disclosers will emit more self-disclosure than low disclosers, has been substantiated (Jourard and Resnick, 1970; Taylor, 1968).

Swensen and Nelson (1967) matched dyads as similar and dissimilar in the areas of extroversion, neuroticism and attitudes. Disclosure was highest in males who were matched similarly on extroversion but differently on neuroticism, in females who were different on attitudes, and in male-female dyads who were similar on all three variables.

Persons and Marks (1970) found more intimacy when there were similar MMPI code types between interviewer/interviewee than when they were not matched. Altman and Haythorn (1965) found no difference between pairs of subjects formed on the basis of either homogeneously high, heterogeneous or homogeneously low pairings on need achievement, need affiliation, need dominance, and dogmatism.

The communications that are generated within the dyadic interaction are obviously governed by a complex network of interpersonal processes (Haley, 1963). Yet none of the above studies have used a personality inventory which was explicitly designed as an interpersonal instrument. Bath and Daly (1972) took these considerations into mind and used the Tim Leary (1957) Adjective Check List in a self-disclosure investigation. Subjects were given questions about themselves to respond to verbally in an interview setting. Subjects were also administered the JSDQ. Thus, both a pencil and paper measure (the JSDQ) and a behavioral measure of self-disclosure was related to different categories defined by the Leary system.

The Leary Adjective Check List. Leary's system of interpersonal roles is a unique personality inventory in that it is a more global description of personality which captures interpersonal styles. Rather than measuring personality along a single dimension, Leary's model defines traits of the individual in terms of two dimensions; Dominance/Submission, and Love/Hate. In view of the interpersonal nature of self-disclosure, the Leary scale appears to be a more appropriate instrument than other personality systems in that it considers more than one personality variable and it is a measure of interpersonal styles.

Results of the Bath et al. Study. It was found that subjects who described themselves as "Passive-Aggressive" on the Leary scale reported (on the JSDQ) having disclosed less to specified target persons than other subjects. Subjects who described themselves as "Dominant-Loving" reported disclosing more than self-described "Submitters-Haters" (Bath and Daly, 1972).

But what was most interesting about the findings of Bath's investigation was that although self-described "Lovers" reported having disclosed more (on the JSDQ), behavioral measures of these subjects disclosing to interviewers showed they actually disclosed less than subjects who described themselves as "Haters." The authors pointed out that perhaps describing oneself as "sceptical," "jealous," "complaining," "sarcastic," and "often times unfriendly" (which are a few of the adjectives which must be checked off to qualify as a "Hater" on the Leary scale) should be viewed as a more disclosing behavior than if one described his or herself as "warm," "helpful," "affectionate," or "understanding" (adjectives pertaining to "Lovers").

If this is true, then these results represent no more than a correlation of one type of self-disclosing behavior with another. That is to say, depicting oneself negatively on the Leary check list and behaviorally disclosing within an actual interview are two behaviors not independent of one another.

Criticisms of the Leary Scale for Research Purposes. There appear to be a number of aspects about the Leary scale which have contributed to the above mentioned confoundings. First of all, the adjectives used in the check-off list are far from subtle. To admit to being "often times unfriendly" or "complaining" may be difficult, to say the least. This, coupled with the fact that subjects are required to answer in an either/or, "black and white" fashion makes it all the more difficult to admit to such attributes, unless of course, one is a high or indiscrete discloser. And this was exactly the problems Bath and Daly (1972) had in their study. High disclosers (behaviorally

measured) were confounded with "Haters" (as measured by the Leary system).

An additional problem with the Leary scale in research is that the system offers subjects no reference points on which to base their responses to the adjectives. That is, to whom do I act this way, how often, etc. This no doubt brings in unnecessary confusion for the subjects that will take away from the precision of measuring interpersonal traits. Although the Leary scale has many useful applications in clinical areas, a less abrasive, multi-response scale which measures multi-dimensional personality and interpersonal styles of behavior is in need. One such scale is the FIRO-B. This instrument was employed in the present investigation as a major classification variable and will now be discussed and contrasted with the Leary system.

Use of the FIRO-B in Self-Disclosure Research. The present investigation considers traits, or more correctly, interpersonal strategies of both the dyadic members. Without going into detail (see Methods Section) dyads were formed through matching subjects according to their FIRO-B scores in a way that created either highly compatible or highly incompatible heterosexual dyads in the area of either Control, Affection, or Inclusion. In this way, dyads were placed within a 2x3 factorial design according to their FIRO-B compatibility and need area scores. A number of interpersonal parameters have been identified in the present investigation to ascertain any functional differences between the dyads, as operationally defined by their respective FIRO scores, and subsequent communication behavior.

Advantages of the FIRO-B in Research. The FIRO has been shown to be a non-threatening scale which measures interpersonal styles or strategies (Ryan, 1970). In the Bath, et al. (1972) investigation, the authors concluded that this was a major problem with the Leary scale. The FIRO also has an advantage over the Leary scale in that the alternative responses which subjects may choose are not of a "black and white," either/or nature. The FIRO has nine alternatives to each question. Ryan has noted:

Relative to other tests, the FIRO minimizes test-taking anxiety resulting from threatening content. The questions are naive and benign in appearance, and subjects tend to be less defensive in responding to them (p. 6).

Because of this, the FIRO-B items are believed to be independent of self-disclosing behavior while the dynamics underlying the responses to these items have been hypothesized to have a functional relationship to one's willingness to disclose.

The FIRO also minimizes "faking." Most personality scales have fallen under criticism for allowing subjects to "paint" a more favorable picture of themselves. Some tests have built-in checks on the validity of responses. The FIRO takes an even less obvious approach in that it allows the subjects to modify their answers without changing the meaning of the scores. Persons taking the test would have to greatly distort their answers a number of times before their unique interpersonal style would be lost. Thus, the score on the FIRO-B will be more representative of the subject's interpersonal strategies while not creating the confounding effects the Leary system had in the Bath, et al. investigation.

Because of the numerous advantages the FIRO has over other scales, and because of the fact that self-disclosure has been shown to be an interpersonal variable, the FIRO-B was adopted as a major classification variable in the present investigation.

Reciprocity of Self-Disclosure

A most interesting interpersonal variable that has generated extensive research in the area of self-disclosure is the concept of "reciprocity" of disclosure. That is, the amount and level of personal information offered by one dyad member has been shown to exert an influence upon the other's willingness to disclose. In addition, there are believed to be "norms of reciprocity" (Ehrlich, et al., 1971) which govern the development of "appropriate amounts of self-disclosure in any given dyadic interaction. The research and theory that has emerged in the self-disclosure literature as a result of this phenomenon has far-reaching implications in regards to explaining self-disclosing behavior beyond personality traits held by the interactants.

Jourard's Initial Findings. In a study cited earlier, Jourard (1958) not only found a significant relationship between liking and self-disclosure but also a significant relationship between "disclosure-intake" and "disclosure-output" between subjects. That is to say, Jourard measured the amount of demographic information each of nine subjects had disclosed to each other, in a one-to-one direct manner, and the amount of information received from the other eight subjects, by each subject. He found a correlation between mutual knowledge of

one another which was significant in seven pairs. The subjects tended to form dyads in a way which allowed them to disclose proportionately what they received, "a lot for a lot," and "a little for a little."

In a follow-up investigation, Jourard and Resnick (1971) paired high-high, low-low, and high-low disclosers (as measured by the JSDQ) and found that high-high dyads (after interacting) chose more intimate topics to discuss (in future interactions) than low-low dyads. Furthermore, when a high subject was paired with a low subject, the former didn't change her disclosure level, but the latter did increase hers until there was no significant difference between the two. Subjects who were "characteristically" low self-disclosers initially behaved as such. But when exposed to a high discloser they changed their strategies. It is also interesting to note that while high disclosers had the opportunity to lower their levels and become more inaccessible, Jourard points out that they chose not to do so. These results are at the basis of Jourard's concept of the "dyadic effect." It is this phenomenon that Jourard feels has far-reaching implications in the area of psychotherapy and other interpersonal situations.

The "Dyadic Effect". Jourard coined the term "dyadic effect" for the interpersonal process whereby self-disclosure from one dyadic member seems to elicit self-disclosure from the other. Jourard (1964) goes on to argue that if this is true, that "disclosure begets disclosure," then implications follow for a number of areas of interpersonal endeavor. In his book, The Transparent Self, Jourard launched his attack against "technique therapists." Here, anti-spontaneous,

rigid therapeutic guidelines and techniques were depicted as being thwarting to growth. The therapist does not readily disclose his or herself, feelings remain hidden from the client, and this procedure does not lend itself to creating a situation conducive to client self-disclosure. According to Jourard's research, a more personal self-disclosing therapist would facilitate disclosure from the client. To many authors, client self-disclosure is basic to therapeutic progress (Jourard, 1964, 68; Mowrer, 1964; Rogers, 1961).

Before reviewing further empirical evidence of the "dyadic effect," I would like to first discuss a number of theories which explain this proposed Jourardian notion. These theories, taken as a whole, represent a corroboration of the idea that disclosing oneself is an interpersonal phenomenon.

Theoretical Positions on the Dyadic Effect. Jourard (1959) has pointed out that there seems to be positive aspects in being confided in by another. Jourard (1964) later proposed that disclosures act as a stimulus to tell the other he or she is in a non-threatening interaction and that self-disclosure is appropriate. This model would predict the raising of output (on the low discloser's part) within a dyad consisting of a low and a high discloser.

Kohen (1975) has criticized Jourard and Resnick's (1971) investigation (which is at the basis of Jourard's "dyadic effect") and the idea that reciprocity is a "one way street" whereby only low disclosers will change their disclosure output as a function of talking to high disclosers.

Kohen found that it was, in fact, a two-way street. Low and high disclosers both changed their respective levels of disclosure. Kohen points out that the subjects in Jourard and Resnick's study did not have a choice of the topic areas to be discussed, and they responded to the same set of topics, first with a similar partner, then with a partner opposite in their level of disclosure. This initial interaction with similar subjects must not be ruled out as an effect on the subsequent behaviors. Thus, Jourard's findings must be considered in view of this confounding. Also, Jourard's subjects never actually talked about these topics. The mere choice of topic areas served as an index of disclosure levels.

Exchange Theory. Worthy, Gary and Kahn (1969) have defined self-disclosure in terms of exchange theory (Homans, 1950; Thibaut and Kelley, 1959). The authors first defined self-disclosure as a behavior on A's part, which consists of him knowingly communicating to B personal information about himself which is not otherwise available to B. Since information of this nature is typically disclosed only to friends, this should indicate to B (the recipient) that he is liked or trusted. Hence, such self-disclosure may be assumed to be rewarding or a "positive outcome" for B.

If the reception of a self-disclosure is indeed a social reward, recipient of such a disclosure should be expected to react in a manner consonant with those principles that have been found to govern other types of social exchange. One expectation about social exchange is that greater rewards are associated with interpersonal attraction. Thibaut and Kelley (1959) pointed out the close relationship between sociometric choices and the ability and willingness to provide positive outcomes. One who provides positive outcomes tends to be liked; likewise, one tends to extend more positive outcomes to those whom one likes. If,

as suggested here, reception of a self-disclosure serves as a positive outcome, it is to be expected that liking and self-disclosure will be positively related (Worthy, et al., 1969, p. 59).

This has been demonstrated many times (Jourard and Lasakow, 1958; Jourard, 1959; Halverson and Shore, 1969; Fitzgerald, 1963; Altman and Haythorn, 1965; Cozby, 1972).

Worthy, et al. performed an investigation trying to sort out the variables responsible for the reciprocal effect in terms of exchange theory. In this study the authors placed groups of four females into a situation where they were to get to know one another through answering questions posed by the other, of which the latter chose from seven (prescaled for intimacy) questions. The subjects chose to answer significantly more intimate questions with these individuals who had given correspondingly intimate answers. Self-disclosures were also positively related to liking.

From these results, the authors concluded that self-disclosure does seem to function as a social reward, and that it is also governed by the "norms of reciprocity." These findings are consistent with exchange theories of Homans (1950, 1961) and of Thibaut and Kelley (1959). An alternative or additional aspect of self-disclosure as a social reward was proposed by these same authors. Their study dealt with only the rewarding effects of receiving disclosures. It is probably also true that making certain self-disclosures is rewarding to the discloser. Worthy, et al. argue this could result from the "catharsis" obtained or the "ego-satisfying" nature of disclosing oneself. Also, receiving an intimate disclosure from another person

would be rewarding in the freedom it accords to the receiver to reply with equally intimate disclosures about himself (Worthy, et al, 1969).

From the above discussion, the dynamics behind disclosing behavior are more clearly portrayed within the context of exchange theory. But as with trying to explain self-disclosure with personality traits, the "rewarding aspects of exchange theory represents only a fraction of the picture. Along with a rewarding effect of being disclosed to, and even disclosing, comes a certain amount of risk. The risk involved in making oneself accessible to others will vary from situation to situation, depending upon many variables. To the extent that this risk is felt, an inhibiting effect will be exerted upon an individual's disclosing behavior.

The Risk Involved in Disclosing Oneself. Sermat (1973) notes we all are apt to be misunderstood, judged, rejected, or possibly even exploited through revealing our vulnerabilities to others. Yalem (1970) has listed factors involved in determining the level of risk a person may apprehend in disclosing himself to another which includes the topic and its importance to the discloser; concern that the disclosure may not have conveyed the intended message; and the concern about how the other may react to this information, i.e., the uncertainty about receiving the kind of response that was hoped for. This last aspect has implications in regards to "reciprocity." If the other person had previously expressed his own thoughts and feelings on a topic area, then the concern for the others reactions and responses would be lessened (Sermat, 1973). One may be overtly concerned about the other's response to one's disclosures because of certain

characteristics in the other's verbal behaviors. These behaviors may create a defensiveness in the discloser which could inhibit his disclosure level out of fear of making himself more vulnerable to the other's exploitations. Gibb (1965) has listed a set of variables which are likely to create a defensive climate which were quoted by Sermat as follows:

- 1) The judgmental and evaluative behaviors of others.
- 2) Attempts by others to control.
- 3) Dogmatic attitudes in others (p. 333).

Sermat notes that each of these variables Gibb has listed have one common element, a threatening quality which is directed at one's "sense of adequacy." Sermat argues that this threatening element can be carried to the extent that one's self-esteem could become dependent upon others for support, or, one's esteem would have to be constantly defended, which would render the person total preoccupied with this heightened emotional arousal and defensiveness. This preoccupation would, in turn, place one on guard against revealing his or herself and would also create distorted perceptions of others. As defensiveness increases and willingness to take risks decreases, so does the likelihood of developing a meaningful relationship. Sermat's risk-taking theory has been corroborated by research involving the mixed-motive games. Sermat (1970) found that when dyadic members were uncertain about being exploited by one another, they adopted strategies which resulted in less than optimal outcomes for both.

According to Sermat, when we make an initial encounter with another person, we have options open to us in regard to our mode of

developing the potential relationship with the other. We will both be taking calculated risks in how much we disclose to one another. The risk is calculated in that disclosure takes place in faith that the other will reciprocate the gesture, and over time this will facilitate a meaningful relationship.

Review of Theoretical Positions. Sermat's investigation into the reciprocity of disclosure will be looked into further following a section on Empirical Findings in the area of Reciprocity. But before these experimental studies are discussed, it will be helpful to take an overall look at the theoretical positions that have been presented.

The reader may recall that both Jourard (1958) and Worthy, et al. (1966) considered reciprocity of self-disclosure to be regulated by positive or facilitative variables. Jourard argued that self-disclosure acts as an invitation to the other to disclose, indicating that this situation and relationship represents a safe time and place to disclose, if you want. Worthy, et al. rely upon Social Exchange Theory to explain the development of reciprocation patterns of disclosure within the dyadic interaction. Basically, they consider disclosure on the part of one dyadic member to be a "positive outcome" for the recipient of the disclosures because these sorts of behaviors are seen only within the context of a friendly relationship.

While the above authors place an emphasis upon positive variables, Sermat (1973) has elaborated upon negative or inhibiting effects related to disclosing personal information. Cozby (1973) has also discussed and attempted to identify the point at which reciprocity

of disclosure is halted because of interpersonal variables related to the feeling of risks going beyond a tolerable threshold. Cozby has argued that there should be a point which dyadic members will not go beyond in regards to intimacy of topics discussed. This "halting effect" is believed to be related to anxieties created by interacting with an indiscrete other. Although intuitively compelling, Cozby (1971) has not been able to clearly define this "halting effect" (Cozby, 1972; Leven and Gergen, 1969).

Further Empirical Findings on the "Dyadic Effect". Reciprocity of self-disclosure has received a good deal of experimental attention as one of the prime variables in regulating disclosing behavior. Beyond the use of the JSDQ, there have been a number of behavioral measures of the reciprocation of personal information.

Tagnoli (1969) used confederates to manipulate the levels of intimacy for topics to be discussed. Subjects were instructed to choose a topic and it was found that subjects tended to match the levels of intimacy chosen by the confederate. Powell (1964; 1967) also provided support for the "dyadic effect" when he demonstrated that the most "powerful reinforcer" of self-disclosure in subjects participating in an experimental interview was self-disclosure from the interviewer.

Delaga, Walmer, and Furman (1973) also performed an investigation employing confederates in order to manipulate the conversation. The authors found that subjects talked more "intimately" (as based upon judges ratings along a seven point scale) when confederates had already revealed personal information.

The Effects of Questions vs. Disclosure Upon Disclosure. Sermat (1973) performed a study based upon a suggestion by Culbert (1970) that greater openness in a relationship would result if one person would make statements which were slightly more disclosing than those of the other, and continued this "leading pace." This form of interaction should result in optimal levels of mutual openness between the dyadic pairs.

Sermat investigated the effects of "matching" vs. "exceeding" the subject's disclosures in intimacy of statements reciprocated to subjects by confederates by means of a teletype machine (see Chapter III). The amount of intimacy in questions asked for by confederates was also manipulated. The investigation used four different experimental conditions:

- 1) Match-match condition: the confederate was to match the subject's current level of self-disclosure in each of his own messages and to keep his questions to the same level.
- 2) Exceed-match condition: the confederate was to exceed the subject's self-disclosure level by a moderate amount in his statements, but not in his questions.
- 3) Match-exceed condition: the confederate was to match the statements in regards to levels of intimacy but to exceed levels of intimacy in the question he asked.
- 4) Exceed-exceed condition: the confederate was to disclose more about himself than the subject had, and also to ask for increasing levels of disclosure.

The results showed that both variables, asking exceeding questions and reciprocating in an exceeding manner had a profound effect upon subsequent disclosures on the subject's part. Questions were by far the strongest variable, followed by an interaction of the two

exceeding confederate verbalizations (condition 4). Conditions 2 and 1 followed in their effectiveness in raising subject's disclosing behaviors over the teletype machines. Sermat concluded:

. . . it appears sufficient for the purpose of eliciting relatively personal disclosure from another person if one consistently matched his disclosure level while probing for further information with more intimate questions (p. 333).

This study partially supports Jourard's (1959) earlier findings that self-disclosure is indeed reciprocated in the dyadic setting, but it also calls for a needed reevaluation of other variables which may be exerting a forceful influence upon the openness of a person's communications. Sermat's results indicate that a most obvious method of finding out information about another person, i.e., by simply asking, is empirically one of the strongest regulators of self-disclosure.

A study by Kohen (1975) is relevant to the present investigation and shall therefore be discussed in detail. The methods of measurement have already been reviewed (see Behavioral Methods Section). The author set out to investigate the development of reciprocity and the maintenance of "personal consistency" of self-disclosure within the dyadic interaction.

Kohen (1975) defined personal consistency as one's relatively static mode of disclosure. Although reciprocity and personal consistency are not mutually exclusive, if a large degree of reciprocity did develop within the interaction and the subjects were initially different in their disclosing behavior, reciprocity would be generated at the expense of personal consistency. Amount of disclosing units defined the subject's "disclosing level." Intimacy of disclosure was not ascertained.

Kohen found a significant decline in self-disclosure for the dyads as a whole over the three five minute time periods. She also found no significant difference between males and females in their individual disclosing rates. The personal consistency hypothesis was confirmed in that the low disclosers remained the low disclosers while the initially high disclosers also (in the first five minute time period) remained the high disclosers throughout the 15 minute interaction. Personal consistency was found to be strongest initially and declining with time. Patterns of reciprocity that have characterized previous dyad research was reconfirmed, apparently at the expense of personal consistency.

Reciprocity was ascertained through correlating dyad member's total disclosure output in each time period. The latter two time periods compared to the first five minute time period showed a progressively higher correlation between the dyadic members, indicating reciprocity. However, high disclosers did not bring low disclosers up in their disclosure level, as Jourard and Resnick (1971) had found. In fact, low disclosing subjects dropped a little, barely reaching a significant deviation from initial baseline by the last time period. High disclosers dropped significantly in their amount of disclosure.

From these results Kohen concluded that reciprocity of disclosure is a two-way street, rather than a one-way, as Jourard's (1970) study had indicated. That is, high disclosers are not the only source of influence within the dyadic interaction. Low disclosers can, and do, alter high disclosers output.

Concluding Remarks on Reciprocity of Disclosure. In summary, reciprocity of self-disclosure within the dyadic interaction is commonly reported (Cozby, 1973). How self-disclosure amounts and levels fluctuate during the interaction is presently unclear, but similarity, or at least the reduction of differences in dyadic members' disclosures does result over time (Kohen, 1975).

Jourard and Resnick (1970) have shown that high disclosers tend to raise low disclosers while maintaining their own "personal consistency." But Kohen has demonstrated the opposite. Using freely interacting dyads Kohen found low disclosers remained lowest throughout the entire interaction (maintaining some "personal consistency") and later lowered their output over time. It was high disclosers who tended to drift toward the low disclosers reducing the differences in the dyadic members self-disclosure output.

Many different methods of ascertaining reciprocity have been used. Researchers have asked subjects to merely choose from a group of topics (prescaled for intimacy) what they would like to discuss with another person, while actual conversation was not measured (Cozby, 1972; Jourard and Resnick, 1970; Tagnoli, 1969; Worthy, et al., 1969). Other investigations have used actual conversations of subjects interacting with confederates or experimental interviewers (Delega, Walmer and Furman, 1973; Ehrlick and Graven, 1971; Leven and Gergen, 1969; Powell, 1964; 1967). In this way, the intimacy levels and amounts of disclosing output were experimentally manipulated.

Kohen (1975) used dyads comprised for two subjects (rather than one dyadic member being a confederate) matched for physical attractiveness. The subjects freely interacted with one another for five

of the total 15 minute interaction. For the remaining 10 minutes the subjects prepared a two minute lecture they were to give after the interaction. By allowing naive subjects to interact with one another the conversation was typified by "mutual contingent" responses as opposed to "asymmetrical contingent" patterns. In this way, the present author contends, the data generated by this investigation is closer to the analogue being evaluated, i.e., real world self-disclosure.

The present investigation has also used freely interacting heterosexual dyads as a data base to promote "mutual contingent" response patterns within the interactions being analyzed. Aside from this similarity, there are several important differences between the present investigation and Kohen's, which this author will argue represent improvements upon the methods Kohen employed. It might be appropriate at this time to discuss a few of these salient issues of the two research designs.

The Nature of the Present Investigation. First of all, the present investigation does not split up the 15 minute interactions into different tasks or forms of interactional instructions. In this way, the total conversation is comparable in regards to reciprocity of disclosure as a function of time. In the Kohen study, subjects were first interacting freely, then they were instructed to prepare a two minute lecture in the latter 10 minutes. This change in tasks may have contributed to the variance reported by Kohen in self-disclosure over time in some unknown amount.

Kohen defined self-disclosure by first operationalizing self-disclosure and then totaling the units for each subject for each time period. Intimacy levels of disclosure were not ascertained. It is the present author's opinion that intimacy of disclosures is a most important parameter in accurately depicting self-disclosure. An example will help in making this point.

In the initial acquaintance phase of heterosexual dyads, typical conversational topics may center around "small talk" and "probing devices" in an attempt to find out "where the other person is at," attitudinally, socially, etc. As the conversation progresses temporally, the topics taken up by the dyadic members may (or may not) also progress in intimacy. To indiscriminately classify, "I'm a business major in school" with "My father is an alcoholic" (as would the methods used by Kohen) would be an enormous distortion of the information exchange within this particular conversation. Because of this, self-referent emissions in the present investigations were placed into one of three classes of intimacy (see Methods Section).

While Kohen transcribed the video-taped interactions from her study into written form to be analyzed by judges, the present investigation utilizes the original tapes for analysis. This methodology preserves any non-verbal, paralinguistic modes of communication. In this way, facial gestures, body movements, inflections of voice tones and other such non-verbal and/or meta expressions, when obviously conveying information, are included within the judgments of self-disclosure levels. Although the semantic content of the interaction is used predominately to ascertain intimacy levels, judges were

instructed to "not be rigidly bound to the operationalizing procedures when these methods were obviously distorting the message being conveyed."

Reciprocity was demonstrated by Kohen through totaling subject's disclosures for each time period. From these aggregates, a progressive decrease in the differences between dyadic members was demonstrated through the use of a repeated measures Anova design. In addition, a correlation between dyadic members' disclosures for each time period proved to progressively rise across time, indicating the subjects were becoming more synchronized in their respective disclosures, or at least less different.

Reciprocity in the present investigation is measured in a more molecular manner. It is the present author's belief that, in conversational research, more information is often times lost than gained when disclosure units are put into aggregates without regards to the sequence of the conversation. The results of such an approach would seem to reflect only the results of the interaction rather than how the conversational processes unfolded and how the sequence of events took place.

Krippendorff (1970) has also argued that communication research requires data rich enough to contain explicit evidence about processes of communication. Kohen's methods of analysis were insensitive to how subjects were actually responding to one another, at the verbal exchange level. There are no answers to such questions as: Did questions elicit more self-disclosure than self-disclosure itself? How did the subjects respond to one another's disclosures of highly personal information? Did they reciprocate at or near the same level

of intimacy, or did they choose to avoid such areas of discussion? In other words, the stream or sequence of events within the dyadic interaction was lost. Although a cause and effect relationship between subject's output cannot be surmised (using either method) in maintaining the sequence of events, a more accurate and comprehensive analysis will result.

Through the use of a sequence probability table (Allen, 1974), the manner in which the conversation shifts from subject to subject (this is called "mix") and how each subject responds to one another is made available. The sequence probability table gives percentages of what sort of mix (e.g., subject A following subject B) characterizes each interaction as well as what sort of "narration" (e.g., subject A following himself). In this way, self-disclosure mix which is congruent (i.e., subject A makes a self-disclosing statement which is followed by subject B's disclosure at the same level of intimacy) defines reciprocity (see Appendix B).

The mixes and narrations in the present investigation serve to maintain processual characteristics of the interaction at a stimulus-response level. That is, what proceeds (or follows) a given assertion or question becomes available data, as does the individual units of output. Although the exact semantical content of the conversation is not available, an elaborate breakdown of the subjects' statements provides a rather sophisticated and accurate description of the interaction in quantitative form along a number of dimensions.

Subjects' statements are defined in terms of questions and assertions (each unit recorded is one meaningful or complete idea), self-disclosure or non-self-disclosure, the intimacy of the disclosing

units, as well as what the particular statement was in response to. It is hoped that these operationalizing procedures devised for the present investigation will contribute to the evidence that there is, in fact, a functional and systematic relationship between self-disclosure behavior, FIRO-B classifications and compatibility, and various processes variables (such as the dyadic effect, the effect of questions upon disclosures, etc.).

Although ultimate proof of actual communication taking place may not be available (short of asking subjects if they did in fact communicate) in most aggregate data (Krippendorff, 1970) the present author contends that these methods of defining self-disclosure will preserve important processes involved in dyadic interaction which will result in a closer analogue to the real world events of interest. Closer, that is, than other methods used in the past which employed aggregational means to analyze disclosure patterns of behavior.

A Brief Conclusion

In summary, upon reviewing the literature of self-disclosure, inadequacies have emerged at the most basic level of operationalizing and measurement. Many investigators have relied upon unrefined scalar methods of measure (Cozby, 1973) while others have opted for more realistic behavioral methods. In choosing parameters of self-disclosure, many researchers have used only amount of disclosing behaviors, totally disregarding the level of intimacy these units represent. This is far from an accurate analysis of one's willingness to be known and has no doubt contributed greatly to the many conflicting results which exist in the self-disclosure literature.

Many attempts have been made to relate self-disclosure to various personality traits and mental health. The results of this search for a "self-disclosing trait" has been unsatisfactory. It appears that self-disclosure is an interpersonal phenomenon which is governed by many situational variables, as well as the sender's traits or character. This is corroborated by consistent findings of "norms of reciprocity" in dyadic interactions (Jourard, 1958; Kohen, 1975).

In keeping with the traditions of rigorous experimental design, many researchers have employed maximum experimental constraints in order to control all "extraneous variables." Although this research strategy lends itself to the isolation of specific effects of various factors within conversation, moving from this oversimplified and controlled laboratory setting back to the real world is not without complications.

The present author has argued in favor of a more "naturalistic observational" approach to conversational research. In allowing dyadic members to interact with a minimal amount of limitations and constraints the subjects respond to each other and to the full richness of variables that may arise within the dyadic encounter.

CHAPTER II

STATEMENT OF THE PROBLEM

In the past, a number of investigations have attempted to relate various personality traits to disclosing behavior, resulting in weak and inconsistent findings (Cozby, 1973). It has been argued in the present paper that self-disclosure is an interpersonal phenomenon. In order to more fully describe and predict self-disclosing behavior, one must take into consideration a number of interpersonal processes that occur within the dyadic encounter.

The majority of past research has generated data from the use of scalar methods and subjects' retrospective self-report of past behaviors. Through the utilization of behavioral measures of self-disclosure coupled with meticulous operationalizing procedures of the variables of interest, the present study will attempt to improve upon already existing methodologies in the area of self-disclosure.

The primary focus of this investigation is upon the effects of high compatibility or incompatibility in heterosexual dyads upon subsequent self-disclosing behavior (where compatibility within dyads is determined by composite FIRO-B scores). Through the use of this interpersonal system (the FIRO-B), it is believed that the FIRO-B need areas will exert a measurable mediating effect upon dyadic conversational patterns, and, more specifically, subject disclosure.

In addition, freely interacting heterosexual strangers are utilized. This affords an opportunity to study the development of self-disclosure within the brief initial acquaintance phase in a situation that approximates daily interpersonal encounters.

Furthermore, "norms of reciprocity" and "personal consistency" patterns of self-disclosure are analyzed from a number of vantage points. Two parameters of self-disclosure are defined in the present investigation: amount of level (of intimacy). Two data bases (individual subjects and dyads as a whole) are generated for purposes of looking at sex differences in conversational patterns and in dyadic FIRO-B classification differences.

Through the use of computer analyses, "Sequence Probability Tables" are organized, comprised of the dyadic conversational processes. The sequence of the conversational stream is maintained so as to provide a richer data base above and beyond mere aggregates of individual units of isolated behaviors. In this way, conversational processes, rather than results, are available for analysis. The application of these methodologies is expected to promote accuracy and precision in the self-disclosure literature, which has been plagued in the past by inconsistent and uncomparable results.

The FIRO-B

In view of the confounding problems Bath and Daly (1975) discovered in using other methods of measuring interpersonal strategies and personality traits, the FIRO-B instrument is employed in the present investigation to measure need orientations and interpersonal strategies. Advantages in using the FIRO-B (over the Leary system)

have already been discussed. A brief description of and rationale for the use of the FIRO-B follows.

According to Schutz (1966), the interpersonal needs of Inclusion (i), Affection (A), and Control (C) exhaust all necessary areas of interpersonal behavior required for the understanding and prediction of interpersonal phenomena. He defines these needs as follows:

Inclusion: the need to establish and maintain a satisfactory relation with respect to interaction and association (p. 18).

Affection: the need to establish and maintain a satisfactory relationship with people with respect to love and affection (p. 20).

Control: the need to establish and maintain a satisfactory relationship with people with respect to control and power (p. 18).

Schutz designed the FIRO-B to measure how an individual typically behaves in interpersonal situations and to allow predictions of such behavior. The FIRO-B questionnaire contains six scales consisting of nine items each. Separate scores are available for each scale. The scores describe what behavior an individual typically expresses (e) toward others, and how he typically wants (w) others to behave toward him in regard to each of the three broad areas of interpersonal needs (I, C, A).

These scores, expressed inclusion (e I), wanted inclusion (w I), expressed control (e C), wanted control (w C), expressed affection (e A), and wanted affection (w A), can be compared in such a way that compatibility indexes between two persons can be calculated. Schutz (1960, p. 105) defines compatibility as "a property of a relation between two persons that leads to mutual satisfaction and harmonious coexistence." He makes no specific prediction regarding need

compatibility in heterosexual dyads, but does hypothesize that certain patterns of relations between expressed and wanted behaviors of two individuals should maximize their mutual need-gratification.

Dyadic compatibility or incompatibility may be present within any interpersonal need domain (I, C, or A) separately, or in any combination. For example, within a given dyad, strong mutual gratification of affectional (A) needs might exist, while relatively little mutual satisfaction of C and I needs occur. Complete understanding of the nature of the compatibility between two persons thus requires independent assessments of the compatibility function within each need area (Close, 1975).

Schutz (1960) has described three separate types of compatibility which can be extracted from FIRO-B scores: Originator (ok), interchange (xk), and reciprocal (rk) compatibility. Each type reflects a different aspect of need satisfaction. The precise meaning of each of these varieties of compatibility has been described elsewhere (Schutz, 1960). Of direct relevance to the present study is rk, which is described as follows:

Reciprocal compatibility can be understood by examining individual A's description of how he likes to be acted toward (i.e., wanted inclusion by A, WIA) in relation to individual B's description of how he likes to act toward people (i.e., expressed inclusion by B, eIB) and vice versa. If B exhibits the behavior that A desires, then they possess reciprocal compatibility. This compatibility type is expressed quantitatively by

$$rk = e_i - w_j + e_j - w_i \quad (\text{Close, 1976, p. 17}).$$

In addition to reciprocal compatibility, dyads in the present investigation are constructed on the basis of an additional compatibility dimension. As suggested by Centers (1975) interpersonal needs

may be gratified when dyadic members are compatible in a similar fashion. That is, to the extent that each person's needs are alike, need satisfaction with the dyadic interaction will result.

Although Schutz did not describe compatibility measures based upon need similarity, such an index is available elsewhere. Close (1975) has proposed three new FIRO-B compatibility indexes which, with the addition of Schutz's three (i.e., rk, ok, and xk), exhaust the mathematical possibilities for comparison of two subjects' FIRO-B raw scores, expressed or wanted, in a given FIRO-B area. Close has labeled his three new compatibility types as: anxiety (ak), intra-change (zk), and similarity (sk). Figure 1, adapted from Freeman (1976) and Close (1975) presents the mathematical expressions for all six of the FIRO-B compatibility measures.

Close's (1975) description of similarity compatibility (sk) is relevant to the present problem:

Similarity compatibility refers to the extent that the expressed behaviors of individuals A and B are similar (i.e., $e_{IA} - e_{IB}$) and the extent that the wanted behaviors of individuals A and B are similar (i.e., $w_{IA} - w_{IB}$). If the expressed behaviors of A and B are equal in magnitude, and the wanted behaviors of A and B are equal in magnitude, they possess similarity compatibility. This index is a clear measure of how similar the scores of two individuals are, compared first for expressed behaviors, and is quantitatively expressed by:

$$sk = e_i - e_j + w_i - w_j \quad (p. 18).$$

Dyads in the present study are defined by both complementary and similarity dimensions of interpersonal compatibility. Following Centers' notations, Schutz's reciprocal compatibility is replaced by Centers' comparable index of compatibility complementary compatibility (ck), while sk indicates similarity compatibility.

	i	j			
e	x	x	$xK = (e_i + w_i) - (e_j + w_j) $	Interchange compatibility	
w	x	x	$aK = (e_i - w_i) + (e_j - w_j) $	Anxiety compatibility	
	i	j			
e	x	x	$zK = (e_i + w_j) - (e_j + w_i) $	Intrachange compatibility	
w	x	x	$rK = (e_i - w_j) + (e_j - w_i) $	Reciprocal compatibility*	
			$cK = (e_i - w_j) + (e_j - w_i) $	Complementarity compatibility	
	i	j			
e	x	x	$oK = (e_i + e_j) - (w_i + w_j) $	Originator compatibility	
w	x	x	$sK = (e_i - e_j) + (w_i - w_j) $	Similarity compatibility*	

*Used in the present investigation.

Figure 1. Mathematical Definitions and Graphic Representation of the Six Types of Compatibility (from Close, 1975).

Hypotheses and Basic Design

The first hypothesis presented in this study is based upon the assumption that people can, in just a few minutes of interaction, recognize that they are compatible or incompatible (in one of the FIRO-B need areas) and this in turn will have a systematic effect upon their subsequent willingness to disclose to one another. Center (1975) and Murstein (1970) have both postulated that people are "sensitized" by their own needs to the potentially gratifying need resources in others (see Freemon, 1976, for an excellent review of this literature). Centers (1975) has argued:

In encounter with others he will respond to them with either feelings of attraction or repulsion in keeping with his conscious or unconscious "sensing" of their actual or potential resources for his gratification or purification (p. 198).

Murstein (1970) has also considered fundamental needs and the potential gratification of these to play an important part in heterosexual relations. But Murstein, as well as Centers, have argued that these needs come into play much later in the relation, not during the initial acquaintance period.

Effects of Overall Compatibility. It is Freemon's notion that many variables may operate simultaneously during the initial acquaintance period (including becoming aware of the others' need structures and resources to satisfy one's own needs). Freemon has argued that although physical attraction and attitudes will be most salient in the first few minutes of an initial interaction, the need resources will be recognized and will be manifested through various means. Freemon has demonstrated that subjects will like each other more when

compatible than not, and subjects in general were able to predict their partners' FIRO-B score after interacting with their partners for just a brief time period (15 minutes). This latter aspect of Freeman's work is indicative of need resources recognition within a brief interaction. (Note: This study was carried out in conjunction with Freeman's and used the same subjects while they were participating in Freeman's study.)

The present investigation tests the hypothesis that this unique relationship between highly compatible and highly incompatible dyads within one of the three FIRO-B need areas will be manifest through the subjects' respective willingness to disclose personal information to each other.

Based upon the assumption that people do perceive each other's needs and resources which may potentially satisfy their needs, the following prediction is proposed:

- 1) There will be a greater amount and higher level of exchanged personal information with the compatible dyads as compared to incompatible dyads. This predicted systematic relationship between self-disclosure and FIRO-B compatibility status within the dyads will be due to the recognition of this unique relationship each dyadic member shares with their partner within the 15 minute interaction.

Compatible Effects for the Three Separate FIRO-B Areas. The three separate need domains of the FIRO-B (I, C, and A) have all been analyzed separately in the present investigation. Dyads are to be created in a way that their respective FIRO-B scores will indicate either highly compatible relationships in sk and ck, or, highly incompatible in sk and ck in the area of either I, C, or A. While only

one need area contributes to the compatibility status of the dyad, the other two, for each subject, are held as close to the grand mean as possible. The following two hypotheses are postulated as a result of this design:

- 2) The greatest amount of self-disclosure within the early phases of the interaction will be within the Compat Inclusion dyads as compared to Compat Affection and Control.
- 3) More intimate levels of disclosure (but less amount) will be found within dyads highly compatible in the area of Affection, when compared to compatible Inclusion dyads.
- 4) There is expected to be a statistical interaction of Time and Compat. That is, subjects who are compatible with their respective partner will drop less in their disclosures (than incompatible dyads) from Time period 1 to Time period 2.

A rationale for these three hypotheses shall briefly be considered. Altman and Haythorne (1965) have suggested that self-disclosure is generally characterized by "breadth" rather than "depth" when two persons are initially becoming acquainted. Consequently, a wide range of personal information of a relatively superficial nature is usually exchanged (Schneider, 1976). Freeman (1976) has also noted that much of the information exchange during the initial heterosexual encounter consists of Inclusion related material (e.g., common friends, mutually appealing social activities, etc.). Freeman further notes that Schutz (1966) has proposed that interpersonal relations tend to develop in or follow a serial sequence in terms of the type of interpersonal need gratification most emphasized at a given time in the relation.

Schutz (1966) argues that initially most interpersonal exchange focuses upon Inclusion related behaviors and topics of discussion. Later, Control and then Affection activities become central to the

relationship. If initial encounters do follow this sequence of communication exchange, it would seem reasonable to hypothesize that dyads highly compatible in the area of Inclusion would recognize their unique relationship earlier (than in Compat Affection and Control) and, as a result of this, generate a large amount of superficial disclosures.

Hypothesis 3 is based upon the assumption that Affection needs may be more difficult to recognize during the early phases of the encounter (Freemon, 1976). However, if the ability to perceive need resources in the other person in the first few minutes of dyadic interaction does exist, then evidence of this process is predicted to be manifested in the subject's disclosure levels and amounts. Compatible Affection dyads are expected to disclose less in amount than Compatible Inclusion dyads, but more in intimacy.

The rationale for Hypothesis 4 seems intuitively sound. Dyads who are Compatible (over all) will recognize this unique dyadic status, which will in turn facilitate more disclosure (or a lesser drop in disclosure output) than Incompatible dyads in the latter phase of the interaction.

Modes of Conversation. An additional prediction related to FIRO-B classification and subsequent verbal output has to do with the form of the conversation. Allen (1974) has differentiated two contrasting forms of verbal exchange: the narrative profile, whereby one dyad member emits one or more assertions while the partner's verbalizations are at a minimum (i.e., he or she is adding nothing in the way of information), and the "responsive cycle" (or "mix

patterns"), where both dyad members alternatively include assertions and questions.

Carried to its extreme, narrative behavior may take the form of a lecture. In lesser degrees, it could be a story being told by one dyadic member, instructions, or a one-sided conversation. It has its advantages in conveying a large amount of information without distraction from partner's input (Allen, 1974). The responsive cycle (or mix) is characterized by a more uniform exchange of information and permits a progressive interlocking of assertions, requests for information and ideas. Allen (1974) notes:

This presumably contributes positively to the quality of the conversational bond. The responsive cycle has the important social function of creating a close temporary union between pairs of actors which leads to understanding, agreement, and consensus. It also develops the socially essential skill whereby one actor can closely coordinate his behavior with that of another (p. 195).

Allen has demonstrated that dyad conversation is typically characterized by responsive or mix patterns. This appears to be the primary mode of conversation. Based upon Allen's conversational research findings, the following hypotheses are proposed:

- 5) Dyads will have a greater amount of "mix" or responsive cycles within their conversation as compared to "narrative patterns."
- 6) Dyads who are highly compatible will have significantly more responsive patterns within their conversation than Incompatible dyads.

The reader may note that "mix" or "responsive patterns" of conversation is akin to reciprocity of self-disclosure when the mix involved is self-disclosure. That is, when one dyadic member asserts a remark about his or herself and the other member comes back with a

similar (in intimacy) remark about his or herself, reciprocity of self-disclosure is indicated. The above hypotheses are based upon overall conversation, making no distinction between disclosure and non-disclosure.

In regard to self-disclosure, the patterns of congruent responsiveness or mix serve as an excellent index of reciprocity in that these conversational parameters represent the immediate exchange process. Typically, reciprocity analysis has not preserved the sequence of the conversation, but rather has drawn conclusions about reciprocity from totals of self-disclosing units of behavior (Kohen, 1975) or from other indices of disclosure not even involving actual verbal behavior (Jourard, 1971). The present author contends that these methods of measuring reciprocity distort and hide more information than they provide. But through the preservation of "narrative" and "mix" processes within the dyadic interaction, the present methodology provides a more precise and dynamic description of self-disclosing processes within the dyadic encounter. The following hypotheses are to be tested using methods which preserve the sequence of each verbal emission in relation to its preceding communication.

- 7) Compatible dyads will generate more "congruent mix" of total self-disclosure than Incompatible dyads, which will represent a stronger "dyadic effect" (Jourard, 1971) or "norms of reciprocity" (Kohen, 1975).
- 8) Dyads highly Compatible in the area of Inclusion will produce the highest amount of reciprocity of self-disclosure.
- 9) Dyads highly Compatible in the area of Affection will produce reciprocity patterns of self-disclosure highest in intimacy.

Questions. The questions asked, what they were asking for, and what sort of responses had been elicited are preserved through the use of the sequence probability table (Allen, 1974). (Note: The reader is referred to the Methods Section for an overview of the methods used in the present study). Sermat (1973) has found that questions represent one of the more potent means of eliciting disclosure from subjects. The present study will test these findings of Sermat's (1973) using freely interacting dyads. The reader may remember that Sermat's methodology employed the teletype machine and a confederate completely out of view of the subject. The confederate would then manipulate the conversation as an independent variable. No study, to this author's knowledge, has investigated the freely interacting heterosexual dyad in regard to what sort of probing devices are manifested.

The present investigation ascertains frequency of questions at various intimacy levels, sex differences in asking for self-disclosure (as well as giving it), and the efficiency of a question asking for self-disclosure as compared to reciprocity of self-disclosure. Hypotheses that are relevant to questions asking for self-disclosure are as follows:

- 10) Questions asked in the dyadic encounter will not be high in intimacy but rather at a more superficial, demographic level.
- 11) Yet questions asking for self-disclosure from the other will be the predominant mode subjects will engage in to "get to know the other person." Questions asking for self-disclosure will have a higher "success rate" than self-disclosure on the part of one subject eliciting self-disclosure from the other (better known as the "dyadic effect").

Although subjects are instructed to get to know one another as people, it is expected to find that they will shy away from asking for too highly intimate information from the other, but rather, ask for superficial information. This is based upon intuition as much as Altman and Haythorne's suggestion that acquaintance phases are typified by "breadth" rather than "depth." A most effective way to "get into" deep topics is to ask for the information. Conversely, the best way to not become deeply engaged in a highly intimate conversation is to avoid asking intimate questions. The latter is expected to occur in the present investigation.

But at the same time, questions are expected to be the most efficient means of eliciting disclosure from the other as compared to relying upon reciprocity on the other's part. A comparison of "mix" which is comprised of two disclosures at the same level of intimacy with questions asking for and eliciting self-disclosure is made to ascertain the relative efficiency of the two conversational strategies.

Sex Differences. Females have typically reported, retrospectively, more self-disclosure than males to target persons listed in self-disclosure inventories (Dimond and Mury, 1967; Hood and Back, 1971; Jourard, 1961a, 1961b; Jourard and Lasakow, 1958; Jourard and Richman, 1963). Similar sex differences have been found in actual interacting dyads (Haymes, 1969) while a few studies have reported no sex differences (Dimond and Hellkump, 1969; Doster and Strickland, 1969; Kohen, 1975). Of particular interest is the Kohen investigation in that the methodology is similar to the present investigation in that freely interacting dyads were employed. Based upon Kohen's findings,

the present author anticipates

- 12) There will be no sex differences in total disclosure output within the freely interacting heterosexual dyadic encounter.

Sex differences in the amount of questions asking for self-disclosure are ascertained, although no formal hypothesis is proposed.

A Brief Summary

A 2x3x2 "Split Plot Factorial Design" is constructed by forming heterosexual dyads on the basis of their FIRO-B scores. The independent variables of interest are Compatibility of the dyads, their respective FIRO-B area (Inclusion, Control, or Affection) and the Time period at which the data is drawn from the total 15 minute interaction. The dependent measures are intimacy and amount of disclosures as a function of the above mentioned independent variables.

The following hypotheses are proposed:

- 1) There will be a greater amount and higher level of disclosure output within Compat dyads as compared to Incompat dyads.
- 2) The greatest amount of early disclosure will occur within dyads Compatible in the area of Inclusion, as compared to other categories of dyads.
- 3) More intimate levels of disclosure will be found in dyads Compatible in the need area of Affection.
- 4) Compat dyads are expected to maintain more disclosure output over Time than Incompat dyads.
- 5) Patterns of "mix" will be greater in frequency than "narrative" patterns of conversation within the initial acquaintance phase of heterosexual dyads.
- 6) Dyads who are compatible will generate more "mix" than incompatible dyads.
- 7) Compat dyads will reciprocate disclosures more often than Incompat dyads.

- 8) Compat Inclusion dyads will produce the highest amount of reciprocity.
- 9) Dyads highly compatible in the area of Affection will produce the most intimate patterns of reciprocity of disclosure.
- 10) Questions asked in the present investigation will be at a very low level of intimacy.
- 11) Questions asking for self-disclosure will be the most efficient and most frequent mode used in "finding out about the other."
- 12) There will be no sex differences in Total Self-Disclosure output.

In addition to analyzing the data to test the above hypotheses, a comparative analysis of the present investigation's methodology for ascertaining patterns of reciprocity is performed. This involves analyzing the dyadic interactions from the present investigation using methods employed by Kohen (1975). In this way, a comparison and evaluation of the two methodologies becomes available. It will be interesting to see if the two methods of measuring self-disclosure reciprocity come up with similar results.

CHAPTER III

METHODS

Subjects

Subjects were drawn from an initial pool of 450 males and females enrolled in undergraduate psychology and sociology classes at Oklahoma State University. All subjects within this sample were administered the FIRO-B scale (Schut, 1960) in class. The subjects were not informed that their FIRO-B scores were necessary for participation in the laboratory phase of the experiment until after they had completed the form. Following completion of the FIRO-B, all subjects were given an opportunity to participate in further stages of the experiment by listing their names, age, sex, marital status, ethnic background, class section, and telephone number on the FIRO-B form and returning it to the experimenter. The subjects were informed that all persons selected for further participation would be personally contacted later. (Note: Self-disclosure process data collected within the experimental phase of the present investigation was obtained from subjects participating in Freeman's (1975) research dealing with heterosexual attractiveness.)

Subject Selection Procedure

Only those potential subjects who were single, Caucasian, and under 25 years of age were included in the next phase of subject

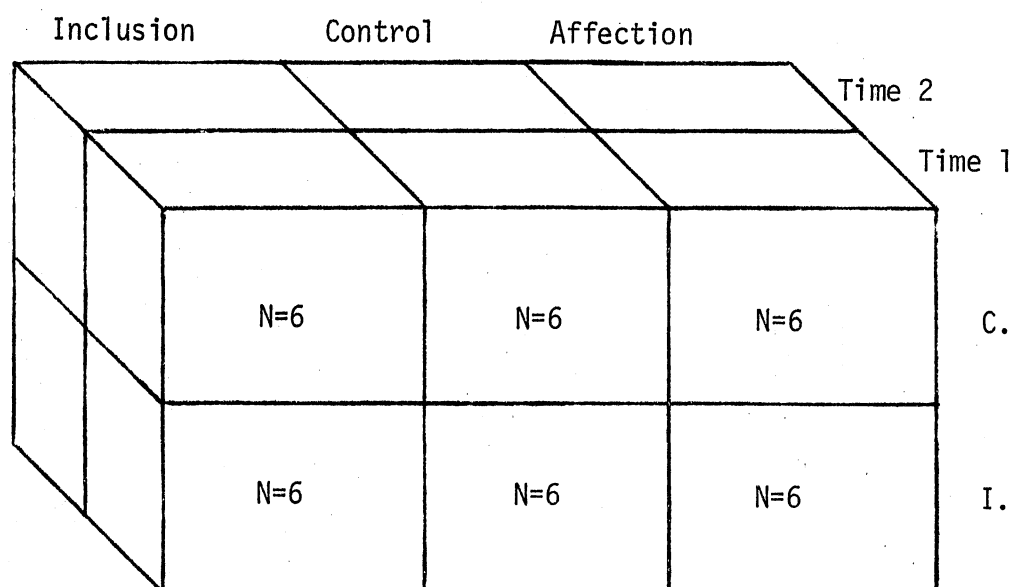


Figure 2. Split Plot 23.2 Factorial Design

selection. The FIRO-B forms of all subjects who satisfied the above criteria, and who had indicated a willingness to participate in the experiment, were hand scored and the six overall FIRO-B scale scores were registered on IBM computer cards. This group included approximately 180 males and 200 females.

Generation of potential experimental dyads followed a modified version of procedures developed by Close (1975). First, complementary (ck) and similarity (sk) compatibility scores were computer calculated for all possible dyadic pairings of males with females for each of the FIRO-B need domains. Next, grand mean scores for sk and ck were determined for each need domain. Selection criteria were chosen so that ck and sk compatibility or incompatibility would be maximized for a given need domain, while being held near the grand mean for the two remaining domains. The following constraint values were adopted: Compatible--sk and ck scores less than or equal to two (low scores indicate greater compatibility); incompatibility--sk and ck scores greater than or equal to 10; intermediate levels--sk and ck scores 4-8, inclusively. Using the above selection rules, incompatible and compatible dyads were generated for each of the FIRO-B need domains. Actual dyads included within the basic experimental design of the study were sampled from these six general groupings.

Figure 2 illustrates the basic experimental design constituting the present study. Six dyads were sampled from each of the six groupings described above, and efforts were made to induce them to participate in the laboratory phase of the study. Many potential subjects appeared in more than one dyad, either within a given cell or in

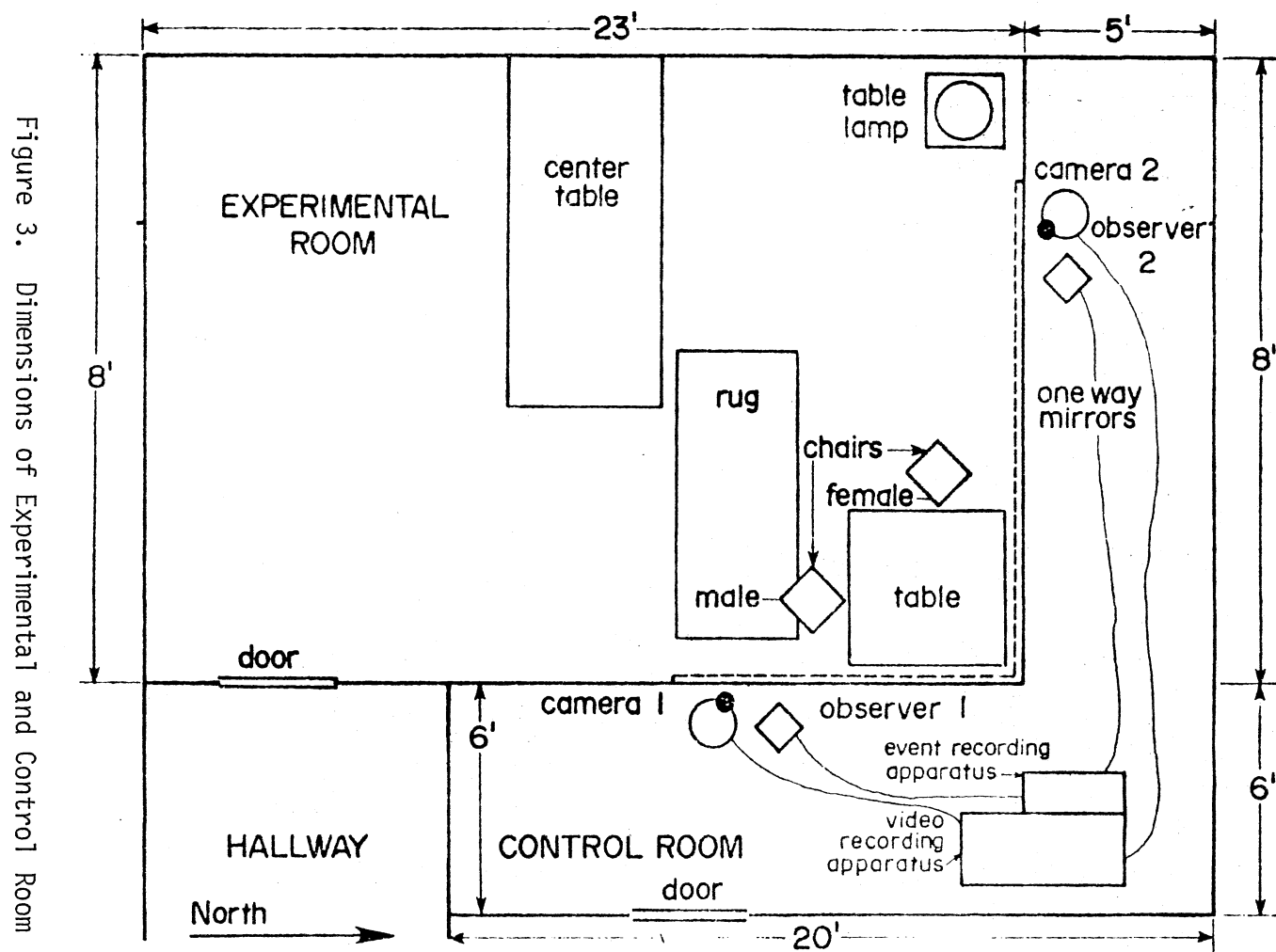
different cells. Therefore, all such multiple pairings but one were randomly deleted.

Materials and Apparatus

A laboratory room (Figure 3) approximately 8 feet by 23 feet with one-way mirrors located along the shorter north and longer east walls, adjoining at the northeast corner, was used for the experiment proper. Located in the northeast corner of the room was a square table 30 inches by 30 inches by 26 inches in dimensions. Two 17-inch high plastic hardbacked chairs situated along the south and west sides of the table (facing each other and rigidly attached to the floor) served as seating arrangements for each heterosexual dyad. Located above the table, but hidden from view behind open curtains framing the mirror on the east wall, was a microphone for audio recording.

The experimental room was decorated in such a way as to diminish the laboratory effect that would otherwise be present. A large throw-rug was placed directly in front of the table which, itself, was covered with a bright red tablecloth. A smaller table and lamp combination was positioned in the northwest corner of the room near the large table.

Several paintings and posters were hung along the walls at the north end of the room. Near the center of the room a large bench-like wooden table was placed in such a way that it tended to break up the rather long, narrow room into two separate sections. Several books and a "driftwood" sculpture were placed on this table in an effort to produce a more casual atmosphere.



Behind each one-way mirror along the north and east sides of the experimental room was an adjacent, but separate control room. The dimensions of this L-shaped room were approximately 20 feet by 6 feet along the east (long) side and 8 feet by 5 feet along the shorter (north) side. Audio and video recording equipment, experimental observers and event recorders were situated in this room. Two tripod-mounted Sony AUC 3260 Video Cameras equipped with Sony 1;1;18, f 12.5-75 Zoom Lenses were placed behind, and at approximately 45 degree angles to, the one-way mirrors, facing each other in roughly a straight line. This placement allowed the cameras to be focused on the face and upper torso of the subjects. A Sony SE6-IA special effects generator was utilized so that a vertical split-screen image including the face and torso of both subjects could be simultaneously recorded. Two experimental observers, one positioned next to each camera, separately recorded the time each subject spent gazing into the face of his partner during the interaction session.

Procedure

Dyads from the various cells in the experimental design were scheduled for participation on a completely random basis. Difficulties in scheduling, however, necessitated contacting a large number of potential subjects in an effort to obtain sufficient dyads to fill all cells in the proposed design. This difficulty was compounded by the failure of large numbers of subjects to show up at the times arranged. Because of the dyadic nature of the study, both members of a couple were required to be present at the scheduled time if experimental procedures were to be completed. Furthermore, the previous

level of acquaintance of subjects constituting a dyad was required to be minimal.

All potential subjects were contacted by phone. The experiment was described as an interpersonal relations study in which they would be asked to talk and visit with a person of the opposite sex. No other details about the experiment or any information about their partner was provided, however. A small amount of extra credit from their psychology instructor was promised for participating. Usually, several calls to each subject were required before a mutually satisfactory time to participate was arranged for both members of a dyad. Most subjects who agreed to participate were telephoned and reminded of their appointment the night before.

When members of an experimental dyad appeared at the laboratory they were ushered into separate rooms where they waited until both members of the couple had arrived. If a subject's partner had not shown up by 15 minutes after the scheduled time, he or she was assured of the extra credit and dismissed with thanks. Another couple with the same compatibility characteristics was then scheduled. If both members of a dyad arrived on schedule, they were each asked to complete a form (Appendix B) indicating their level of acquaintance with their prospective partner. All subjects who were acquainted with their partner at a level beyond category 3 ("Have spoken to him or her in class a few times, but don't really know them") were given an alternative task (filling out a dating questionnaire), promised course credit, and dismissed.

If the level of acquaintance was established as not exceeding the constraint defined above, then the two subjects were escorted from

their separate rooms and taken across the hall to the main laboratory. Two experimental assistants, one male and one female, were positioned in the hall leading to the experimental room. As the two subjects passed, tentative impressions of physical attractiveness were formed. These measurements were used in another, simultaneous investigation into "Liking and Loving."

Upon entering the experimental room, the two subjects were introduced and seated around the table at the north end. The male was always seated on the south side of the table, and the female on the west side. The chairs were positioned directly facing each other separated by the southwest corner of the table (Figure 3). A distance of approximately 46 inches separated the subjects.

The principal experimenter, a 32-year-old male graduate student, instructed and debriefed all subjects who participated in the study. Once the subjects had settled comfortably into their chairs, he presented the following instructions:

"First, I would like to assure you that this experiment involves no deception or trickery. Both of you are real subjects. All that you will be asked to do is talk and visit with each other for a few minutes. One of the most important things that we're interested in for this study is how two people who are not very well acquainted go about getting to know each other. People have all sorts of ways of trying to really get to know someone else as a person, i.e., really finding out what they are like as a human being. That's what we would like the two of you to do today. Just do what you normally do when you're really trying to get to know someone. However, please remain seated throughout. Any Questions?"

"Now, to help us better understand what happens in the process of getting acquainted we will be observing and video taping your interaction. This is done so that later, when we have time, we can look at your interaction more closely. There are a few things which happen so fast that they'd be missed if we didn't record them. After we've had a chance to look at these things all the tapes will be erased."

"Okay, after you have visited for awhile and each of you has found out some things about the other's personality and character, I'll be back in to have you fill out some forms and questionnaires about your impressions of your partner. If at any time during the procedure you decide that you would like to withdraw from the experiment, feel free to let me know and you may do so. Any final questions?"

Occasionally, subjects would ask how long the interaction session would last. Whenever this question arose, the experimenter apologized, but told the subjects he could not reveal the precise length until the session was over. After responding to all questions and putting the subjects as much at ease as possible, the experimenter left the room and the free interaction session began. At this point, all cameras were activated and the timing devices were started. The entire 15 minute session was video taped by technicians located in the control room. Simultaneously, the two observers began recording eye gaze-time and continued to do so throughout the session.

At the end of 15 minutes, all observation procedures were terminated and the principal experimenter re-entered the main experimental room and escorted the subjects to separate chambers. Post-interaction attitude and attraction scales used for concurrent research were administered by a different experimenter, a 27-year-old male graduate student.

After completing all the scales, the two members of the dyad were brought together, debriefed regarding the purposes and goals of the investigation, cautioned against revealing any of this to other potential subjects and dismissed with thanks. The entire experimental procedure required approximately one hour. With the exception of the principal experimenter, none of the experimental assistants were aware of the compatibility characteristics of a given dyad at the time the

couple was run and during the operationalizing of the conversational parameters used in the present investigation.

The "Inner Circle"

This is a clinical tool which has been used to overcome certain resistances in clients so they may assume a greater willingness and ability to attend to and disclose certain relevant personal issues to the clinician. In the clinical setting, the client who may seem reluctant to talk about important matters or who just dwells on tangential materials is shown the Inner Circle. The client is told this depicts the way many people function. Area A represents a person's most private territory, his inner world. He shares information within this area with hardly anyone; maybe his therapist. Area B represents feelings, thoughts, and experiences which a person may reveal to only a very few intimate friends or confidants.

Area C contains matters which may be shared with several good friends without involving much risk, but these friends are not allowed in Area B, and of course not in Area A. Area D contains information which one would disclose to acquaintances such as a friend of a friend, someone with whom one has known for only a very brief time, and so on. Area E is the sort of information which is public and pertains to oneself, or information which would be revealed to most superficial contacts.

The element of risk involved in disclosing information about oneself to another from each of these groups is at its maximum in Group A and declines to a minimum in Group E. When it is pointed out to the client that there are really very few things one could possibly do or

feel which rationally belong in Area A, Lazarus reports the client often times loosens up and talks more freely.

The Experimental Application of the Inner Circle

The Inner Circle concept was employed in the present investigation to enable judges to more accurately categorize the intimacy of the subject's disclosures.

Categorizing the Verbal Behaviors

For purposes of categorizing the verbal behaviors, two three-minute samples (time periods) were taken from each fifteen minute dyadic interaction. It was presumed that the subjects would have enough time to orient themselves to the experimental setting as well as each other by the third minute. The first time period consisted of the third, fourth, and fifth minutes of interaction. The second time period was made up of the twelfth, thirteenth, and fourteenth minutes. By temporally spacing the samples, one early and the other later in the session, an index of developmental patterns in conversational processes was provided.

Operationalizing Self-Disclosure

From each set of time periods each individual's verbalizations were operationally defined and categorized into one of nine groups. Verbalizations were first broken down into the two general groups of Assertions (a meaningful statement) and questions. Questions were coded as either 2, 3, 4, or 5, which indicated the subject was asking for information at either the C, D, E, or F level of intimacy.

Assertions were broken down further into either self-disclosure (Groups C, D, or E), non-self-disclosure (Group F) and Passers (Group G).

In order for a verbal act to qualify as one unit of measurable behavior the subject speaking must have clearly taken the floor and the emission must have been one complete thought (an assertion or a meaningful question). The various levels of intimacy within the self-disclosure category (Groups C, D, and E) have been differentiated by means of the "Inner Circle" strategy (Lazarus, 1969).

Groups A and B. By definition, the very personal Group A concepts were not communicated, and were thus not measurable. Group B included very intimate information about oneself which could be communicated, such as feelings or ideas about one's own body, personality, personal sex life, extreme fears and passions about very personal matters, and so on. Very few disclosures were expected to fall within this group because of the briefness of the interaction and the fact that the dyad members were meeting each other for the first time (there were, in fact, no disclosures measured at the level of Group B as well as Group A).

Group C. This category contained assertions and questions which are less risky to disclose and ask than the ones contained in Group B. Personal tastes, attitudes, fears and likes about such topics as sex in general, religion, one's philosophy on life, politics, etc. comprised Group C. In addition, issues pertaining to one's family and love life which seemed less intimate than Group B were included in Group C. A few of the verbal acts that could be placed in this category

are:

"My mother has to be the mediator between my father and I."

"My boy friend in the city doesn't mind if I have a boy friend up here."

Although very few assertions and questions asking for personal information at this level of intimacy occurred, the subjects in the present study did, on occasion, reach this level of intimacy.

Group D. Assertions and questions which composed Group D are demographic units of information about oneself, such as one's major in school, work, home town, number of siblings, etc. If someone said his or her father was a carpenter, this would be scored at the "D" level of self-disclosure. Although this assertion is not self-disclosure, per se, this type of information does in fact convey personal data, i.e., social economical status of one's family. If the subject then choses to expand upon the topic of his father, this subsequent information would be coded separately as non-self-disclosure.

Also included in Group D were opinions and attitudes about various topics as school and classes, work, hobbies, the experimental setting and partner, etc. As was expected, most of the disclosures in this study fell at or near this level of intimacy. This was probably so because of the non-threatening, probing quality of this level of disclosure, as well as the nature of the situation (this being the first time the dyadic members had met and talked to one another).

Examples of self-disclosures which could be assigned to level D are:

"Whats your major?"

"Well, I don't really have one right now. I might try business."

This last response would be scored as two units of self-disclosing information at the "D" level. The subject's response to the question contains two meaningful statements or pieces of information. The question would be coded as a level "3", indicating that the verbal behavior was a question asking for a level "D" answer.

Group E. This category is defined as "public information" about one's self which reveals very little in the way of personal information. For example:

"I have an eight o'clock class."

"I do have a bit of an accent."

These last two categories, Group D and E, in pilot work, occasionally seemed to overlap. To help the judges obtain more consistent evaluations of the conversation, further operational concepts were employed.

Additional Operational Techniques

To further operationalize and clarify the last two categories, "D" and "E", one additional set of norms was developed. If the type of information asked for or given could not be obtained short of using "Private Eye Techniques" (i.e., the information was not immediately apparent and snooping into the person's personal life would be required to gain the information) the behavior was coded at or above the intimacy level of Group D.

Information which could not be obtained short of coming into one's house, for example, would require the "Private Eye Technique" and would go into category "D". For example:

"I like classical music."

"I like to raise plants."

But disclosures about oneself which were more apparent and could be known by merely being in a public situation with the other would go into Group "E", as "public data." For example:

"My hair is long."

"My eyes are bad enough to wear glasses."

Thus, when the assertions and questions were ambiguous in regards to the "Inner Circle" classification system, the "Private Eye" concept was employed. This strategy contained within it a "physical boundary" (one's house) which facilitated clarification for the judges, between Group E and the more intimate self-disclosures of Group D and above.

Non-Self-Disclosure Classifications

Group F was made up of all non-self-disclosures. If person A asked a question which did not request self-disclosure from person B, and person B gave an answer which did not reveal any aspect about his or herself, each person would receive one unit (toward their respective score) at the "F" level. Person A's behavior would be coded a "5", indicating she asked a question for non-self-disclosure, person B's behavior would be coded with an "F", indicating he made an assertion containing no personal information. By differentiating questions from assertions, the subject's respective effect upon the other dyadic member's responses could be analyzed. The coding system employed in this study also preserved the sequence of the conversational exchange. That is to say, what followed and preceded each response is preserved to give a better picture of the immediate exchange process of the dyadic interaction.

Group G. Communications which were complete thoughts in themselves, yet only reflected what the other person had just said, were classified as Group G emissions, along with "pacers" (see above). For example, if person A made an assertion and person B reflected that statement verbatim (for whatever reason), the reflection was scored as a "G" statement.

But if an assertion was repeated in an inflective manner which clearly indicated the person was asking for an elaboration or clarification of the previous statement, the reflection was scored as a question in it's appropriate class. By using the actual video tapes, voice tonal qualities and other such "meta-communicational processes" (Haley, 1966) could be taken into consideration. The tape player was operated by the principal experimenter who defined each meaningful assertion or question to be categorized while one of two judges recorded and classified all dyadic emissions. When necessary, the tape was rewound and played again for clarification. Both the judges as well as the principal experimenter were naive in regards to what FIRO-B classification each dyad belonged to throughout the operationalizing procedures.

A Rationale for Measuring Only Assertions and Questions. Allen (1974) has broken conversation down into seven elementary components which include assertions, questions, agreements, laughs, interjections, fragmentations and simultaneous speech. The first two, assertions and questions, represent the primary focus of this investigation and are consistent with the "Inner Circle" concepts used for categorization of the verbal outputs.

Allen has noted:

The assertion and question are complementary to each other and carry virtually all of the information transfer. It is important to recognize that the information transfer is mutually additive for both participants in the actions of sending and receiving. Therefore, the study of communication and social relations involved should center here (p. 42).

Laughter, fragmentations, simultaneous speech and agreements were not scored. Interjections which were discrete enough to "get the idea across" and were not simultaneously spoken were scored within their proper category.

The "Cycle" Concept. Allen (1974) has also noted that conversation may be analyzed at various levels. One such level is the "cycle." Conversation is made up of a series of cycles. The first cycle begins when person A emits the first verbal act within a dyadic encounter and terminates when person B (the other) completes his or her verbal responses to A's initial utterance. Taking this perspective, there are many measurable units of behavior within each cycle and within each half cycle (i.e., when one person starts and ends their own statements).

If a person has chosen to disclose added amounts of personal information beyond the question asked of him or her, this would be significantly different from giving only a minimal response to the other's question. Following this rationale, each new complete thought or idea was recorded as a separate unit of data. In this way, each cycle and/or half cycle could (and very often did) contain a number of units of measure. Each measured unit had to be a discretely different piece of information. If an assertion was merely restated in another manner (e.g., "I really like apple pie. I can't think of anything I

like better") it was scored as just one unit. But if a sentence or utterance contained a number of different ideas or pieces of information, the half cycle was broken down into as many units as necessary.

This method was found, in pilot sessions, to make classifications of the verbal behaviors into the intimacy groups more easy. This was so because any given half cycle may contain any number of different levels of disclosure which could not be classified, as a whole, in just one group. By breaking the more complex half cycles down into several categories of intimacy the present classification system became more consistent and adaptable to actual dyadic interactions.

Judgment of Verbalizations. Two judges (both females, one 21, the other 23 years of age) were trained in the operational procedures described above. After several sessions using the procedures with practice tapes a more than satisfactory interjudge reliability was obtained. Judges were able to correctly categorize (i.e., their judgments were the same) specified utterances at a .99 and .92 percent rate. Upon establishing this level of accuracy one judge was employed at a time to classify the assertions and questions while the principal experimenter specified the units to be judged. As mentioned, both the judges and the experimenter were blind to which FIRO-B classification the dyads belonged.

The Use of the Sequence Probability Table

Once the verbal behaviors had been categorized and coded, through the use of a Fortran program (devised by Allen, 1976), the data was organized within a Sequence Probability Table (SPT) (Allen, 1974).

Sequence probability refers to the likelihood that any kind of verbalization will be followed by any kind of verbalization. For example, what is the probability of an assertion being directly followed by another assertion from the other person (mix) or the same person (narration). In the latter case, an individual may be telling a story while in the former the two dyadic members are responding to each other. Allen (1974) has asserted:

Knowledge of the probability of the sequence among verbal acts affords a basis for a dynamic analysis of the characteristics of the stream. Such analysis would foster a better understanding of the basic function of the assertion in conjunction with other kinds of verbal acts (p. 189).

The SPT provides a description of the linking of within (narrations) and between (mix) half cycle assertions and questions as well as a frequency count of all verbal behaviors for the total dyad.

"Within half cycle" analysis will give patterns of the internal organization of one subject's verbalizations. "Between half cycle" analysis will provide information pertaining to the action shifts from one actor to the other (Allen, 1974). The type of verbal act which links one half cycle to the next has implications in regards to reciprocity of self-disclosure (Kohen, 1975) and the effects of questions upon subsequent disclosure from the other (Sermat, 1973).

For example, if a conversation is characterized by high amounts of disclosure, say assertions at the "D" level, from one person while the other person is following these verbal emissions with his or her own "D" level disclosures, reciprocity of self-disclosure is indicated. This level of analysis affords a more dynamic elucidation of conversational processes such as "reciprocity," "personal consistency

in disclosures" questions and their effects upon subsequent responses, and so on.

Danzinger (1976) has argued that there exists a "circular influence" within the dyadic interaction. Each member of the dyad, rather than the highest discloser, as Jourard (1971) has argued, will exert an influence upon their partner, and at the same time, receive influences from their partner's responses to their utterances. The present methodology will preserve these conversational actions. Through the use of the SPT aggregates of data will be used, so that statistical procedures will be appropriate in the analysis, but at the same time a richer data base will be provided. These aggregates will represent a grouping of conversational processes rather than isolated units of behavior.

A Brief Conclusion

In summary, qualitative as well as quantitative aspects of dyadic conversation are preserved within the present investigation. In this way, subsequent disclosures (and their intimacy levels) of personal information and probing tactics used by the dyadic members are a prime focus within the analysis. In addition, the SPT is employed so as to maintain the sequence of the conversational content. In this way, "reciprocity" is redefined. In the past, reciprocity was defined by subject's retrospective self-report (Jourard, 1958) using scalar methods. Behaviorally, reciprocity is demonstrated through totalling self-disclosure units of behavior for a number of time periods out of a total conversation and then comparing early and late time periods for

developmental patterns of verbal behavior. If subject's disclosures become synchronized (quantitatively), reciprocity is indicated (Kohen, 1975).

A call for more meaningful conversational data has been made by Krippendorff (1970). A data base is needed that will provide explicit evidence about processes of conversation rather than mere results. In an attempt to improve upon already existing methods, the present investigation provides for the analysis of immediate conversational exchanges, as the stream of conversation unfolds. In this way, a more dynamic and precise operationalization of "reciprocity" and other patterns of conversation is provided.

This represents an improvement upon existing methodologies within the self-disclosure literature in that disclosure is behaviorally defined (qualitatively and quantitatively) rather than inferred from subjects' self-reports. In addition, an attempt is made to capture processes of conversational interaction rather than totalling isolated units of behavior which are meaningless in and by themselves.

CHAPTER IV

RESULTS

Analysis of Specified Conversational Parameters

The data generated in the present investigation utilized several conversational parameters originating from various data bases. Total self-disclosure (disregarding intimacy levels) and reciprocity of disclosure were measured using the dyad as a whole for a unit of analysis. Other parameters such as questions and total self-disclosure (for purposes of ascertaining sex differences) were taken from each subject's individual contribution to the conversational process.

Total Self-Disclosure as a Data Base

Using the dyad as a whole for the unit of analysis, Table 4 provides the means for the 12 cells within the factorial design. A Split Plot, SPF 23.2 (Kirk, 1968, p. 283) was employed for the overall analysis. Table 1 gives the Total Self-Disclosure Summary table. Inspection of this table reveals an overall significance for FIRO, $F(2,30) = 3.74$, $p < .034$ for Time, $F(1,30) = 10.38$ $p < .003$ and a strong trend for the three-way and two-way interactions of Compat x FIRO x Time, $F(2,30) = 2.8$ $p < .074$, and Compat x Time $F(1,30) = 2.7$ $p < 0.10$.

TABLE I
SPLIT PLOT FACTORIAL SUMMARY TABLE FOR
TOTAL SELF-DISCLOSURE AS A FUNCTION
OF COMPAT, FIRO, AND TIME PERIOD

Source	df	Means Square	F Value	Prob F
Compat	1	36.125	0.66	0.57
FIRO	2	201.8	3.74	0.034*
Compat x FIRO	2	48.42	0.89	0.57
Dyads (Compat x FIRO)	30	53.9		
Time	1	357.3	10.38	0.003**
Compat x Time	1	93.38	2.7	0.10
FIRO x Time	2	38.9	1.13	0.33
Compat x FIRO x Time	2	96.7	2.8	0.074
Time x Dyad (Compat FIRO)	30	34.39		

*p < .05

**p < .01

Compatible vs. Incompatible

Hypothesis 1 stated that Compatible dyads (Compat) as a whole would disclose more personal information than Incompatible dyads (Incompat). This prediction was based upon the assumption that Compat dyadic members would recognize their unique relationship with their respective partner and this, in turn, would have a facilitative effect upon subsequent disclosure output. This prediction was not substantiated in the present investigation. The overall F for Compat was nonsignificant $F(1.30) = .06$ $p < .57$. In fact, a look at the

means table (Table II) will show that Incompat dyads, as a whole, disclosed slightly more personal information than did Compat dyads.

TABLE II
MEANS TABLE FOR TOTAL SELF-DISCLOSURE
AS A FUNCTION OF COMPATIBILITY

Compatibility	Self-Disclosure Means
Incompat	26.64
Compat	25.22

Specific FIRO-B Areas

Hypothesis 2 predicted that the most self-reference assertions would occur within dyads compatible in the FIRO-B area of Inclusion early in the interaction. This prediction was based upon the notion that Inclusion related topics would be the center of the conversation within the initial phases of getting acquainted. Because of this, it was believed that a stronger facilitative effect, in regard to subsequent disclosure output, would be exerted upon dyads Compatible in the area of Inclusion during the early part of the interaction.

Furthermore, based upon Schutz's (1966) ideas that it is a sequence of Inclusion, Control, and then Affection related issues that temporally enter into an interpersonal encounter, one might expect Compatible Inclusion dyads to recognize their unique relationship

first. As a result of this one might logically assume that initial disclosure outputs for this group would be higher than for the others.

The dyad was again used as the data base (i.e., total disclosure was a joint product on the part of both dyadic members). An inspection of the means tables (Tables III and IV) reveals that Compat Affection dyads were by far the highest disclosers when compared to other dyads, for Time Period 1. Compat Affection was followed by Compat Inclusion dyads.

Using a Dunn's a priori test for mean differences, Table V reveals a significant difference between Compat Affection and all other means ($p < .01$), while Compat Inclusion is significantly larger than Compat Control. Thus, Hypothesis 2 was not confirmed. It was Compat Affection dyads, and not Inclusion dyads, that disclosed the greatest amount of personal information within the early phases of the dyadic encounter.

TABLE III
MEANS TABLE FOR TOTAL SELF-DISCLOSURE AS A
FUNCTION OF COMPATIBILITY AND FIRO AREAS

Compatibility	Self-Disclosure Means
Incompat Inclusion	28.75
Incompat Control	24.45
Incompat Affection	26.71
Compat Inclusion	26.50
Compat Control	20.71
Compat Affection	28.46

TABLE IV

MEANS TABLE FOR TOTAL SELF-DISCLOSURE AS A
FUNCTION OF COMPATIBILITY, FIRO AREA,
AND TIME PERIOD

Compatibility by FIRO Area	Time 1	Time 2
Incompat Inclusion	28.5	29.0
Incompat Control	27.5	21.4
Incompat Affection	27.1	26.3
Compat Inclusion	28.7	24.3
Compat Control	21.9	19.5
Compat Affection	35.1	21.8

TABLE V

DUNN'S TEST FOR DIFFERENCES AMONG MEANS
FOR TOTAL SELF-DISCLOSURE

	CC	IA	IC	II	CI	CA
CC	--	5.2*	5.6*	6.6*	6.8*	13.2*
IA		--	.4	1.4	1.6	8.0*
IC			--	1.0	1.2	7.6*
II				--	.2	6.6*
CI					--	6.4*
CA						--

* $p < .01$ (Dunn's Multiple Comparison Test).

Crit. diff. = 4.56 for $p < .01$.

Hypothesis 3 predicted that Compat Affection dyads would disclose the most intimate personal information as compared to other dyadic categories. Upon analyzing the collected data it was found that only 96 "C" level (highly intimate) disclosures were found to exist within the total 36 six-minute samples of conversation collected. In fact, over half of the 12 cells in the SPF 23·2 design had no "C" level disclosure entries. Because of this low frequency of intimate disclosures, hypotheses pertaining to intimacy either were not analyzed, or analysis was performed in regards to "amount" of disclosures rather than intimacy levels. Hypothesis 3 was the hypothesis not tested.

Compat vs. Incompat Over Time

Hypothesis 4 predicted that Compat dyads (in general) would drop less in their disclosures from Time 1 to Time 2 when compared to Incompat dyads. The overall F for the interaction Compat x Time provides a test. The summary table (Table I) for Total Self-Disclosure reveals a strong trend for the interaction ($F(1,30) = 2.71, p < .10$). But when the table of means is consulted (Table VI) it is apparent that the disclosure scores are in the opposite direction of the prediction.

Incompat (rather than Compat) dyads maintained the most consistency in disclosure output over Time, as compared to Compat dyads. A further breakdown into the FIRO-Compat areas reveals that (Table IV) Incompat Inclusion dyads rose slightly in their disclosure output over Time, while all the other dyads dropped slightly. Compat Affection dyads were the only group to drop significantly over Time, $t(30) = 3.92, p < .001$.

TABLE VI
MEANS FOR SELF-DISCLOSURE SCORES BY COMPATIBILITY
FOR EACH TIME PERIOD

Compatibility	Time 1	Time 2
Incompat	27.73	25.55
Compat	28.59	21.86

Mix Patterns

Hypothesis 5 predicted there would be a greater amount of mix within the dyad conversations as compared to narration patterns. That is to say, considering all the dyads, the subjects were expected to be responding more to each other, creating shifts in the speaker rather than engaging in narrative patterns of conversation, which is the creation of a stream of conversation on the part of one person. Allen (1974) has found that freely interacting dyads typically do mix more than they converse in narrative patterns.

Within the present investigation, it was found that dyads conversed using mix strategies 60% of the time (frequency of 2398) while narrations took up the remaining 40% (frequency of 1602) of the conversation. A test for proportional significance found mix totals to be insignificantly larger than 50%, $z = 1.2$, $p < 0.115$.

Table VI displays the analysis of "general mix" patterns (not differentiating between the content of speech). Within the means for general mix is a test for Hypothesis 6. The reader may recall that it was anticipated that Compat dyads would show the most

mix, as compared to Incompat dyads. This prediction was based upon Allen's (1974) notion that mix adds positively to the verbal exchange. If this idea has validity, and if the effects of classifying dyads according to FIRO-B need areas is robust enough to exert a mediating effect upon subsequent verbal exchanges, then it would logically follow that Compat Dyads will mix more, or have more responsive patterns in their conversation than their counterpart, Incompat dyads.

The overall F test for Compat (see Table VII) represents a test for the above prediction. As is apparent, Hypothesis 6 was not supported, $F(1,30) = .33$, $p < .57$. Table VIII, the means for "general mix" as a function of compatibility, reveals that Compat dyads did mix more than Incompat dyads, but only slightly more.

TABLE VII
SPLIT PLOT FACTORIAL SUMMARY TABLE FOR
GENERAL MIX PATTERNS

Source	DF	Mean Squares	F Value	Prob F
Compat	1	37.5	0.33	0.57
FIRO-B	2	12.5	0.11	0.89
Compat x FIRO	2	258.6	2.30	0.11
Dyad (Compat FIRO)	30	112.1		
Time	1	1458.0	29.24	0.0001*
Compat x Time	1	50.0	1.00	0.32
Time x FIRO	2	47.79	0.95	0.60
Compat x Time x FIRO	2	195.8	3.92	0.029*

TABLE VIII
MEANS FOR GENERAL MIX ACROSS COMPATIBILITY

Compatibility	Means
Incompat	33.1
Compat	34.5

Reciprocity of Self-Disclosure

Hypothesis 7 predicted that Compat dyads would reciprocate more disclosure than Incompat dyads. The overall F test for Compat in Table IX provides a test for this hypothesis. This table reveals a strong trend for Compat in the predicted direction $F(1,30) = 2.54$, $p < .11$.

Hypothesis 8 proposed that Compat Inclusion dyads would generate the most amount of reciprocity patterns while Hypothesis 9 dealt with the idea that Compat Affection dyads would reciprocate the most intimate disclosures. As mentioned, intimate levels of disclosure (and especially patterns of reciprocity) occurred at such a low frequency that intimacy was not used as a conversational parameter. As a result of this, Hypothesis 9, as it is stated, was not testable. Instead, both Compat Inclusion and Affection dyads were evaluated upon the basis of "amount" of disclosure.

Table X contains the results of a Dunn's test for differences among means providing a test for Hypothesis 8 and the modified Hypothesis 9. Table X reveals Compat Inclusion dyads had reciprocated

TABLE IX
SPLIT PLOT FACTORIAL SUMMARY TABLE FOR TOTAL
RECIPROCITY OF SELF-DISCLOSURE

Source	DF	Means Square	F Value	Prob F
Compat	1	32.13	2.54	0.11
FIRO	2	11.98	0.95	0.59
Compat x FIRO	2	7.18	0.57	0.57
Dyad (Compat FIRO)	30	12.61		
Time	1	34.86	6.65	0.014*
Compat x Time	1	16.53	3.15	0.08
FIRO x Time	2	13.80	2.63	0.86
Compat x FIRO x Time	2	6.69	1.27	0.29

*p < .05

TABLE X
DUNN'S TEST FOR DIFFERENCES AMONG MEANS FOR
RECIPROCITY OF SELF-DISCLOSURE ACROSS
FIRO AREAS AND COMPATIBILITY

FIRO Area	IC	IA	CC	II	CI	CA
Means	3.6	4.1	4.6	5.0	5.5	6.6
IC	--	0.5	1.0	1.4	1.9**	3.0**
IA	--		0.5	0.9	1.4	2.5**
CC	--	--	--	0.4	1.1	2.0*
II	--	--	--	--	0.5	1.6
CI	--	--	--	--	--	1.1
CA	--	--	--	--	--	--

Crit. Diff. = 1.75

* p < .05

** p < .01

more self-disclosure than Incompat Inclusion ($p < .05$), while Compat Affection dyads reciprocated more disclosure than Incompat Inclusion and Affection ($p < .01$) and Compat Control ($p < .01$).

Questions Asking for Self-Disclosure

This conversational parameter, to this author's knowledge, has not been investigated within the freely interacting dyadic paradigm. Sermat (1973) found that confederates' questions were a most potent means of eliciting progressively higher levels of self-disclosure from subjects when compared to confederates "self-disclosing techniques." Vondracek (1966) also found "probing" strategies on the part of interviewers to be far superior to interviewer "self-disclosures" and "reflection techniques." Both investigators used pre-fabricated conversations. None of the above mentioned investigations demonstrated how subjects themselves probe one another, and, in turn, how they respond to these impromptu questions.

It was predicted (Hypothesis 10) that initially-acquainted heterosexual dyads would not ask highly intimate questions. Rather, they were expected to probe only into superficial, demographic areas. It is obvious from Table XI that highly intimate probing was not the means by which dyadic members "got to know one another." There was a total of 294 questions asking for demographic type information as compared to 6 questions asking for highly intimate information. This data represents all 36 dyadic interactions.

Questions vs. Reciprocity

Based upon Sermat's findings that questions are a most powerful technique in eliciting self-disclosure within the dyadic interaction,

TABLE XI
BREAKDOWN OF TOTAL QUESTIONS ASKED FOR BOTH
THREE MINUTE SAMPLES FROM ALL 36
DYADIC INTERACTIONS

Type of Question	Total Units
Non-Intimate Self-Disclosure	294
Highly Intimate Self-Disclosure	6
Non-Self-Disclosure	155

N = 36 dyads

the efficiency of questions vs. "the dyadic effect" (or reciprocity of disclosure) in eliciting disclosure from the other was ascertained. That is, the amount of questions asking for, say, a "D" level disclosure which elicits a "D" level response from the other, divided by the total number of "D" questions, regardless of the elicited response, would provide an index of the efficiency of self-disclosure questions. The "Dyadic Effect" was defined as a disclosure by one dyadic member which was, in turn, followed by a disclosure, at the same intimacy level, by the other partner. The "Dyadic Effect" ratio of efficiency was determined by total self-disclosure divided into disclosure that was reciprocated by the other dyadic partner. A comparison of these two ratios will provide a test for the relative efficiency of these two modes of eliciting self-disclosure from the other.

Overall, self-disclosure questions proved to have an 89% efficiency. Self-disclosure assertions were reciprocated at a 36.6%

frequency. A two-tailed sign test (Bruning and Kintz, 1968) was used to calculate the differences between the relative efficiency of questions and disclosures. The test demonstrated questions to be more efficient (elicited more disclosures proportionally) at the .05 level of significance, supporting Hypothesis 11.

Sex Differences

It was predicted (Hypothesis 12) that no sex differences in total self-disclosure output would be found in the freely interacting heterosexual dyadic encounter. An F test for dependent means was performed upon the total 36 dyadic member's disclosure scores (amounts). This revealed no differences between male and female disclosures $F(1,30) = 1.75$, $p < .29$.

In addition, no sex disclosures were found in the area of amount of questions asking for self-disclosures from the other, $F(1,30) = 1.75$, $p < .29$.

Personal Consistency

Kohen (1975) found that "personal consistency" characterized freely interacting dyads. She defined "personal consistency" by determining the lowest disclosers (out of each dyad) during the early time period of the entire interaction. If these low disclosers remained lowest during the latter time period, "personal consistency" was indicated.

Within the present investigation, out of the total 36 dyads, 3 were ties, 20 remained consistent across time, while 13 switched from lowest to highest discloser within their respective dyad. A test for differences of proportions (Bruning and Kintz, 1968) failed to find a significant difference between these scores, $Z = 1.2$, $p < .11$.

CHAPTER V

DISCUSSION

The FIRO-B and Self-Disclosure

Compat vs. Incompat

One of the major foci in the present investigation was to demonstrate a functional relationship between self-disclosing behavior on the part of freely interacting heterosexual dyads and their respective status in regards to their FIRO-B classification. Dyads were formed on the basis of being either highly compatible or incompatible in the FIRO-B area of either Inclusion, Control or Affection. It was predicted that dyadic members would recognize their unique relationship to their respective partners, and this, in turn, would be manifested in their subsequent disclosure output and overall conversational patterns.

In general, it was anticipated that Compat dyads would disclose more personal information than Incompat dyads. As indicated in the preceding chapter, this prediction was not substantiated. In fact, Incompat dyads revealed slightly more about themselves than Compat dyads. This was a measure of disclosure collapsing over both Time periods and all FIRO-B areas.

Although these results (lack of significant difference between the Compat and Incompat groups) go against intuition, they do corroborate similar findings reported by Altman and Haythorn (1965). These authors found no differences between pairs of subjects which were either homogeneously high, heterogeneous, or homogeneously low on need achievement, need affiliation, need dominance, and dogmatism. The need-affiliation and need-dominance dimensions parallel Control and Affection in the present investigation. Subjects in the present investigation were paired together on the basis of a "complimentarity," as well as a similarity index. Even with the addition of this second dimension of compatibility, the present study failed to differentiate Compat dyads from Incompat dyads on the basis of their respective total disclosure output.

Specific FIRO Areas

Hypothesis 2 predicted that Compat Inclusion dyadic members would recognize their unique relationship with one another, and this, in turn, would be manifested in their early disclosure output. By taking an early and late sample from the total 15 minute interaction, analysis of early disclosure patterns was available.

As indicated in the preceding chapter, Compat Affection dyads by far disclosed the most amount of personal information as compared to the other FIRO-B categories. Compat Inclusion was second in early amounts, but only significantly higher than Compat Control dyads.

These results go against the prediction that Compat Inclusion dyads would disclose more during the early phases of interaction than Compat Affection dyads. The reader may remember that Schutz (1966)

has argued that Inclusion related issues and topics are the central focus of the acquaintance phase. Later on Control and then Affection issues become more salient within interpersonal interactions.

Why is it then that Compat Affection, rather than the predicted Compat Inclusion dyads, disclosed the most early in the interaction? With the advantage of an a posteriori view of the present investigation's results, and upon making alterations in the adaptation of Schutz's interpersonal needs theory, the present author contends that an explanation can be found. The following interpretation of Compat Affection dyads' disclosing the most during the early phases of interaction has value, if only for heuristic purposes, in that it creates a link between interpersonal theoretical underpinnings and empirical data. The author admits, wholeheartedly, that the following post hoc attempt to impose a rationale upon counter intuitive results is mere speculation. With this in mind, it will be argued that when dyads are paired together in a Compatible fashion in the need area of Affection, subsequent self-disclosure will be at a maximum, holding other variables constant.

In the present investigation, considering the situation the dyadic members found themselves in, the Compat Affection group should (and did) allow themselves to be most accessible to one another for several reasons. Very briefly, Affection needs are a dyadic issue, while Control and Inclusion (although they do enter into the dyadic encounter) are for the most part a group process (Schutz, 1966). In addition, issues of Control and Inclusion were absent from the experimental situation due to the extensive structure imposed upon the interactants. Essentially, the only interpersonal needs that were of

issue were Affection needs. Therefore, pairing dyads together in a Compatible Affection manner would maximize favorable outcomes in their subsequent interactions, while Compatible Inclusion and Control dyads might not experience such favorable interactions due to the irrelevancy of their compatibility status. Further elaboration upon these ideas is now called for.

Theory Behind the FIRO-B

Initially, it may be pointed out that Schutz's construction of and work with the FIRO-B scale dealt predominately with groups of people (in encounter) rather than dyads. The FIRO-B is based upon Schutz's work with people in groups and how they related to one another, how the groups developed into cohesive entities, adjusted, functioned, stabilized, and so on. The dyad as a unit of analysis did enter in, but only after a considerable amount of group integration and development had taken place. In regards to Inclusion needs, Schutz (1971) has proposed that:

Inclusion refers to my feelings about being important and belonging to a group. The need to be included manifests itself as wanting attention and interaction (p. 38).

Schutz goes on to say:

Unlike the Affection area, Inclusion does not involve my strong emotional attachments to other individuals. Since Inclusion involves the process of group formation, it usually occurs as the earliest interpersonal issue in the life of a group. Affection behavior refers to close, personal, emotional feelings between two people. Affection is a dyadic relation, that is, it occurs between pairs of people (p. 39).

The application to the present investigation of Schutz's theory of the development of interpersonal encounter and how interpersonal needs

temporally arise within these situations calls for a considerable amount of adjustment. These adjustments, to be discussed next, were not foreseen in the initial formulation of the hypotheses relevant to the FIRO-B need areas of Inclusion and Affection.

Use of the FIRO-B Within Dyads

First of all, as mentioned, dyads were used in the present investigation, rather than groups of people. According to Schutz, Inclusion is a group concern, although it certainly must enter in to some (unknowable) extent in the dyadic interaction. But when one considers the situation that was created by the present investigation's design, the contention that Inclusion related issues were absent within the dyad's interactions will become more convincing.

Issues of Inclusion

If Inclusion needs pertain to a desire to belong, an apprehension to be included and paid attention to (as Schutz claims), then it might be argued that the dyad members did not have these primary (temporally) concerns to worry about. The structure of the present investigation had "cleared the air" of inclusive issues for the subjects.

Each dyad received instructions to 'get to know one another as people.' Each subject, at that moment, was cognizant of the fact that they would have the other's undivided attention for the duration of the experiment. They no longer had to worry about being important, or worry whether attention would be paid to them, or whether they would be ignored. In a word, the issue of Inclusion had been resolved for the dyadic members by the nature of the situation they were placed into.

Issues of Control

Following Schutz's temporal schema of the development of interpersonal processes, one might argue that Control needs would arise before Affection. If this were the case, then it might follow that Compat Control dyads (rather than Affection) would experience the most favorable interactions earliest, and, as a result of this, generate the most disclosure in the early phases of the encounter.

But Schutz has indicated that Control issues pertain to decision making, responsibility taking, and the distribution of power within groups. Although it might be argued that the subjects had a rather wide range to steer the conversation in, and subjects could have attempted to influence one another in some fashion (which they no doubt did), ultimately, issues of Control were not as salient within the interactions as Affection needs. This was, again, due to the nature of the experimental situation.

The dyadic members found themselves in a situation where they were instructed to 'get to know one another as people . . . find out about the other's personality . . . please do not leave your seat,' and so on. In addition, implicit in the entire proceedings (from the time they were being recruited to being in the experiment proper) was the meta-communication that "you, as subjects, are here to cooperate in order to gain promised extra credit points for your grade in Introductory Psychology." Furthermore, after the subjects were given the instructions, they were informed that experimenters would observe and videotape the entire experiment. What the present discussion is leading up to is the fact that issues of Control were at a minimum within

the situation these subjects found themselves in. The entire session was a "free interaction" at one level, but completely structured at another. Overtly, the subjects were to just 'act as you normally do when you are getting to know another.' Covertly, the experimenter had control over the proceedings, the situation, and, in addition, the subjects were fully aware of the experimenter's monitoring the whole interaction for "purposes of data collection."

It does seem reasonable to assume that any decision making, taking of responsibility, or power distributions were at a minimum, or totally absent from the dyadic interactions. Although subjects could have attempted to influence one another in various ways, the present author would like to argue that the only real issue left to resolve for each dyadic member was: To what extent should I allow (and contribute to) the integration of this interaction with this particular opposite-sexed stranger in regards to emotional and personal issues (disclosing personal information and making oneself known to the other as instructed)? Any issues of Inclusion and Control had not entered in due to the structure of the experimental situation as perceived by the subjects. The only problem to be resolved was how accessible should one be to this other person, which is an Affection issue.

If this post hoc interpretation is correct, then it would logically follow that Compat Affection dyads would manifest the greatest amount of early disclosures, especially if at some level they came to recognize their compatibility status. In regards to the other FIRO-B groups, their compatibility would be irrelevant to the most salient issues at hand, i.e., self-disclosure. The data from the present

investigation certainly tends to support such a notion. Except for Compat Control dyads, Table IV reveals that all other dyadic groups are amazingly homogeneous in early disclosure output, while Compat Affection dyads are by far the highest disclosers during Time period one.

An Alternative Explanation. It might be argued that self-disclosure is as much an Inclusion issue as it is Affection. The present author can easily think of several situations whereby disclosure of one's personal life is used as a strategy to become more acquainted with another person or to become part of a group. Through disclosing personal information about oneself that will allow one to share common experiences and attitudes with others, self-disclosure would certainly be instrumental in gaining inclusion within a given group. Thus, self-disclosure is certainly as much an Inclusion as it is an Affection issue, given certain circumstances.

But Affection needs are the most important concern within the dyadic interaction while Inclusion and Control are more of a group issue (Schutz, 1971). This is even more true considering the situation the subjects were placed into. Therefore, while self-disclosure may or may not be predominately an Affection issue, Affection needs are a most salient concern within the dyadic encounter. It would then seem reasonable to anticipate dyads compatible in the area of Affection to experience the most favorable outcomes and possibly disclose the most personal information.

But the disclosure output, for all dyads, was at a very low level of intimacy. Intimacy, as a conversational parameter, did not

statistically differentiate FIRO-B classifications, whereas amount did. A word about this low frequency of intimate exchange within the dyadic interaction is now called for.

Intimacy Levels of Disclosure

Within the initial acquaintance phases of dyads, the manifest disclosure output, in regard to highly intimate exchange, appears to be at a minimum. This phenomenon has appeared elsewhere in the self-disclosure literature.

Vondracek (1966) was forced to abandon "intimacy" as a conversational parameter in initial interviews. Although "amount" of disclosure proved to be a good dependent measure, "intimacy" did not. Vondracek attributed this failure of intimacy levels to vary as a function of interviewing techniques (the independent variable) to the nature of the acquaintance phase, i.e., dyads just do not disclose intimate information early in the relationship.

Vondracek's (1966) findings also parallel Altman's (1966) notion that acquaintance periods are characterized by "breadth" rather than "depth." The present investigation had a similar problem in finding verbal exchanges at a highly intimate level. The interpretation of this lack of intimacy within initially acquainted heterosexual dyads can be made from a number of theoretical stances. Yalom's (1970) discussion on the risk involved in disclosure has relevancy to this phenomenon.

Risk Involved in Disclosing Oneself

The reader may remember Yalom contended that in making oneself readily accessible to others, we often will be justifiably apprehensive

about being evaluated, misunderstood, or even exploited. And when one considers the added amount of ambiguity within an interaction with a stranger, as compared to interacting with an acquaintance whose responses one can reasonably predict, the risks involved are no doubt experienced as being higher. As a result of this, a "halting effect" upon subsequent disclosures might be expected. Although intuitively compelling, a search for the point at which subjects halt their disclosure output has not been clearly defined (Cozby, 1972; Levin and Gergen (1969) hold the same ideas while Argyle (1966) has proposed a theory of interpersonal norms that set limits upon a variety of interpersonal behaviors and in turn are established, in a reciprocal manner, by these very behaviors. This latter theory will be briefly elaborated upon because of its relevancy to the problem at hand.

Norms of Interpersonal Intimacy

It appears there may be a sort of interpersonal homeostatic setting for intimacy (Argyle, 1966) or a set of norms in the initial acquaintance phase that regulates what is appropriate to disclose (along with other behaviors that indicate different types of relationships in regards to intimacy). The reader may remember Argyle's proposal of such a hypothetical construct that exists within interpersonal interactions in general. Argyle has argued that a number of interpersonal processes such as the intimacy of the conversation, eye contact, physical proximity, and so on are all interrelated and regulatory of the degree to which each of these processes manifest themselves. If one (or several) of the above mentioned processes is too high or too low, one or several of the others are believed to have the capacity

to compensate (through incrementing) for the temporary disruption of "interpersonal homeostasis." Argyle has reported several empirical findings that substantiate his ideas of homeostatis settings for interpersonal intimacy (Argyle, 1965).

The present author contends that such limiting devices, rules of conduct or norms of intimacy, may very well exist during the initial acquaintance phase of heterosexual strangers. In fact, these norms are no doubt in magnified form, i.e., there are more inhibitions preventing disclosure to a stranger than an acquaintance.

If these interpersonal norms do exist, they certainly may account for the low frequency and even non-existence of intimate disclosures within over half of the 12 cells of the ANOVA analysis in the present design. There is an additional finding in the present investigation that adds validity to the notion that norms for intimacy do exist.

Self-Disclosure Over Time

It was predicted that Compat dyads, as a whole, would drop less in their disclosure output over Time, when compared to Incompat dyads. This was not supported. In fact, a strong trend ($p < .10$) was found in the opposite direction. Compat dyads disclosed slightly more personal information during the early phase of the interaction than Incompat dyads and then dropped significantly in their disclosures across time, $t(30) = 3.2$, $p < .01$. Incompat dyads dropped only slightly in their disclosures over time. Although these results are in opposition to the anticipated results, they do lend support to the proposed norms of interpersonal intimacy. That is, on the average, Compat

dyads disclosed the most during Time 1, indicating they had immediately recognized their unique compatibility status. Later, in the 15-minute interaction, the Compat dyads found themselves running out of "permissible" topics to discuss and therefore, in keeping within the restrictions laid down by the tacit norms of interpersonal intimacy, dropped in disclosure output. It is being argued here that the Compat dyads reduced their disclosure rate rather than continuing into more intimate areas of disclosure.

One might argue that the difference between Compat and Incompat dyads in their rates of early disclosure is not discrepant enough to expect Compat dyads to have reached their limits in regard to what is permissive to discuss. Table VI clearly indicates this. Although the drop across Time for the Compat dyads is significant while Incompat's is only slight, the initial disclosure output for both groups are virtually the same. Compatible dyads are only slightly higher in disclosure output within this early phase, not enough to anticipate a difference in late disclosure output because of "too much disclosure" within the early phase.

But when Table IV is consulted, it is apparent that the patterns of disclosure across Time for Inclusion and Affection groups conform to the norms of interpersonal intimacy theory while Control groups do not. A reevaluation of the data, excluding Control groups, is shown in Table XII.

When the data is arranged in this matter, it is apparent that "Compat" dyads did disclose a greater amount of personal information than "Incompat" dyads during the early phase of conversation. In addition, although the significant drop in disclosure output over

Time for the Compat group is still present, the Totals for the entire conversation are the same. These results might indicate a "limiting effect" upon the total exchange for the entire conversation. That is to say, although Compat dyads clearly disclosed greater early amounts, due to the proposed norms of interpersonal intimacy, Compat dyads could not go on to disclose more about themselves. To do this would mean to disclose "taboo" information (more intimate), given the relationship (with a stranger) and situation (within the laboratory).

TABLE XII
MEANS OF TOTAL SELF-DISCLOSURE AS A FUNCTION OF
COMPATIBILITY AND TIME EXCLUDING
CONTROL GROUPS

Compatibility	Time 1	Time 2	Totals
Incompat	27.8	27.65	55.44
Compat	31.9	23.05	54.94

A Brief Summary

It has been found that Compat Affection dyads, by far, self-disclosed the most in early stages of the heterosexual dyadic interaction. This has been interpreted as Affection needs being the most salient and relevant to self-disclosure within the dyadic encounter. It has been argued that Inclusion and Control needs are more germane

to group processes, or to the dyad situation outside the constraints of a laboratory. Issues of being included and of controlling the situation were virtually absent from the dyadic encounter in the present experimental design.

Although Compat Affection dyads did disclose greater amounts early in the conversation, their overall exchange of personal information was not different from the other groups'. In addition, when Compat Affection and Inclusion dyads are compared to their counterparts (Incompat Affection and Inclusion) the overall modified Compat group generated the most early disclosure, but the least in Time 2. Yet, when the total self-disclosure is compared for these two modified groups, once again the overall communication exchange of personal information is the same. It has been proposed that these unanticipated results indicate a limiting device or norms of interpersonal intimacy that "halt" dyadic members from going on to become more intimately accessible to one another.

Other Communication Patterns

Mix

Allen (1974) has argued that a high frequency of shifts in the speakers within dyadic interactions is indicative of a more closely coordinated conversation and contributes positively to the interaction. Based upon these ideas, it was anticipated that Compat dyads would exhibit more mix than Incompat dyads, while all dyads would be typified by more mix than narrative patterns of conversation. This latter prediction was based upon empirical findings by Allen (1974),

as well as open intuition. That is, due to the nature of the dyadic make-up (i.e., strangers instructed to get to know one another) it would seem reasonable to anticipate more shifts in speakers and fewer narrations.

The idea that mix patterns would characterize the conversation for all dyads was not substantiated. In addition, although Compat dyads did display more mix patterns than Incompat dyads, this was not significant as indicated by the overall F test for Compat in the Summary tables for General Mix (Table VI). Mix appears to be a poor discriminator of Compatible and Incompatible dyads as measured by the FIRO-B.

In regard to mix being the predominant mode of conversing with another person, this was actually true. Mix patterns did take up 60% of the shifts in assertions and questions while narrative patterns occurred at a 40% rate. The 60% rate of mix just failed to reach a significant difference from chance (50%).

The reasons for mix patterns being a poor discriminator of Compat and Incompat dyads may lie in the nature of the situation the subjects found themselves in. That is, subjects were placed in a room with an opposite sexed stranger with instructions to "get to know one another. . . ." The artificiality of the situation, with an opposite sexed stranger sitting across the way, and the instructions, may have contributed to overpowering any sort of functional relationship between the FIRO-B need areas and mixing patterns of conversation, if any sort of relationship does exist. The present investigation did not find one.

Reciprocity of Self-Disclosure

This conversational parameter has been redefined in the present investigation. In the past, researchers have relied upon either self-report scalar methods of ascertaining reciprocity (Jourard, 1959) or upon total aggregates of self-disclosing behaviors (Kohen, 1975). The former methodology has its pitfalls, as discussed extensively in preceding chapters. Briefly, a self-report retrospective account of one's past behaviors may be totally independent of one's present and future behaviors (Cozby, 1973). The self-report method has been criticized by the present author because of the impoverished data base that is provided by such an analysis. When a process such as self-disclosure reciprocity is being investigated by means of looking at the results of a conversation, a great deal of information is lost in the aggregation of such data. Typically, a record of independent isolated units of behavior are recorded for a number of time periods for each dyadic member. If the subjects become more similar, or less different, reciprocity, by these means of analysis, is indicated. But how subjects respond to one another is not indicated through such methods. Only results of the total conversational output are available, not interpersonal patterns and processes.

The present investigation has defined reciprocity as "congruent mix of self-disclosure assertions." When person A discloses at level "D" and person B comes back immediately with a meaningful assertion about his or her self, at the same level of intimacy, reciprocity is indicated.

It was anticipated that Compat dyads would reciprocate self-disclosing statements more often than Incompat dyads. The Split Plot Summary Tables for Reciprocity reveals a strong trend, $F(1,30) = 2.54$, $p < .11$, in the predicted direction.

It was more specifically predicted that Compat Inclusion and Compat Affection dyads would exhibit the most reciprocity and the highest levels of intimacy, respectively. Due to the low frequency of "C" level reciprocity (highly intimate assertions) Compat Affection dyads were analyzed in terms of amount of disclosure units.

Compat Inclusion dyads were significantly different from Incompat Inclusion dyads, while Compat Affection dyads reciprocated significantly more disclosure than three of the other dyadic categories (see Table X). Thus, it appears that Compat dyads can be differentiated from Incompat (at the $p < .11$), and Inclusion and Affection Compat dyads are significantly different from a number of the other FIRO groups.

Once again, it might be argued that reciprocity of disclosure, like disclosure by itself, is an Affection issue within the dyadic encounter. This would account for the higher amounts of reciprocity on the part of the Compat Affection dyads. Table XII shows an early loading of personal exchange for Compat Affection dyads, similar to the data shown in Table IV for Total disclosure patterns. This is no doubt due to the dependency which the frequency of reciprocity-of-disclosure has on the mere existence of disclosure within the conversation.

TABLE XIII

MEANS FOR TOTAL SELF-DISCLOSURE RECIPROCITY
AS A FUNCTION OF COMPATIBILITY,
FIRO AREA, AND TIME

Compatibility	Time 1	Time 2
Incompat Inclusion	4.51	5.60
Incompat Control	4.21	2.98
Incompat Affection	4.70	3.55
Compat Inclusion	6.10	4.86
Compat Control	5.06	4.20
Compat Affection	9.15*	4.20

*Early loading effect

TABLE XIV

KOHEN'S (1975) CORRELATIONS BETWEEN DYADIC
MEMBER'S TOTAL DISCLOSURE OUTPUT AS
A FUNCTION OF TIME

Time 1	Time 2	Time 3
$r = .29$	$r = .57$	$r = .80$

Note: All correlations were significant beyond the .05 level.

TABLE XV
CORRELATIONS BETWEEN DYADIC MEMBER'S TOTAL
DISCLOSURE OUTPUT AS A FUNCTION OF
FIRO, COMPATIBILITY, AND TIME

FIRO-Compat Area	Time 1	Time 2
Incompat Inclusion	0.02	0.29*
Incompat Control	-0.38	0.43*
Incompat Affection	-0.20	-0.72
Compat Inclusion	0.03	0.19
Compat Control	0.63	-0.68
Compat Affection	-0.08	-0.46

*Might be considered a substantial increase across time.

A Comparative Analysis of Measuring Reciprocity

The present investigation has been able to demonstrate the existence of reciprocity patterns of disclosure and a functional relationship between these patterns of conversational behavior and the FIRO-B need areas of Affection and Inclusion. This was accomplished through the use of computer analyses and the utilization of the Sequence Probability Table (SPT), which has provided a richer data base to work with. Patterns of mix and narrations have been captured with this methodology which have furnished more meaningful data when compared to other methods (Kohen, 1975).

To demonstrate the advantages of the SPT over other methodologies, a comparative analysis was performed. Methods used by Kohen to analyze "reciprocity" were employed using the present investigation's dyadic

interactions. Kohen used a repeated measures ANOVA to demonstrate significant decreases in the dyadic partners' differences in total disclosure output across time periods. That is to say, as the subjects interacted, the discrepancy between their total output for each five minute period became significantly less, indicating reciprocity.

I performed a repeated measures ANOVA analysis upon the interactions in the present investigation in the same manner in which Kohen (1975) analyzed her data to demonstrate reciprocity. There was no significant decrease in the dyadic partners' differences in total disclosure output across Time $F(1,30) = 0.50, p < .57$. In fact, a rise in total self-disclosure discrepancies was found between dyadic partners in general. On the average, subjects differed by 5.49 units in Time 1 and 6.19 in Time 2.

In addition, Kohen (1975) was able to demonstrate a substantial increase in the correlations between dyadic members' total disclosure output for each of the three time periods analyzed (see Table XIV). Because of the presence of a substantial increase in correlations over time, the author concluded that reciprocity was present within the interactions.

Using the present investigation's interactions, correlations were computed between each of the dyadic member's disclosure totals for each time period within each FIRO-B-Compatibility area. Table XV portrays this data. It is apparent that the clear cut trends that Kohen (1975) had reported are absent within the present investigation. Analyzing total disclosure units per time period with correlational methods does not demonstrate any differences between the six FIRO-B-Compatibility dyadic categories.

The reason for these inconsistent findings may lie in the fact that Kohen (1975) used different instructions for Time period 1 as compared to Times 2 and 3. The reader may recall that in Kohen's work Time 1 was used so that the subjects could get to know one another, while Times 2 and 3 were more structured, requiring the subjects to perform various tasks together. The present investigation was totally "unstructured." In addition, the present investigation used Kohen's (1975) methods in an attempt to differentiate FIRO-B-Compatibility areas with an $N = 12$ for each correlation computed. Kohen performed an overall correlation analysis using 130 subjects or 65 dyads.

Whatever the problem might be, these findings clearly demonstrate the dangers in attempting to describe conversational patterns and processes by means of analyzing totals of isolated units of behavior representing conversational results. The use of such aggregates will hide and distort more information than it will reveal. When the sequence of the verbal exchange is not maintained, the results will be questionable in regard to capturing and providing explicit evidence of conversational processes. This is due to the insensitivity these methodologies have to the internal dynamics of dyadic interactions.

Personal Consistency

"Personal Consistency" was expected within the dyadic interactions. This was based upon the findings of Kohen (1975) that low disclosers (early in the interaction) typically remained lowest (within their respective dyad) when Time period 2 was analyzed.

The present investigation failed to replicate Kohen's (1975) findings. A test for proportions produced a $p < .11$. The reason for these results that go against Kohen's findings, again, might lie within the difference in experimental instructions. Kohen had an initial five minute free interaction which was followed by ten minutes during which the subjects had to work out various tasks. The present investigation was unstructured for the entire 15 minutes.

Kohen (1975) asked her subjects to first get to know one another, then to work on the projects later in the session. Possibly the subjects who disclosed the most during the initial portion of the interaction were the most assertive or dominant dyadic members. Thereupon, each different instruction may have allowed the most assertive subject to renew his or her assertiveness, resulting in what seemed to be "personal consistency." Within the present investigation, the highest discloser, because the entire 15 minute session was unstructured, may have simply run out of things to say. As a result of this, the lowest discloser was forced to "take over" by increasing disclosure output and causing a switch in highest and lowest disclosers.

In addition, from a statistical point of view, the present investigation's results are not that different. A Z score with a $p < .11$ was found in the present study using an N of 33 (dyads). Kohen (1975) used 65 dyads, which, if the present investigation's proportions would remain constant (60% Personal Consistency, 40% Switched from low to high) using 65 dyads, an $N = 65$ would have provided enough power for the proportions test to be significant at the $p < .05$ level. Thus, the failure of the present investigation to replicate Kohen's findings

of personal consistency may be more an issue of "statistical power" than the lack of an existing "personal consistency" phenomenon.

Questions

The present investigation demonstrated, as predicted, that heterosexual strangers, when freely interacting, would not delve into highly intimate questions. Furthermore, questions asking for self-disclosure were followed by self-disclosure more often than self-disclosure assertions were reciprocated.

Although the above results are merely common sense, the conversation could have taken on a different flavor, considering the nature of the situation. The dyadic strangers could have relied more heavily upon the "dyadic effect" to gain information about each other. This would have been a "safer" and more discrete means of probing into the partner's personal world. To what extent this did occur could not be determined within the present investigation's design. The only definitive statement that can be empirically backed up is: subjects asked for more self-disclosure and elicited it by direct questions than they did through the reciprocation of disclosures.

Sex Differences

Using a test for differences between dependent groups (so as to account for the dependency that exists between subjects within the same dyad), it was found that no differences existed between males and females in disclosure output. This corroborated Kohen's (1975) findings that heterosexual strangers within a freely interacting encounter disclose the same amounts.

These findings go against a great deal of previous research which has reported females disclosing more than males. However, opposite-sexed dyads have not been the focus of such research. Kohen (1975) has suggested that sex differences do not characterize opposite-sexed interactions either because males increase their disclosure output when interacting with women, or women decrease their output while interacting with men. Kohen goes on to point out that Jourard (1964) has argued that males are more competitive than females within social encounters, and as a result, disclose less to "mystify" others. This will, in turn, retain a competitive advantage over others. But in the male-female interaction, Kohen argues women are viewed as non-competitive, thus allowing men to be more accessible without the concern of competition. Furthermore, the laboratory setting was possibly viewed as a non-competitive situation by the males, with instructions for the dyadic members to merely "get to know one another."

Sex differences in regards to asking for self-disclosure were also non-existent in the present investigation. Although there were no formal hypotheses about sex differences in asking questions, it was expected that females would ask for more personal information than males. This was based upon the notion that males have been reported to be less accessible than females, while the latter may feel obligated to probe her partner just to "keep the ball rolling." This was not demonstrated in the present investigation.

A Brief Summary of the Present Investigation's Results

- 1) Compatible dyads, as a whole, are no different in their respective disclosure output from Incompatible dyads.

- 2) Compatible Affection dyads disclosed far more early in the dyadic interaction than other dyadic groups. These results were interpreted as an indication that Affection issues are the most salient concerns within the dyadic encounter. It has also been suggested that self-disclosure is an Affection issue.
- 3) Intimacy of disclosure did not occur at a frequent enough rate within the initial acquaintance phase of dyads to be considered a dependent measure of self-disclosure.
- 4) Excluding Control groups from the analysis, Compatible groups, as a whole, disclosed the most in the early stages and the least in the late stages of the interaction session, creating a statistical interaction between Compat X Time. Considering both Time periods, the two modified groups were equal in disclosure totals.

These results (as well as result number 3) have been interpreted as an indication of tacit norms that exist within interpersonal interactions that limit the intimacy of topics to be discussed by the interactants.

- 5) Reciprocity, as defined by the present investigation, differentiated Compatible Inclusion and Affection groups a number of the other FIRO-B groups.
- 6) There were no sex differences in the total disclosure outputs nor in questions asking for self-disclosure.
- 7) Questions were used much more frequently than revealing strategies as a successful method of eliciting self-disclosure.
- 8) Personal consistency did not exist within the dyadic members' disclosure strategies over Time.
- 9) A comparative analysis of the present investigation's methodology demonstrated the high amounts of precision that can be gained when conversational processes are measured through the use of the Sequence Probability Table. Reciprocity, as defined in the present investigation, was able to differentiate different populations of subjects (as measured by the FIRO-B). The application of this methodology in the area of self-disclosure is warranted in that the dynamics and sequential processes of the conversation are preserved. In this way, a more accurate and comprehensive picture of the variables that "regulate" disclosure patterns become available in quantitative form for analysis.

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APPENDIX A

LEVEL OF ACQUAINTANCE SCALE

In regards to (other dyadic member's name), I:

1. Do not know this person _____
2. Know of him/her, never talked to him/her _____
3. Have seen him/her in class, never talked _____
4. Have talked very briefly _____
5. Know him/her quite well _____

APPENDIX B

AN EXAMPLE OF THE SEQUENCE PROBABILITY TABLE

SEQUENCE PROBABILITY TABLE FOR MALE DYADIC MEMBER.
WITHIN HALF CYCLE (NARRATIONS)

	C	D	E	F	G	2	3	4	5	
C	0	1	0	0	0	0	0	0	0	1
D	0	14	0	9	0	0	2	0	1	25
E	0	0	0	0	0	0	0	0	0	0
F	0	3	0	8	0	0	1	1	1	13
G	0	1	0	2	0	0	0	0	1	4
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0
5	0	2	0	2	0	0	0	0	0	3
	0	20	0	20	0	0	2	1	2	59*

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