A study of self-disclosure prediction and two types of interviewer modeling in the counseling interview

John David Sykes

College of William & Mary - School of Education

Follow this and additional works at: https://scholarworks.wm.edu/etd

Part of the Student Counseling and Personnel Services Commons

Recommended Citation


https://dx.doi.org/doi:10.25774/w4-dd3k-4d95

This Dissertation is brought to you for free and open access by the Theses, Dissertations, & Master Projects at W&M ScholarWorks. It has been accepted for inclusion in Dissertations, Theses, and Masters Projects by an authorized administrator of W&M ScholarWorks. For more information, please contact scholarworks@wm.edu.
INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or “target” for pages apparently lacking from the document photographed is “Missing Page(s)”. If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.

2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in “sectioning” the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.

4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from “photographs” if essential to the understanding of the dissertation. Silver prints of “photographs” may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

Xerox University Microfilms
300 North Zeeb Road
Ann Arbor, Michigan 48106
SYKES, John David, Jr., 1943-
A STUDY OF SELF-DISCLOSURE PREDICTION AND TWO TYPES OF INTERVIEWER MODELING IN THE COUNSELING INTERVIEW.

The College of William and Mary in Virginia, Ed.D., 1976
Education, guidance and counseling

Xerox University Microfilms, Ann Arbor, Michigan 48106

© COPYRIGHT BY AUTHOR

JOHN DAVID SYKES, JR.

1976

NO PART OF THIS DISSERTATION MAY BE USED OR REPRODUCED IN ANY MANNER WITHOUT WRITTEN PERMISSION FROM THE AUTHOR.
A Study of Self-Disclosure Prediction and
Two Types of Interviewer Modeling
in the Counseling Interview

A Dissertation
Presented to the
Faculty of the School of Education
College of William and Mary in Virginia

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
John D. Sykes, Jr.
July, 1976
APPROVAL SHEET

We the undersigned do certify that we have read this dissertation and that in our individual opinions it is acceptable in both scope and quality as a dissertation for the degree of Doctor of Education

Accepted July, 1976 by

Fred L. Adair, Ph.D.
Chairman, Doctoral Committee

Kevin E. Geoffroy, Ed.D.

Curtis H. O'Shell, Ed.D.
Acknowledgments

The support of many persons was necessary in order to complete this study. A special note of thanks is due everyone who assisted in the experimental phase of the study: to Mr. Ronald C. Diment and Mr. Eric J. Hummel, Counselors at Southside Virginia Community College, and Ms. Yvette R. Carney, Resident Counselor at Saint Paul's College, who served as interviewers; to Dr. Robert F. Snead, Provost, and Mr. Charles E. Hybl, Coordinator of Admissions and Records, Southside Virginia Community College, who were judges for the tapes; and to the Southside Virginia Community College students who volunteered to participate in the study.

I am deeply indebted to Dr. Fred L. Adair, advisor and doctoral committee chairman, and to Dr. Kevin E. Geoffroy and Dr. Curtis H. O'Shell, doctoral committee members, for their helpful criticisms and suggestions in the course of this project.

Great assistance was rendered also by my wife, Carolyn, who was my typist and clerical assistant for all phases of the project, and by Mrs. Christie Ogburn and Mrs. Rhina Parrish, who gave fine data processing and clerical aid.

The support and encouragement to continue my studies came from my wife, parents, and other family members. My daughter, Sandy, has been very understanding of her father through it all. The contributions of these persons and of others too numerous to mention are greatly appreciated.
Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acknowledgments</td>
<td>3</td>
</tr>
<tr>
<td>List of tables</td>
<td>7</td>
</tr>
<tr>
<td>List of figures</td>
<td>9</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. Introduction</td>
<td>11</td>
</tr>
<tr>
<td>Historical background</td>
<td>12</td>
</tr>
<tr>
<td>Contemporary perspective</td>
<td>14</td>
</tr>
<tr>
<td>Statement of the problem</td>
<td>19</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>19</td>
</tr>
<tr>
<td>Theoretical framework</td>
<td>20</td>
</tr>
<tr>
<td>Description of the instruments</td>
<td>21</td>
</tr>
<tr>
<td>The Self-Disclosure Questionnaire-40</td>
<td>22</td>
</tr>
<tr>
<td>The Willingness-to-Disclose Questionnaire</td>
<td>22</td>
</tr>
<tr>
<td>The California Psychological Inventory</td>
<td>22</td>
</tr>
<tr>
<td>Definition of terms</td>
<td>23</td>
</tr>
<tr>
<td>Self-disclosure</td>
<td>23</td>
</tr>
<tr>
<td>Depth of self-disclosure</td>
<td>23</td>
</tr>
<tr>
<td>Amount of self-disclosure</td>
<td>23</td>
</tr>
<tr>
<td>Passive listening condition</td>
<td>23</td>
</tr>
<tr>
<td>Modeled disclosure condition</td>
<td>24</td>
</tr>
<tr>
<td>Responsive disclosure condition</td>
<td>24</td>
</tr>
<tr>
<td>Target person</td>
<td>25</td>
</tr>
<tr>
<td>Chapter</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Reciprocity</td>
<td>25</td>
</tr>
<tr>
<td>Plan of presentation</td>
<td>25</td>
</tr>
<tr>
<td>2. Review of the literature</td>
<td>27</td>
</tr>
<tr>
<td>Measurement of self-disclosure</td>
<td>27</td>
</tr>
<tr>
<td>The CPI, the MMPI, and self-disclosure</td>
<td>35</td>
</tr>
<tr>
<td>Relations of self-disclosure to other personality variables</td>
<td>39</td>
</tr>
<tr>
<td>The target person and reciprocity of disclosure</td>
<td>47</td>
</tr>
<tr>
<td>Effects of modeling upon self-disclosure</td>
<td>51</td>
</tr>
<tr>
<td>Self-disclosure and counseling</td>
<td>59</td>
</tr>
<tr>
<td>3. Methodology</td>
<td>65</td>
</tr>
<tr>
<td>Population</td>
<td>65</td>
</tr>
<tr>
<td>Procedures used</td>
<td>66</td>
</tr>
<tr>
<td>Data collection</td>
<td>67</td>
</tr>
<tr>
<td>Processing the data</td>
<td>71</td>
</tr>
<tr>
<td>Statistical methods</td>
<td>73</td>
</tr>
<tr>
<td>4. Results</td>
<td>76</td>
</tr>
<tr>
<td>Interjudge reliability</td>
<td>76</td>
</tr>
<tr>
<td>Interviewer behavior</td>
<td>78</td>
</tr>
<tr>
<td>Unity of the population</td>
<td>84</td>
</tr>
<tr>
<td>Hypotheses 1, 2, and 3</td>
<td>89</td>
</tr>
<tr>
<td>Hypotheses 4, 5, and 6</td>
<td>97</td>
</tr>
</tbody>
</table>
5. Summary, conclusions and recommendations ........... 102
   Summary ................................................................. 102
   Conclusions and recommendations .................... 105

Appendix
A. The Self-Disclosure Questionnaire-40 and
   the Willingness-to-Disclose Questionnaire .......... 110
B. California Psychological Inventory
   scale descriptions ............................................. 119
C. Presentation to classes from which
   volunteers were obtained ................................. 122
D. Contract covering taping release and
   confidential research use of tapes .................... 126
E. Instructions for interviewers ............................. 127
F. Qualifications of interviewers ............................ 133
G. Judge's rating forms ........................................ 135
H. Qualifications of judges ................................. 142
I. Summary statistics of inventory
   scores for all subjects ...................................... 144

Reference note ..................................................... 146
References ......................................................... 147
## List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Means, standard deviations, and Pearson product-moment coefficients of correlation ($r$) for interjudge reliability on disclosure ratings assigned by J1 and J2</td>
<td>77</td>
</tr>
<tr>
<td>2. Means and standard deviations of IR disclosure times and depth ratings by treatment condition</td>
<td>79</td>
</tr>
<tr>
<td>3. Means and standard deviations of IR total disclosure ratings by treatment condition</td>
<td>81</td>
</tr>
<tr>
<td>4. Means, standard deviations, and $t$ values of IR disclosure ratings for the modeled disclosure and responsive disclosure conditions</td>
<td>83</td>
</tr>
<tr>
<td>5. Means, standard deviations, and $t$ values of CPI scores for eastern campus and western campus subjects</td>
<td>85</td>
</tr>
<tr>
<td>6. Means and standard deviations of IE total disclosure ratings by IR and treatment condition</td>
<td>90</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>7. Contrast coefficient matrix for</td>
<td>92</td>
</tr>
<tr>
<td>orthogonal comparisons between</td>
<td></td>
</tr>
<tr>
<td>and among treatment groups</td>
<td></td>
</tr>
<tr>
<td>8. t values for orthogonal comparisons</td>
<td>93</td>
</tr>
<tr>
<td>between and among treatment groups</td>
<td></td>
</tr>
<tr>
<td>9. Four-way analysis of covariance of IEs'</td>
<td>95</td>
</tr>
<tr>
<td>total disclosure ratings by treatment,</td>
<td></td>
</tr>
<tr>
<td>counselor, IE sex, and IE race,</td>
<td></td>
</tr>
<tr>
<td>covarying on IEs' WTDQ and SDQ scores</td>
<td></td>
</tr>
<tr>
<td>10. Partial correlation coefficients between</td>
<td>99</td>
</tr>
<tr>
<td>self-disclosure ratings and inventory</td>
<td></td>
</tr>
<tr>
<td>scores of IEs, controlling for the</td>
<td></td>
</tr>
<tr>
<td>effects of IR self-disclosure, IE sex,</td>
<td></td>
</tr>
<tr>
<td>and IE race</td>
<td></td>
</tr>
</tbody>
</table>
# List of Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
</table>
| 1. Comparison of mean CPI profiles  
for male subjects to mean profiles  
for high school and college males | 87 |
| 2. Comparison of mean CPI profiles  
for female subjects to mean profiles  
for high school and college females | 88 |
A Study of Self-Disclosure Prediction and Two Types of Interviewer Modeling in the Counseling Interview
Chapter 1

Introduction

Mark Twain once commented, "Everyone is a moon, and has a dark side which he never shows to anybody" (Allport, 1961, pp. 499-500). Unlike heavenly bodies, however, individuals vary in their willingness to shed light on their inner beings according to the situations and persons involved. This process of making the self known to other persons, which has come to be called self-disclosure, is more than a matter of confiding inner thoughts and feelings. It is also concerned with the spontaneous daily activities of the individual which imply a certain openness or opaqueness. Thus, non-verbal as well as verbal communication transmits personal messages defining each of us as a person. Means by which persons disclose themselves include, but are not necessarily limited to, words, actions, gestures, facial expressions, and the absence of any or all of these phenomena.

A question posed by Thomas Wolfe goes to the heart of the matter: "Which of us has known his brother?" (Jourard, 1963). As well as knowing one's brother, also involved is the question of real self knowledge: to disclose one's self honestly is to know one's real self. Individuals may not know their real selves, a phenomenon Karen Horney (1950) has labeled "self-alienation." The personality variable labeled self-disclosure, then, is a complex concept.
Historical Background

In 1956 the late Sidney M. Jourard became intrigued with the concept of self-disclosure. Prior to that time, self-disclosure had not been studied directly. However, indirect mention of the concept appears in the work of Block (1952) and of Block and Bennett (1955). They noted that the individual reveals himself differently to various others depending upon the role he plays in regard to them. Each individual has various roles he assumes, such as husband, father, employee, citizen, and so on, and in these roles he reveals himself differently to those with whom he comes in contact.

Similarly, Fromm (1947), Riesman (1950), and Horney (1950) all made indirect reference to self-disclosure in their writings. They each noted the tendency among persons in our society to misrepresent the self to others. Each of these social scientists also gave a different label to this tendency: Fromm called it the marketing personality, Riesman's label was the other-directed character, and for Horney it was self-alienation.

As Jourard (1971b, pp. 29-30) has noted, it is also possible to go as far back as the nineteenth century Viennese physician, Joseph Breuer, to find indirect reference of self-disclosure. Breuer developed a talking-out technique and found, according to Jourard, that when his hysterical patients talked about themselves, disclosing not only the verbal content of their memories, but also the feelings that they had suppressed at the time of assorted "traumatic" experiences, their hysterical symptoms disappeared.
Somewhere along the line, Breuer withdrew from a situation which would have made him Freud's peer in history's hall of fame. When Breuer permitted his patients "to be," it scared him, one gathers, because some of his female patients disclosed themselves to be quite sexy, and what was probably worse they felt sexy toward him. Freud did not flinch. (p. 29)

Jourard goes on to point out that Freud developed this talking-out technique into a method known as free association, through which people who are allowed to "be" can then disclose all kinds of feelings and thoughts. Jourard states,

Freud learned to permit his patients to be, through permitting them to disclose themselves utterly to another human. He evidently did not trust anyone enough to be willing to disclose himself vis-à-vis, so he disclosed himself to himself on paper and learned the extent to which he was himself self-alienated. (p. 30)

Thus, the concept of self-disclosure is not a new one, but one which only recently has received any appreciable research interest. The late Sidney Jourard began his study of self-disclosure in 1956 and established himself as the dominant figure in the field, having written several books and numerous articles on the subject of self-disclosure. The first instrument designed to measure self-disclosure was also constructed by Jourard. The Jourard Self-Disclosure Questionnaire, with its numerous versions and variations, is widely used in current research involving self-disclosure. No other researcher
has reached a place of real prominence in this field, though many have contributed to the advance of knowledge about self-disclosure.

For Jourard, a psychotherapist and teacher, the seed was planted while he was in the process of reviewing galley proofs for his textbook, Personal Adjustment. In this book he made reference to the idea that "real-self being" was necessary to the healthy personality. This set him to thinking of how research could be conducted into the process of "being one's real self in relation to others." He wondered: Who knows me? He conducted research among family, friends, and colleagues and discovered a diversity of descriptions of Sid Jourard. He came to realize how differently he had presented himself to these various others.

During this same time period, Jourard was involved in finding a job. In the course of filling out numerous application blanks he realized how much private personal information he was revealing to strangers. He began a self-examination which pivoted around the questions: Would I reveal as much to family and friends? To whom has this information been previously disclosed? This all led to the development of a method to measure real-self being. Jourard believed this scientific query is also connected with the existential question: "Am I a liar, a fraud, and a phony? Or am I for real?" (Jourard, 1971a).

Contemporary Perspective

Benner (1968) noted that three major theoreticians hold somewhat different views on self-disclosure. Carl Rogers stresses the affective dimensions of self-disclosure in the counseling relationship and the
importance of counselor genuineness in the relationship in promoting client disclosure. O. H. Mowrer emphasizes the behavior content of the disclosure, focusing on the confessions of misdeeds. Jourard, on the other hand, views the content of self-disclosure as referring to cognitive topic-target aspects.

All theories of counseling and psychotherapy would seem to make either implicit or explicit use of self-disclosure. The difference lies in the approach to self-disclosure. For example, psychoanalytic theory uses self-disclosure in a cathartic manner through such techniques as free association. The client-centered approach aims at eliciting self-disclosure through the warm, accepting person of the therapist. Jourard goes one step further by emphasizing the reciprocity aspect of the disclosure, wherein the therapist participates in the relationship by also being his real disclosing self.

In an early work, Jourard took a strong stand as to the importance of self-disclosure to the helping professions, emphasizing particularly the need for openness and vulnerability on the part of the helper as well as the helpee:

How does it come to pass that a patient will open himself up to be known and to be influenced? This really is the nub of psychotherapy, and teaching, and love, and leadership. How do you arrive in a relationship at the point where the other person is maximally open to you and will be affected by you? I now believe that his openness and vulnerability to influence and to good and to harm is a concomitant of your openness before him,
so that you are also vulnerable. . . . I suspect that he will
become as open, trusting, and vulnerable as I am willing to be
with him. If I want him to be maximally open, then I have to
be prepared to be maximally open. If I want him to be only half
open, then I will only get half-open. If I want him to be
maximally open, but I keep myself fully closed off, peeking at
him through chinks in my own armor, trying to manipulate him
from a distance, then in due time he will discover that I am
not in that same mode; and he will then put his armor back on
and peer at me through chinks in it, and he will try to manipulate
me. (Jourard, 1968, p. 64)

Although Jourard's theoretical position here is a dramatic depart-
ture from many accepted approaches to counseling and psychotherapy,
similarities may be seen in an earlier Carl Rogers statement concerning
genuineness in the counseling relationship:

I have found that the more that I can be genuine in the relation-
ship, the more helpful it will be. This means that I need to be
aware of my own feelings, in so far as possible, rather than pre-
senting an outward façade of one attitude while actually holding
another attitude at a deeper or unconscious level. Being genuine
also involves the willingness to be and to express, in my words
and my behavior, the various feelings and attitudes which exist
in me. It is only in this way that the relationship can have
reality, and reality seems deeply important as a first condition.
It is only by providing the genuine reality which is in me that
the other person can successfully seek for the reality in him. I have found this to be true even when the attitudes I feel are not attitudes with which I am pleased, or attitudes which seem conducive to a good relationship. It seems extremely important to be real. (Rogers, 1961, p. 33)

O. H. Mowrer appears to occupy a position somewhere between Jourard and Rogers with respect to the use of counselor self-disclosure in the relationship:

A deeply disturbed person is often very guarded, in the beginning, about what he or she will spontaneously reveal, and modeling by the interviewer is necessary in order to loosen resistance and provide much-needed encouragement and reassurance. But in any case I like for the other person to go as far as possible in the direction of self-disclosure before I model. There are several advantages in this practice, among them the fact that it permits one to see where the other person is, in terms of the capacity for and the practice of openness, and also it permits one to see the often very dramatic effects of modeling—in the sense of releasing material which might otherwise be quite inaccessible. (Mowrer, 1968, p. 176)

While Mowrer appears to regard counselor disclosure as simply a technique, Carkhuff, whose discrimination training program for helpers contains a self-disclosure scale, seems to assign a more integral role to this type of counselor, or helper, behavior:

Although we tend to emphasize the helper's acceptance of the helpee, it is just as critical to study the helpee's acceptance
of the helper. The helpee has to know, for example, that, given his circumstances, the helper could have resolved his conflicts more effectively than the helpee has been able to do. Similarly, just as helpee self-exploration is an indication of helpee progress, so may increasing levels of counselor self-disclosure be an indication of the increasing reciprocal and equalitarian interaction of an effective counseling process. (Carkhuff, 1969, p. 61)

It can be readily seen from the foregoing examples that a number of theorists recognize the importance of self-disclosure in counseling and psychotherapy. This study is concerned with self-disclosure within the one-to-one context of the counseling interview. A large body of research, much of it quite recent, has delved into the topic of self-disclosure. A portion of this research has been devoted to one-to-one, or dyadic, situations. A lesser portion of this same research has dealt with the one-to-one counseling interview as such, wherein the dyadic situation under study involved a client and a trained professional, the counselor.

The focus of this study is upon questions of practical interest to counselors. Firstly, can the counselor predict anything about the level of self-disclosure which a new client will be likely to display in an interview prior to the interview's taking place? Secondly, will different modes of action and reaction on the counselor's part have any significant effect upon client self-disclosure in the interview? Finally, do interviewees react differently to different techniques
according to scores on either of the prior measures used in this study?

Statement of the Problem

The present study will attempt to answer two major questions. First, does either the Self-Disclosure Questionnaire-40 (SDQ-40), a Willingness-to-Disclose Questionnaire, or the California Psychological Inventory (CPI) predict satisfactorily actual interviewee (IE) self-disclosure in a structured initial counseling interview? Second, do three different modes of interviewer (IR) behavior result in significant differences in IE self-disclosure in this structured initial counseling interview?

Hypotheses

For purposes of the research, the following hypotheses are formulated:

1. Greater IE disclosure occurs in interviews conducted under the modeled disclosure condition than in interviews conducted under passive listening condition.

2. Greater IE disclosure occurs in interviews conducted under the responsive disclosure condition than in interviews conducted under the passive listening condition.

3. Greater IE disclosure occurs in interviews conducted under the modeled disclosure condition than in interviews conducted under the responsive disclosure condition.

4. SDQ-40 scores of IEs are related positively to IE disclosure.

5. Willingness-to-Disclose Questionnaire scores of IEs are related positively to IE disclosure.
6. IEs' CPI scores on the Do, Cs, Sy, Sp, and Sa scales are related positively and on the Sc scale are related negatively to IE disclosure.

Theoretical Framework

The theoretical base for the present study is found in the social penetration theory of Altman and Taylor (1973). According to the theory, many factors play a role in enhancing or inhibiting the growth of interpersonal relationships. Among the more important factors are the personal characteristics of the participants, the outcomes of exchange, and the situational context involved. Altman and Taylor see social penetration as a complex process:

Social penetration refers to (1) overt interpersonal behaviors which take place in social interaction and (2) internal subjective processes which precede, accompany, and follow overt exchange. The term includes verbal, nonverbal, and environmentally oriented behaviors, all of which also have substantive and affective/emotional components. . . . Thus interpersonal exchange functions as a "system", involving many levels of behavior which operate together--complementing one another, substituting for one another, and influencing one another. (Altman & Taylor, 1973, pp. 5-6)

The first theme in social penetration theory is that the social penetration process is orderly and proceeds through stages over time. The second theme is especially pertinent to the present study. According to the theory,
people assess interpersonal rewards and costs, satisfaction and
dissatisfaction, gained from interaction with others, and that
the advancement of the relationship is heavily dependent on the
amount and nature of the rewards and costs. (p. 6)
Also applicable to the current study is Altman and Taylor's
interest in,
how the social penetration process is affected by the personal
characteristics of people; for example, those with predisposi-
tions to reveal themselves should show a different history of
social penetration than those more reluctant to enter into
relationships with others. Some situations may accelerate the
process, whereas others may inhibit mutual exploration and
scanning. (p. 7)
Social penetration theory holds that reciprocity of exchange does
operate in self-disclosure events. Although important, a norm of
reciprocity is not seen as the sole determinant of the social pene-
tration process. Rather, Altman and Taylor hypothesize,
that reciprocity derives from (1) dynamics of the encounter
between people, (2) level of intimacy of topics discussed,
(3) properties of the situation, and (4) characteristics of
the participants. (pp. 54-55)

Description of the Instruments

The instruments selected for use in this study are the Self-
Disclosure Questionnaire-40 (SDQ-40), the Willingness-to-Disclose
Questionnaire, and the California Psychological Inventory (CPI).
The Self-Disclosure Questionnaire-40

The Jourard SDQ is widely used in research as a measure of self-disclosure. Sullivan (1972) compared available measures of self-disclosure for effectiveness and concluded that Jourard's Self-Disclosure Questionnaire was the most satisfactory measure for research purposes. Prevalent forms in use are 20-, 40-, and 60-item versions. All utilize self-reported past disclosure to significant target persons as a measure of a subject's self-disclosure level. The SDQ-40, including answer sheet and scoring directions, is reproduced in Appendix A.

The Willingness-to-Disclose Questionnaire

A variation of the SDQ, the Willingness-to-Disclose Questionnaire, utilizes self-reported estimates of future disclosure to a particular target person as a measure of a subject's willingness to disclose in a certain context. Bundza and Simonson (1973) found responses on a willingness-to-disclose measure highly predictive of actual IE disclosure. The SDQ response items are also used with the Willingness-to-Disclose Questionnaire. The answer sheet and scoring directions for this latter instrument appear in Appendix A.

The California Psychological Inventory

The California Psychological Inventory (CPI) was designed specifically for the multidimensional description of normal personality. It contains 480 items, approximately 200 of which are taken from the Minnesota Multiphasic Personality Inventory (MMPI) and all of which are answered "true" or "false". The CPI is scored for 15 personality
and 3 validity scales which are organized into four sub-groups or clusters. In general, reviewers have rated the CPI as a reasonably useful test for the multidimensional description of normal personality (Lanyon & Goodstein, 1971). Brief descriptions of the CPI scales are given in Appendix B.

**Definition of Terms**

**Self-Disclosure**

Self-disclosure refers to the process of making the self known to other persons. Operationally, self-disclosure is defined as the total mean score on the Judge's Rating of Subject's Disclosing Responses (Appendix G).

**Depth of Self-Disclosure**

Depth of self-disclosure is the degree of intimacy of the material which the person is disclosing. Operationally, this term is defined as the depth ratings on the Judge's Rating of Subject's Disclosing Responses (Appendix G).

**Amount of Self-Disclosure**

Amount of self-disclosure is the amount of material which a person discloses about himself. Operationally, this term is defined as the length ratings on the Judge's Rating of Subject's Disclosing Responses (Appendix G).

**Passive Listening Condition**

The passive listening condition is an interview condition in which the IR asks a question, listens attentively but passively to the IE response, and asks the next question. The passive listening condition is illustrated in the following interaction example:
IR: Describe the unhappiest moment of your life: in detail.

IE: Well, I guess that would have to be the day my mother died. It just seemed ... really was a bad scene. (IR listens attentively but passively throughout the IE disclosure.)

IR: What do you regard as the mistakes your parents made in raising you?

Modeled Disclosure Condition

The modeled disclosure condition is an interview condition in which the IR asks a question, discloses himself on the topic for a minimum of 60 seconds, allows the IE to respond on the same topic, and asks the next question. The modeled disclosure condition is illustrated in the following interaction example:

IR: Describe the unhappiest moment of your life: in detail.
   I would have to say that the unhappiest moment of my life was when our first child was still-born. There had been so much waiting and happiness ... certainly a bad time.

IE: For me that would be the day my mother died. It just seemed ... really was a bad scene. (IR listens attentively but passively throughout the IE disclosure.)

IR: What do you regard as the mistakes your parents made in raising you? I don't feel that my parents made too many serious mistakes in raising me. I guess the worst thing was letting me have my way too much ... 

Responsive Disclosure Condition

The responsive disclosure condition is an interview condition in which the IR asks a question, allows the IE to respond, self-discloses
on the topic for a minimum of 60 seconds, and asks the next question. The responsive disclosure condition is illustrated in the following interaction example:

IR: Describe the unhappiest moment of your life: in detail.
IE: Well, I guess that would have to be the day my mother died. It just seemed . . . really was a bad scene. (IR listens attentively but passively throughout the IE disclosure.)
IR: On that subject, I would have to say that the unhappiest moment of my life was when our first child was still-born. There had been so much waiting and happiness . . . Moving to the next topic, what do you regard as the mistakes your parents made in raising you?

Target Person

The target person is the individual with whom a subject interacts at a point in time.

Reciprocity

Reciprocity is the tendency of one person's self-disclosure to elicit similar disclosure from others with whom he interacts.

Plan of Presentation

The current investigation is presented in five sequential parts designated as chapters. The present chapter has served to introduce the area of inquiry and to identify the questions to be investigated. It has also established the theoretical framework for this study, discussed the instruments to be used, and defined terms. The final
four chapters will be presented as follows: (a) review of the literature, (b) methodology, (c) results, and (d) summary, conclusions, and recommendations.
Chapter 2

Review of the Literature

Serious research on self-disclosure began with Jourard in 1956. Since that time, many directions in research have emerged from investigations in the field. This chapter undertakes a summary of the areas of self-disclosure research pertinent to the present study as follows:

(a) measurement of self-disclosure,
(b) the CPI, the MMPI, and self-disclosure,
(c) relations of self-disclosure to other personality variables,
(d) the target person and reciprocity of disclosure,
(e) effects of modeling upon self-disclosure, and
(f) counseling and self-disclosure.

Measurement of Self-Disclosure

Jourard's Self-Disclosure Questionnaire was the first instrument designed to measure self-disclosure. Of the many versions of the original questionnaire which have been used by researchers, the 20-, 40-, and 60-item versions appear to have been most popular. The Jourard SDQ is widely used in research today as a measure of self-disclosure. It is, however, the source of some debate among experts in the field. Reliability for this instrument is generally around .93 to .94 (Jourard & Lasakow, 1958; Himelstein & Kimbrough, 1963).
Validity measures of the SDQ have been debated. Early construct validity studies yielded mixed results. Some researchers concluded the instrument had construct validity (Pedersen & Higbee, 1968; Jourard, 1971); others concluded that it did not (Hurley & Hurley, 1969; Von-dracek & Marshall, 1971).

Panyard (1973) appears to have demonstrated that the SDQ does, in fact, have construct validity. She found a correlation of .61 ($p < .01$) between the amounts of personal information exchanged between friends as indicated through a dual administration of the questionnaire. Further, a similar correlation of .63 ($p < .01$) was found between the amount the subject reported he had disclosed and the amount the friend reported he had received. Panyard concluded that the SDQ is a valid measure of past disclosure to a specific target person. In addition, she pointed out that studies which questioned the construct validity of this instrument did so on the basis of other instruments whose validity had not been demonstrated. It therefore appears that the Self-Disclosure Questionnaire does measure what it claims to measure.

Support for Panyard's position is found in an earlier investigation by Lind (1971). As a portion of his research, Lind did a validity study of Jourard's SDQ as a measure of claimed self-disclosure, but used new instructions encompassing both verbal and nonverbal means of self-disclosure. Actual disclosure of the 27 male Ss was measured through ratings by the SDQ target persons. An overall correlation of .43 was found. However, correlations were found to be very different for the different target persons (Father .09,
Mother - .14, Best Male Friend .75, Best Female Friend .80, and Spouse .80). Thus it appears desirable to have a separate score for each target person rather than combining them, especially where prediction in relation to a specific target is involved.

Along these lines, predictive validity in terms of prediction of future disclosure levels has generally been poor for the SDQ. Studies have almost uniformly failed to demonstrate that Self-Disclosure Questionnaire scores predicted future disclosure levels. When 68 participants were rated at the conclusion of 20 group sessions on a nine-point scale of self-disclosure (reliability .69), a correlation of only .13 to SDQ scores was found (Lubin & Harrison, 1964). Drag (1969) likewise found that Ss' SDQ claims did not accurately predict actual self-disclosure behavior in the group situations used. However, Drag saw weaknesses in his study in the lack of specificity of the target situation, in instructions to Ss during the administration of the SDQ, and also in the target population actually utilized. These weaknesses would appear also to apply to the Lubin and Harrison study.

Himelstein and Kimbrough (1963) compared SDQ scores to the amount of information revealed by 25 graduate students in their classroom self-introductions to the group, where the Ss were told only to give their name and present professional position. The resulting correlation of only .102 is taken by the researchers to indicate a lack of predictive validity for the SDQ. However, the extremely limited self-disclosure task involved here renders their conclusion suspect.

Different results were found by Jourard and Resnick (1970). Of 80 Ss, they selected the 12 highest and the 12 lowest scorers on the
SDQ and exposed them to a self-disclosure task. In this case, the SDQ did predict performance, with the difference between groups on actual disclosure significant at the .01 level.

Despite its difficulties, researchers generally agree that the SDQ and its many variations comprise the most satisfactory means yet devised to measure self-disclosure. Sullivan (1972) compared questionnaires, self-ratings, peer nominations, and clinicians' ratings of subjects' written responses to projective materials for effectiveness in measuring self-disclosure. He concluded that Jourard's Self-Disclosure Questionnaire was the most satisfactory measure for research purposes.

This instrument is in general use as a means of selecting high and low self-disclosing subjects (Rodriguez, 1971; Wildman, 1972). A median split is generally utilized to dichotomize the population into high and low disclosers.

A potentially fruitful approach is that of Heilbrun (1973). In a study of late adolescent girls, he discovered that Ss who would more likely defect from psychotherapy early had a self-rated history of greater self-disclosure than did similar girls who would more likely continue. Here past disclosure history was found to be predictive of some condition other than future disclosure level. This may prove to be a useful approach in further research with the SDQ. Even if scores on the questionnaire or variations thereof never prove capable of predicting future disclosure, they may be found to be predictive of other conditions of interest to researchers.
and of importance in studying self-disclosure. SDQ scores should be examined carefully as predictors of the conditions under which various levels of future disclosure occur.

Numerous studies have utilized variations of the Self-Disclosure Questionnaire as to target person and whether reported disclosure was past or predicted future. Frankel (1970), for example, used nine different target persons in her study. It would appear that the predictive powers of this instrument would be improved if the disclosure situation presented for self-report approximated as closely as possible the situation for which predictions were being made.

Several factors might help to account for problems concerning predictive validity for the SDQ. One such factor is that, for most studies, the situation in which self-disclosure is observed experimentally is quite different from the situation(s) measured through self-report of past disclosure level. Although a few studies have included a willingness-to-disclose measure, often the situation presented does not approximate very closely the forthcoming experimental condition.

A willingness-to-disclose questionnaire offers a possible solution to the problem of specificity of the target person, which was encountered in several studies cited above. It also avoids attempting to predict future behavior from past situations very unlike the present one. Bundza and Simonson (1973) found strong support for willingness-to-disclose measures in an experiment involving presenting the 16 male and 29 female Ss written transcripts of one of three simulated
psychotherapy sessions. The variable manipulated in these transcripts was the IR responses, with IE responses held constant. The Ss then completed a self-disclosure questionnaire according to their willingness to disclose to this particular therapist. When Ss were then interviewed by the same therapist, responses on the willingness-to-disclose measure were highly predictive of actual IE disclosure.

Mann and Murphy (1975) have suggested that IE willingness to disclose and other IE variables may play some role in the disclosure-exchange process. This notion was supported by Simonson (1976), who had each of 90 female Ss complete a modified version of the Jourard SDQ-60 according to the degree to which she was willing to discuss each item with the therapist she had just heard on tape. All Ss were then interviewed by the therapist who asked the same series of open-ended questions of all and encouraged expression by all. When the tapes of these interviews were rated independently by two judges on an 11-point scale of self-disclosure, it was found that SDQ-60 scores correlated .82 with judges' ratings of actual disclosure. The researcher felt that this afforded substantial evidence for the predictive validity of the SDQ-60 in a willingness-to-disclose framework in this situation.

Past research involving the SDQ and its variations seems to hold out greater promise of acceptable predictive validity for willingness-to-disclosure measures than for other forms of the instrument.

In addition to the SDQ and other self-report measures, a number of techniques to measure IE self-disclosure in the experimental
interview have evolved. All methods involve some type of standard observation, generally by trained judges.

Chafey (1974) audio-recorded the interviews in his experiment and had them rated and tabulated by judges trained to determine the amount and type of self-disclosure. Similarly, Feigenbaum (1975) measured intimacy of self-disclosure through judges' content ratings and also by Ss' use of self-referent words.

A type of measurement which appears frequently in the literature is that used by Baum (1972). In this study, three judges rated self-disclosure from taped segments of interview sessions according to three scales: amount of talking, frequency of self-disclosure, and quality and depth of self-disclosure. Most researchers use multiple rating scales because it is felt that a complex variable such as self-disclosure cannot be adequately assessed by a simplistic approach.

Nosanchuk (1972) demonstrated some of the problems involved in a simplistic approach to self-disclosure measurement. He used two measures of self-disclosure: the unweighted self-disclosure score represented the number of self-disclosure topics answered by each S; the weighted self-disclosure score reflected the intimacy levels of the topics and the intimacy levels of the Ss' responses. As hypothesized, the unweighted measure did not differentiate the groups on the variables studied. Also as predicted, the weighted measure did reveal differences between groups.

Researchers have tried to make their measurements as objective as possible in recent studies. Kohen (1972), for example, working
from audiovideo-taped interaction of the 59 pairs of Ss during a 15-minute laboratory period, transcribed the sessions in typewritten form. The transcriptions were then coded for self-disclosure. Expressions of attributes, attitudes, and feelings were included in the self-disclosure totals.

Turoczi (1972) measured Ss' disclosure by three objective indices: reaction time, total time spent talking, and total number of words. A fourth measure was a rating scale used to assess depth of disclosure. Although it appears necessary to use some type of trained judges in assessing Ss' self-disclosure, it is most desirable to objectify measurement and standardize it where possible.

O'Reilley (1971) underscored potential problems with judges. He conducted a pilot investigation to determine the accuracy with which judges (close friends) could rate the past disclosure of each other. Results indicated that judgments of Ss' past disclosure correlated better with the judge's own self report than with the self report of the Ss involved.

Then, in his primary investigation, O'Reilley studied the effects of internal frames of reference upon Ss' intimacy ratings of disclosure-related questions. Ss with high self-disclosure scores showed overinclusion of questions in the two categories of lowest intimacy. Ss with moderate self-disclosure scores showed overinclusion of questions in the two middle categories of moderate intimacy. Ss with low self-disclosure scores exhibited overinclusion of questions in the two categories of highest intimacy. It was felt that results supported the idea that self-disclosure
reports of Ss are reflective of their internal frames of reference. This points up possible concerns in having judges rate self-disclosure and the need for objectivity and standardization to the extent possible.

**The CPI, the MMPI, and Self-Disclosure**

A review of the literature reveals no published research dealing with the relationship of Ss' CPI scores and self-disclosure. In an unpublished paper, however, Tatem (Note 1) utilized as Ss 12 males and 16 females in a personality course to study the relationship of self-disclosure in autobiographies to CPI scores and several other variables. Each S wrote an autobiography and completed the CPI along with a special fact sheet. The autobiographies were scored by giving one point for each item disclosed which appears on the SDQ-60. Self-disclosure scores were then correlated to other variables, including CPI scores. A median split was used to select the high and low self-disclosure groups on autobiography scores. In general, CPI scores did not differ significantly between groups for either males or females. However, females low on self-disclosure tended to score higher on the Responsibility (Re) and Femininity (Fe) scales of the CPI than did high-disclosing females. Also, low-disclosing males scored higher on Socialization (So) than high-disclosers, while high disclosing males scored higher on Achievement via Independence (Ai), Flexibility (Fx), and Intellectual Efficiency (Ie).

Although research involving the CPI and self-disclosure is quite limited, there have been a number of studies which examined the
relationship of scores on the MMPI to self-disclosure. Since the CPI was developed from the MMPI and since approximately 200 of the 480 CPI items also appear on the MMPI (Gough, 1957), this research is relevant to the present study.

In an effort to explore the relationship between self-disclosure and quality of adjustment, Smith (1958) employed a self-disclosure questionnaire and the MMPI as instruments. He compared self-disclosure scores of Ss who had "abnormal" MMPI clinical scale scores with those obtained from Ss with "normal" MMPI clinical scale scores. He selected subjects from the entering freshman class at the University of Alabama. Nine male and nine female records were chosen from among the 2000 test scores. A self-disclosure questionnaire was administered to these 18 Ss. A comparison of self-disclosure scores of Ss who had "abnormal" MMPI clinical scale scores with those obtained from Ss with "normal" MMPI clinical scale scores revealed no significant differences between these groups.

The study contained two confounding variables. First, the MMPI was standardized on urban dwellers, not on college students. Second, further investigation revealed that less than 10% of the freshman class received T-scores less than 60. Jourard (1971) contended that it was possible that the "normal" control group was unrepresentative of a college population on MMPI scores and self-disclosure patterns. Jourard randomly chose a total of 54 males and 54 females from other colleges to compare the self-disclosure patterns with those obtained by Smith's MMPI groups. It was hypothesized that Ss whose MMPI
clinical scale T-scores fall below 60 (normals) would differ in self-disclosure pattern from randomly-selected Ss in the same age range. The second hypothesis was that "abnormals" with scores indicative of maladjustment would manifest less self-disclosure to significant others than the random group. The results supported both hypotheses. Self-disclosure scores were considered indicative of the degree of alienation of an individual from significant others in his life. The random group had a significantly higher self-disclosure score than either the "normal" or "abnormal" MMPI subjects from Smith's study.

Another investigation of the correlation between self-disclosure and MMPI scores involved the use of the K scale, which is a measure of healthy emotional adjustment and ego-strength. Himelstein and Lubin (1966) tested the hypothesis that the K scale, as a measure of defensiveness, is inversely related to a measure of the amount of disclosure about the self in which a subject engages. The Ss were 95 unmarried males and 85 unmarried females. A modified version of the Self-Disclosure Questionnaire and the MMPI K scale were administered to both groups. The results showed that females disclosed more than males to all target persons. Males and females disclosed more to their mothers. However, the correlations were not significant for female subjects between SDQ and K scale scores. The authors suggest that the K scale is positively related to level of psychological health in normal female Ss only. While for male Ss a high K scale score indicates defensiveness, it indicates a good state of psychological health for females.
The MMPI was used by Fritchey (1971) in a study of the effects of anxiety and threat on self-disclosure. The Ss were 90 males who had requested vocational guidance. The MMPI was administered and Ss rated as low anxious, moderately anxious, and high anxious were assigned to two groups. Both groups were administered an eight-question tape asking self-disclosing items. The experimental groups were monitored in a threatening manner and were told their answers revealed emotional difficulties. The control group received non-threatening instructions and were told the questionnaire was just a routine survey. Follow-up interviews were rated for intimacy level and amount of self-disclosure. The results showed no significant differences on either of the measures for any of the groups, although high anxious Ss did disclose more.

In a study of the type of self-disclosure to two target persons, Truax and Whittmer (1971) compared Ss' MMPI scores and the amount of non-private, semi-private, intimate, and total self-disclosure to both a personal friend and a family member. Results indicate that when the target person was a close friend: (a) the least well-adjusted Ss showed the greatest amount of self-disclosure and (b) the more well-adjusted Ss showed the least amount of self-disclosure. These findings are contrary to the accepted notion that self-disclosure is directly proportional to the degree of adjustment. There was no significant correlation between self-disclosure and personality adjustment when a family member served as the target person.
Mullaney (1964) used the SDQ and the MMPI as two of the instruments in a doctoral study which utilized 196 male undergraduates as Ss. He selected the 50 highest, 50 midway, and 50 lowest scorers on the SDQ to form high, medium, and low disclosure groups. The only significant difference between groups on the MMPI was in Social Introversion scores. The low self-disclosure group was more socially introverted than the high disclosure group. The low disclosure group was also significantly different from both the medium and the high disclosure groups in greater discrepancy between self-appraisal and social ideal than between self-appraisal and self ideal. The amount of self-disclosure was thus seen as dependent on both personality factors and the degree to which the self is seen as unlike what is personally desirable and unlike what is desirable to society.

Although research examining the relationship of the CPI and the MMPI to self-disclosure is somewhat limited, sufficient possibilities have been raised to warrant further study of CPI scores and self-disclosure.

Relations of Self-Disclosure to Other Personality Variables

Along these same lines, researchers have often studied the relations between self-disclosure and other personality variables. One area which has received the attention of a number of investigators is the relationship of self-disclosure to generalized personality adjustment.
Studies involving the MMPI as the indicator of level of adjustment have yielded varied results. Smith (1958) found no difference in self-disclosure scores between groups of Ss with "normal" and "abnormal" MMPI clinical scale scores. Smith's results were questioned by Jourard (1971), who found that randomly selected Ss had significantly higher self-disclosure scores than Smith's "abnormal" group.

Himmelstein and Lubin (1966) found an inverse relationship between the MMPI K scale as a measure of defensiveness and self-disclosure scores for male Ss. This relationship did not hold for female Ss in the same study, however.

Truax and Whittmer (1971) used the MMPI to establish groups high and low in adjustment. Results varied according to the target person involved, with subjects low in adjustment showing greater self-disclosure when the target person was a close friend. On the other hand, the groups did not differ in self-disclosure when a family member was the target person.

Other studies examining the relationship between adjustment and self-disclosure have produced similarly conflicting results. In a study of the personality correlates of actual self-disclosure, Pedersen and Breglio (1968) had 52 Ss complete a questionnaire requiring actual self-disclosure about the topics of interests, personality, studies, body, and money. Instruments which measured seven personality variables were also given. The only significant relation found was
that emotionally unstable males disclosed more about the topics of personality and body than did stable males.

Similarly, Truax, Altman, and Whittmer (1973) administered the Jourard SDQ and the Relationship Questionnaire to 14 male and 51 female undergraduate Ss. Each S used his closest friend as the target person in completing his inventories. In general, a positive relationship was found between maladjustment and the extent of self-disclosure.

Neuroticism and its relationship to self-disclosure were investigated by Stanley and Bownes (1966). Subjects for the study were 72 male and 65 female students at the University of Western Australia. The Maudsley Personality Inventory and the SDQ were administered to all Ss. No consistent relationship between neuroticism and self-disclosure was found.

Rudisill (1975) also examined the relation between neuroticism and self-disclosure in two experiments. The neuroticism (N) scale of the Eysenck Personality Inventory was used in the first experiment to select 192 Ss from a total subject pool of 528. High scorers on the N scale were placed in the low adjustment group and low scorers on the scale were placed in the high adjustment group. The 192 Ss were given a questionnaire designed to measure their perceptions of self-disclosure norms. Contrary to the hypothesis, no significant difference was observed between groups in their perception of these norms.

For the second experiment, the researcher had hypothesized that high adjustment Ss would self-disclose more appropriately to the
setting and also would engage in more self-disclosure and more intimate self-disclosure than low adjustment Ss. Self-disclosure was elicited from 48 of the Ss used in the first experiment. The settings in which the disclosure was elicited were designed to suggest high, intermediate, and low conduciveness to self-disclosure. No significant differences were observed between high and low adjustment groups in this experiment.

Jourard (1961) investigated the correlation between self-disclosure and Rorschach productivity. The SDQ-40 was given to a graduate education class of 25 male and 20 female students. These Ss were then shown Rorschach plates by means of an opaque projector. A significant relationship \( (p < .05) \) was found between Rorschach productivity and self-disclosure scores. Since low productivity on the Rorschach is clinically regarded as a measure of defensiveness in a subject, the researcher considered low self-disclosure to significant others to be related to defensiveness for the Ss in this study.

Hyink (1975) selected 14 male and 14 female Ss according to their ego strength (Es) scores on Barron's Es Scale administered as part of the MMPI prior to therapy. Ss were selected to form high and low Es groups of seven male and seven female IEs each. IEs' self-disclosing behavior in 895 segments taken from their psychotherapies was examined. Results indicated that, when paired with male therapists, high Es clients disclosed more frequently and explored more deeply than low Es clients. This relation did not hold for female therapists. In
general, however, depth of self-disclosure was a function of Es in female IEs, but not in male IEs.

In an effort to explore the relationship between self-disclosure and self-esteem, Fitzgerald (1963) administered a self-disclosure questionnaire and a self-esteem questionnaire to 300 unmarried White female undergraduate students. It was found that the amount of self-esteem alone did not significantly relate to the amount of self-disclosure for these Ss. However, there was an interaction effect among self-esteem, social distance, and area of the self revealed which did relate to self-disclosure scores in this study.

Along the same lines, Vondracek and Marshall (1971) explored the relationship between interpersonal trust and self-disclosure. It was hypothesized that Ss who scored high on the Rotter Interpersonal Trust Scale would also score high on the SDQ. The results, however, showed no significant relationship between interpersonal trust and self-disclosure.

In a similar study, Shapiro (1968) explored the relationship between self-concept and self-disclosure. After completing the Tennessee Department of Mental Health Self-Concept Scale, 105 male and 105 female Ss were divided into high, medium, and low self-concept groups. Ss were then divided into dyads and each member of the pair interviewed the other using an adaptation of the SDQ for structure. Each S then rated his own self-disclosure and that of his partner in the dyad. A significant relationship was found between self-concept scores and self-disclosure ratings for these Ss.
Thus, although many researchers have examined the relationship between self-disclosure and various indices of general personality adjustment, no clear determination of the nature of this assumed relationship has emerged.

Other researchers have investigated the relationships between self-disclosure and a number of other personality variables. Fritchey (1971) used the MMPI to classify Ss as low anxious, moderately anxious, and high anxious prior to their exposure to a self-disclosure task. No significant differences were found among groups in their disclosure level or amount. However, McNeal (1971) found that a high-emotional group of male college students scored significantly higher on a self-disclosure measure than did a comparable low-emotional group. Evidence is therefore conflicting as to the relationship between anxiety level or emotionality and self-disclosure.

The relationship between authoritarianism and self-disclosure has received some research attention. In their study of self-disclosure as an exchange process, Worthy, Gary, and Kahn (1969) found that the authoritarianism of the subject had no significant effect on self-disclosure. On the other hand, different results emerged from a study of self-disclosure, authoritarianism, and several other variables in 53 Peace Corps trainees (Halverson and Shore, 1969). The trainees' authoritarianism and self-disclosure level were measured during a pre-training assessment program. Self-disclosure was negatively related to authoritarianism. Highly authoritarian subjects disclosed less, suggesting that those with relatively
closed belief systems act so as to minimize challenges to their values and beliefs, a finding consistent with the theory of authoritarianism.

Self-disclosure has also been studied in relation to degree of intraverison or extraversion. In a study involving 196 male undergraduates, Ss were selected to form three groups of 50 Ss each on the basis of self-disclosure scores. When MMPI scores were examined, the only significant difference found was in Social Introversion scores. Specifically, the low self-disclosure group was more socially introverted than the high self-disclosure group (Mullaney, 1964).

Conversely, when Ss were interviewed by same sex interviewers, Becker and Munz (1975) found no self-disclosure differences among groups on the basis of the introversion-extraversion scale of the Eysenck Personality Inventory.

Other studies have examined self-disclosure in relation to the need for affiliation. In a doctoral study, Pelletier (1974) found a significant positive relationship between measured reported affiliation needs of women and affiliative behaviors, including self-disclosure or personal information-sharing.

This finding was supported by a second doctoral study (Ksionzky, 1975), in which Ss were first divided into dyads and then engaged in 10-minute conversations on either highly intimate or low intimate topics. Each S was assigned either the role of discloser on the topic or facilitator of the discloser's discussion on the topic. Afterward, Ss completed personality inventories, emotional reaction scales, and a self and partner impression questionnaire. Conversations
were taped and the content analyzed. It was found that those high on sensitivity to rejection were uneasy in the discloser role, felt threatened, and rated the experience unpleasant. This group felt less socially adequate and were more submissive. Conversely, those high on affiliative tendency were more comfortable in the discloser role, more open and intimate, more talkative, and felt more dominant in that role.

Somewhat related here are three other studies: two dealing with self-disclosure and the need for approval and one examining self-disclosure and internal-external reinforcement expectations. Kaplan (1974) selected 80 college students as Ss on the basis of scores on Rotter's Internal-External Scale. Ss were selected to form two groups: one group was classed as externalizers, or expecting reinforcement from outside sources, and the other group was classed as internalizers, or expecting reinforcement from their own efforts. One finding of significance was that externalizers tended to disclose more than did internalizers.

Somewhat contradictory were the results of a study relating self-disclosure to need for approval (Kopfstein & Kopfstein, 1973). A battery of tests and a self-disclosure task were administered to two groups of 38 undergraduate psychology students, with each group consisting of 14 males and 24 females. Results indicated that Ss reporting higher needs for social approval were more evasive than those reporting reliance on self-approval. Ss rated by peers as being dependent on others were more impersonal than those with lower peer ratings of need for approval.
Along these same lines, Cravens (1975) investigated the relationship between need for approval and public versus private self-disclosure. In this experiment, 60 female college students discussed their steady date preferences with a confederate, either in confidence or after having given permission for their comments to be cited in lectures or a book.

Ss high in need for approval self-disclosed more intimately in public than in private conditions, while Ss with low and moderate need for approval disclosed more intimately in private than in public conditions. These results are in agreement with those of Kopfstein and Kopfstein (1973) in that Ss high in need for social approval appeared to disclose less than Ss with lower needs unless motivated by the desire to assist the confederate by allowing comments to be used in lectures or a book.

In this study, the investigator felt that it was very significant that, unless Ss were divided into groups on the basis of need for approval scores, no significant differences appeared between public and private conditions. Thus it is that personality factors must always be accounted for in self-disclosure research if self-disclosure is to be understood completely.

The Target Person and Reciprocity of Disclosure

One of the earliest thrusts of self-disclosure research dealt with the receiver of disclosure. Jourard and Lasakow (1958) and Jourard (1959) found in their studies that individuals differ in the amount
and type of disclosure according to the target person involved. Studies since that time have uniformly upheld these findings. Important in this is the quality of the relationship between the discloser and the target person.

Vondracek and Marshall (1971) found that, although most people can agree on the relative intimacy of self-disclosure items, whether they actually disclose information about themselves depends on the nature of the target person, on the relationship between the discloser and the target person, on the verbal and non-verbal behavior of the target person, and on the category of information to be disclosed.

The target person may have a variety of effects upon self-disclosure. A number of researchers have investigated effects upon self-disclosure of reciprocity or, as it is often called, the dyadic effect.

Jourard and Resnick (1970) studied the effects of exposing an S to another S who differed from her in disclosure level. On the basis of the Self-Disclosure Questionnaire, 12 women were selected as high disclosers and 12 as low disclosers from a group of 80 female undergraduates. When dyads were formed with the like-disclosing pairs, low self-disclosure Ss disclosed less to their partners than did high self-disclosure Ss. However, when low self-disclosure Ss were paired with high self-disclosure Ss in dyads, the latter remained high in disclosure while the low disclosure group showed a statistically significant increase in disclosure to their partners. There was a
marked tendency, then, for low disclosers to display reciprocity in their interaction with high disclosers, but there was no apparent effect upon high disclosers who interacted with low disclosers.

As a part of a doctoral study, Vondracek (1970) used 40 males and 40 females from the sixth grade of an elementary school in Central Pennsylvania. One half of the group was exposed to a target person who disclosed personal information about himself, while the other half was paired with a target who gave only impersonal or neutral information to them. The results indicated that the disclosing technique was significantly more effective in eliciting disclosure than was the neutral technique. There was a positive relationship between disclosure input and output, further supporting the concept of reciprocity.

Another study utilized as Ss 48 undergraduates from introductory psychology classes. Ss were scheduled in groups of four who were not known to each other. After 10 minutes of get-acquainted interaction, each participant gave a confidential rating of her liking for the other three Ss. Participants responded to each other in written form in answer to questions of the intimacy level they chose from a list of 70 intimacy-scaled questions. The experimenters allowed eye contact on some trials, but none on others. A final measure of liking for the other three Ss was obtained from all participants. At the .001 level of confidence, Ss tended to disclose more intimate information to those from whom they had received more intimate information. The authors concluded that self-disclosure functions as a social reward. The reciprocity principle held since higher
self-disclosures were made to those from whom higher intimacies were received (Worthy, Gary, & Kahn, 1969).

Gary and Hammond (1970) duplicated this study, using as volunteer Ss 36 diagnosed alcoholic and drug-addicted patients of a Georgia institution. The null hypothesis was that reciprocity would not hold. An analysis of covariance did not uphold the null hypothesis. Ss tended to give intimacies in proportion to what they received at a .01 level of confidence.

The primary concern of an Ehrlich and Graeven (1971) study was to explore self-disclosures in a meeting between two Ss without prior contact. The Ss were 40 single male undergraduate volunteers from introductory sociology classes. In the experiment, two people were to talk to one another about themselves for 16 minutes. Each S's characteristic level of self-disclosure was assessed with a self-disclosure questionnaire prior to the interview. In each encounter, one of the Ss and the same experimental assistant were involved. Each S's disclosure to the supposed fellow subject was determined by a content analysis of tape recordings. Two disclosure scripts, one of high and other of low intimacy, were used by the assistant, thus exposing each S to the same stimuli.

Two trained judges, listening only to the Ss' responses, rated them for intimacy level. In addition, a post-experimental questionnaire measured Ss' feelings toward the assistant and their perceptions of their own disclosure behaviors during the experiment. Among other findings was that the hypothesis of reciprocity of intimacy was
upheld at the .001 level of significance. Ss did tend to match the intimacy level of their partner in the dyad.

Similarly, nine male graduate students at the University of Florida were utilized in experimentally testing several hypotheses. Among the hypotheses upheld was that men will disclose the most to those who have disclosed most to them and vice versa, again confirming the dyadic effect (Jourard & Landsman, 1960).

Sullivan (1972), although primarily involved with other aspects of self-disclosure, found that a confederate displaying the high-disclosing/ill-will condition evoked the greatest amount of self-disclosing behavior and from the test-classified low-disclosure group, while the confederate's displaying the low-disclosing/good-will condition brought forth the least amount of disclosure and from the test-classified high-disclosure group. Although the relation is complicated by an interaction of treatments here, reciprocity still appeared to hold. This was likewise true in a study conducted by Savicki (1971). Through all four confederate strategies, it was found that Ss disclosed as the confederate did.

**Effects of Modeling Upon Self-Disclosure**

Closely related and of particular interest to those engaged in counseling and psychotherapy are the effects of the IR-IE situation upon the self-disclosure of the IE. A rather large number of researchers have delved into this area, with some interesting results.

Many studies have dealt with the effects of modeling upon self-disclosure in the IE. In a study of male college students,
high-emotional and low-emotional groups produced significantly different scores on a self-disclosure measure given prior to the experiment.

However, no significant differences were observed between groups following exposure to the model. It was found that low-emotional Ss in all three groups increased greatly in self-disclosure tendencies after observing the model (McNeal, 1971).

The influence of an IR's disclosure upon the self-disclosing behavior of IEs was examined by Jourard and Jaffe (1970). Their subjects were 40 females who were divided into four groups matched on past and expected future disclosure rate. All Ss were interviewed in the same manner. The IR first discussed openly and truthfully her thoughts and feelings on 20 topics, each IR's statement being followed immediately by the S's reaction to it. The only difference in conditions among groups was the length of the IR's remarks over the 20 topics.

A significant positive correlation existed between the lengths of IR and IE utterances. Ss exhibited an increase in the number of topics discussed in the interviews over what they said they would discuss beforehand. No important difference was found in disclosure time between high and low intimacy topics, but high intimacy verbalizations tended to be longer.

It was apparent that the IR served as a model for the IE in this experiment. The researchers saw as an implication for counseling and psychotherapy the fact that "example-setting" may be a valid technique
for facilitating IE disclosure in the interview and appears to be worth adding to one's repertoire of techniques.

Liberman (1971) researched the effect of modeling procedures on attraction and disclosure in psychotherapy. His Ss were 84 recently-hospitalized male alcoholic inpatients whom he divided into four modeling and two control groups. The experimental groups were exposed to four different taped interviews with an alcoholic patient displaying high or low attractions to therapist and high or low self-disclosure in all possible combinations. Therapist statements in the taped interviews were constant. After the experimental or control exercise, each of the 84 Ss participated in a live interview using the same questions as on the four tapes for experimental groups. After each interview, an attraction-to-therapist questionnaire was administered. Self-disclosing behavior was measured by content analysis of the interviews.

High-attraction modeling did not result in a significantly greater attraction to a live IR than did any other attraction or control condition. However, high-disclosure modeling did result in significantly greater actual disclosure in a live interview than either low-disclosure modeling or no modeling. The significant relationship held even in combination with low modeled attraction to therapist, indicating for this condition, at least, that high-disclosure modeling was largely responsible for the actual high disclosure exhibited in the interview.
Hays (1972) studied the effects of initial disclosure level and IR disclosure level upon the IE's subsequent level of disclosure. The Ss were divided into three groups for an experimental interview: a control group with no IR disclosure, a high IR disclosure group, and a medium IR disclosure group. A prior measure of initial disclosure levels was low for all groups and there was no significant difference between group means.

When the post-experimental disclosure level was measured, there was no significant difference in the control group, but both the medium and high IR disclosure groups had significantly greater disclosure levels than they had initially and also than the subsequent level of the control group. However, the subsequent disclosure level of the high IR disclosure group was not significantly differentiated from that of the medium IR disclosure group. Thus, although a modeling effect was evident from this study, the dyadic effect was not confirmed: that is, reciprocity did not hold.

Stone and Gotlib (1975) examined the relative effectiveness of modeling and instructions in training Ss to self-disclose. Ss were 48 male university students randomly assigned to one of three instructional conditions: specific instructions to self-disclose, general instructions to self-disclose, or no instructions. Half of the Ss were also exposed to a model and half were not. All Ss then participated in a brief monologue which was taped and scored for self-disclosure. Both instructions and modeling, alone and in combination, increased self-disclosing behavior of Ss, but the
combination condition produced no greater disclosure than modeling alone or instructions alone.

Further evidence of the effectiveness of modeling in producing greater IE disclosure was found by Becker and Munz (1975). These researchers hypothesized that introverts would vary their amount and depth of disclosure with the disclosure of the target person more than would extraverts. The volunteer Ss, 36 male and 36 female college students, were divided into three levels of extraversion based upon scores on the Eysenck Personality Inventory. Each S was then interviewed by a same sex interviewer who systematically varied the length and depth of his or her own disclosures in the interview. An analysis of the tapes revealed no self-disclosure differences among Ss on the basis of the introversion-extraversion scale. However, a modeling effect was significant for both males and females on both amount and depth of disclosure.

Along with the positive research on modeling which has been cited, there have also been studies which produced different results. Another study of modeling used 75 alcoholic inpatients as Ss. The patients were given the Attitudes Toward Psychotherapy and Psychotherapists Scale and divided into three experimental and two control groups of 15 members each. Four of the groups were exposed to different kinds of taped IR-IE interaction, while one control group responded to questionnaires on attraction to a taped IR and willingness to respond to him, then participated in a live interview of a similar type to the one they had heard. They finally completed a questionnaire on attraction to the live IR.
There were no significant differences on attraction or disclosure among either taped or live IRs of various types. There was likewise no correlation between the APPS and other attraction measures. The author pointed out that the results here differ from other studies on modeling with other types of Ss and suggested that short-term modeling techniques may be of little value for poor prognosis patients such as these (Klepper, 1971).

Blackburn (1970) attempted to find if different levels of modeled self-disclosure by a tape-presented IR, in relation to different levels of IR status, produced different levels of self-disclosure in IEs. Initial paper-and-pencil disclosure level was assessed for all Ss. The Ss, 100 never-married female college students, were randomly divided into four experimental groups and one control group. The four experimental groups were exposed to different levels of taped-interview self-disclosure and status, while the control group heard no tape. Each S received a structured interview after the experiment and the tapes of these interviews were evaluated for self-disclosure by three judges independently. Four paper and pencil evaluation forms were also completed by each S.

No significant relationship was found between either the S's degree of self-disclosure during the interview or the length of the interview and exposure to modeling tapes. Neither high nor low levels of disclosure were initiated by the Ss. Also model status had no measureable effect on the Ss. The IEs apparently reacted more
to the taped therapist's personality than to technique, whether high or low self-disclosure was modeled.

Similarly negative results were found by Gay (1975). In this doctoral study 174 female undergraduate psychology students participated in a 15-minute audiotaped interview with either a counselor or a student interviewer under conditions of either high or low IR self-disclosure. Reciprocity did not hold: that is, no significant modeling effects were found. Also, subjects used significantly more unfavorable adjectives to describe their interviewers when interviewed under the high disclosure condition.

Other recent studies of the effects of modeling have also investigated the hypothesis that an intermediate level of IR disclosure is most effective in eliciting reciprocity of disclosure from the IE. In his study involving undergraduate female psychology students, Simonson (1976) assigned Ss to one of six conditions (n = 15/cell). All Ss were exposed to a taped therapist. The independent variables manipulated by the researcher were the representation of the therapist as "warm" or "cold" as a person and exposure to three levels of therapist self-disclosure: no self-disclosure, demographic self-disclosure, and personal self-disclosure.

When Ss were actually interviewed by the therapist, the analysis revealed significantly greater IE disclosure in the warm therapist/demographic disclosure group than in either the warm therapist/no disclosure group or the warm therapist/personal disclosure group. No difference was found between these latter two groups. Additionally,
each level of disclosure by the cold therapist produced less IE disclosure than the comparable level by the warm therapist. It was found, however, that the cold therapist groups were not different from each other in IE disclosure, despite the same manipulations of IR disclosure level. These results give some indication that an intermediate level of IR disclosure may best initiate reciprocity of disclosure in the IE and also that high levels of IR disclosure may be no more effective than no IR disclosure in eliciting disclosure from the IE.

Mann and Murphy (1975) found similar results in an earlier study. The Ss, 48 female college students, were individually interviewed for 40 minutes each about how they were influenced by friends, family, and persons in authority. The IR was a fourth-year undergraduate female psychology major posing as an experienced counseling psychologist. Eight Ss were randomly assigned to each of six treatment conditions. One of the independent variable manipulations involved the IR's making 0, 4, or 12 self-disclosures at random according to a light signal visible only to the IR. The disclosures were short, personally honest comments by the IR about her own experiences, beliefs, and attitudes.

Results indicated the 4-disclosure condition produced significantly more IE disclosures and more positive evaluations of the IR by the IEs than either the 0-disclosure or the 12-disclosure conditions. No significant difference was found between the 12 and the 0 conditions.
Different results, however, were found by Rabin (1975), who also studied the use of helper self-disclosure as a technique for increasing helpee self-disclosure. Rabin hypothesized that, since research on client expectations of therapists indicated that therapist disclosure was not a major expectation, high levels of disclosure by a helper would produce less helpee disclosure and more negative ratings of the helper than moderate disclosure or no disclosure by the helper.

Ss were 72 female undergraduates who were randomly assigned to conditions and roles. Each S participated in a role-playing situation in which she played the role of either a peer or a client. Undergraduate psychology student confederates played the role of either a peer helper or a therapist in these interviews. An analysis of the data revealed no differences in helpee disclosures by treatment conditions and also a limited effect on ratings of liking for therapists and peer helpers. The author observed that the varied reactions to helper behavior under all conditions suggest that for some Ss helper disclosure elicited reciprocal disclosure, while for others it created a need to respond to the helper that inhibited the S's own disclosure.

Self-Disclosure and Counseling

While much of the research cited previously contains important implications for counseling and psychotherapy, other studies have produced findings more directly related to the importance of self-disclosure in counseling. Bundza and Simonson (1973) found that
when Ss were presented transcripts of one of three simulated psychotherapy sessions, the therapist who made warm, accepting, self-disclosing remarks to the client in the simulated session impressed Ss as being the most nurturant and elicited the greatest willingness to self-disclose from Ss.

Similarly, McLeod (1974) exposed 139 public school and 91 parochial school ninth-graders to two different types of orientation sessions. With the experimental groups, the counselor/leader used self-disclosing behavior while explaining role and function of counseling services to Ss in the orientation session. The control groups were exposed to the same material, but without self-disclosing behavior from the counselor/leader. Records of first self-initiated visitations by Ss to counselors were then kept for 25 days. It was found that significantly more Ss from the experimental groups visited counselors during this period, a finding which underlines the potential importance of self-disclosure research for counseling.

The potential value of research on self-disclosure for counseling is further highlighted in research by Chafey (1974), who examined the effects of self-disclosure counseling and non-self-disclosure counseling on the self-disclosure of clients with both high and low precounseled levels of self-disclosure. Ss were 32 female undergraduates at the University of Virginia. One-half of the Ss had high precounseled self-disclosure scores and the other half had low precounseled scores. Ss in each group were randomly assigned to the two treatment modes, both of which involved a 45-minute individual
counseling session. The researcher found significant differences on
total self-disclosure and affective self-disclosure, with greater
disclosure exhibited by the group exposed to self-disclosure counsel-
ing. No significant difference was found, however, between Ss with
high and low precounseled levels of disclosure. Self-disclosure
counseling proved equally effective with both groups. These results
appear to support Jourard's contention that the self-disclosing
counselor is a facilitator of client self-disclosure.

Feigenbaum (1975) studied reciprocity of self-disclosure in initial
psychological interviews. Ss were male and female college students
given standardized interviews, each of which was audiotaped. The
interviews were divided into four time periods. During the second and
third time periods, the IR made either reflecting or self-disclosing
statements related to the content of IE statements. It was found that
intimacy of IE self-disclosure increased over time as a function of
both reflecting and self-disclosing conditions. Nonetheless, Ss' responses on a post-interview questionnaire indicated they felt
closer to the self-disclosing IR, saw him as more open and more reveal-
ing, and found him more talkative. In general, however, the results
support both reflection and self-disclosure as useful interviewing
techniques.

The preponderance of evidence would appear to indicate that
reciprocity of disclosure does generally operate and that modeling
on the part of the IR generally elicits disclosure of a similar
nature from the IE. Further, Murphy (1970) demonstrated that the
number of self-references which an IR made affected student reactions
to an interview in a positive direction: that is, more IR self-references were associated with a more positive rating of the interview by the IE. This finding points again toward the importance of counselor self-disclosure in the counseling interview.

The study which most nearly relates to the present one is built upon the foregoing principles. Olson (1972) investigated the effects of IRs' self-disclosing behavior and verbal reinforcing behavior on IEs' self-disclosures. Three groups of 20 Ss were interviewed, one group under each of three different treatment conditions. Under the disclosure condition (essentially a modeling situation), the IR asked a question, self-disclosed on the question for a minimum of 60 seconds, listened nonresponsively to the IE's response to the item, and then asked the next question. For the reinforcement condition, the IR asked a question, verbally reinforced the IE's self-disclosure response, and then asked the next question. In the control condition, the IR asked a question, listened nonresponsively to the IE's response, and then asked the next question.

Analysis of audio-taped and videotaped recordings of the interviews revealed that IEs interviewed under the disclosure condition disclosed themselves with greater intimacy and to a greater length than IEs in both of the other conditions. IEs in the reinforcement condition did not vary significantly from those in the control condition on these measures. Thus, IR disclosure was more effective than positive reinforcement or no reinforcement in eliciting IE disclosure in this study, a result in agreement with the literature on self-disclosure in general.
If, as many theories of counseling and psychotherapy hold,
counselee disclosure is a condition to be desired in the counseling
interview, then this finding is of great importance since it points
toward a method of eliciting greater counselee disclosure in the
interview setting.

IR modeling, on the other hand, may at times be awkward in the
counseling interview. Particularly in the case of client-centered
approaches, the counselor's first disclosing himself on a topic in
order to elicit counselee disclosure is almost untenable. Firstly,
such sequencing gives too great a focus on the counselor's thoughts
and feelings and too little focus on those of the counsellee. Secondly,
the counselor's disclosing himself first may at times inhibit the
counselee from expressing his true feelings completely if they differ
from those of the counselor.

Mann and Murphy (1975) attempted to vary the customary approach
to IR modeling. In addition to manipulating the number of IR
disclosures in their experiment, these researchers also had these
disclosures made either immediately after IE disclosures (reinforce-
ment situation) or immediately before IE disclosures (the usual
modeling situation). No effect was found for this manipulation.

However, since by design the IR disclosures were randomly made
according to a signal given, the authors felt that this study failed
to provide information on whether IR modeling or reinforcement
differentially affects IE disclosure and reactions to the IR. The
two approaches may be equally effective or it may be that some
optimal combination of the two exists. Mann and Murphy feel that further research on this area is needed.

The foregoing literature review is by no means exhaustive. It has, however, dealt with the topics of primary interest and application with respect to the present study.
Chapter 3
Methodology

Chapter 3 contains a detailed description of the methods of data collection and analysis used in this study. This material is organized into the following sections: (a) population, (b) procedures used, and (c) statistical methods.

Population

The present investigation utilized 63 volunteer subjects from classes in associate degree curricula at a small rural community college in south-central Virginia. All Ss were freshman or sophomore students on one of the two campuses of this college. These campuses are located near small towns and are 43 miles apart. By the design of the experiment, 42 Ss came from the western campus and 21 Ss from the eastern campus.

The institution from which Ss were drawn is one of 23 comprehensive colleges in the state-wide Virginia Community College System. The college serves a ten-county, two-city region in rural south-central Virginia. Approximately 96% of the student body resides within the college service area.

The college has an enrollment of 640 full-time students, with a total enrollment of 1702. The student body is 51% female and 49% male, while its racial composition is 69% Caucasian and 31% Negro.
Volunteers were obtained from a number of different classes within the Associate in Arts, Associate in Science, and Associate in Applied Science curricula. The researcher was given a few minutes' class time by the instructor of each of these classes in order to explain his research project and solicit volunteers. This presentation is reproduced in Appendix C. Potential volunteers were told that they would receive $2 for their involvement in the experiment, that they would have the opportunity of having the results of the inventories they completed interpreted, and that they would be able to learn the results of the study when it was completed.

As volunteers were obtained, the researcher and each of them entered into the contractual agreement reproduced in Appendix D. This contract was designed to protect the confidentiality of the information revealed by Ss during the course of the research project and also to reduce the anxiety that Ss might feel about the audiotaping of the actual experimental interview.

This process resulted in a population of 63 Ss, 33 females and 30 males. In terms of racial identity, the subject pool consisted of 49 whites and 14 non-whites. In order that each S might be interviewed by a college counselor with whom he had had no prior counseling contact, 42 Ss were obtained on the western campus and 21 on the eastern campus.

Procedures Used

Once the subject population was obtained, a number of procedures and processes were necessary in order to collect and process the data
involved in this investigation. In the sections which follow, detailed information on the collecting and processing of the experimental data is given.

Data Collection

The first step in collecting the experimental data was to have each subject complete three inventories. The inventories used in this investigation were the SDQ-40 (Appendix A), the Willingness-to-Disclose Questionnaire (Appendix A), and the CPI (Appendix B). These instruments were distributed to Ss as they volunteered to participate in the study. Ss were asked to complete their inventories within one week. The researcher followed up with contacts as needed to insure that inventories were completed prior to each subject's experimental interview.

As subjects completed their inventories and submitted them to the researcher, names were removed and replaced by code numbers in preparation for scoring. These code numbers were also used later to identify interview tapes. These measures were instituted in order to avoid the possibility of Ss' confidentiality being violated during the experimental procedures.

The second step in data collection was the holding of the experimental interviews themselves. However, before the interviews could be conducted, a good deal of advance preparation was necessary. The experimental design called for three IRs who were actual college counselors to conduct structured initial interviews. IRs were to
have had no previous counseling contact with their IEs and were each to conduct seven interviews under each of the three interview conditions.

Since the two campuses of the institution from which Ss were drawn are 43 miles apart and since counselors are assigned to only one campus, two of the three IRs were counselors at that college. One White male counselor from the eastern campus served as an IR at the western campus, while a second White male counselor from the western campus conducted the interviews on the Eastern campus. The second IR for the western campus was a Black female counselor from a four-year college which is near the eastern campus and therefore well removed from the western campus. In this manner it was possible to obtain as IRs actual college counselors who had had no previous counseling contact with their IEs prior to the experiment.

Once IRs were obtained, the researcher began the process of training them to conduct the experimental interviews. The procedures had been explained briefly to IRs before they agreed to assist in the experiment. After they had committed themselves to the study, each IR was given a set of instructions which is reproduced in Appendix E. After IRs had studied the instructions, the researcher met with them individually to discuss their roles and to answer any questions. Care was taken to be sure that each IR understood how he was and was not to behave under each of the three conditions. Each IR was asked to prepare his own disclosure script and to be ready to practice his roles within a few days.
The researcher followed up this second meeting with each IR with one or more role-playing sessions as needed until both he and the IRs were satisfied that IR behavior corresponded closely to that specified for each of the three experimental conditions.

After IRs were trained, the assignment of IEs to the experimental conditions was undertaken. This was accomplished by consulting a random numbers table (Li, 1964, p. 589). In the case of the 42 Ss from the western campus, three steps were needed. First, these Ss were randomly assigned to three groups, 14 per group. Second, the Ss within these groups were randomly assigned to two interviewers, seven per interviewer. Third, the groups were assigned at random to treatments. For the eastern campus Ss, only the first and third steps were needed since only one interviewer was involved. Thus, the interview condition for each IE was determined by random assignment prior to the interview's taking place.

Interviews were highly structured in nature. Fifteen self-disclosure questions, previously rated by college students for intimacy value, were selected from items used by Jourard and Resnick (1970) and by Olson (1973) and were used as an interview schedule in all interviews, with an equal number of items calling for high, medium, and low disclosure information being utilized. The questions used in these interviews are listed in Appendix E.

Prior to the actual interviews, taping permission had been given and confidentiality assurances received by all IEs via the contract
signed with the researcher. Each IE was individually interviewed by the appropriate IR in a private office.

In each case, the office used was actually the office of a member of the Student Services Division on the campus where the IE was enrolled. Offices were arranged and furnished in a manner typical of counselor and faculty offices at this institution. Furniture was arranged so that the IE and the IR faced one another with no desk between them. Tape recorders and microphones were placed on the IR's desk in full view of the IEs. All interviews were recorded on Wollensak reel-to-reel recorders.

Each interview began with the series of IR statements suggested in Appendix E. IRs then used different procedures for the three interview conditions. In interviews conducted under the passive listening (control) condition, the IR asked a question, allowed the IE to respond as he listened attentively but passively, and asked the next question. Under the modeled disclosure condition, the IR asked a question, self-disclosed on the topic for a minimum of 60 seconds, allowed the IE to respond to the same question as he listened attentively but passively, and asked the next question. In the case of the responsive disclosure condition, the IR asked a question, allowed the IE to respond as he listened attentively but passively, self-disclosed on the topic for a minimum of 60 seconds, and elicited disclosure on the next topic.

Conceptually, the different interaction units for the three treatment conditions might be represented as follows:
The IR proceeded through each of the 15 questions in the same manner depending upon the condition assigned to that particular interview. At the conclusion of each interview, the IR answered any IE questions in line with the stated purpose of the interview, thanked the IE for his participation, and gave him his $2.

Although, of necessity, each IR used his own genuine disclosure in the interviews he conducted, a measure of standardization derived from the requirement that each IR disclosure be highly self-disclosing and at least 60 seconds in length. Further, each IR also standardized his disclosure across his interviews by preparing and adhering to an outline script. Finally, IR disclosures, like IE disclosures, were rated by judges as explained in the next section. This rating procedure permitted statistical analysis of the disclosure behaviors of each IR in order to determine whether non-experimental differences in IR behavior occurred.

Processing the Data

The first procedure in processing the data in this investigation was the scoring of the three inventories completed by the IEIs. The SDQ-40 and the Willingness-to-Disclose Questionnaire were hand-scored by the researcher and two clerical assistants. In the case of both instruments, this was simply a matter of adding all of the ratings
made by each IE in order to derive a total score. Complete information on these instruments and their scoring is found in Appendix A.

Although the CPI may also be hand-scored, computer scoring was selected instead due to the number of inventories involved. Data processing assistants punched each IE's responses on the CPI onto computer cards. The inventories were then scored utilizing program CPI/ACL on the IBM 370/145 computer at the College of William and Mary Computer Center. Although the CPI was scored for all 18 scales, the primary interest of the present investigation was in six of these scales.

The second procedure in processing the data was the rating of the interview tapes by two trained judges. The techniques for measuring both IE and IR disclosure in the experimental interviews were twofold. Judges assessed IE and IR disclosure on one highly objective measure: total time spent talking and on one less objective measure: a rating scale to assess depth of disclosure. Rating forms used by judges in this study are reproduced in Appendix G.

The final self-disclosure score yielded by these instruments was the mean of the composite length and depth ratings of all 15 items. The score used for each S in the analysis was the mean of the scores assigned by the two judges. IE disclosure was rated on all tapes. IR disclosure only occurred under the two experimental conditions and was therefore rated only on two-thirds of the tapes.

The two judges were trained by the researcher prior to their rating the actual experimental tapes. The researcher first met with
the judges and explained their task and the rating forms. After all questions had been fully discussed, judges were given practice tapes to rate independently. This process continued, supplemented by discussions between judges and between judges and the researcher, until a high rate of interjudge agreement was attained. Interjudge reliability reached .93 in training. Qualifications of judges are given in Appendix H.

The final procedure in processing the data was preparation for statistical analysis. Data for testing the various hypotheses was punched on computer cards by the researcher and processed by the Virginia Community College System Computer Center on the IBM 370/145 computer.

**Statistical Methods**

Statistical methods utilized in the analysis of the data were selected to:

(a) determine significant differences among the three treatment groups in self-disclosure in the experimental interviews,

(b) determine significant relationships between IEs' self-disclosure in the experimental interviews and their SDQ-40 and/or Willingness-to-Disclose Questionnaire scores, and

(c) determine significant relationships between IEs' self-disclosure in the experimental interviews and their scores on selected scales of the CPI.

Since the first three hypotheses asked specific questions of the data regarding differences between particular treatment groups, these
hypotheses were tested through planned comparisons (Kerlinger, 1973, p. 236) by means of the ONEWAY program of the Statistical Package for the Social Sciences (SPSS). An analysis of covariance was then run to determine the relative strength of various covariates, factors, and interactions. The analysis of covariance was accomplished with the ANOVA program of SPSS.

Hypotheses four through six were tested by computing Pearson product-moment coefficients of correlation. The PARTIAL CORR program of SPSS was used to complete this procedure since it was necessary to control for the experimental differences in IR behavior. Statistical significance was determined for all results using a 5% level of confidence.

Additionally, interpreting the value of any relationships found in testing hypotheses four through six involved a level of acceptable predictive validity. Based upon the research cited earlier, the level for acceptable predictive validity for this study was set at .50. This level appeared reasonable when the typically rather low correlations of other personality measures to various criteria as, for example, those reported in the Manual for the California Psychological Inventory are considered (Gough, 1957).

In addition to the statistical methods utilized in testing the hypotheses, Pearson product-moment coefficients of correlation were used in assessing interjudge reliability. Also, t tests were needed to determine whether the Ss from the two campuses involved could be
assumed to comprise a single population and whether there were differences in IR disclosure between the modeled disclosure and responsive disclosure conditions. These procedures were accomplished with the PEARSON CORR and T-TEST programs from SPSS.
Chapter 4

Results

The results of the present investigation are presented in several sections. Since specific preliminary analyses were an important consideration, the results of these analyses are presented first in sections on interjudge reliability, interviewer behavior, and unity of the population.

The related results for Hypotheses 1, 2, and 3 are discussed in the next section, while the final section presents the also related results for Hypotheses 4, 5, and 6. Statistical analyses associated with each section are given, along with appropriate comparisons and remarks concerning the results.

Interjudge Reliability

The means of judges' ratings of the self-disclosures of both IEs and IRs were important variables in the statistical analyses for all hypotheses in the current investigation. Thus, interjudge reliability for these ratings has great impact upon the interpretation of the results of other analyses.

The two judges, hereafter called J₁ and J₂, rated independently all IR and IE self-disclosure from the interview tapes. Means and standard deviations for the final ratings made by J₁ and J₂ for all interviews are given in Table 1, along with the Pearson product-moment coefficients of correlation (r) for interjudge reliability.

76
Table 1

Means, Standard Deviations, and Pearson Product-Moment Coefficients of Correlation (r) for Interjudge Reliability on Disclosure Ratings Assigned by J1 and J2

<table>
<thead>
<tr>
<th>Rating</th>
<th>Judge</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>IR Disclosure</td>
<td>J1</td>
<td>42</td>
<td>13.64</td>
<td>1.14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>J2</td>
<td>42</td>
<td>13.84</td>
<td>1.18</td>
<td>.974*</td>
</tr>
<tr>
<td>IE Disclosure</td>
<td>J1</td>
<td>63</td>
<td>9.98</td>
<td>3.37</td>
<td></td>
</tr>
<tr>
<td></td>
<td>J2</td>
<td>63</td>
<td>10.38</td>
<td>3.45</td>
<td>.993*</td>
</tr>
<tr>
<td>IE &amp; IR Disclosure</td>
<td>J1</td>
<td>105</td>
<td>11.45</td>
<td>3.24</td>
<td></td>
</tr>
<tr>
<td></td>
<td>J2</td>
<td>105</td>
<td>11.77</td>
<td>3.25</td>
<td>.993*</td>
</tr>
</tbody>
</table>

*p < .001.
In line with the results achieved in training, a high degree of interjudge reliability was found on ratings of both IR and IE disclosure. From Table 1 it is seen that all relationships were significant at the .001 level. The r of .993 for all final ratings assigned by the two judges indicates a high degree of reliability for the measures of IR and IE disclosure used in the present study.

**Interviewer Behavior**

Interviewer behavior was the variable manipulated in the treatments involved in the present experiment. Specifically, IRs were to conduct all interviews in the same manner except that there was to be no IR self-disclosure under the passive listening (control) condition and a high degree of IR self-disclosure under both experimental conditions. The only difference in these latter conditions was that IR disclosure was to precede IE disclosure in the modeled disclosure condition, but follow IE disclosure in the responsive disclosure condition.

Therefore, it was important to examine the extent to which IRs (hereafter identified as IR1, IR2, and IR3) were successful and consistent in manifesting the desired behaviors. In general, few deviations from specified behaviors were observed.

IR1 asked one question out of order in one interview, while IR2 and IR3 each omitted one question in one interview. No other procedural deviations were noted either by judges or by the researcher.

It was also possible to assess the extent to which IRs were successful in making their self-disclosures highly disclosing and at
Table 2
Means and Standard Deviations of IR Disclosure Times and Depth Ratings by Treatment Condition\textsuperscript{a}

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Disclosure time\textsuperscript{b}</th>
<th>Depth rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>Modeled disclosure condition</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IR\textsubscript{1}</td>
<td>7</td>
<td>55.22</td>
</tr>
<tr>
<td>IR\textsubscript{2}</td>
<td>7</td>
<td>54.96</td>
</tr>
<tr>
<td>IR\textsubscript{3}</td>
<td>7</td>
<td>69.15</td>
</tr>
</tbody>
</table>

Responsive disclosure condition

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Disclosure time\textsuperscript{b}</th>
<th>Depth rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>IR\textsubscript{1}</td>
<td>7</td>
<td>52.62</td>
</tr>
<tr>
<td>IR\textsubscript{2}</td>
<td>7</td>
<td>55.70</td>
</tr>
<tr>
<td>IR\textsubscript{3}</td>
<td>7</td>
<td>68.00</td>
</tr>
</tbody>
</table>

Both disclosure conditions

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Disclosure time\textsuperscript{b}</th>
<th>Depth rating</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n</td>
<td>M</td>
</tr>
<tr>
<td>IR\textsubscript{1}</td>
<td>14</td>
<td>53.92</td>
</tr>
<tr>
<td>IR\textsubscript{2}</td>
<td>14</td>
<td>55.33</td>
</tr>
<tr>
<td>IR\textsubscript{3}</td>
<td>14</td>
<td>68.58</td>
</tr>
</tbody>
</table>

\textsuperscript{a}IR disclosure was not a part of the passive listening (control) condition.

\textsuperscript{b}Times are given in seconds.
least sixty seconds in length, the two requirements which IRs were asked to meet in preparing and delivering their personal thoughts and feelings on the interview topics to IEs. Table 2 presents the means and standard deviations of IR disclosure times and depth ratings by treatment condition. The times and depth ratings utilized for each IR were the averages of the mean ratings assigned by the two judges.

In terms of length of disclosure, Table 2 indicates that mean disclosure times for both disclosure conditions were 53.92 seconds for IR₁, 55.33 seconds for IR₂, and 68.58 seconds for IR₃. Thus, although only IR₃ had a mean disclosure time of at least 60 seconds, neither of the IRs deviated greatly from the specified disclosure length when mean disclosure times are considered.

An examination of the standard deviations of the disclosure times for each IR indicates that IR₁ and IR₃ were considerably more consistent in their disclosure times across interviews than was IR₂. The bulk of the inconsistency for IR₂ seems to have occurred under the responsive disclosure condition, where the standard deviation of 14.08 seconds for those interviews is quite high in comparison to that for the other interview groups.

As for mean depth ratings, Table 2 reveals mean scores of 2.41 for IR₁, 2.34 for IR₂ and 2.42 for IR₃. A maximum of three points could be assigned by judges for depth of disclosure. Therefore, the mean ratings indicate a high disclosure rating for all three IRs. The standard deviations of the disclosure depth ratings also show consistency in depth for each of the IRs.
Table 3
Means and Standard Deviations of IR
Total Disclosure Ratings by Treatment Condition\textsuperscript{a}

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modeled disclosure condition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IR\textsubscript{1}</td>
<td>7</td>
<td>13.65</td>
<td>0.50</td>
</tr>
<tr>
<td>IR\textsubscript{2}</td>
<td>7</td>
<td>13.25</td>
<td>0.99</td>
</tr>
<tr>
<td>IR\textsubscript{3}</td>
<td>7</td>
<td>14.82</td>
<td>0.31</td>
</tr>
<tr>
<td>Responsive disclosure condition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IR\textsubscript{1}</td>
<td>7</td>
<td>13.11</td>
<td>0.30</td>
</tr>
<tr>
<td>IR\textsubscript{2}</td>
<td>7</td>
<td>12.86</td>
<td>1.81</td>
</tr>
<tr>
<td>IR\textsubscript{3}</td>
<td>7</td>
<td>14.76</td>
<td>0.30</td>
</tr>
<tr>
<td>Both disclosure conditions</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IR\textsubscript{1}</td>
<td>14</td>
<td>13.38</td>
<td>0.49</td>
</tr>
<tr>
<td>IR\textsubscript{2}</td>
<td>14</td>
<td>13.06</td>
<td>1.41</td>
</tr>
<tr>
<td>IR\textsubscript{3}</td>
<td>14</td>
<td>14.79</td>
<td>0.30</td>
</tr>
</tbody>
</table>

\textsuperscript{a}IR disclosure was not a part of the passive listening (control) condition.
Since the scores utilized in the various statistical analyses were the mean total disclosure ratings assigned by judges for each IR in each interview, comparative data for these scores are of interest and are given in Table 3. It should be noted that the total disclosure ratings are a composite of ratings of disclosure length and disclosure depth.

While the maximum total disclosure rating was 16.00, mean ratings actually assigned for all interviews were 13.38 for IR₁, 13.06 for IR₂, and 14.79 for IR₃. Again, an examination of the standard deviations for the various groups reveals that IR₂ was somewhat more inconsistent than IR₁ and IR₃ in his disclosure across interviews as rated by judges.

The final area of interest in examining IR self-disclosing behavior was whether IRs were successful in being equally disclosing under the modeled disclosure and responsive disclosure conditions. Table 4 gives results of t-tests conducted to determine whether IR disclosure as rated by judges differed significantly between the modeled disclosure and responsive disclosure conditions for any of the three IRs.

From Table 4 it is seen that each IR had a somewhat higher mean self-disclosure rating under the modeled disclosure condition than under the responsive disclosure condition. However, only IR₁ displayed a statistically significant difference here, t(12) = 2.47, p < .05. When the data were analyzed as a whole for all three IRs, no significant difference was found between IR disclosure ratings.
Table 4
Means, Standard Deviations, and t Values
of IR Disclosure Ratings for the Modeled Disclosure and Responsive Disclosure Conditions

<table>
<thead>
<tr>
<th>Interviewer</th>
<th>Modeled disclosure</th>
<th>Responsive disclosure</th>
<th>t&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>IR&lt;sub&gt;1&lt;/sub&gt;</td>
<td>7</td>
<td>13.65 0.50</td>
<td>13.11 0.30</td>
</tr>
<tr>
<td>IR&lt;sub&gt;2&lt;/sub&gt;</td>
<td>7</td>
<td>13.25 0.99</td>
<td>12.36 1.81</td>
</tr>
<tr>
<td>IR&lt;sub&gt;3&lt;/sub&gt;</td>
<td>7</td>
<td>14.82 0.31</td>
<td>14.76 0.30</td>
</tr>
<tr>
<td>IR&lt;sub&gt;1&lt;/sub&gt;, IR&lt;sub&gt;2&lt;/sub&gt;, &amp; IR&lt;sub&gt;3&lt;/sub&gt;</td>
<td>21</td>
<td>13.91 0.93</td>
<td>13.58 1.34</td>
</tr>
</tbody>
</table>

<sup>a</sup><sub>t</sub> (12) = 2.18, p<.05.
<sup>a</sup><sub>p</sub><.05.
under the modeled disclosure condition and those assigned under the responsive disclosure condition.

Although deviations from specified IR behavior were noted, these appear to have been relatively minor in nature. On the whole, IRs were successful and consistent in manifesting the behaviors specified for the experiment.

Unity of the Population

Since the subject population consisted of volunteers from two different campuses of a community college, it was necessary to determine whether or not the Ss should be considered a part of the same population. The concern of the present study lay in personality comparability between Ss from the two campuses. Therefore, \( t \)-tests for differences between mean scores of eastern campus Ss and western campus Ss were run for each of the 18 CPI scales. Means, standard deviations, and \( t \) values for each of these comparisons between campus groups are given in Table 5.

The differences between campus group means were not significant for any of the scales of the CPI. On this basis, the subject pool was treated as a single population in all of the analyses which were conducted as a part of this study.

Once the unity of the subject population was determined, comparability of personality scores of the sample of community college students used in this investigation to various norm groups became of interest. A comparison of mean CPI profiles for male Ss (\( n = 30 \)) to mean profiles for high school and college males is given in Figure 1,
Table 5
Means, Standard Deviations, and t Values
of CPI Scores for Eastern Campus and
Western Campus Subjects

<table>
<thead>
<tr>
<th>CPI scale</th>
<th>Eastern campus $S_a$</th>
<th>Western campus $S_b$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Do</td>
<td>44.191</td>
<td>15.035</td>
</tr>
<tr>
<td>Cs</td>
<td>41.476</td>
<td>11.965</td>
</tr>
<tr>
<td>Sy</td>
<td>43.667</td>
<td>13.264</td>
</tr>
<tr>
<td>Sp</td>
<td>48.857</td>
<td>10.617</td>
</tr>
<tr>
<td>Sa</td>
<td>53.667</td>
<td>11.774</td>
</tr>
<tr>
<td>Wb</td>
<td>33.619</td>
<td>10.860</td>
</tr>
<tr>
<td>Re</td>
<td>35.905</td>
<td>9.273</td>
</tr>
<tr>
<td>So</td>
<td>40.762</td>
<td>9.924</td>
</tr>
<tr>
<td>Sc</td>
<td>38.143</td>
<td>6.843</td>
</tr>
<tr>
<td>To</td>
<td>34.762</td>
<td>9.705</td>
</tr>
<tr>
<td>Gi</td>
<td>38.238</td>
<td>9.049</td>
</tr>
<tr>
<td>Cm</td>
<td>50.333</td>
<td>15.196</td>
</tr>
<tr>
<td>Ac</td>
<td>38.571</td>
<td>9.806</td>
</tr>
<tr>
<td>Ai</td>
<td>43.762</td>
<td>9.170</td>
</tr>
<tr>
<td>Ie</td>
<td>35.429</td>
<td>10.405</td>
</tr>
</tbody>
</table>
Table 5 (continued)

<table>
<thead>
<tr>
<th>CPI scale</th>
<th>Eastern campus Ss&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Western campus Ss&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Py</td>
<td>46.048</td>
<td>7.990</td>
</tr>
<tr>
<td>Fx</td>
<td>51.286</td>
<td>11.118</td>
</tr>
<tr>
<td>Fe</td>
<td>51.714</td>
<td>10.470</td>
</tr>
</tbody>
</table>

Note. CPI results are reported as standard scores.

<sup>a</sup><sub>n</sub> = 21.
<sup>b</sup><sub>n</sub> = 42.
<sup>c</sup><sub>t (61) = 2.00, p < .05.</sub>
Figure 1. Comparison of Mean CPI Profiles for Male Subjects to Mean Profiles for High School and College Males

**MALE Norms**
- Male Subjects (n=30)
- College Males
- High School Males
Figure 2. Comparison of Mean CPI Profiles for Female Subjects to Mean Profiles for High School and College Females.
while Figure 2 illustrates a similar comparison between female Ss (n = 33) and the norm groups for high school and college females.

From Figure 1 it is apparent that the CPI profile of male Ss closely approximates that of the norm group of high school males and differs rather markedly from the norm group of college males on many of the scales, with eight scales differing by ten or more standard score points from this latter group.

Similarly, Figure 2 reveals that the CPI profile of female Ss is also more similar to the high school than to the college norm group of females. In the case of female Ss, there are two scales on which differences of ten or more standard score points from the high school group appear. However, there are nine scales on which there are such differences between female Ss and the college group.

Therefore, it can be stated that, for both male and female Ss in the present study, CPI profiles closely resemble those of high school norm groups and differ rather markedly from those of college norm groups.

**Hypotheses 1, 2, and 3**

One major concern in the present study was whether there were significant effects on IE disclosure due to treatments. Since Hypotheses 1, 2, and 3 are related and were tested through a single statistical procedure, the results for these three hypotheses are presented jointly.

Hypothesis 1 stated that greater IE disclosure would occur in interviews conducted under the modeled disclosure condition than in
Table 6
Means and Standard Deviations of
IE Total Disclosure Ratings by IR and
Treatment Condition

<table>
<thead>
<tr>
<th>Treatment condition</th>
<th>IR</th>
<th>n</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive listening</td>
<td>IR_1</td>
<td>7</td>
<td>6.95</td>
<td>1.39</td>
</tr>
<tr>
<td></td>
<td>IR_2</td>
<td>7</td>
<td>6.84</td>
<td>2.76</td>
</tr>
<tr>
<td></td>
<td>IR_3</td>
<td>7</td>
<td>7.23</td>
<td>3.17</td>
</tr>
<tr>
<td></td>
<td>IR_1, IR_2, &amp; IR_3</td>
<td>21</td>
<td>7.00</td>
<td>2.43</td>
</tr>
<tr>
<td>Modeled disclosure</td>
<td>IR_1</td>
<td>7</td>
<td>12.19</td>
<td>1.48</td>
</tr>
<tr>
<td></td>
<td>IR_2</td>
<td>7</td>
<td>12.13</td>
<td>2.90</td>
</tr>
<tr>
<td></td>
<td>IR_3</td>
<td>7</td>
<td>11.23</td>
<td>3.26</td>
</tr>
<tr>
<td></td>
<td>IR_1, IR_2, &amp; IR_3</td>
<td>21</td>
<td>11.85</td>
<td>2.56</td>
</tr>
<tr>
<td>Responsive disclosure</td>
<td>IR_1</td>
<td>7</td>
<td>10.45</td>
<td>2.65</td>
</tr>
<tr>
<td></td>
<td>IR_2</td>
<td>7</td>
<td>12.39</td>
<td>2.08</td>
</tr>
<tr>
<td></td>
<td>IR_3</td>
<td>7</td>
<td>12.12</td>
<td>3.20</td>
</tr>
<tr>
<td></td>
<td>IR_1, IR_2, &amp; IR_3</td>
<td>21</td>
<td>11.65</td>
<td>2.69</td>
</tr>
</tbody>
</table>
interviews conducted under the passive listening condition. Hypothesis 2 stated that greater IE disclosure would occur in interviews conducted under the responsive disclosure condition than in interviews conducted under the passive listening condition. Hypothesis 3 stated that greater IE disclosure would occur in interviews conducted under the modeled disclosure condition than in interviews conducted under the responsive disclosure condition.

Specific questions were asked of the data by these three hypotheses. Since relationships between pairs of treatment groups were predicted before the data collection and analysis took place, it was appropriate to test the first three hypotheses through the method of planned comparisons. Thus, the analysis of covariance which is discussed later in this section was of interest primarily as a means of examining the relative strengths of the various sources of variation.

Table 6 gives the means and standard deviations of IE total disclosure ratings. Data is provided for Ss interviewed under each treatment condition by each IR as well as for treatment groups as a whole. Mean total disclosure ratings for the 21 Ss interviewed under each of the treatment conditions were 7.00 for the passive listening condition, 11.85 for the modeled disclosure condition, and 11.65 for the responsive disclosure condition.

The contrast coefficient matrix for orthogonal comparisons between and among treatment groups is given in Table 7. Contrast 1 tests both Hypothesis 1 and Hypothesis 2. It states that IE disclosure
Table 7
Contrast Coefficient Matrix for Orthogonal Comparisons Between and Among Treatment Groups

<table>
<thead>
<tr>
<th>Treatment group</th>
<th>Passive listening</th>
<th>Modeled disclosure</th>
<th>Responsive disclosure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrast 1</td>
<td>1.0</td>
<td>-0.5</td>
<td>-0.5</td>
</tr>
<tr>
<td>Contrast 2</td>
<td>0.0</td>
<td>1.0</td>
<td>-1.0</td>
</tr>
</tbody>
</table>
Table 8

_t_ Values for Orthogonal Comparisons
Between and Among Treatment Groups

<table>
<thead>
<tr>
<th>Contrast</th>
<th>df</th>
<th>( t^a )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrast 1</td>
<td>60</td>
<td>-6.93*</td>
</tr>
<tr>
<td>Contrast 2</td>
<td>60</td>
<td>0.25</td>
</tr>
</tbody>
</table>

*\( t \) (60) = 2.00, \( p < .05 \).

*\( p < .001 \).
under the passive listening condition is equal to IE disclosure under
the modeled disclosure and responsive disclosure conditions, taken
together or separately. Contrast 2 tests Hypothesis 3; it states
that IE disclosure under the modeled disclosure condition is equal
to IE disclosure under the responsive disclosure condition.

The resulting \( t \) values for Contrast 1 and Contrast 2 are given
in Table 8. The \( t \) value obtained for Contrast 1 was significant,
\( t (60) = -6.93, p < .001 \). Therefore, both Hypothesis 1 and Hypothesis 2
were accepted. In the present experiment, IE disclosure as rated by
judges was significantly greater under both the modeled disclosure
condition and the responsive disclosure condition than under the
passive listening condition.

On the other hand, the \( t \) value obtained for Contrast 2 was not
significant, which led to the rejection of Hypothesis 3. No signifi-
cant difference was found between IE disclosure under the modeled
disclosure condition and IE disclosure under the responsive disclosure
condition in this experiment.

After the first three hypotheses had been tested, a four-way
analysis of covariance of IEs' total disclosure ratings was conducted
in order to determine the relative strength of the treatment effect
in relation to other variables. The results of this analysis are
given in Table 9.

Of the main effects, only that due to treatments was significant,
\( F (2, 41) = 30.782, p < .001 \). As for the other main effects tested,
nor IE sex, nor IE race contributed significantly
Table 9

Four-Way Analysis of Covariance of IE's Total Disclosure Ratings by Treatment, Counselor, IE Sex, and IE Race, Covarying on IE's WTDQ and SDQ Scores

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Covariates</td>
<td>28.140</td>
<td>2</td>
<td>14.070</td>
<td>2.669</td>
</tr>
<tr>
<td>IE's WTDQ scores</td>
<td>20.868</td>
<td>1</td>
<td>20.868</td>
<td>3.959</td>
</tr>
<tr>
<td>IE's SDQ scores</td>
<td>0.965</td>
<td>1</td>
<td>0.965</td>
<td>0.183</td>
</tr>
<tr>
<td>Main effects</td>
<td>346.583</td>
<td>6</td>
<td>57.764</td>
<td>10.958**</td>
</tr>
<tr>
<td>Treatment (A)</td>
<td>324.521</td>
<td>2</td>
<td>162.260</td>
<td>30.782**</td>
</tr>
<tr>
<td>Counselor (B)</td>
<td>6.080</td>
<td>2</td>
<td>3.040</td>
<td>0.577</td>
</tr>
<tr>
<td>IE sex (C)</td>
<td>5.681</td>
<td>1</td>
<td>5.681</td>
<td>1.078</td>
</tr>
<tr>
<td>IE race (D)</td>
<td>9.633</td>
<td>1</td>
<td>9.633</td>
<td>1.827</td>
</tr>
<tr>
<td>2-way interactions</td>
<td>119.378</td>
<td>13</td>
<td>9.183</td>
<td>1.742</td>
</tr>
<tr>
<td>A x B</td>
<td>28.996</td>
<td>4</td>
<td>7.249</td>
<td>1.375</td>
</tr>
<tr>
<td>A x C</td>
<td>9.932</td>
<td>2</td>
<td>4.966</td>
<td>0.942</td>
</tr>
<tr>
<td>A x D</td>
<td>4.424</td>
<td>2</td>
<td>2.212</td>
<td>0.420</td>
</tr>
<tr>
<td>B x C</td>
<td>47.987</td>
<td>2</td>
<td>23.993</td>
<td>4.552*</td>
</tr>
<tr>
<td>B x D</td>
<td>16.976</td>
<td>2</td>
<td>8.488</td>
<td>1.610</td>
</tr>
<tr>
<td>C x D</td>
<td>12.399</td>
<td>1</td>
<td>12.399</td>
<td>2.352</td>
</tr>
</tbody>
</table>
Table 9 (continued)

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explained</td>
<td>494.101</td>
<td>21</td>
<td>23.529</td>
<td>4.463**</td>
</tr>
<tr>
<td>Residual (error)</td>
<td>216.125</td>
<td>41</td>
<td>5.271</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>710.227</td>
<td>62</td>
<td>11.455</td>
<td></td>
</tr>
</tbody>
</table>

*P < .05.

**P < .001.
to the variance of IE disclosure ratings. Also, neither of the covariate effects reached significance, and the only significant interaction was between counselor and IE sex, $F(2, 41) = 4.552$, $p < .05$. Since none of the 3-way or higher interactions were significant, and since they were not of interest in the present study, they were grouped with the residual (error) term in Table 9.

It was further determined that the eta value for the treatment variable was 0.67. Since eta-squared is the proportion of variance in the dependent variable explained by the independent variable, it appears that $0.4489$, or almost 45%, of the variance in IE disclosure ratings is explained by the treatment effect.

To summarize, a strong treatment effect was noted in the present study. Both modeled disclosure and responsive disclosure by IRs resulted in significantly greater IE disclosure than did passive listening. On the other hand, no significant difference in IE disclosure was found whether IRs modeled disclosure or disclosed responsively.

**Hypotheses 4, 5, and 6**

The second major concern of the present study was whether there were significant relationships between IEs' disclosure in the experimental interviews and their scores on the inventories completed prior to the interviews. A related interest was whether any such relationships reached the level of .50 or better set as the standard for acceptable predictive validity for this investigation.
Hypotheses 4, 5, and 6 dealt with this area of inquiry. Since these hypotheses were tested with the same statistical procedure, results are presented jointly. Hypothesis 4 stated that Self-Disclosure Questionnaire-40 (SDQ-40) scores of IEs would be related positively to IE disclosure. Hypothesis 5 stated that IEs' Willingness-to-Disclose Questionnaire (WTDQ) scores would be related positively to IE disclosure. Hypothesis 6 stated that IEs' CPI scores on the Do, Cs, Sy, Sp, and Sa scales would be related positively and on the Sc scale would be related negatively to IE disclosure.

To test Hypotheses 4, 5, and 6, partial correlation coefficients were computed between self-disclosure ratings and inventory scores of IEs, controlling for the effects of IR self-disclosure, IE sex, and IE race. Table 10 gives the results of these computations.

From Table 10 it is seen that the SDQ-40 scores of IEs correlated only .114 with self-disclosure ratings as assigned by judges. Therefore, Hypothesis 4 was rejected. No significant positive relationship was found in this investigation between SDQ-40 scores and actual self-disclosure ratings of IEs.

Hypothesis 5, on the other hand, was accepted. WTDQ scores of IEs were found to correlate .338 (p < .01) with self-disclosure ratings in the experimental interviews. However, this relationship did not reach the level set for acceptable predictive validity in this study.

Based upon data from Table 10, Hypothesis 6 was partially accepted. Significant positive relationships were found between IEs'
Table 10
Partial Correlations Coefficients Between
Self-Disclosure Ratings and Inventory
Scores of IEs, Controlling for the Effects
of IR Self-Disclosure, IE Sex, and IE Race

<table>
<thead>
<tr>
<th>Scale</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDQ-40</td>
<td>.114</td>
</tr>
<tr>
<td>WTDQ</td>
<td>.338**</td>
</tr>
<tr>
<td>CPI</td>
<td></td>
</tr>
<tr>
<td>Do</td>
<td>.538***</td>
</tr>
<tr>
<td>Cs</td>
<td>.387**</td>
</tr>
<tr>
<td>Sy</td>
<td>.489***</td>
</tr>
<tr>
<td>Sp</td>
<td>.079</td>
</tr>
<tr>
<td>Sa</td>
<td>.454***</td>
</tr>
<tr>
<td>Wb</td>
<td>.179</td>
</tr>
<tr>
<td>Re</td>
<td>.383**</td>
</tr>
<tr>
<td>So</td>
<td>.353**</td>
</tr>
<tr>
<td>Sc</td>
<td>.099</td>
</tr>
<tr>
<td>To</td>
<td>.176</td>
</tr>
<tr>
<td>Gi</td>
<td>.348**</td>
</tr>
<tr>
<td>Cm</td>
<td>.097</td>
</tr>
<tr>
<td>Ac</td>
<td>.372**</td>
</tr>
<tr>
<td>Ai</td>
<td>-.025</td>
</tr>
</tbody>
</table>
Table 10 (continued)

<table>
<thead>
<tr>
<th>Scale</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ie</td>
<td>.259*</td>
</tr>
<tr>
<td>Py</td>
<td>.148</td>
</tr>
<tr>
<td>Fx</td>
<td>-.248</td>
</tr>
<tr>
<td>Fe</td>
<td>-.072</td>
</tr>
</tbody>
</table>

Note. $n = 63$, $df = 58$ for each correlation.

* $p < .05$.

** $p < .01$.

*** $p < .001$. 
disclosure ratings and their Do, Cs, Sy, and Sa scores on the CPI. However, no significant relationship between either Sp or Sc scores and disclosure ratings was found.

IEs' disclosure in the interviews correlated .538 (p < .001) with Do scores, .387 (p < .01) with Cs scores, .489 (p < .001) with Sy scores and .454 (p < .001) with Sa scores. Thus, only the relationship between IE disclosure and Do scores reached the level of .50 established for acceptable predictive validity in the present study.

In addition to the hypothesized relationships, several significant unhypothesized correlations were found between other CPI scales and IE disclosure. Disclosure ratings of IEs were found to correlate .383 (p < .01) with Re scores, .353 (p < .01) with So scores, .348 (p < .01) with Gi scores, .372 (p < .01) with Ac scores, and .259 (p < .05) with Ie scores.

In summary, the data from the current investigation supported the hypothesized positive relationships between IEs' disclosure ratings and scores on the WTDQ and on the Do, Cs, Sy, and Sa scales of the CPI. Contrary to hypothesis, no relationship was found between IEs' SDQ-40 scores and disclosure ratings or between scores on the Sp and Sc scales of the CPI and disclosure ratings. Only the relationship between scores on the Do scale of the CPI and disclosure ratings met the standard of .50 set for acceptable predictive validity in the current investigation.
Chapter 5
Summary, Conclusions, and Recommendations

A brief summary of the preceding four chapters is given in Chapter 5. Also included are the conclusions drawn from the present investigation and recommendations for further research.

Summary

The present investigation was concerned with self-disclosure prediction and the effects of two types of interviewer (IR) modeling in the counseling interview. The following six hypotheses were tested in this study:

1. Greater IE disclosure occurs in interviews conducted under the modeled disclosure condition than in interviews conducted under passive listening condition.

2. Greater IE disclosure occurs in interviews conducted under the responsive disclosure condition than in interviews conducted under the passive listening condition.

3. Greater IE disclosure occurs in interviews conducted under the modeled disclosure condition than in interviews conducted under the responsive disclosure condition.

4. SDQ-40 scores of IEs are related positively to IE disclosure.

5. Willingness-to-Disclose Questionnaire scores of IEs are related positively to IE disclosure.
6. IEs' CPI scores on the Do, Cs, Sy, Sp, and Sa scales are related positively and on the So scale are related negatively to IE disclosure.

Interviewees (IEs) were 63 student volunteers from a small rural community college. IEs first completed the Self-Disclosure Questionnaire-40 (SDQ-40), the Willingness-to-Disclose Questionnaire (WTDQ), and the California Psychological Inventory (CPI). They were then randomly assigned to one of three treatment conditions after which each participated in a structured initial interview with one of three college counselors who served as IRs.

IRs had had no previous counseling contact with their IEs. Each IR conducted seven interviews under each of the three treatment conditions. The interviews were audiotaped and rated independently for both IE and IR self-disclosure by two trained judges. Interjudge reliability reached .993 for all ratings.

Treatment conditions differed only in the IR behavior involved; the same series of questions was used as structure for all interviews. Under the passive listening (control) condition, IRs simply listened attentively but passively to IE responses to the questions. Under the modeled disclosure condition, IRs disclosed themselves on each topic prior to the IE response, while IR disclosure followed the IE response in the responsive disclosure condition. As a whole, IRs were found to have adhered closely to the specified behaviors.

The first three hypotheses were tested through the method of planned comparisons. Mean disclosure ratings for the three treatment
conditions for all IEs (n = 21/group) were 7.00 for passive listening, 11.85 for modeled disclosure, and 11.65 for responsive disclosure. A significant t value was obtained for Comparison 1, which permitted both Hypothesis 1 and Hypothesis 2 to be accepted. In the present study, IE disclosure as rated by judges from interview audiotapes was significantly greater under both the modeled disclosure condition and the responsive disclosure condition than under the passive listening condition.

On the other hand, the t value obtained for Contrast 2 was not significant which led to the rejection of Hypothesis 3. No significant difference in IE disclosure was found between the modeled disclosure condition and the responsive disclosure condition in this experiment. However, it was determined that the eta value for the treatment variable as a whole was 0.67, which would indicate that almost 45% of the variance in IE disclosure ratings is explained by the treatment effect.

The last three hypotheses were tested by computing partial correlation coefficients between self-disclosure ratings and inventory scores of IEs while controlling for the effects of IR self-disclosure, IE sex, and IE race. Since a non-significant positive relationship was found between SDQ-40 scores and actual self-disclosure ratings of IEs, Hypothesis 4 was rejected.

Hypothesis 5, on the other hand, was accepted. WTDQ scores of IEs were found to correlate .338 (p<.01) with self-disclosure ratings in the experimental interviews.
Hypothesis 6 was partially accepted. Significant positive relationships were found between IEs' disclosure ratings and their Do, Cs, Sy, and Sa scores on the CPI. However, no significant relationship between either Sp or Sc scores and disclosure ratings was found.

IEs' disclosure in the interviews correlated .538 with Do scores, .387 with Cs scores, .489 with Sy scores, and .454 with Sa scores. The relationship between IE disclosure and Do scores was the only one which reached the level of .50 established for acceptable predictive validity in the present study.

Conclusions and Recommendations

Several conclusions may be drawn on the basis of the results of this investigation. The support which was found for Hypotheses 1 and 2, coupled with the eta value associated with the treatment variable, indicates that a strong modeling effect was present in the experimental interviews. IR disclosure was associated with significantly greater IE disclosure, no matter whether the IR disclosure preceded or followed the IE disclosure in the interviews.

The rejection of Hypothesis 3 indicates that modeled disclosure and responsive disclosure by the IR were equally effective in eliciting IE disclosure in this experiment. This finding is in agreement with the results obtained by Mann and Murphy (1975). Should further research support this conclusion, greater applicability and flexibility of modeling as a counseling technique would be possible. In addition to the usual modeling or example-setting technique in which IR disclosure precedes IE disclosure, an equally effective responsive
disclosure technique would be available which would permit the counselor to realize the benefits of modeling in the interview while at the same time responding directly to a client concern.

Hypothesis 4 was also rejected; the SDQ-40 failed to predict IE disclosure in the present experiment. Since other studies (Lubin & Harrison, 1964; Drag, 1969; Himmelstein & Kimbrough, 1963) have produced similar results, it might be concluded that the SDQ is ineffective as a predictor of future disclosure levels.

The acceptance of Hypothesis 5, on the other hand, indicates that the WTDQ was significantly related to IE disclosure in the present study. This finding concurs with the results of Bundza and Simonson (1973) and Simonson (1976). However, Simonson found in this latter study a far higher (.820) correlation than the present study (.338) between the SDQ in a willingness-to-disclose format and actual IE disclosure as rated by judges.

Although different populations alone may account for this difference, it is also possible that other factors are involved. Simonson used the SDQ-60 while the present investigation utilized the SDQ-40. Perhaps even more importantly, Simonson's Ss completed the questionnaire immediately after hearing on tape the particular therapist to whom their willingness to disclose was being directed. It may be, then, that the relationship between WTDQ scores and actual disclosure increases in the presence of such a behavior sample.

The partial acceptance of Hypothesis 6, together with additional unhypothesized relations to other CPI scales, indicates that the CPI,
either through present scales or through a new scale constructed from selected items, offers promise as a predictor of IE disclosure. In the present study, the Do scale was the best predictor of actual IE disclosure. Should future investigations confirm this result, the Do scale as it exists could be a useful predictor of future disclosure.

Of perhaps greater potential importance was the finding in this investigation of significant positive relationships between nine CPI scales and IE disclosure. Should these results be replicated, good possibilities exist for constructing a highly effective self-disclosure scale from selected CPI items.

Several recommendations for further research emerge from the present investigation. The relative effectiveness of modeled disclosure and responsive disclosure techniques should be examined in other experiments with different kinds of subject populations and under various interview conditions.

Further research should be conducted on the effectiveness of the CPI as a predictor of self-disclosure. Should future studies replicate the results of the present investigation, attempts should be made to construct and validate a self-disclosure scale from the CPI.

The WTDQ as a predictor of self-disclosure also should be studied under various conditions. The relationship between the specificity of the respondent's knowledge about the target person and the effectiveness of the WTDQ as a predictor should be given particular research attention.
Finally, the extremely high interjudge reliability achieved with the judge's rating forms utilized in this study suggests that greater weight could be given to the more subjective depth ratings while maintaining satisfactory interjudge reliability. It is therefore recommended that future use of these rating forms incorporate either a five- or a seven-point scale for the depth ratings rather than the present three-point scale.
Appendices
Appendix A

The Self-Disclosure Questionnaire-40 and the Willingness-to-Disclose Questionnaire

Appendix A includes forms and scoring information pertaining to the SDQ-40 and the Willingness-to-Disclose Questionnaire. The SDQ-40 is one standard form of the original Self-Disclosure Questionnaire published by Jourard and Lasakow (1958). The SDQ has been used in a willingness-to-disclose format by other researchers previously (Bundza & Simonson, 1973; Simonson, 1976).

The 40-Item Self-Disclosure Questionnaire was used with both the Answer Sheet for the Self-Disclosure Questionnaire-40 and the Answer Sheet for the Willingness-to-Disclose Questionnaire. All subjects who participated in the present study completed both of these instruments.
40-Item Self-Disclosure Questionnaire

1. What you dislike about your overall appearance.

2. The things about your appearance that you like most, or are proudest of.

3. Your chief health concern, worry, or problem, at the present time.

4. Your favorite spare-time hobbies or interests.

5. Your food dislikes at present.

6. Your religious activity at present—whether or not you go to church; which one; how often.

7. Your personal religious views.

8. Your favorite reading materials—kinds of magazines, books, or papers you usually read.

9. What particularly annoys you most about your closest friend of the opposite sex or your spouse.

10. Whether or not you have sex problems, and the nature of these problems, if any.

11. An accurate knowledge of your sex life up to the present e.g., the names of your sex partners in the past and present, if any; your ways of getting sexual gratification.

12. Things about your own personality that worry you or annoy you.

13. The chief pressures and strains in your daily work.

14. Things about the future that you worry about at present.

15. What you are most sensitive about.

16. What you feel the guiltiest about, or most ashamed of in your past.

17. Your views about what is acceptable sexual morality for people to follow.

18. The kinds of music you enjoy listening to the most.

19. The subjects you did not, or do not like in school.
20. Whether or not you do anything special to maintain or improve your appearance, e.g., diet, exercise, etc.

21. The kind of behavior in others that most annoys you, or makes you furious.

22. The characteristics of your father that you do not like, or did not like.

23. Characteristics of your mother that you do not like, or did not like.

24. Your most frequent daydream—what you daydream about most.

25. The feelings you have the most trouble controlling, e.g., worry, depression, anger, jealousy, etc.

26. The biggest disappointment that you have had in your life.

27. How you feel about your choice of life work.

28. What you regard as your chief handicaps to doing a better job in your work or studies.

29. Your views on the segregation of whites and Negroes.

30. Your thoughts and feelings about other religious groups than your own.

31. Your strongest ambition at the present time.

32. Whether or not you have planned some major decision in the near future, e.g., a new job, break engagement, get married, divorce, buy something big.

33. Your favorite jokes—the kind of jokes you like to hear.

34. Whether or not you have savings; if so, the amount.

35. The possessions you are proudest of and take greatest care of, e.g., your car, or musical instrument, or furniture, etc.

36. How you usually sleep, e.g., well, or poorly or with help of drugs.

37. Your favorite television programs.

38. Your favorite comics.
39. The groups or clubs or organizations you belong to e.g., fraternity, lodge, bridge club, YMCA, professional organizations, etc.

40. The beverages you do not like to drink, e.g., coffee, tea, coke, beer, liquor, etc. and your preferred beverages.
Answer Sheet for the Self-Disclosure Questionnaire-40

Name_______________________________________________________

Sex: Male____, Female____. Marital Status: S__,M__,D__,W__.

Birthdate:_____________________. Curriculum______________________.

Directions This answer sheet has columns with the headings "Mother," "Father," "Best Same-Sex Friend," and "Best Opposite-Sex Friend [if unmarried] or Spouse [if married]." Please read each item on the 40-Item Self-Disclosure Questionnaire and indicate beside the appropriate number on this answer sheet the extent that you have talked about that item to each person; that is, the extent to which you have made yourself known to that person. Please use the following rating scale to describe the extent that you have talked about each item:

0: Have told the other person nothing about this aspect of me.

1: Have talked in general terms about this. The other person has only a general idea about this aspect of me.

2: Have talked in full and complete detail about this item to the other person. He knows me fully in this respect and could describe me accurately.

X: Have lied or misrepresented myself to the other person so that he has a false picture of me.
<table>
<thead>
<tr>
<th></th>
<th>Mother</th>
<th>Father</th>
<th>Best Same Sex Friend</th>
<th>Best Opposite Sex Friend or Spouse</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Name ____________________________
Answer Sheet for the Willingness-to-Disclose Questionnaire

Name_______________________________________________.

Sex: Male____, Female____. Marital Status: S___,M___,D___,W____.
Birthdate:_____________________.

Curriculum__________________________.

Directions Please read each item on the 40-Item Self-Disclosure Questionnaire and indicate beside the appropriate number on this answer sheet the extent that you would be willing to talk about that item to a college counselor you had just met; that is, the extent to which you would be willing to make yourself known to such a counselor. Please use the following rating scale to describe the extent that you would be willing to talk about each item:

0: Would tell the counselor nothing about this aspect of me.

1: Would talk in general terms about this. The counselor would have only a general idea about this aspect of me.

2: Would talk in full and complete detail about this item to the counselor. He would know me fully in this respect and could describe me accurately.

X: Would lie or misrepresent myself to the counselor so that he would have a false picture of me.
<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
</tr>
<tr>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
<td>20</td>
</tr>
<tr>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>26</td>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>31</td>
<td>32</td>
<td>33</td>
<td>34</td>
<td>35</td>
</tr>
<tr>
<td>36</td>
<td>37</td>
<td>38</td>
<td>39</td>
<td>40</td>
</tr>
</tbody>
</table>

Name __________________________
Scoring the SDQ-40 and
the Willingness-to-Disclose Questionnaire

The SDQ-40 is scored by summing the numerical entries for all four target persons. X's are assigned a value of zero. Thus the highest possible score is 320. A higher score indicates greater reported past disclosure to these target persons.

The Willingness-to-Disclose Questionnaire is scored by summing the numerical entries for the single target person. X's are again assigned a value of zero. Thus the highest possible score here is 80. A higher score indicates a greater willingness to disclose to this target person.
Appendix B

California Psychological Inventory Scale Descriptions

The 18 scales of the CPI and the characteristics assessed by each one are:

I. Measures of Poise, Ascendancy, and Self-Assurance

1. Dominance (Do)—identifies strong, dominant, influential, and ascendent individuals who are able to take the initiative and exercise leadership.

2. Capacity for Status (Cs)—appraises those qualities of ambition and self-assurance that underlie and lead to status.

3. Sociability (Sy)—devised to differentiate people with an outgoing, sociable, and participative temperament from those who shun involvement and avoid social visibility.

4. Social Presence (Sp)—assesses poise, self-confidence, verve, and spontaneity in social interactions.

5. Self-acceptance (Sa)—assesses factors such as sense of personal worth, self-acceptance, and capacity for independent thinking and action.

6. Sense of Well-being (Wb)—derived to discriminate individuals feigning neuroses from normal and psychiatric patients responding truthfully.
II. Measures of Socialization, Maturity, and Responsibility

7. Responsibility (Re)—identifies people who are conscientious, responsible, dependable, articulate about rules and order, and who believe that life should be governed by reason.

8. Socialization (So)—reflects the degree of social maturity, integrity, and rectitude the individual has attained.

9. Self-control (Sc)—designed to assess the adequacy of self-regulation and self-control and the degree of freedom from impulsivity and self-centeredness.

10. Tolerance (To)—identifies permissive, accepting, and nonjudgmental social beliefs and attitudes.

11. Good Impression (Gi)—identifies people who are able to create favorable impressions and who are concerned about how others react to them.

12. Communality (Cm)—designed to detect protocols on which the respondent answered in a random fashion. The purpose is similar to the F scale on the MMPI.

III. Measures of Achievement Potential and Intellectual Efficiency

13. Achievement via Conformance (Ac)—assesses the need for achievement coupled with a deeply internalized appreciation for structure and organization.
14. Achievement via Independence (Ai)—predicts achievement where independence of thought, creativity, and self-actualization are rewarded.

15. Intellectual Efficiency (Ie)—constructed to provide a set of personality items that would correlate significantly with accepted measures of intelligence.

IV. Measures of Intellectual and Interest Modes

16. Psychological-mindedness (Py)—reflects the degree to which the individual is interested in and responsive to the inner needs, motives, and experiences of others.

17. Flexibility (Fx)—identifies people who are flexible, adaptable, and somewhat changeable in their thinking, behavior, and temperament.

18. Femininity (Fe)—the purpose is to define a psychological continuum which may be conceptualized as masculine versus feminine.
My name is John Sykes and I am doing research for my doctoral work in counseling at William and Mary.

I would like to ask you to assist me in my research. As a small token of my appreciation for this assistance, each volunteer will receive $2 at the conclusion of his or her involvement in the research. You can help in two ways. The first is by completing three inventories out of class in your spare time. To show you what is involved, I am going to give each of you a packet of materials. I will also give every second or third person a CPI booklet. Please look on with your neighbor when I discuss the CPI. (distribute materials)

For each inventory, there are no "right" or "wrong" answers. Each item requires an honest, direct response; items should not be dwelt over. Inventories should be completed without comparing answers or discussing items with others.

Since you may wish to change an answer occasionally, a pencil is recommended. There is no time limit, but it is best to work fairly rapidly.

Although you will write your name on each inventory for initial identification purposes, I will remove names from all inventories and substitute a code number before scoring.
From that point, I am not interested in whose inventory I am scoring, with one exception. That is, if you would like to see your results and discuss them with me, I will be happy to do this with you.

For the California Psychological Inventory (CPI), you each have an answer sheet and there is a test booklet nearby. Please look at the directions on the cover of the booklet and follow along as I read them aloud. (read directions) Are there any questions? (pause) Now look at the directions on the answer sheet and follow along as I read them aloud. (read directions) Are there any questions? (pause)

Each of you has copies of the 40-Item Self-Disclosure Questionnaire, the Answer Sheet for the Self-Disclosure Questionnaire-40, and the Answer Sheet for the Willingness-to-Disclose Questionnaire. The pages of both answer sheets are stapled back-to-back so that you can keep the scale in mind in marking your responses. (demonstrate)

The 40-Item Self-Disclosure Questionnaire contains the items for use in marking both answer sheets. First, look at the directions on the Answer Sheet for the Self-Disclosure Questionnaire-40 and follow along as I read them aloud. (read directions) Are there any questions? (pause)

Second, look at the directions on the Answer Sheet for the Willingness-to-Disclose Questionnaire and follow along as I read them aloud. (read directions) Are there any questions? (pause)

You have now had a chance to look at the three inventories involved in the first phase of this research. As for the second phase, its focus is upon how community college students think and feel about
themselves and other relevant issues. I would like to have a counselor talk with you in order to gain this information. Thus, each of you who agrees to assist me, in addition to completing the three inventories, will also participate in one interview of perhaps 20 to 30 minutes in length.

Most students who have participated in interviews of this kind have found the experience of speaking out their attitudes and feelings to a concerned counselor a helpful and pleasant experience.

Let me assure you, however, that your grade in this class will not be affected by whether or not you decide to participate. Participation is strictly voluntary.

Interviews will be anonymous. Your name will not be attached to the content of your interview. I am interested in how students think as a whole rather than in individual views. Interviews will be audio-taped in order that the two raters may collect the necessary data. You and I will sign a mutual agreement guaranteeing your anonymity in return for permission to tape the interview. I should also mention that the three persons who will hear the tapes—the two raters and I—are all professionally trained counselors.

If you would like to participate in this research, please sign up on this sheet. (pass around sign-up sheet) All interviews will be conducted in the counseling offices here on campus. You will receive your $2 at the conclusion of your interview.

If for any reason you would like to talk with a counselor or with me about anything that arises from the interview, I will arrange this
at your request. No volunteer will be asked to complete the interview if he wishes to stop. However, I believe you will find the experience quite enjoyable. Are there questions in regard to the interview?

(pause)

Now, would those of you who have decided not to participate please pass in the materials that I gave you?

For those of you who will be assisting me, I am going to leave one CPI booklet for each two or three of you to share. Also, I have placed several booklets in the Learning Lab. You can use one there simply by asking the supervisor for it. Please try to complete all inventories by one week from today. I will come back to this class at that time to collect your inventories.

I appreciate your participation as it will help me complete my research and add to our knowledge of the community college student.
Appendix D

Contract Covering Taping Release

and Confidential Research Use of Tapes

The undersigned interviewee hereby agrees to allow audiotaping of his/her interview for research purposes.

In return for this release, the undersigned researcher hereby agrees:

1. To treat the contents of the tape in a confidential manner, allowing only the two judges access thereto.
2. To reveal to no one the name of the interviewee on the tape.
3. To use the contents of the tape only for research purposes.
4. To allow the interviewee to terminate the interview at any point if he/she desires.

Signature of Interviewee

Signature of Researcher

Date

Date

126
Appendix E

Instructions for Interviewers

1. Each interviewer (IR) will complete 21 interviews, seven under each of the three conditions.

2. Interviewees (IEs) will be scheduled at 30-minute intervals, with the interview condition having been predetermined for each IE by random assignment to treatments. Interviews are not set for any special length of time. It is expected that some may run less than five minutes and some more than 30 minutes. However, the average interview, except for the passive listening (control) condition, will probably be in the 20 to 30 minute range. Thus appointments at 30-minute intervals should work out.

3. Confidentiality assurances will have been given previously to all IEs. Also, each IE will have previously signed a release for the interview to be taped and used for research purposes.

4. The three interview conditions under which each IR will be conducting interviews are defined as follows:

**Passive Listening Condition**

The passive listening condition is an interview condition in which the IR asks a question, listens attentively but passively to the IE response, and asks the next question. The passive listening condition is illustrated in the following interaction example:
IR: Describe the unhappiest moment of your life: in detail.

IE: Well, I guess that would have to be the day my mother died. It just seemed . . . really was a bad scene.

(IR listens attentively but passively throughout the IE disclosure.)

IR: What do you regard as the mistakes your parents made in raising you?

Modeled Disclosure Condition

The modeled disclosure condition is an interview condition in which the IR asks a question, discloses himself on the topic for a minimum of 60 seconds, allows the IE to respond on the same topic, and asks the next question. The modeled disclosure condition is illustrated in the following interaction example:

IR: Describe the unhappiest moment of your life: in detail.

I would have to say that the unhappiest moment of my life was when our first child was still-born. There had been so much waiting and happiness . . . certainly a bad time.

IE: For me that would be the day my mother died. It just seemed . . . really was a bad scene. (IR listens attentively but passively throughout the IE disclosure.)

IR: What do you regard as the mistakes your parents made in raising you? I don't feel that my parents made too many serious mistakes in raising me. I guess the worst thing was letting me have my way too much . . .
Responsive Disclosure Condition

The responsive disclosure condition is an interview condition in which the IR asks a question, allows the IE to respond, self-discloses on the topic for a minimum of 60 seconds, and asks the next question. The responsive disclosure condition is illustrated in the following interaction example:

IR: Describe the unhappiest moment of your life: in detail.
IE: Well, I guess that would have to be the day my mother died. It just seemed ... really was a bad scene. (IR listens attentively but passively throughout the IE disclosure.)
IR: On that subject, I would have to say that the unhappiest moment of my life was when our first child was still-born. There had been so much waiting and happiness ... Moving to the next topic, what do you regard as the mistakes your parents made in raising you?

5. The interviews must be conducted by adhering closely to the following outline script:

"Hello, you must be (IE's name)____. I'm (your name)____. I'm a counselor over at (your place of employment)____. Come on in and sit down.

As you may recall, the purpose of this interview is to find out how community college students think and feel about themselves and other relevant issues. The interview will probably last from 15 to 30 minutes.
I want to remind you that you have agreed to allow this interview to be taped. I also want to assure you once more that you are responding anonymously here and that these tapes will be used for research purposes only."

According to the condition under which the interview is to be conducted, one of the following will be used:

**Passive Listening Condition**

"I will ask a series of questions, one at a time. I would like for you to give me your feelings and attitudes on each question as I ask it. Do you have any questions? (pause) Let's begin."

**Modeled Disclosure Condition**

"I will ask a series of questions, one at a time. I will first give you my feelings and attitudes on each topic. Then I would like for you to give me your feelings and attitudes. Do you have any questions? (pause) Let's begin."

**Responsive Disclosure Condition**

"I will ask a series of questions, one at a time. I would like for you to give me your feelings and attitudes on each topic. Then I will give you my feelings and attitudes. Do you have any questions? (pause) Let's begin."

The IR then proceeds through the attached list of questions according to the specified interview condition. At the conclusion of the interview, the IR thanks the IE for participating and answers any IE questions in line with the stated purpose of the study.
6. Throughout each interview, interviewer behavior must be confined to that specified. Under all three conditions, the IR remains silent throughout the IE response, listens attentively, and attempts to keep eye contact. No smiles, nods of the head, tilts of the head, vocalizations of "mmm-hmmm," "mmm," "uh-huh," "good," "yeah," "I see," "right," "fine," or any other vocalizations, or any other gestural or postural changes in response to the IE's disclosure are permitted.

7. For the two conditions specifying counselor disclosure, each IR will need to prepare his/her own original script and adhere closely to it for all 14 interviews in which it is needed. The only requirements are that each IR disclosure be highly disclosing and at least 60 seconds in length.

8. The 15 interview questions to be used in each interview are given below. They are to be used in the order given.

1. What are your hobbies: how you best like to spend your spare time?

2. What are your favorite foods and beverages, and your chief dislikes in food and drink?

3. What are your personal goals for the next ten years or so?

4. Give a description of a person with whom you have been or are in love.

5. Which characteristics of yourself give you cause for pride and satisfaction?
6. Describe the unhappiest moment of your life: in detail.
7. What do you regard as the mistakes your parents made in raising you?
8. What do you feel the guiltiest about, or most ashamed of in your past?
9. Describe the kind of person with whom you would like to have sexual experiences.
10. What is your educational background and how do you feel about it?
11. Describe the happiest moments of your life: in detail.
12. What are your personal religious views and the nature of your religious participation, if any?
13. What are the aspects of your personality that you dislike, worry about, or regard as a handicap to you?
14. What are your feelings about your adequacy in sexual behavior—your abilities to perform adequately in sexual relationships?
15. How do you feel about having members of the opposite sex touch you?
Appendix F

Qualifications of Interviewers

1. Ms. Yvette R. Carney, Resident Counselor
   Saint Paul's College
   Lawrenceville, Virginia 23868
   Educational Background
   B.A. in History, Lincoln University (Pennsylvania)
   M.A. in Student Personnel Administration in Higher Education,
      Teachers' College, Columbia University
   Relevant Experience
   1 year, college admissions counselor
   1 year, college resident counselor

2. Mr. Ronald C. Diment, Counselor
   Southside Virginia Community College
   Christanna Campus
   Alberta, Virginia 23821
   Educational Background
   A.B. in Psychology, Lafayette College
   M.Ed. in Counselor Education/Student Personnel Services,
      Pennsylvania State University
   Relevant Experience
   1 year, college resident counselor
   4 years, community college counselor
3. Mr. Eric J. Hummel, Counselor

Southside Virginia Community College

John H. Daniel Campus

Keysville, Virginia 23947

Educational Background

B.A. in Psychology, The College of Wooster

M.Ed. in Counseling Psychology, University of Missouri

Relevant Experience

1 year, assistant to the dean of students

2.5 years, community college counselor
Appendix G

Judge's Rating Forms

Appendix G contains the forms used by judges in rating both IE and IR disclosure from audiotapes of interviews conducted as a part of the present study.

The Judge's Rating of Subject's Disclosing Responses utilizes the rating system devised by Olson (1973). The Judge's Rating of Interviewer's Disclosing Responses is the present researcher's adaptation of Olson's system to a second purpose.
JUDGE'S RATING OF
SUBJECT'S DISCLOSING RESPONSES

Judge: ___________________________ Interviewer: ___________________________

Audiotape Number: _______________________ Side: _________________________

Subject Number: _____________________

Rate the subject's responses to each of the 15 items according to the following scale:

0 = The subject disclosed nothing about himself on this item to me.

1 = The subject disclosed very little about himself on this item to me.

2 = The subject disclosed only at a general level (facts, but little or no disclosure of personal feelings) about himself on this item to me.

3 = The subject very fully disclosed attitudes and information of a personal nature about himself on this item to me.

Also rate the subject's length of response to each of the 15 items according to the following scale:

1 = 0 to 5 seconds 2 = 6 to 10 seconds 3 = 11 to 15 seconds
4 = 16 to 20 seconds 5 = 21 to 25 seconds 6 = 26 to 30 seconds
7 = 31 to 35 seconds 8 = 36 to 40 seconds 9 = 41 to 45 seconds
10 = 46 to 50 seconds 11 = 51 to 55 seconds 12 = 56 to 60 seconds
13 = over 60 seconds

<table>
<thead>
<tr>
<th>Item</th>
<th>Depth Rating</th>
<th>Length Rating</th>
<th>Item Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. What are your hobbies: how you best like to spend your spare time? (L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Depth Rating</td>
<td>Length Rating</td>
<td>Item Total</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>--------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>2. What are your favorite foods and beverages, and your chief dislikes in food and drink? (L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. What are your personal goals for the next ten years or so? (L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Give a description of a person with whom you have been or are in love. (H)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Which characteristics of yourself give you cause for pride and satisfaction? (M)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Describe the unhappiest moment of your life: in detail. (M)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. What do you regard as the mistakes your parents made in raising you? (M)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. What do you feel the guiltiest about, or most ashamed of in your past? (H)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Describe the kind of person with whom you would like to have sexual experiences. (H)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. What is your educational background and how do you feel about it? (L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Describe the happiest moments of your life: in detail. (M)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. What are your personal religious views and the nature of your religious participation, if any? (L)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Depth Rating</td>
<td>Length Rating</td>
<td>Item Total</td>
</tr>
<tr>
<td>------</td>
<td>--------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>13.</td>
<td>What are the aspects of your personality that you dislike, worry about, or regard as a handicap to you? (H)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.</td>
<td>What are your feelings about your adequacy in sexual behavior—your abilities to perform adequately in sexual relationships? (H)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>How do you feel about having members of the opposite sex touch you? (M)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
JUDGE'S RATING OF
INTERVIEWER'S DISCLOSING RESPONSES

Judge: ____________________ Interviewer: ____________________

Audiotape Number: ______________ Side: ____________________

Subject Number: ____________

Rate the interviewer's (IR's) responses to each of the 15 items according to the following scale:

0 = The IR disclosed nothing about himself on this item to me.
1 = The IR disclosed very little about himself on this item to me.
2 = The IR disclosed only at a general level (facts, but little or no disclosure of personal feelings) about himself on this item to me.
3 = The IR very fully disclosed attitudes and information of a personal nature about himself on this item to me.

Also rate the IR's length of response to each of the 15 items according to the following scale:

1 = 0 to 5 seconds  2 = 6 to 10 seconds  3 = 11 to 15 seconds  4 = 16 to 20 seconds  5 = 21 to 25 seconds
6 = 26 to 30 seconds  7 = 31 to 35 seconds
8 = 36 to 40 seconds  9 = 41 to 45 seconds  10 = 46 to 50 seconds  11 = 51 to 55 seconds  12 = 56 to 60 seconds
13 = over 60 seconds

<table>
<thead>
<tr>
<th>Item</th>
<th>Time In Seconds</th>
<th>Depth Rating</th>
<th>Length Rating</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>_____________</td>
<td>___</td>
<td>_____________</td>
<td>____</td>
</tr>
<tr>
<td>Item</td>
<td>Time In Seconds</td>
<td>Depth Rating</td>
<td>Length Rating</td>
<td>Item Total</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-----------------</td>
<td>--------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>2. What are your favorite foods and beverages, and your chief dislikes in food and drink? (L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. What are your personal goals for the next ten years or so? (L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Give a description of a person with whom you have been or are in love. (H)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Which characteristics of yourself give you cause for pride and satisfaction? (M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Describe the unhappiest moment of your life: in detail. (M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. What do you regard as the mistakes your parents made in raising you? (M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. What do you feel the guiltiest about, or most ashamed of in your past? (H)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Describe the kind of person with whom you would like to have sexual experiences. (H)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. What is your educational background and how do you feel about it? (L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Describe the happiest moments of your life: in detail. (M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Time In Seconds</td>
<td>Depth Rating</td>
<td>Length Rating</td>
<td>Item Total</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>----------------</td>
<td>--------------</td>
<td>---------------</td>
<td>------------</td>
</tr>
<tr>
<td>12. What are your personal religious views and the nature of your religious participation, if any? (L)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. What are the aspects of your personality that you dislike, worry about, or regard as a handicap to you? (H)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. What are your feelings about your adequacy in sexual behavior--your abilities to perform adequately in sexual relationships?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. How do you feel about having members of the opposite sex touch you? (M)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix H

Qualifications of Judges

1. Dr. Robert F. Snead, Provost

Southside Virginia Community College

Christanna Campus

Alberta, Virginia 23821

Educational Background

B.S. in Sociology, West Virginia University

M.A. in Counseling, West Virginia University

Ph.D. in Counselor Education, University of Missouri

Relevant Experience

2 years, high school teacher of history, sociology, and psychology

2 years, high school counselor

1 year, community college counselor

1 year, counselor in four-year college counseling center

1 year, counseling intern in university counseling center

5 years, community college administrator: 3 years as dean of student services, 2 years as provost.

2. Mr. Charles E. Hybl, Coordinator

Admissions and Records

Southside Virginia Community College

John H. Daniel Campus

Keysville, Virginia 23947
Educational Background

B.A. in Social Sciences, University of Florida

M.Ed. in Counseling and Student Services, University of Florida

21 semester hours of advanced graduate work in Counselor Education, University of Virginia

Relevant Experience

1.5 years, community college counselor

2 years, director of counseling and guidance services, community college

5 years, coordinator of admissions and records, community college
## Appendix I

Summary Statistics of Inventory Scores
for All Subjects

<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Range</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>WTDQ&lt;sup&gt;a&lt;/sup&gt;</td>
<td>51.048</td>
<td>15.564</td>
<td>64</td>
<td>16</td>
<td>80</td>
</tr>
<tr>
<td>SDQ-40&lt;sup&gt;b&lt;/sup&gt;</td>
<td>171.254</td>
<td>49.722</td>
<td>243</td>
<td>41</td>
<td>284</td>
</tr>
<tr>
<td>CPI&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do</td>
<td>46.540</td>
<td>12.581</td>
<td>59</td>
<td>15</td>
<td>74</td>
</tr>
<tr>
<td>Cs</td>
<td>40.857</td>
<td>12.259</td>
<td>50</td>
<td>15</td>
<td>65</td>
</tr>
<tr>
<td>Sy</td>
<td>45.762</td>
<td>11.007</td>
<td>46</td>
<td>19</td>
<td>65</td>
</tr>
<tr>
<td>Sp</td>
<td>49.524</td>
<td>10.291</td>
<td>46</td>
<td>23</td>
<td>69</td>
</tr>
<tr>
<td>Sa</td>
<td>53.936</td>
<td>12.233</td>
<td>54</td>
<td>25</td>
<td>79</td>
</tr>
<tr>
<td>Wb</td>
<td>35.079</td>
<td>12.944</td>
<td>55</td>
<td>3</td>
<td>58</td>
</tr>
<tr>
<td>Re</td>
<td>37.032</td>
<td>10.332</td>
<td>44</td>
<td>12</td>
<td>56</td>
</tr>
<tr>
<td>So</td>
<td>42.413</td>
<td>10.774</td>
<td>49</td>
<td>15</td>
<td>64</td>
</tr>
<tr>
<td>Sc</td>
<td>38.032</td>
<td>8.388</td>
<td>40</td>
<td>14</td>
<td>54</td>
</tr>
<tr>
<td>To</td>
<td>35.730</td>
<td>10.662</td>
<td>51</td>
<td>8</td>
<td>59</td>
</tr>
<tr>
<td>Gi</td>
<td>38.444</td>
<td>8.697</td>
<td>38</td>
<td>20</td>
<td>58</td>
</tr>
<tr>
<td>Cm</td>
<td>50.476</td>
<td>13.314</td>
<td>63</td>
<td>0</td>
<td>63</td>
</tr>
<tr>
<td>Ac</td>
<td>38.587</td>
<td>11.656</td>
<td>53</td>
<td>11</td>
<td>64</td>
</tr>
<tr>
<td>Ai</td>
<td>44.381</td>
<td>10.237</td>
<td>41</td>
<td>27</td>
<td>68</td>
</tr>
<tr>
<td>Ie</td>
<td>38.238</td>
<td>11.184</td>
<td>43</td>
<td>15</td>
<td>58</td>
</tr>
</tbody>
</table>

144
<table>
<thead>
<tr>
<th>Scale</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Range</th>
<th>Min.</th>
<th>Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Py</td>
<td>44.952</td>
<td>9.383</td>
<td>43</td>
<td>21</td>
<td>64</td>
</tr>
<tr>
<td>Fx</td>
<td>52.159</td>
<td>11.153</td>
<td>54</td>
<td>27</td>
<td>81</td>
</tr>
<tr>
<td>Fe</td>
<td>51.429</td>
<td>11.227</td>
<td>49</td>
<td>24</td>
<td>73</td>
</tr>
</tbody>
</table>

Note.  n = 63 for all scales.

* Raw scores; maximum score = 80.
* Raw scores; maximum score = 320.
* Standard scores.
Reference Note

1. Tatem, B. A. *Relationship of self-disclosure of autobiographies on CPI scores, concern with identification, and social distance.* Unpublished undergraduate research paper, 1974. (Available from Dr. Virgil McKenna, College of William and Mary, Williamsburg, Virginia 23185.)
References


Feigenbaum, W. M. Self-disclosure in the psychological interview as a function of interviewer self-disclosure, sex of subjects, and seating arrangement (Doctoral dissertation, University of South Carolina, 1974). *Dissertation Abstracts International*, 1975, 35, 5108B. (University Microfilms No. 70-17,878)
Fitzgerald, M. P. Self-disclosure and expressed self-esteem, social
distance, and areas of the self revealed. *Journal of Psychology*,
1963, 56, 405-412.

Frankel, G. Reported self-disclosure and perceived characteristics
of the disclosee (Doctoral dissertation, University of Rochester,
(University Microfilms No. 70-17,878)

Fritchey, K. H. The effects of anxiety and threat on self-disclosure
(Doctoral dissertation, University of Southern California, 1970).
*Dissertation Abstracts International*, 1971, 31, 4336B. (University
Microfilms No. 71-2522)

1947.

Gary, A. L., & Hammond, R. Self-disclosures of alcoholics and drug
addicts. *Psychotherapy: Theory, Research, and Practice*, 1970,
7, 142-143.

Gay, E. G. Interviewer role and self-disclosure level as determinants
of interviewee self-disclosure level and reactions to an interview
(Doctoral dissertation, University of Minnesota, 1975). *Disses-
tation Abstracts International*, 1975, 36, 3039B. (University
Microfilms No. 75-27,154)


Halverson, C. F., & Shore, R. E. Self-disclosure and interpersonal
functioning. *Journal of Consulting and Clinical Psychology*, 1969,
33, 213-217.
Hays, C. F. The effects of initial disclosure level and interviewer disclosure level upon interviewee's subsequent disclosure level (Doctoral dissertation, Emory University, 1971). Dissertation Abstracts International, 1972, 32, 4215B. (University Microfilms No. 72-3029)


Himelstein, P., & Lubin, B. Relationship of the MMPI, K scale, and a measure of self-disclosure in a normal population. Psychological Reports, 1966, 10, 166.


Klepper, J. L. The effects of pre-interview exposure to vicarious reinforcement on disclosure and attraction in alcoholics: A psychotherapy analogue (Doctoral dissertation, Syracuse University, 1971). Dissertation Abstracts International, 1971, 32, 563B-564B. (University Microfilms No. 71-18,491)


Liberman, B. L. The effects of modeling procedures on attraction and disclosure in a psychotherapy analogue (Doctoral dissertation, Syracuse University, 1970). Dissertation Abstracts International, 1971, 32, 564B-565B. (University Microfilms No. 71-18,520)

Lubin, B., & Harrison, R. L. Predicting small group behavior with the self-disclosure inventory. Psychological Reports, 1964, 15, 77-78.


Abstract

The present investigation was concerned with self-disclosure prediction and the effects of two types of interviewer (IR) modeling in the counseling interview. Interviewees (IEs) were 63 student volunteers from a small rural community college. IEs first completed the Self-Disclosure Questionnaire-40 (SDQ-40), the Willingness-to-Disclose Questionnaire (WTDQ), and the California Psychological Inventory (CPI). They were then randomly assigned to one of three treatment conditions after which each participated in a structured initial interview with one of three college counselors who served as IRs. The interviews were audiotaped and rated independently for both IE and IR self-disclosure by two trained judges. Interjudge reliability reached .993 for all ratings.

Treatment conditions differed only in the IR behavior involved; the same series of questions was used as structure for all interviews. Under the passive listening (control) condition, IRs simply listened attentively but passively to IE responses to the questions. Under the modeled disclosure condition, IRs disclosed themselves on each topic prior to the IE response, while IR disclosure followed the IE response in the responsive disclosure condition. As a whole, IRs were found to have adhered closely to the specified behaviors.

Mean disclosure ratings for the three conditions for all IEs (n = 21/group) were 7.00 for passive listening, 11.85 for modeled disclosure, and 11.65 for responsive disclosure. Analysis by the method of planned comparisons revealed, as hypothesized, that IE disclosure was significantly greater for both disclosure conditions than for the control condition, t (60) = -6.93, p < .001. Contrary to hypothesis, no difference was found between the modeled disclosure and responsive disclosure conditions.

Partial correlation coefficients were computed between self-disclosure ratings and inventory scores of IEs, controlling simultaneously for the effects of IR self-disclosure, IE sex, and IE race. Contrary to hypothesis, IE disclosure was unrelated to SDQ-40 scores and also unrelated to scores on either the Sp or Sc scales of the CPI. However, as hypothesized, significant relationships were found between IE disclosure and WTDQ scores (r = .338, p < .01) and between IE disclosure and four CPI scales: Do (r = .538, p < .001), Cs (r = .387, p < .01), Sy (r = .489, p < .001), and Sa (r = .454, p < .001). Only the Do scale reached the standard of .50 set for acceptable predictive validity in this study.

For this investigation, it was concluded that high levels of IR disclosure were associated with greater IE disclosure, no matter whether the IR disclosure preceded or followed the IE disclosure in the interviews. The SDQ-40 was found ineffective as a predictor of future disclosure levels in this study, but the WTDQ, and especially certain CPI scales, appeared to hold out greater promise as predictors of actual IE disclosure levels.
Vita

John David Sykes, Jr.

Born December 16, 1943, in Franklin, Virginia. Married to the former Carolyn Bishop and has one daughter, Sandra Bishop Sykes, age 7.


Employed from 1967 to 1971 as a high school counselor in Nansemond County (now the City of Suffolk), Virginia. Since 1971, has been employed at Southside Virginia Community College at Alberta, Virginia, as a counselor for one year and as Coordinator of Admissions and Records for the past four years. Current faculty rank is Associate Professor.