An Evaluation of Affective Outcomes of a Community College Human Relations Course

Philip C. Theodorou

Loyola University Chicago

Follow this and additional works at: https://ecommons.luc.edu/luc_diss

Part of the Education Commons

Recommended Citation
https://ecommons.luc.edu/luc_diss/1541

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.

This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License.
Copyright © 1976 Philip C Theodorou
AN EVALUATION OF AFFECTIVE OUTCOMES
OF A COMMUNITY COLLEGE
HUMAN RELATIONS COURSE

by
Philip C. Theodorou

A Dissertation Submitted to the Faculty of the Graduate School
of Loyola University of Chicago in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

April
1976
ACKNOWLEDGEMENTS

Foremost, to Dr. John A. Wellington and also to Drs. John P. Eddy, Gloria J. Lewis, C. John McCann, and Manuel S. Silverman, I express my profound appreciation for their ability to help me learn.

To the late Dr. Roberta Christie goes my appreciation for her solid encouragement.

To my wife, Carol, whose assistance, concern and patience facilitated the completion of this task, I express my deep gratitude that we can participate in each other's interpersonal growth.

To my children, Stefanie, Suzanne and Kevin, who have participated (watched) with much pride in this professional endeavor, I give special thanks for their patience and love.

To my colleagues Dr. Kathy Baratta, Dr. Alfred Hecht and Miles Meyerson go my special thanks for their support and consultation.

To my secretary, Debra Johnson, go my thanks for her dedication and assistance in completing this task.
VITA

Philip C. Theodorou was born on July 22, 1933, in Chicago, Illinois. He graduated from Monroe Elementary School in 1946 and Schurz High School in 1950. He attended Wright Junior College in Chicago from 1950 to 1952 and completed the B.S. degree in Mathematics at Northwestern University, Evanston, Illinois, in 1954. Mr. Theodorou completed the M.A. degree in Mathematics at Northwestern University in 1960. In the summer of 1961, he was awarded a National Defense Educational Act grant for study in mathematics at the Illinois Institute of Technology, Chicago, Illinois.

Mr. Theodorou began his teaching career in the Fall of 1954 as a substitute teacher in the Chicago Public School system. From 1955 to 1968 he was employed by Reavis High School, Burbank, Illinois, as a mathematics teacher, 1955-1963, Mathematics Department Chairman, 1963-1967, and Dean of Boys, 1963-1968. From 1968 to the present, Mr. Theodorou has been employed at Moraine Valley Community College, Palos Hills, Illinois. At MVCC he has been Coordinator of Student Activities, 1968-1972, and Assistant Dean for Student Life, 1972-1974. From 1974 to the present, Mr. Theodorou has been the Dean of the Student Development Division.
In the fall of 1970, Mr. Theodorou was accepted into the doctoral program in Guidance and Counseling at Loyola University, Chicago, Illinois. His studies have centered around student personnel services, counseling and measurement and evaluation.

Mr. Theodorou is married to Carol Ann and they have three children, Stefanie, Suzanne and Kevin.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. DEFINITION OF THE PROBLEM</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Background</td>
<td>6</td>
</tr>
<tr>
<td>Problem</td>
<td>8</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>8</td>
</tr>
<tr>
<td>Limitations</td>
<td>10</td>
</tr>
<tr>
<td>Definitions</td>
<td>12</td>
</tr>
<tr>
<td>Summary</td>
<td>16</td>
</tr>
<tr>
<td>II. REVIEW OF RELATED LITERATURE</td>
<td>17</td>
</tr>
<tr>
<td>Introduction</td>
<td>17</td>
</tr>
<tr>
<td>Laboratory Training</td>
<td>21</td>
</tr>
<tr>
<td>Definition</td>
<td>21</td>
</tr>
<tr>
<td>Goals</td>
<td>25</td>
</tr>
<tr>
<td>Laboratory Training and PSY 201</td>
<td>29</td>
</tr>
<tr>
<td>Outcomes</td>
<td>30</td>
</tr>
<tr>
<td>Encounter Groups</td>
<td>40</td>
</tr>
<tr>
<td>Definition</td>
<td>40</td>
</tr>
<tr>
<td>Goals</td>
<td>44</td>
</tr>
<tr>
<td>Encounter Groups and PSY 201</td>
<td>45</td>
</tr>
<tr>
<td>Outcomes</td>
<td>46</td>
</tr>
<tr>
<td>Group Counseling</td>
<td>50</td>
</tr>
<tr>
<td>Definition</td>
<td>50</td>
</tr>
<tr>
<td>Goals</td>
<td>54</td>
</tr>
<tr>
<td>Group Counseling and PSY 201</td>
<td>55</td>
</tr>
<tr>
<td>Outcomes</td>
<td>55</td>
</tr>
<tr>
<td>Student Development Courses</td>
<td>61</td>
</tr>
<tr>
<td>Rationale</td>
<td>61</td>
</tr>
<tr>
<td>Student Development Courses on College Campuses</td>
<td>66</td>
</tr>
<tr>
<td>Summary</td>
<td>73</td>
</tr>
</tbody>
</table>
III. PROCEDURES FOR THE STUDY

Introduction ......................................................... 74
Sample .............................................................. 75
Hypotheses ......................................................... 76
Instruments and Scales ........................................... 79
Scoring ............................................................. 84
Data ................................................................. 89
Design ............................................................... 89
Data Analysis Technique ......................................... 92
Summary ............................................................ 93

IV. RESULTS .......................................................... 94

Introduction .......................................................... 94
Analysis of Data .................................................... 95
Summary ............................................................. 118

V. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .......... 122

Problem ............................................................ 123
Methodology Used .................................................. 123
Hypotheses and Results ............................................ 124
Synthesis of Results and Conclusions ............................ 127
Recommendations for Further Study ................................. 131

REFERENCES ......................................................... 134

APPENDIX A .......................................................... 142
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pre-test Equivalence Scores for Experimental and Control Groups</td>
<td>96</td>
</tr>
<tr>
<td>3. Main Research Hypothesis Univariate Analyses of CPI and FIRO-B Post-test Scores Adjusted for Covariance</td>
<td>99</td>
</tr>
<tr>
<td>4. Above Age Median Experimental and Above Age Median Control Post-test Means Adjusted for Covariance, and Difference Between Means</td>
<td>101</td>
</tr>
<tr>
<td>5. Above Age Median Experimental and Above Age Median Control Univariate Analyses of CPI and FIRO-B Post-test Scores Adjusted for Covariance</td>
<td>102</td>
</tr>
<tr>
<td>6. Below Age Median Experimental and Below Age Median Control Post-test Means Adjusted for Covariance, and Difference Between Means</td>
<td>104</td>
</tr>
<tr>
<td>7. Below Age Median Experimental and Below Age Median Control Univariate Analyses of CPI and FIRO-B Post-test Scores Adjusted for Covariance</td>
<td>105</td>
</tr>
<tr>
<td>8. Above Age Median Experimental and Below Age Median Experimental Post-test Means Adjusted for Covariance, and Differences Between Means</td>
<td>107</td>
</tr>
<tr>
<td>9. Above Age Median Experimental and Below Age Median Experimental Univariate Analyses of CPI and FIRO-B Post-test Scores Adjusted for Covariance</td>
<td>108</td>
</tr>
<tr>
<td>10. Male Experimental and Male Control Post-test Means Adjusted for Covariance, and Differences Between Means</td>
<td>110</td>
</tr>
<tr>
<td>Table</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>------</td>
</tr>
<tr>
<td>11. Male Experimental and Male Control Univariate Analyses of CPI and FIRO-B Post-test Scores Adjusted for Covariance</td>
<td>111</td>
</tr>
<tr>
<td>12. Female Experimental and Female Control Post-test Means Adjusted for Covariance, and Differences Between Means</td>
<td>113</td>
</tr>
<tr>
<td>13. Female Experimental and Female Control Univariate Analyses of CPI and FIRO-B Post-test Scores Adjusted for Covariance</td>
<td>114</td>
</tr>
<tr>
<td>14. Male Experimental and Female Experimental Post-test Means Adjusted for Covariance, and Differences Between Means</td>
<td>116</td>
</tr>
<tr>
<td>15. Male Experimental and Female Experimental Univariate Analyses of CPI and FIRO-B Post-test Scores Adjusted for Covariance</td>
<td>117</td>
</tr>
</tbody>
</table>
CONTENTS FOR APPENDICES

APPENDIX A  Human Relations Class Syllabus  . . . . . .  142
CHAPTER I

DEFINITION OF THE PROBLEM

INTRODUCTION

Whether or not counselors should involve themselves in the teaching program of a college is a valid question. Robert T. Brown states that although student personnel workers have professed themselves to be educators and to be interested in the whole student, they have served higher education essentially as "housekeepers, activities advisors, and counselors and been seen by many in the higher education arena as petty administrators."¹ Certainly, the ultimate objective of staff, according to Brown, is to improve the quality of life on campus. He feels that this objective is often achieved, but he questions whether many students are affected in a developmental way.

Terry O'Banion² states that student personnel staff members should teach student development courses not usually available in instructional programs. He says that the


experience of the student is an important part of the subject matter of student development courses.

Such curricular involvement by counselors would be congruent with O'Banion's contention that student personnel programs should be the most prominent aspect of institutional efforts to humanize the educational process. According to O'Banion, counselors, because of their student-centered commitments, would be able to exercise more influence in humanizing education than any other group functioning in education today.

Ernest H. Berg also sees the emerging role of the student personnel worker as heavily involved in the integration of humanistic emphasis in the instructional program. He demonstrates that cognitive and affective learning can take place simultaneously in the classroom, and the first priority for counselors would be to associate with instructors in the real world of the academic environment. The second priority would be to infiltrate, by whatever means necessary, the academic structure of the community college. He relates that if counselors are to establish themselves as specialists in student development, they will have to demonstrate that the "cognitive and affective aspects of the educational

---

3Ibid., p. 77.

program are not only possible but (even more important) desirable and essential."5

Brown6 feels that having an impact on student development requires awareness of an involvement in the total environment of the student. He states that a significant part of that environment is the classroom. He asks, "Is it possible to accomplish some student development goals in an organized, course-like fashion that could become courses for credit? If so, then the logical step is to develop departments of human relations...which present theoretical concepts but emphasize skill development and personal growth."7

In accepting counselors as teachers of student development courses, we ask a second question. In what dimensions of personal growth might a student development course have a substantial impact for some developmental change?

Arthur W. Chickering8 cites evidence that seven major dimensions of development occur during the college year: competence, emotions, autonomy, identity, interpersonal relationships, purpose and integrity. He feels that the period for major development of change in these seven major dimensions either begins at the age of 17 or 18 and continues

5Ibid., p. 142.
6Robert D. Brown, op. cit., p. 91.
7Ibid., p. 97.
into the middle or late twenties, or that a strong potential exists for such change at this age. Chickering further states that certain kinds of college experiences have a substantial impact for such developmental change.

One dimension of personal growth described by Chickering in one of his vectors is "freeing of interpersonal relationships." He suggests that growth in freeing of interpersonal relationships involves two aspects: (1) "a shift in the quality of relationships with intimate and close friends," and (2) "increased tolerance and respect for those of different backgrounds, habits, values and appearance."9

A shift in the quality of relationships with intimate and close friends can be described as an "increased ease in relationships with peers and adults" and as a "diminished need to dominate, to override others with one's own ideas, and to coerce or manipulate others."10 Increased tolerance and respect for those of different backgrounds, values and appearance can be described as "increasing openness and acceptance of diversity." Increased openness "allows our own sensitivities to expand and increases the range of alternatives for satisfying exchanges and for close and lasting friendships."11

---

9 Ibid., p. 94.
10 Ibid., p. 101.
11 Ibid., p. 94.
In the next section this author describes a human relations course taught by counselors in a community college. This author contends that it is a student course, which as Brown suggests, affects students in a developmental way. In addition, as Berg suggests, the course demonstrates that cognitive and affective learning can take place simultaneously.
BACKGROUND

Psychology 201 is a human relations class taught by counselors at Moraine Valley Community College (MVCC), Palos Hills, Illinois. The mode of instruction used by the counselors is described as experiential learning. The experiential mode includes dissemination of cognitive learning material through a combination of methods. These include but are not limited to: lectures, discussion and use of audio-visual material. Also, the development of interpersonal skills occurs with structured group exercises. Finally, each experience is processed by the counselor.

The structured experiences are an important part of the class. According to Ruth R. Middleman and Gale Goldberg, a feature of the structured learning situation in human relations training is the psychological safety factor provided by the boundary of each structured situation. Morton A. Lieberman, Irvin D. Yalom and Matthew B. Miles indicate that there is a tendency for structured


exercises in human relations training to provoke less identification and fewer negative reactions than other types of group events in human relations training.

The content of the course includes cognitive material and structured group experiences in initiating relationships, building interpersonal trust, developing communications and confrontation skills, and establishing conflict resolution. (See Syllabus, Appendix A, P. 142) All instructors who teach this human relations class are trained counselors with broad experience in community college group work.

The human relations class does much to humanize the educational process at MVCC. The class is part of an emerging model of student personnel work primarily concerned with the students' development. This author contends that it is a course where "the experience of the student is an important part of the subject matter." He also contends that the human relations class focuses in on one dimension of personal growth described by Chickering in one of his vectors, "freeing of interpersonal relationships."

This study will provide an evaluation of the affective outcomes of the human relations course taught at MVCC. The study will attempt to assess experimentally if participation in the human relations class contributes to the students' interpersonal competence.
PROBLEM

In general, this study will provide an evaluation of a new student personnel activity referred to as a student development course. Specifically, this study will assess the effectiveness of the Human Relations course, PSY 201, as taught by counselors at MVCC. This study will determine whether participation in the class improves personality characteristics used in interpersonal situations and behavior characteristics in groups.

HYPOTHESES

The main research hypothesis of this present study is that the human relations class, PSY 201, taught by counselors at MVCC, will produce positive changes in two areas. One of these areas is the participants' behavior characteristics in a group as measured by the FIRO-B. The other is influence on the participants' personality characteristics which are considered important for social living and social interaction as measured by the CPI.

For experimental purposes, research hypotheses have been proposed for this study. (See Chapter III) The author contends that, as measured by the FIRO-B and three scales of the CPI, participants will show more favorable behavior in the areas of inclusion, control, affection, tolerance, flexibility and socialization.
Participants who will show more favorable characteristic behavior are:

(a) Students in the experimental group compared with students in the control group.

(b) Students in the experimental group falling above the age median of all subjects compared with students in the control group falling above the age median of all subjects.

(c) Students in the experimental group falling below the age median of all subjects compared with students in the control group falling below the age median of all subjects.

(d) Students in the experimental group falling above the age median of all subjects compared with students in the experimental group falling below the age median of all subjects.

(e) Male students in the experimental group compared with male students in the control group.

(f) Female students in the experimental group compared with female students in the control group.

(g) Male students in the experimental group compared with female students in the experimental group.
LIMITATIONS

The experimental aspect of the present study is limited to a single student-sponsored student development course, PSY 201, taught at MVCC. This study was limited to this institution for several reasons. This author is unaware of any other institution that teaches a human relations class with the same syllabus. In addition, by limiting the study to MVCC this author was able to insure that each section of the course was taught within the time frame of the class syllabus and that the course was taught by the experiential mode of instruction. Because of this, the results of the study can be generalized only for students who attend Moraine Valley Community College.

A second limitation is that the PSY 201 classes, the experimental group in this study, are taught by five different counselors. Each counselor has his own style of introducing cognitive material, facilitating the structured experiences and processing the experiences. Middleman and Goldberg14 stated that the personality of the instructor and specific style in human relations training bear much less influence on the group in structured experiences than in unstructured experiences. However, Lieberman, Yalom and Miles15 found that one of the most important influences on

outcomes in human relations training is the personality and style of the leader.

It is also questionable that the same amount of time was spent by each counselor on each aspect of the class: cognitive material, experiences and counseling process. Although the syllabus specified the time for each unit, the nature of the experiences and the time taken to process each experience could be different for each class. In addition, each counselor brings a different kind of experience and knowledge to the classroom situation.

Finally, Donald T. Campbell and Julian C. Stanley\(^{16}\) state that if the pre-test scores for the experimental and control groups are similar, the design is the principal factor controlling the main effects of history: maturation, testing and instrumentation. Since participants in the experimental group deliberately seek exposure to the treatment, the pre-test scores may not be as similar as desired and the proposed nonrandomized control group design may be weakened. If the pre-test scores for the experimental and control groups are equivalent, the main effects of history will have been controlled.

DEFINITIONS

Student Development--Student development has been defined as the development of the whole student. But educational practice, according to Terry O'Banion, has narrowly defined those aspects of the students that need development. O'Banion expands the definition of student development. His definition includes the development of the student to the point where he realizes that he has the freedom to choose his own directions for learning and that he is responsible for those choices. According to O'Banion, the development of the whole student includes greater awareness of self and others, greater acceptance of self and others, and increased openness to experience.

Student Development Course--Harold W. Grant describes a student development course as a curricular offering designed to facilitate personal growth by emphasizing the integration of content and process. Grant states, "If we view education as an attempt to structure experiences of persons so that their behavioral development is facilitated in the most efficient manner possible, we must be concerned

17 Terry O'Banion, op. cit., p. 103.
with both the content of behavior and the process by which it is developed.\textsuperscript{19}

\textbf{Humanization}--O'Banion\textsuperscript{20} states that the student personnel program in a community college should do much to humanize the educational process. This humanization process takes place when "students become highly involved with their fellow staff members."\textsuperscript{21} The staff members are able to facilitate freedom of expression, the reduction of defensiveness and a climate of mutual trust between staff and students. The students gain a greater acceptance of themselves as they are. The result of the humanization is that students and staff become "open, supportive, creative, facilitative and innovative."\textsuperscript{22} According to O'Banion, this is the kind of environment humans would prefer to work in if they thought it possible to achieve.

\textbf{Structured Group Experiences in Human Relations Training}--Middleman and Goldberg\textsuperscript{23} refer to "structured, group experiences" in human relations training as an "approach to understanding human interaction in social situations." They describe this training as a "deliberately employed vehicle for creating, in microcosm, particular social situations for learning purposes."\textsuperscript{24} Middleman and

\textsuperscript{20}Terry O'Banion, op. cit., p. 78.
\textsuperscript{21}Ibid.
\textsuperscript{22}Ibid.
\textsuperscript{23}Ruth R. Middleman and Gale Goldberg, op. cit., p. 203.
\textsuperscript{24}Ibid.
Goldberg feel that structured group experiences enable human relations trainers to construct particular conditions for purposes of study. The structured group experience enables the trainers to impose a certain frame of reference, and the frame of reference emphasizes some aspects of the situation and screens out others. According to Middleman and Goldberg, "The social situation is delimited, and a particular focus emerges."25

Experiential Learning--Middleman and Goldberg26 emphasizes the importance of the "here-and-now," of action and reaction in the living moment, as a "potent dynamic" in the experiential learning process. The structured group experiences and the processing of those experiences in the PSY 201 classes at Moraine Valley Community College fit the definition by Middleman and Goldberg for experiential learning.

Emerging Model of Student Personnel Work--O'Banion27 states that the old model which was "rehabilitative (and which) tended the lame and halted the blind," is giving way to a new model which is "facilitative, and turns on the bored, bright and beautiful." Under the new emerging model, O'Banion feels each student must "find his own affairs, to be open to experience, realize his full potential and awaken his own creativity." The new model is described as

25Ibid.
26Ibid.
27Terry O'Banion, op. cit., p. 76.
an "action-oriented program that encounters, facilitates and intervenes." The old model was a series of services for students who wished to use them. O'Banion describes the counselor in the emerging model as the "catalyst" and a "change agent." He says the counselor is a person deeply committed to the full development of the individual. The counselor is the "initiator, producing positive changes in student behavior."29

28Ibid.
29Ibid., p. 9.
SUMMARY

The first chapter presented a rationale for counselors to be involved in student development instruction, provided an introduction to a human relations class taught by counselors at Moraine Valley Community College and stated the hypotheses and limitations of the present study.

Chapter Two will survey selected literature which is related to the Human Growth Potential Movement. In Chapter Two the author will also demonstrate how different aspects of the Human Growth Potential Movement are related to student development instruction and specifically related to PSY 201 as taught at MVCC.

The third chapter discusses the procedures for the study. Chapter Four provides analyses of the data and a summary of the results. Finally, Chapter Five offers this author's conclusions and his recommendations for future studies.
A review of the literature on student development courses reveals that PSY 201 is part of the vast field described by Donald H. Clark as the "Human Growth Potential" movement. According to Clark, the movement is aimed at encouraging human growth that will unlock a greater share of human potential. Clark adds, "The movement is widespread and includes organizations, centers, schools, institutes and publications, as well as unaffiliated workers." Clark states that presently the most representative organization of the movement is the Association for Humanistic Psychology. According to Clark, the two powerful forces in the Human Growth Potential Movement are the Esalen Institute and the National Training Laboratory.

Frederick H. Stoller states that the "development of growth centers such as Esalen has given a setting in which the encounter group is practiced along with a rich variety

---


2Ibid., p. 347.
of approaches."3 The result, Stoller says, has been a broadening and enrichment of the encounter group. According to Morton A. Lieberman, Irvin D. Yalom and Matthew B. Miles,4 some 75 growth centers, many of them spin-offs modeled on the Esalen design, have started around the country.

According to Clark, the National Training Laboratory "began in the roots of group dynamics and flowered into varieties of T-Groups." The accent of NTL, Clark adds, is on "organizational development" as opposed to "personal growth."5 Leland P. Bradford, Jack R. Gibb and Kenneth D. Benne6 state the NTL is primarily interested in developing new avenues for learning with an emphasis on group process as a major focus of interest.

Kenneth D. Benne7 traces the genesis of the Human Growth Potential Movement to a workshop held on the campus


5Donald H. Clark, op. cit., p. 347.


of the State Teachers College in New Britain, Connecticut, during the summer of 1946. The workshop was jointly sponsored by the Connecticut Interracial Commission, the Connecticut Department of Education and the Research Center for Group Dynamics, then located at the Massachusetts Institute of Technology. The aim of the workshop was to develop more effective local leaders in facilitating understanding of the Fair Employment Practices Act under which the Interracial Commission had been created.

Subsequently, the training staff of the New Britain workshop worked with other institutions to plan a three-week summer session in 1947 at the Gould Academy in Bethel, Maine. The joint sponsors for this workshop were the National Education Association and the Research Center for Group Dynamics of the Massachusetts Institute of Technology. One of the features of this session was a small continuing group called the "Basic Skills Training Group," in which an "anecdotal observer made observational data available for discussion and analysis by the group."8

According to Benne, this group planned the program of the Basic Skills Training Group that used for the first time the "T-Group" experience that has evolved into laboratory experiences as we know them today. Benne adds that the T-Group experience is basic to the Human Growth Potential Movement of today.

8Ibid., p. 347.
The movement today, according to Clark, is most visible in its small groups technique. He says that "the use of the small groups...is a technique usually used in conjunction with other techniques." Clark states that groups that focus on "personal growth" are defined by several authors as encounter groups, and groups that focus on organizational development are defined by several authors as laboratory training.

Because "group counseling" is also most "visible in its use of the small groups as a technique" for individuals to "cope with typical developmental problems," this author includes group counseling as part of this review of the human growth potential movement. The survey of the literature in this chapter also will include several authors' definitions of laboratory training, encounter groups and group counseling; the goals of each, and the results of studies made on the outcomes of several groups in each classification. Similarities and differences between laboratory training, encounter groups and group counseling will be pointed out. Also, the author will point out the similarities and

9Donald H. Clark, op. cit., p. 347.


differences between laboratory training, encounter groups and group counseling and the PSY 201 class taught at Moraine Valley Community College. Finally, this chapter will describe student development courses taught in other institutions of higher education across the country.

LABORATORY TRAINING

DEFINITION

According to E. H. Schein and W. G. Bennis, many attempts have been made to characterize the nature of laboratory training, but most of them have not been successful. Schein and Bennis list several reasons for this difficulty. They say:

1) Laboratories vary tremendously in goals, training design, delegate population, length and setting, making it difficult to describe this experience in general.

2) Laboratories attempt to provide a total and integrated learning experience for the participants, making it difficult to communicate in written words the interdependence of the many separate aspects of the laboratory training design.

3) Laboratories intend to provide a learning experience which is, in part, emotional, and to provide the opportunity for the participants to explore the interdependence of emotional and intellectual learning. Without observing the process first-hand, it is difficult to describe and understand the nature of this emotional learning and its meaning to the learner.

---


13Ibid.
Although it is difficult to characterize the nature of laboratory training, several prominent authors have attempted to do so. Collectively, the definitions offered in this text by several authors give the reader insight into the nature of laboratory training.

Dorothy Stock states that the laboratory is "deliberately designed to include lectures on theory, demonstrations and practice sessions, on the assumption that these plus the T-Group constitute an integrated whole." Stock further states that the participants feel that the T-Group experience has the greatest impact, but she warns that the T-Group experience does not necessarily testify to its primary role in learning. Stock says:

The T-Group is aimed toward facilitating learning of a special type: increased sensitivity toward group process, increased awareness of the character of one's own group participation, and increased ability to deal with a variety of group situations.

Bradford, Gibb and Benne define laboratory training similarly to Stock. They see the training laboratory as a "temporary residential community" shaped to the learning requirements of all its members, with the community providing "formal and informal social process events which support and expand learning within the T-Group." Bradford, Gibb and Benne define the T-Group as:

...a relatively unstructured group in which the individual participates as learner. The data for learning are

---


15 Ibid.

within the individual who participates in the session and his immediate experience within the T-Group. The data are the transactions among members...as they work to stimulate and support one another's learning within that society.17

The definition of Schein and Bennis also emphasizes the "experience generated in various social encounters by the learners themselves" in the laboratory. But they add that laboratory training is an "educational strategy which purports to influence the development of learning in individuals and induces change in organization."18

C. Seashore describes laboratory training as a type of "experienced-based learning" in which participants work together in small groups (T-Groups) over an extended period of time. Both Seashore and Bradford, Gibb and Benne emphasize that laboratory training allows the participants to experiment with new patterns of behavior. Bradford, Gibb and Benne state that "new patterns of behavior are invented and tested in a climate supporting change."20 Seashore sees the experience of the laboratory as providing "maximum possible opportunities for the individual to expose his behavior, give and receive feedback, and experiment with new behavior."21

---

17 Ibid., p. 2.
18 E. H. Schein and W. G. Bennis, op. cit., p. 3.
21 C. Argyris, op. cit., p. 145.
The increased understanding of group processes is emphasized in Roy M. Whitman's definition. He sees training in groups of this type as "sensitizing the individual to the group process affecting him, the influence of other individuals to respond to him."22

Whitman's definition of the T-Group also gives special attention to "group dynamics." He defines the T-Group as:

...a collection of heterogeneous individuals who gather for the purpose of examining the interpersonal relations and group dynamics that they themselves generate by their interactions.23

T-Group definitions by John P. Campbell and Marvin D. Dunnette and by Richard L. Burke and Warren G. Bennis focus on the unstructuredness of the T-Group. Burke and Bennis describe the T-Group as a "device where, in an initially unstructured setting, with the usual group controls absent, the members develop group norms, standards, power and friendships."24 Campbell and Dunnette describe the T-Group learning experience as a "small, unstructured, face-to-face group...typically with no activities or topics for discussion planned."25


23Ibid.


GOALS

E. H. Schein and W. G. Bennis find that "laboratory training focuses on the individual, the small group, and the organization" and that "the goals vary with the specific lab." According to Campbell and Dunnette, "the differential emphasis" of the goals of a lab constitutes one of the most important dimensions for distinguishing among variations in the laboratory training sessions and their T-Groups. Campbell and Dunnette feel:

Some groups tend to emphasize the individual's goals of fastening self awareness and sensitivity. Others orient toward the more organizational objectives of understanding interaction phenomena and intergroup processes with the ultimate aim of improving organizational effectiveness.

Whatever the goals are for the specific lab, Gerald Egan states that most professionals engaged in laboratory training maintain that the goals, both general and specific, must remain flexible. According to Egan it is important to allow each group "to create its own goals and to move in fruitful, though perhaps unexpected directions."

---

27John P. Campbell and Marvin D. Dunnette, op. cit., p. 75.
28Ibid.
30Ibid.
Gibb states that the central aim of laboratory training is "to achieve personal competence, group and organizational effectiveness."\textsuperscript{31} Schein and Bennis state that a major training goal is "increased interpersonal competence in the many roles each participant plays."\textsuperscript{32}

Leland P. Bradford, E. H. Schein and W. G. Bennis, and Kenneth D. Benne, Leland P. Bradford and Ronald Lippit all state that an important goal of the lab is learning how to learn. Bradford states that learning how to learn comes from the participants "continuing experience in the areas of self-awareness, sensitivity to phenomena of interpersonal behavior, and understanding of the consequences of behavior—one's own and others."\textsuperscript{33} According to Bradford, learning how to learn leads to "diagnostic and problem solving ability in group development, and the ability to seek and to accept realistic and responsible membership functions."\textsuperscript{34}

Schein and Bennis\textsuperscript{35} list the "learning process" as one of their goals and state that the "how to learn" is achieved by the participants' "own experiences." Benne, Bradford and

\begin{flushleft}

\textsuperscript{32} E. H. Schein and W. G. Bennis, op. cit., p. 11.


\textsuperscript{34} Ibid., p. 194.

\end{flushleft}
Lippit state that learning how to learn comes from "becoming an analyst of one's own process of learning."36

According to Schein and Bennis, several metagoals in laboratory training which are "seldom articulated" are "implicit in the functioning of most laboratory training groups."37 The metagoals of Schein and Bennis are:

(a) a spirit in inquiry or a willingness to hypothesize and experiment with one's role in the world.

(b) an expanded interpersonal consciousness or an increased awareness of more things about more people.

(c) an increased authenticity in interpersonal relations or simply feeling free to be oneself and not feeling compelled to play a role.

(d) an ability to act in a collaborative and interdependent manner with peers, supervisors and subordinates rather than in authoritative or hierarchical terms.

(e) an ability to resolve conflict situations through problem solving rather than through house trading, coercion or power manipulation.38

Campbell and Dunnette39 list several goals that they feel are explicit and are regarded by most authors as the direct outcomes of a properly functional T-Group. They confess that not all practitioners would agree that all T-Groups try to accomplish all of these aims, but they feel that they


38 Ibid., p. 31.

39 John P. Campbell and Marvin D. Dunnette, op. cit., p. 74.
are sufficiently common to most discussions of the T-Group methods. The aims listed by Campbell and Dunnette are:

(a) increased self-insight or self-awareness concerning one's own behavior and its meaning in a social context.

(b) increased sensitivity to the behavior of others.

(c) increased awareness and understanding of the type of processes that facilitate or inhibit group functioning and the interaction between different groups. (Why do some members participate actively while others retire to the background?)

(d) heightened diagnostic skills in social, interpersonal and intergroup situations.

(e) increased action skill... which refers to a person's ability to intervene successfully in inter- or intra-group situations.40

Benne, Bradford and Lippitt state that any laboratory is based on the assumption that "understanding and skills of participation can be learned validly only through processes of participation in which the learner is involved."41

Benne, Bradford and Lippitt list several goals of laboratory training:

(a) increased awareness of and sensitivity to emotional reactions and expressions in the individual and others.

(b) greater ability to perceive and learn from the consequences of his actions through attention to feelings--his own and others.

(c) classification and development of personal values and goals consonant with a democratic and scientific approach to problems of social and personal decision and action.

40 Ibid., p. 75.

41 Kenneth D. Benne, Leland P. Bradford and Donald Lippitt, op. cit., p. 16.
(d) development of concepts and theoretical insights which will serve as tools in linking personal values, goals and intentions to actions consistent with these inner factors and with the requirements of the situation.

(e) achievement of behavioral effectiveness in transactions with one's environment.42

LABORATORY TRAINING AND PSY 201

The lectures on theory, demonstrations and practice sessions referred to by Dorothy Stock are similar to the lectures on theory and structured experiences of the PSY 201 class. The PSY 201 class is one type of experience-based learning in which participants work together in the same small groups during the semester, such as the "experienced-based learning" described by Seashore. The PSY 201 class enables the participants to "experiment with new patterns of behavior" similar to those described by Bradford, Gibb and Benne. In keeping with Seashore's description, the participants of the class "give and receive feedback." However, the PSY 201 class is dissimilar to the unstructuredness of the T-Group as described by Campbell and Dunnette and by Burke and Bennis. The small groups within the PSY 201 classes have "activities and topics for discussion" planned by the instructor throughout the semester.

Several goals of laboratory training that focus on the individual rather than group processes also are goals of the PSY 201 class. "Increased interpersonal competence,"

42Ibid.
referred to by Schein and Bennis as a goal for laboratory training, is also a goal in the PSY 201 class. The metagoal of "an increased authenticity in interpersonal relations or simply feeling free to be oneself," also referred to Schein and Bennis, is the focus of the PSY 201 class throughout the semester. Counselors of the PSY 201 class consistently stress the importance of "sensitivity to the behavior of others" and "increased self-insight or self-awareness concerning one's own behavior," goals referred to by Campbell and Dunnette.

OUTCOMES

Jack R. Gibb\(^43\) identifies several barriers to accurate research on the effects of laboratory training. One problem, according to Gibb, is the inadequacy of theories of training. A second barrier stated by Gibb is the problem of design. He found that training is almost always done under field conditions in which the researchers have been unable to find or construct adequate control or comparison groups.

Schein and Bennis\(^44\) question the results on most of the research done on laboratory training outcomes. They feel that the evidence is "meager" because of the "fantastic difficulties of doing valid evaluation research." Schein and

\(^{43}\)Jack R. Gibb, op. cit., p. 842.

\(^{44}\)E. H. Schein and W. G. Bennis, op. cit., p. 10.
Bennis mention two general problems similar to those mentioned by Gibb. They are:

1. difficulties of achieving rigor of research design in a setting devoted to achieving practical changes and learning goals.

2. difficulties of gathering reliable and valid data. Where human and organizational change is involved it is difficult to determine the kinds of data that would reliably and validly reflect change and learning.45

Campbell and Dunnette46 contend that laboratory training research must be extended beyond "observable changes" to the effect such training has on the individual's organizational performance. They say:

An examination of the research literature leads to the conclusion that while T-Group training seems to produce observable changes in behavior, the utility of these changes for the performance of individuals in their organizational roles remains to be demonstrated.47

Gibb states that some individuals benefit from laboratory training more than others. He found:

Participants who are less dogmatic, more openminded and more open to incoming stimuli presumably are most sensitive to the world of people. Those who are most open to ideas and to expression of feelings gain most from laboratory training.48

Gibb's statement is supported by research reported by Douglas R. Bunker. In a study of an organizational laboratory training program, he found that those who learned most

45Ibid.
46John P. Campbell and Marvin D. Dunnette, op. cit., p. 73.
47Ibid.
in a T-Group and applied their learning most effectively tended to be those who were described by supervisors and peers before the training as being "open to new ideas and to the expression of feelings."49

Yet, in spite of the difficulties and problems in laboratory training research, a great many studies have been made on laboratory training outcomes. In a report made by Matthew B. Miles,50 34 elementary school principals who attended a two-week training laboratory at Bethel, Maine, were treated as the experimental population. Two control groups were used, one a matched pair group nominated by the experimentals and the other a random group drawn from a national directory of principals. The criterion measure included the Ohio State Leader Behavior Description Questionnaire, a peer nomination form and the Group Participation Scale. Results of the study showed sensitivity and diagnostic ability could not be discriminated across instruments. Analysis of variance showed no experimental-control differences on the Leadership Behavior Description Questionnaire or on the Group Participation Scale. Changes resulting from the training of the experimentals seemed primarily associated


with active unfrozen participation at the laboratory and with reception of feedback.

Bunker\textsuperscript{51} did a follow-up study in an effort to determine whether Miles' findings relative to behavior change among school principals could be extended to an occupation-ally diverse, larger group of participants in training laboratories. Bunker studied a sample of 346 participants from six different training laboratories conducted by NTL at Bethel, Maine, in 1960 and 1961. Results indicated that participants were seen by co-workers as increasing significantly more than controls in cognitive openness, behavioral skill and understanding of social process. In addition, it was determined that members of the training group take more risks, receive more feedback and make more adaptive behavioral adjustments than others.

Gordon Lippitt and Jack R. Gibb both studied the effects of feedback on changes in individual behavior. In a study by Lippitt,\textsuperscript{52} data was collected about the ways each person was perceived by his fellow members and the ways in which they would like him to change in terms of his frequency of participation, the degree to which he welcomed or resisted the ideas of others, and the extent to which he sought attention or avoided recognition. Thirteen out of 14

\textsuperscript{51}Douglas R. Bunker, op. cit., p. 131.

\textsuperscript{52}Dorothy Stock, op. cit., p. 429.
persons who received feedback changed in the direction the group wanted them to change.

Gibb\(^53\) and his associates conducted a series of related laboratory studies which investigated the effects of feedback on group process. The results showed that groups which received feedback differed from those which did not in that members felt more favorable toward the group, displayed a higher level of appreciation for their groups, and expressed more negative feelings.

Burke and Bennis\(^54\) studied the impact of laboratory training on changes in the perception of self and other group members. A Group Semantic Differential test was devised and administered twice to each member of six T-Groups, near the beginning and toward the end of the three-week laboratory. According to the test results:

Perception of self and ideal self tended to converge, mainly because of changes in the way self was perceived rather than in the way self was concentrated, and that the way people see themselves and the way in which they are seen by others becomes more similar over time.\(^55\)

William C. Schutz and Vernon L. Allen\(^56\) studied 71 participants in the 1959 Western Training Laboratory in

\(^{53}\)Ibid., p. 430.

\(^{54}\)Ibid., p. 426.

\(^{55}\)Ibid.

Human Relations. The control group was a class of 70 students in an education class at the University of California, Berkley. The lab included lectures, films and discussion on theoretical material presented by staff members. The FIRO-B questionnaire was administered before and after the lab and six months later. Results supported the hypothesis that as a result of the lab the "overly dominant become less dominant," the "overly submissive become more friendly." The most pronounced changes occurred during the first six months after the laboratory. Schutz and Allen also reported that since the pre-test scores of the control group differed significantly from those of the WTL group, the University of California education class may not have been an appropriate control group.

Eugene B. Nadler and Stephen L. Fink studied 41 college students from a large Midwestern university. The students gathered for five days of laboratory training for the purpose of improving their interpersonal and leadership skills. A pre-test and post-test comparison showed a "highly significant shift in a democratic direction on each of four different scales measuring aspects of democratic attitudes." No control group was used in Nadler and Fink's study.

---

John L. Hippie's study attempted to assess if laboratory training had differential effects on male and female college students. Hippie hypothesized that female participants would make significantly more personal growth gains than male participants. Two off-campus training laboratories were conducted. Each laboratory lasted three days with 24 hours of scheduled T-Group, theory sessions and focused exercises. From the total number of students who applied, 79 students (40 male and 39 female) were selected. Those who were not selected were asked to participate in the control group. The Interpersonal Relations Rating Scale (IRRS), FIRO-B and the Self-Disclosure Questionnaire (SDQ) were administered before the lab and six weeks after. There were no significant differences between the two groups on any of the scales of the SDQ. On the IRRS the participants described themselves more positively after their laboratory experience than did the non-participants.

In spite of the main effects on outcomes of the laboratory participation, Hippie rejected the hypothesis that female participants will make significantly greater personal growth gains than males as a result of participation in a human relations laboratory. Hippie found:

...a total of six different items on the IRRS—and none of the FIRO-B or SDQ scales were significantly different

---

when males were compared to females. The changes in the positive direction of the IRRS items could well be accounted for by chance. The significant others who evaluated the participants in the back-home situation also found no differences between males and females.\(^{59}\)

Hippie concluded that his results supported the conclusions drawn by Lieberman, Yalom and Miles that there are few, if any, differences between male and female participants.

Marvin D. Dunnette and Robert J. House have reported about studies conducted to assess possible personality changes resulting from laboratory training. House\(^{60}\) states that a well-designed, controlled experiment conducted by J. Kernan produced contradictory and confusing results. Kernan employed two experimental and two control groups, each consisting of 23 persons. He found no mean changes in responses to measures of authoritarian attitudes, in opinions towards the use of different leadership styles or in the Thermatic Apperception Tests of tolerance, toughness, friendliness, interpersonal problems, dominance and nurturance.

Dunnette\(^{61}\) states that Massarik and Carlson administered the California Psychological Inventory before and after 48 hours of laboratory training for 70 business students. They found only minor changes in the expected

---

\(^{59}\)Ibid., p. 163.


\(^{61}\)Ibid., p. 10.
direction of increased spontaneity, and slightly lowered overall use of control.

Dorothy Stock asks and answers the question, "How many people gain from laboratory training, and what do they learn?" She reports that usually 60% to 75% have been shown to gain from such an experience, but she also warns that there is a problem in interpreting such figures.

Stock states:

...an individual who is already quite effective when he arrives at the laboratory may show no change, and for others some of the most important changes may not show in behavior and, therefore, may not be visible to others.

Stock reports that all of the following have been shown to be influenced by laboratory training:

...various perception of the self, affective behavior, congruity between self perception and ideal self, self insight, sensitivity to the feelings or behavior of others, role flexibility, sensitivity to group decisions, diagnostic ability, behavioral skill, utilization of laboratory techniques, self confidence and approach to diagnosing organizational problems.

But, Stock adds, "These factors have also been shown to change for some people under certain conditions." She says, "What the individual is like when he comes to the laboratory seems to have a great deal to do with the learning he takes away with him." Stock suggests that "conflict

62 Dorothy Stock, op. cit., p. 433.
63 Ibid.
64 Ibid.
or some internal awareness or lack of it or consistency" have something to do with readiness for learning."65

Harrison has hypothesized that "individuals so threatened by confrontations with dissonance...are likely to close themselves off from opportunities to learn at "laboratory training sessions."66 Miles reports that "threat-oriented individuals are less receptive to feedback of certain kinds."67 Watson suggests that "responsive, outgoing persons are more likely to apply laboratory learnings."68 Lieberman's69 studies suggest that the particular emotional culture which develops in the group may facilitate learning for certain personality types but may make it more difficult for others. Finally, according to Stock, the evidence thus far suggests that "characteristics of the back-home job situation or the individual's role in his organization is a less potent factor in the participant's ability to learn."70

65Ibid., p. 434.
66Ibid.
67Ibid.
68Ibid.
69Ibid., p. 435.
70Ibid.
ENCOUNTER GROUPS
DEFINITION

Gerald Egan\textsuperscript{71} defines Encounter Groups as a particular kind of laboratory training in which personal and interpersonal issues are the direct focus of the group. Unlike the focus of the laboratory training seminars, according to Egan, learning about group processes and developing skills for diagnosing groups and organizational behavior, although not eliminated, are incidental to the central issue of dealing with personal and interpersonal deficiencies and potentialities. Egan feels that an encounter group provides its members a unique opportunity for responsible learning about themselves on intrapsychic and interpersonal levels.

Carl Rogers describes the process of the encounter group in the same terms as client-centered therapy. He states:

\ldots in spite of ambivalence about the trustworthiness of the group, expression of feelings does assume a large portion of the discussion.\textsuperscript{72}

Rogers feels that common threads run through encounter groups. First, he identifies a "psychological climate of safety in which freedom of expression and reduction of  

\textsuperscript{71}Gerald Egan, op. cit., p. 10.

defensiveness gradually occurs." Following this, according to Rogers, a "climate of mutual trust develops out of a mutual freedom to express real feelings." With the reduction of defensiveness, Rogers says, "individuals, with the feedback from one person to another, learn from each other."73

Leonard Blank, Gloria B. Gottsegen and Monroe B. Gottsegen74 state that the encounter movement is a reaction by human beings against a sense of mechanization and automation. They further state that the encounter movement has been influenced by the "existential stress on meaningfulness, involvement and immediacy" and by the "humanistic emphasis on maximizing human potential, development, and communication and respect for other humans."75

Terry O'Banion and April O'Connell76 also define the encounter group movement in existential and humanistic terms. They describe the encounter group as a series of human encounters. Each human encounter, they say, is a dynamic relationship between the individuals involved in an

73Ibid., p. 7.


75Ibid.

actual one-of-a-kind event in which what occurs is relevant to the existential moment. They also say, "When encounters occur repeatedly between the same persons there is added each time a new dimension to the relationship: new areas of being together are being explored, or deeper levels of understanding are being reached."  

For O'Banion and O'Connell, self-revealment is an important aspect of the encounter group process. The self-revealment, they say, leads to "involvement, belonging"... and to an "exciting discovery of your awareness of your uniqueness from all others at the deepest level of your being."  

Robert House states that "the encounter groups utilize such methods as inducing anxiety, stimulating interpersonal feedback, introspection and self-evaluation." He warns that, "although the encounter groups are not primarily therapeutic, such methods closely approximate methods used in therapeutic processes."  

Robert W. Siroka and Ellen K. Siroka found that the encounter group "basically teaches the total psychic involvement of men in his life." They say that the group itself

77 Ibid., p. 17.  
78 Ibid., p. 45.  
79 Gerald Egan, op. cit., p. 10.  
becomes the "model" and that members are often encouraged to develop among each other relationships of an emotional nature.

E. H. Schein and W. G. Bennis state that several factors distinguish encounter groups from laboratory training. Most laboratory training seminars have more structure than encounter groups. The encounter groups usually are non-task oriented, while most laboratory training seminars are more task-oriented. Laboratory training has focused exercises to generate some specific behavior so that a particular area can be studied, or to practice some skill which is important for further learning. The background of group leaders in laboratory training differ from those in the encounter group movement. Joseph L. Kleemann says:

The strong commitment to task organization on the part of the staff of social psychologists at the National Training Laboratory was, in part, what caused others to break away from the laboratory method to experiment with unstructured and non-task oriented group experiences.

But, Kleemann adds, the T-Group experience in laboratory training is not easily distinguishable from the encounter group.


GOALS

In general terms, Carl Rogers\textsuperscript{83} emphasizes "personal growth and the development and improvement of interpersonal communication and relationships" as goals of the encounter group process. But, according to Rogers, the group members are to develop their own individualized goals rather than having some present goals such as "happiness, joy and effective organizational behavior."

Siroka and Siroka simply say that the encounter group is a place "to learn to encounter others." They state that the goal is "to express feelings, seek confrontation and plunge oneself into an interpersonal experience, and to learn from the concrete situation."\textsuperscript{84}

According to Lieberman, Yalom and Miles,\textsuperscript{85} researchers on human relations training have tended to employ a wider range of outcome measures than has been customary in educational or therapeutic research. The outcome measures of researchers give some indication of the many specific goals of encounter groups. For example, Gibb has organized research on the effects of human relations training under

\begin{itemize}
  \item \textsuperscript{83}Carl R. Rogers, op. cit., p. 10.
  \item \textsuperscript{84}Robert W. Siroka and Ellen K. Siroka, op. cit., p. 83.
\end{itemize}
six-major rubrics":

sensitivity (greater awareness of the feelings and perceptions of others); managing feelings (awareness and acceptance of the feeling components of one's own actions); managing motivations (e.g., clear communications of one's own motives to others); functional attitudes toward self (self acceptance, self esteem); functional attitudes toward others (e.g., decreased authoritarianism; prejudices, collaborative orientation); and interdependent behavior (e.g., interpersonal competence, teamwork). 86

ENCOUNTER GROUPS AND PSY 201

The PSY 201 classes are similar to the encounter groups described by Egan in that the classes are a particular kind of laboratory training in which "personal and interpersonal issues" are a focus of the class. Any discussion in the class about group processes, as suggested by Egan, is "incidental to the central issues of dealing with personal and interpersonal deficiencies and potentialities."

Anyone who has taught the class observes what Rogers observes in encounter groups. In the class a "climate of mutual trust develops out of a mutual freedom to express feelings." Also, one observes the "involvement and belonging" of a student to his small group. The methods utilized in encounter groups described by House as "stimulating interpersonal feedback, introspection and self-evaluation," also are utilized in the PSY 201 class.

Several goals of encounter groups are congruent to the goals of the PSY 201 class. Rogers emphasizes "personal

86Ibid.
growth and the development and improvement of interpersonal communication and relationship" as a goal for encounter groups. Each counselor who teaches PSY 201 emphasizes this goal. Siroka and Siroka state that the encounter group is a place "to learn to encounter others," "to express feelings," "to plunge oneself into an interpersonal experience" and "to learn from the situation," and the PSY 201 class is such a place.

OUTCOMES

Perhaps the most thorough study on encounter groups has been conducted by Lieberman, Yalom and Miles at Stanford University. Eighteen groups representing ten approaches to personal change were comprised of Stanford undergraduates during the winter quarter of 1969. Common to all ten approaches was the attempt to provide an intensive group experience.

The original treatment group was comprised of 209 students. Forty of the 209 experimental dropped out of the groups over the three-month treatment period. A control group of 69 was comprised of 38 students who had registered for a Race and Prejudices course but could not be accommodated in the encounter groups and of 31 students who were randomly selected from names generated through a questionnaire which had asked participants to name six friends who "may have an interest in the group experience."

87Ibid., p. 21.
Each of the 18 groups had its own unique experience. The number of sessions differed with each group, and the length of each session varied with each group. Some sessions lasted two or three hours; other sessions lasted as long as 18 hours.

An overwhelming majority of participants saw the group experience as constructive. Seventy-five percent reported immediately after that they felt a positive change in themselves as a result of the group experience. Of these, 75% expected the change to be lasting.

According to Lieberman, Yalom and Miles, the magnitude of the differences between the experimental population and the control subjects was not impressive. Of those who entered the groups, approximately a third showed positive gain, and a little more than a third showed no change. The remainder underwent some form of negative experience.

The most powerful change discriminative between experimental and control was in the self-system area. At the end of the experience, participants saw themselves as more permissive and less honest, with a greater self-ideal congruence in the interpersonal area.

---


Lieberman, Yalom and Miles add that there were extensive differences among the groups. Some groups had almost no impact on the participants. Other groups affected nearly every member of the group. The most disturbing finding was that four to eight months after the group experience, 9.4% of the participants who completed the experience showed evidence of negative outcome.

Although no data were offered to support their statement, Lieberman, Yalom and Miles found that the laboratory experiences did not affect men and women differently.

Lieberman, Yalom and Miles concluded:

The overall encounter groups show a modest positive impact, an impact much less than has been portrayed by their supporters and an impact significantly lower than participants' view of their own change would lead one to assume.

Carl Rogers conducted a special program at Immaculate Heart College and Western Behavioral Sciences Institute. The major purpose of the program was to utilize the encounter group, intensive group experience to bring about self-directed and self-perpetuating change in an educational system. The program was conducted over a two-year period

90 Ibid., p. 132.


from August, 1967, to June, 1969. A series of intensive workshops were held with administrators, students, faculty and parents. In these workshops they attempted to improve communication, and to bring about more openness to educational innovation and organizations of innovation.

The primary data-gathering method was a case study design with heavy emphasis on observation and interviewing. The major conclusions of the evaluation were:

1) The most positive responses to the encounter experiences come from those who knew what to expect.

2) The number of people able to integrate an intensive group experience in a way that significantly affected interpersonal behavior was relatively small.

3) The level of response and later integration of the intensive group experience by college students was qualitatively different from that of faculty and administration.

4) Not a single case of severe, long-term disability as a function of participation in the intensive experience was documented.93

James Belout and Barry Gordon94 studied more than 1,000 encounter group participants as part of a four-year research project. They investigated the value of encounter groups for personal and interpersonal growth. They found:

...self esteem increases, the self-concept changes in many positive directions, self-actualization tendencies are greater, alienation is reduced, and individual problems are lessened; interpersonal relations become

93Ibid., p. 283.

more empathetic and improve, and interpersonal values change toward a more realistic supportiveness; people become close with each other and feel less lonely.95

Although Belout and Gordon examined the laboratory gains of men and women separately, they did not compare them with each other.

James P. Trotzer and William A. Sease96 studied 70 volunteers from the residence halls at the University of Colorado. They participated in seven encounter groups, with 10 to 12 participants in each group. They were assigned to their groups randomly by sex. Trotzer and Sease utilized Campbell and Stanley's experimental post-test design to find that participants in the encounter group experience did not effect any measured change in members' self-concept that was different from those in the controls.

GROUP COUNSELING
DEFINITION

Although some individuals who participate in encounter groups and/or laboratory training come to these activities because of problems they face in their daily living, the definitions offered for encounter groups and laboratory training emphasize the growth-oriented activities in each.

95Ibid.

Contrary to this, the definitions offered for group counseling emphasize the problem-solving activities of these sessions.

In his definition, Clarence Mahler says that the "process may be concerned with a particular problem, with life patterns, with identity seeking, or with a combination of these areas." Don C. Dinkmeyer and James J. Muro define group counseling as "an interpersonal process...conducted with individuals who are coping with typical developmental problems." George M. Gazda and Mary J. Larsen characterize the group counseling as involving basically normal individuals who come to small-group sessions to share concerns.

Although the focus on much of the group counseling sessions is problem solving, further exploration of these definitions reveal some growth-oriented activities that may lead to the solutions of these problems. Many of these activities focus in on the participants' values, goals and attitudes and on their own and other people's behavior. Mahler sees group counseling as a:

..."helping process which is aimed at aiding individuals to better understand their own and other people's behavior...Within the counseling session individuals can explore both the meaning of behavior and new ways of behaving." 100

98 Don C. Dinkmeyer and James J. Muro, op. cit., p. 57.
99 George M. Gazda and Mary J. Larsen, op. cit., p. 57.
100 Clarence Mahler, op. cit., p. 10.
Dinkmeyer and Muro\textsuperscript{101} state that the group process permits the individual to examine and share self with others by focusing on thoughts, feelings, attitudes, values, purposes and goals of the individuals in the group. Gazda and Larsen\textsuperscript{102} find that the group counseling process enables the participants to increase understanding and acceptance of values and goals and to learn new attitudes and behavior.

Mahler feels that participants of group counseling will experience growth activities. He feels these activities can help people learn to be "more natural, less defensive, more open to the richness of feelings, with increasingly deeper capacity to enjoy living and experience." In addition, he states that group counseling "provides an opportunity for participants to examine their feelings and attitudes and the ideas they have about themselves and the world."\textsuperscript{103}

Cornelius L. Golightly,\textsuperscript{104} a philosopher, sees group counseling as part science and part philosophy. He says, counseling is the practical art of making rational decisions about values. He complains:

Group counseling readily recognizes its dependence on professional science for empirical knowledge about fact

\textsuperscript{101}Don C. Dinkmeyer and James J. Muro, op. cit., p. 57.
\textsuperscript{102}George M. Gazda and Mary J. Larsen, op. cit., p. 57.
\textsuperscript{103}Clarence Mahler, op. cit., p. 11.
and theory but tends to ignore the analytic contributions of professional philosophy for understanding the nature of value and value theory.105

Merle M. Ohlsen106 writes that group counseling and laboratory training are similar in that reinforcement and feedback are crucial teaching tools in each. But Ohlsen also notes several differences:

1) T-Groups in laboratory training tend to be less carefully structured than the counseling groups.

2) T-Group leaders tend to feel that part of the benefits come from members developing a meaningful group relationship.

3) T-Groups tend to give more attention to the analysis of interaction among members and to the study of group processes, and to the appraisal of their own group effectiveness.

4) T-Groups tend to stress confrontation and interpretation of behavior, whereas counseling groups tend to stress empathy with the support for fellow clients.107

105Ibid.


107Ibid.
GOALS

According to Dinkmeyer and Muro, a certain kind of environment needs to exist if the goals of group counseling are to be achieved. They contend that the environment must include:

...a leader who is concerned with establishing a relationship which is both accepting and permissive, and at the same time confronting and encountering insofar as it creates a setting in which the individual sees himself and receives genuine feedback. The leader needs to be a congruent sender as well as a reflective listener.

The goals listed by Dinkmeyer and Muro reflect both the problem-solving and the growth-oriented activities of group counseling. According to Dinkmeyer and Muro, the general goals of group counseling are:

(a) to help each member of the group know and understand himself.
(b) to develop increased self acceptance and feeling of personal worth.
(c) to develop sound skills and interpersonal abilities.
(d) to develop increased self-direction, problem-solving and decision-making abilities.
(e) to develop sensitivity to the needs of others.

Merle M. Ohlsen lists several goals of counseling that are therapeutic in nature. He talks about group counseling a way of helping the client to overcome feelings of isolation and to develop hope for improved adjustment.

108Don C. Dinkmeyer and James J. Muro, op. cit., p. 9.
109Ibid.
110Ibid., p. 10.
111Merle M. Ohlsen, op. cit., p. 118.
Ohlsen also mentions some goals that are much less therapeutic in nature, such as enhancing self esteem, increasing acceptance of self, and helping each client to express his real feelings.

GROUP COUNSELING AND PSY 201

Unlike most group counseling sessions, the structure of the PSY 201 class minimizes the amount of time the class may spend on the problems of the students in the class. Some time may be spent on a student problem as it is related to the same or a similar problem that the student may have experienced in the activities of the class.

Golightly's point on the need for a better understanding of the nature of value and value theory is well taken. PSY 201 students discuss competing theories on human behavior to better understand their own behavior as well as the behavior of others. The one goal mentioned by Dinkmeyer and Muro that is emphasized in the PSY 201 class is "developing social skills and interpersonal abilities."

OUTCOMES

Gazda and Larsen\textsuperscript{112} did an extensive survey of more than a hundred studies on group counseling. They found from their examination of the outcome research that some positive change or growth was reported in about half the studies. Of

\textsuperscript{112}George M. Ohlsen, op. cit., p. 118.
those studies that utilized a grade-point average and/or academic achievement as a criterion in the study, 50% showed significant increases or improvement, and an equal number showed no significant improvement. Self-concept improvement and related "self" variable changes were reported in about 20% of the studies. Gazda and Larsen concluded that group counseling research is inconclusive.

Morris L. LeMay113 reviewed 60 studies of counseling that used group techniques, including studies in vocational counseling, academic recovery and orientation to college. He concluded that although the effectiveness of group procedures in counseling has not been empirically demonstrated with any degree of regularity, its potential has been demonstrated.

Walter A. Dickenson and Charles B. Truax; Charles A. Speigler, Henry Weitz and J. Peter Denny; Stuart H. Gilbreath, and D. H. Hart all found positive changes in college underachievers as the result of group counseling. Dickenson and Truax114 evaluated the effects of "time limited group counseling" upon the college underachievers by contrasting with a group receiving no counseling. The 24 experimental students who received group counseling showed greater improvement in grade-point average than the 24 matched, non-counseled


control subjects. Further, those counseled subjects who received the highest therapeutic conditions tended to show greater improvement.

Gilbreath\textsuperscript{115} studied the effects of two group counseling methods on the personality characteristics that typify the male academic underachiever and on the grade-point average. The two methods were leader-structured and group-structured. Men in the leader-structured groups increased in ego strength more than those in the control group and had a significantly greater rate of positive change in grade-point average than men in either the group-structured or control groups.

D. H. Hart\textsuperscript{116} also studied the effects of two types of group experiences on academic achievement of college underachievers. The two methods were defined as "affective" and "cognitive." The "cognitive" approach emphasized improvement in study skills, and the "affective" approach stressed personality dynamics and personal problems. Hart found significant positive differences in grade-point average between the affective group and the controls, but not between the affective and the cognitive groups.


Charles D. Speigler, Henry Weitz and J. Peter Denny\textsuperscript{117} studied college freshmen with high anxiety scores who were invited to participate in counseling groups designed to help them make more effective adjustment to college life. Of the students who volunteered, half were seen weekly in group counseling sessions during the first semester; the other half served as a control group. Those anxious freshmen who regularly attended group counseling sessions showed more improvement in their academic performances than students who were not counseled or did not regularly attend counseling.

William J. Chestnut\textsuperscript{118} found that college underachievers who received group counseling did no better or worse in academic performance than those in comparison or control groups. Chestnut studied 683 freshman and sophomore male students with a grade-point average below 2.0. The experimental group, all volunteers, participated in eight group sessions of 1\frac{1}{2} hours each. The two types of treatment for the experimental group were counselor-structured and group-structured. In the counselor-structured groups the counselor presented the topics for discussion. In the group-structured sessions material spontaneously originated within


the group. Chestnut's results showed no significant differences between counselor-structured and group-structured groups and no significant differences between both groups and a control group.

Walter H. Abel\textsuperscript{119} studied male students with less than a C average at other institutions who were placed on probation when admitted to Transylvania. The probationary transfer students were subjected to group counseling. Compared to a control group of matched students, more of the probationary experimental students persisted in college and had a significantly higher grade-point average.

David W. Goodman; Gretchen Crafts, and Jeri W. Leib and William U. Snyder studied the effects of group counseling on self-concept improvement and/or self variable changes. Goodman\textsuperscript{120} studied the impact of group-centered counseling on the psychological openness of a selected group of students who were pre- and post-tested with the Rokeach Dogmatic Scale --Form E. With an analysis of covariance, Goodman found no significant differences between experimental and control groups.

Crafts\textsuperscript{121} compared the effects of group counseling and reading skills instruction on an experimental group with the


\textsuperscript{121}Gretchen Crafts, "The Effect of Group Counseling on Self-Concept and Reading Improvement of Selected Community College Students," \textit{Dissertation Abstracts} XXXV (1975), p. 4181.
effects on a control group that received reading skills instruction only. In a pre-test and post-test design, using the Tennessee Self-Concept Scale, she found a significant difference for students in the experimental group.

Lieb and Snyder measured 28 underachieving college students for self-actualization. These students withdrew from their remedial study skills psychology classes. Half participated in a group counseling session and half participated in highly structured lecture sessions for the remainder of the semester. Significant increments in self-actualization and grade-point averages occurred in the two groups as compared to the students who remained in the remedial study skills psychology classes. However, there were no significant differences between lecture and discussions groups.

Whether human growth potential experiences are a form of education and can be included in student development courses depends on how education is defined. Donald H. Clark says:

> The original meaning of the word educate is to lead, draw or bring out what is in the person. It means drawing on the potential that an individual has, discovering it, and refining it.\(^{123}\)

Terry O'Banion states that education should not be a "pouring into." Instead, he says, it should be a "means of providing a learning climate in which the greatest possible development of potential and fulfillment can take place."\(^{124}\)

Many advocate that old educational practices must be reviewed and new directions must be considered. Carl Rogers warns that "a new way must be found to develop the educational system so that each component of the system provides a climate conducive to personal growth."\(^{125}\)

Martin Tarcher says:

> The times call for new social goals, new values assumption, new institutional arrangements that will allow us

\(^{123}\)Donald H. Clark, op. cit., p. 349.


to complete our unfinished war against scarcity and move beyond production to the development of human potential.126

Nevitt Sanford writes:

The time has come for us to control our zeal for imparting knowledge and skills, and to concentrate our efforts on developing the individual student.127

Sanford suggests that this can be done by offering programs that promote an "identity" based on qualities such as "flexibility, creativity, openness to experience and responsibility."128

Harold W. Grant129 contends that in higher education the focus has been almost exclusively on content. Grant suggests that educators focus on the process by which the content behavior was developed.

Matthew B. Miles states that no amount of classroom concern with "cognitive change can observe the fact that the student is always learning as a whole person."130 Miles says,

...attitudinal, values-related and behavioral change are proceeding simultaneously with the cognitive changes...


128Ibid., p. 9.


The schools must be as concerned with man's feelings, doing and acting—along with others—as they are with man's thinking.131

According to O'Banion,132 if the educational process is to be changed so that human beings can "grow and flourish," then a concern for human development must become a central focus of education. To achieve this change O'Banion contends that the student must become the subject matter and in some cases the student should be the subject matter entirely. Matthew B. Miles states that group participation is a "valuable subject matter in its own right—subject matter which deserves an important place in the general education of our people."133

According to Clark134 the human growth potential experiences are most educational when the primary focus of the experience is exploration. Clark says:

"Exploration is the focus when participants are offered the opportunity to find what lies beyond their self-imposed boundary walls of self-concept.135

O'Banion136 suggests that teaching student development courses is one way to change the educational process so that human beings can "grow and flourish." Clark is supportive

131 Ibid.
133 Matthew B. Miles, op. cit., p. 471.
134 Donald H. Clark, op. cit., p. 352.
135 Ibid., p. 349.
of O'Banion in this when he says human growth potential techniques are being used by instructors "from nursery to graduate school" and that these new courses "represent the primitive links between the education of today and the education of tomorrow."  

According to O'Banion, "a course in student development is a course in introspection: the experience of the student is the subject matter."  

Rachel D. Wilkerson states that in student development courses students should examine their experiences.

For O'Banion a student development course provides each student with opportunities to:

(1) examine his values, attitudes, beliefs and abilities and how these affect the quality of his relationship with others; (2) examine the social milieu— the challenges and problems of society— and how it relates to his development; (3) broaden and deepen a developing philosophy of life.

Similarly, Wilkerson describes a student development course as an experience in which students look at their "goals, beliefs, attitudes, interpersonal relationships, and relate these to the world or community problem."

---

137 Donald H. Clark, op. cit., p. 137.
138 Terry O'Banion, op. cit., p. 662.
140 Terry O'Banion, op. cit., p. 662.
141 Rachel D. Wilkerson, op. cit., p. 15.
O'Connell, a student development course is a course in which students focus on themselves, on the perceptions of where they live, and their journey through the world. Grant says that some student development courses may develop from ad hoc curriculum ventures which may fill gaps in the existing curriculum.

Terry Ludwig suggests a design for student development courses based on data compiled from a questionnaire sent to "experts" in the student development field. His data showed that the student development course characteristics with the greatest desireability were utilization of the students' experiences as course content, small class size and granting of academic credit for the courses. Objectives for student development courses with the greatest desireability, according to Ludwig, were encouraging personal growth and development, helping students plan personal changes by using their strengths and abilities, and creating a supportive environment in which the students can learn skills in communicating with others. Ludwig found that practices with the greatest desireability were group processes used to build trust, increase self-insight and generate feedback.

---


143W. Harold Grant, op. cit., p. 196.

STUDENT DEVELOPMENT COURSES ON COLLEGE CAMPUSES

Recently, several student development courses have become popular in pre-elementary and pre-secondary education training curriculums. Richard R. Harden\textsuperscript{145} did a study on a student development course (Educ 300) for teachers in training at the University of Pittsburgh. The course utilizes reflective exercises and discussion of them as a means of promoting a "subjective and inductive process." Harden compared this mode of instruction to the conventional mode of instruction of lectures and discussion of case studies for the same course. Using four standardized tests, he found no significant differences of affective or content knowledge. Harden concluded that the experiential mode appeared to be as effective in teaching content knowledge as a more traditional approach.

Whiton S. Paine\textsuperscript{146} reported on a student development course, Educ 300, taught at the University of Maryland. The course utilizes the affective and experientially-oriented small group format that has been developed in non-academic contexts such as workshops and training conferences. When Paine compared this class to the traditionally taught


Education 300 class, he found that the experimental students reported more learning, more satisfaction with course procedures and more participation. The experimental students also did significantly better on weekly multiple-choice tests.

Shirley Ann Purinton\textsuperscript{147} relates that two human relations modules, one on group course observations skills and one on attending behavior skills, were introduced into two sections of a pre-service elementary education course at Florida State University. In comparing the experimental group with a control group of students in the same course without the human relations modules, Purinton found that the experimental students' scores for discrepancy between their self-concept and their goal self-concept decreased significantly. The experimental students also made observable gains in their ability to use specific human relations skills.

Dorothy Sue Slaten\textsuperscript{148} reported on the effects of a small group laboratory method of an Education 300 Student Development and Education course at Washington State University. Slaten used the FIRO-B and other selected instruments to measure warmth of interpersonal relationships, application of principles and recall of facts. A comparison of the


experimental groups with students who attended the Education 300 class that used the traditional methods of lecture and discussion revealed no significant differences in outcomes.

Donald H. Clark\textsuperscript{149} describes a student development course taught since 1969 at Herbert H. Lehman College of the City University of New York. The course, listed in the catalog as Education 207, Human Relations, is an introductory course in a teacher education program and includes the study of attitudes and behavior patterns affecting human relations in the schools. The course emphasizes development of the personal awareness of future teachers with respect to social, cultured and social conflicts and interactions in urban centers. Group dynamic techniques such as sensitivity training and role playing are used.

Martha McBride\textsuperscript{150} states that at Southern Illinois University, a student development course for two hours of credit is offered to resident assistants in on-campus residence halls. The class consists of nine two-hour sessions. Included in the sessions are didactic and experiential training in responsive conditions and initiative dimensions. McBride compared an experimental group of 12 resident assistants who attended the specially designed class for the assistants with a control group of 10 resident assistants at the same residence halls. Results indicated that the

\textsuperscript{149}Donald H. Clark, op. cit., p. 156.

two-credit hour class has a significant positive effect on
the helping skills of the resident assistants who attended
the class.

Daniel I. Malamud teaches a student development
course (Workshop in Self-Understanding) in the School of
Continuing Education at New York University. The course
accommodates groups of 30 adults who vary widely in age and
educational background. The class meets once a week for 15
weeks, and each session lasts for about two hours. Students
also meet once a week without the instructor.

Malamud reports that "self confrontation exercises are
the chief vehicle of movement" in the class. He says that
the exercises are structured activities in which the instruc-
tor encourages the students to involve themselves with a
blend of playfulness, curiosity and risk-taking. Although no
formal evaluation of the course has been made, Malamud feels
that self confrontation exercises offer opportunities for
learning in a personalized, first hand way and that expanded
self-awareness is possible through focusing on what one is
experiencing in the here-and-now.

Recently, a University of California undergraduate
course on the psychology of personal and social development
underwent some methodological changes. Added to the tradit-
tional lectures during the fall and winter quarters were

151Daniel I. Malamud, "The Second Chance Family: A
Medium for Self-Directed Growth," Confrontation: Encounter in
Self and Interpersonal Awareness, eds. Leonard Blank, Gloria
B. Gottsegen and Monroe G. Gottsegen (New York: The Macmillan
weekly encounter groups, and substituted for the lectures in the Spring quarter were the encounter groups. Summer B. Morris, Jack C. Pflugrath and John R. Emery¹⁵² found that students reported that the addition of the encounter groups to the lectures increased their involvement in the course and made it a much more meaningful and relevant experience when compared with other college courses already taken. Students who participated in the class which included the encounter groups scored as well as those in the traditional lecture class.

The recent development of the community college system in higher education has produced student development courses in their curriculum offering as well. Joseph Fordyce originated at Santa Fe Junior College in Gainesville, Florida, a student development course titled "Behavioral Science 100." The course is a core course in the general education curriculum. Terry O'Banion and April O'Connell¹⁵³ write that the course was originated because the students wanted an educational experience relevant to their existing situation and because the course was a vehicle through which the student personnel staff could come into close contact with students rather that wait for the students to come to them. A pilot course identical to the "Behavioral Science" course


¹⁵³Terry O'Banion and April O'Connell, op. cit., p. 35.
offered at Sante Fe was initiated at the University of Illinois at Urbana in the spring of 1972 under the supervision of Terry O'Banion.154

James McHolland155 describes a student development course, titled Human Potentials Seminar (HPS), offered at Kendall Junior College, Evanston, Illinois. The course is designed to help the student increase in self-affirmation, self-determination, self-motivation, and empathetic regard for other persons. McHolland states:

We address ourselves to the need for human intimacy, the joy of being heard, the experience of goal satisfaction and success, personal value clarification, acknowledging of personal strengths, identifying and resolving personal conflicts in terms of one's own values and planning a life style based on one's strengths and values.156

Joseph L. Kleemann157 studied eight colleges conducting HPS according to the Kendall College model. Available classrooms of non-HPS peers were used as control groups. Using a non-randomized control group design, Kleeman found that at the end of the one-term treatment period the experimentals' general regard for others was significantly different in a positive direction from the controls.

154Joseph L. Kleeman, op. cit., p. 54.
156Ibid.
Ben Thomas Haygood\textsuperscript{158} used the Personal Orientation Inventory and the balance F. Scale to determine if student development instruction at an urban community college in the Southwest influences students' self-actualization, existentiarity, self-regard, self-acceptance, capacity for intimate contacts, grade-point average and authoritarian attitude. Activities in the student development course included encounter groups and tracing the history of the small group method. Haygood found no significant change when he compared a control group of students enrolled in a psychology course at the same institution with the experimental group.

It is difficult to deny that educators are aware that change in education is necessary. Many educators are interested in how to meet the human needs of their students. Evidenced by the many new student development courses appearing on college campuses across the country, many educators are evaluating the present curriculum and are trying new approaches that will humanize education. Some educators have adopted innovative methods to reach that goal. Joseph W. Fordyce writes:

It occurs to me that programs must be established that relate to the total curriculum and that stress the humaneness and the humaneness of the educational professor. Student personnel workers, counselors and others must constantly point out the need for such programs and courses and take the lead in developing proposals for human relations programs.\textsuperscript{159}


\textsuperscript{159}Don G. Creamer, op. cit., p. 8.
SUMMARY

The second chapter surveyed the literature described by Donald H. Clark as the "Human Growth Potential" movement. In addition, the survey of literature described certain selected student development courses, of which PSY 201 is one. In the third chapter the methodology used to determine the effectiveness of the human relations class taught by counselors at Moraine Valley Community College will be described.
CHAPTER III
PROCEDURES FOR THE STUDY
INTRODUCTION

The experimental aspect of the Moraine Valley Community College study is concerned with an assessment of the effects of the human relations class, PSY 201, taught by counselors, upon participants. The experiment studies participants' behavior in groups, as measured by the B form of the Fundamental Interpersonal Relations Orientation test, and participants' personality characteristics important for social living and social interaction, as measured by three scales of the California Psychological Inventory test, during the spring semester of 1974.

At Moraine Valley Community College the human relations class is taught on a credit basis over one semester for three hours per week. Up to 32 students register for each class. The average number of hours spent in class is 45 hours. It should be noted that participants in this human relations program are self-selected and are grouped heterogeneously.

Each class was taught by a counselor with broad experience in group work. The counselors at MVCC teach a human potential seminar on a credit basis over one semester for two
hours per week. The mode of instruction, similar to the human relations classes, is experiential. In addition, the counselors at MVCC facilitate week-end seminars for non-credit in leadership styles, group dynamics, values clarification, and assertiveness. The week-end seminars are also taught by the experiential mode of instruction.

Each counselor attended an in-service training session prior to the beginning of the 1974 fall semester. At the session the counselors agreed to use the experiential mode of instruction. In addition, there was agreement by all counselors to follow the syllabus. Each counselor agreed to use the same material when disseminating information. There was a consensus on which exercises to use for the experiential aspect of the class. Finally, the counselors agreed to strictly adhere to the time schedule of the syllabus.

**SAMPLE**

In the fall of 1974, five human relations classes were taught by counselors at Moraine Valley Community College. All five PSY 201 classes taught by MVCC counselors participated in the experimental portion of this study. Sizes of the individual human relations classes used in the study ranged from 15 to 30 students.

Nine non-randomized classes of various disciplines taught at MVCC (geography, math, police science, business, typing, history, art, radiology and natural science) were
used as the control groups. The nine non-randomized classes similar to the experimental classes consisted of students enrolled in transfer and occupational programs taught at MVCC. Since MVCC is organized administratively into cluster colleges, classes selected for the control group represented transfer and occupational classes in each cluster college. The final selection of classes for the control group was on the basis of those instructors who were willing to make their classes available for the study.

Students enrolled in both a control class and an experimental class were eliminated from the control group. For the purpose of testing the research hypotheses, all subjects in the human relations classes were treated as one experimental group, and all subjects in the control classes were treated as one control group. Total experimental students numbered 89 and total control students numbered 128.

HYPOTHESES

The main hypothesis of the experimental aspect of the present study is that the PSY 201 classes produce significantly greater positive changes at the $p \leq .05$ level in participants' interpersonal behavior in groups, as measured by the B form of the Fundamental Interpersonal Relations Orientation test, and personality characteristics important for social living and social interactions, as measured by the three scales of the California Psychological Inventory, than
control classes. Stated in **null** form: Using the pre-test measures as covariates, there will be no significant post-test differences between the experimental and control groups on the six subscale scores (expressed and wanted inclusion, expressed and wanted control, and expressed and wanted affection) of the FIRO-B and the three subscale scores (socialization, tolerance and flexibility) of the CPI.

**Major Hypothesis No. 1** Using the pre-test measures as covariates, there will be no significant post-test differences between experimental groups and between experimental and control groups according to age on the six subscales of the FIRO-B and the three subscales of the CPI.

**Minor Hypothesis No. 1.1** Using the pre-test measures as covariates, there will be no significant post-test differences between the students in the experimental group falling above the age median of all subjects and the students of the control group falling above the age median of all subjects on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.

**Minor Hypothesis No. 1.2** Using the pre-test measures as covariates, there will be no significant post-test differences between the students in the experimental group falling below the age median of all subjects and the students of the control group falling below the age median of all subjects on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.
Minor Hypothesis No. 1.3 Using the pre-test measures as covariates, there will be no significant post-test differences between the students in the experimental group falling above the age median of all subjects and the students in the experimental group falling below the age median of all subjects on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.

Major Hypothesis No. 2 Using the pre-test measures as covariates, there will be no significant post-test differences between experimental groups and between experimental and control groups according to sex on the six subscales of the FIRO-B and the three subscales of the CPI.

Minor Hypothesis No. 2.1 Using the pre-test measures as covariates, there will be no significant post-test differences between the male students in the experimental group and the male students in the control group on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.

Minor Hypothesis No. 2.2 Using the pre-test measures as covariates, there will be no significant post-test differences between the female students in the experimental group and the female students in the control group on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.

Minor Hypothesis No. 2.3 Using the pre-test measures as covariates, there will be no significant post-test differences between the male students in the experimental group and
the female students in the experimental group on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.

INSTRUMENTS AND SCALES

The six scales of the FIRO-B (Fundamental Interpersonal Relationships Orientation) and three scales from the CPI (California Psychological Inventory) were used to test the main hypothesis that at the end of the one-term treatment period the experimental group would be significantly different in a positive direction from the control group.

A primary purpose of the FIRO-B is to measure how an individual acts in interpersonal situations.¹ According to John P. Campbell and Marvin D. Dunnette:

The FIRO-B includes a series of attitude items designed to measure six relatively homogeneous dimensions related to three major types of an individual's behavior in groups: control (i.e., attempting to influence the proceedings), inclusion (i.e., initiating contacts with others in a group), and affection (i.e., moving towards others in a close personal way).²

The questionnaire contains a pair of scales, wanted behavior and expressed behavior, for each behavior category. The expressed behavior scale attempts to assess "the respondent's own tendency or desire to show the behavior." The


wanted-behavior scale attempts to assess "how much he wants others in the group to show it."³

The FIRO-B was chosen by this author for this study because King described the successful use of the FIRO-B in research at Harvard. King found that from freshman to senior year scores on the FIRO-B for Harvard students increased at a high level of statistical significance.⁴ In addition, Chickering uses King's study at Harvard to support the contention that certain kinds of college experiences have a substantial impact for developmental change in the freeing of interpersonal relationships.⁵

Schutz⁶ reports that test-retest reliability coefficients are considered high for the FIRO-B. Test-retest reliability coefficients among Harvard students over a one-month period, except for expressed and wanted affection which were based on an interlude of one week, had a mean coefficient of .76 for the six scales.

Schutz contends that if content validity is determined by showing how well the content of the test items samples the class of situations or the subject matter about which conclusions are to be drawn, then the FIRO-B has content validity. Schutz supports his contention by stating, "All the items

³John P. Campbell and Marvin D. Dunnette, op. cit., p. 93.
⁴S. H. King, op. cit.
⁵Arthur W. Chickering, op. cit., p. 102.
measure the same dimension, are of descending popularity and represent a sample of items from that dimension.  

Schutz points out that since the original publication of the test in 1958, research on FIRO-B has taken place in a variety of fields and that these studies represent and have demonstrated the present state of concurrent, construct and predictive validity. He states that the FIRO-B has been used in marriage counseling; evaluation of human relations workshops, such as sensitivity training groups of the National Training Laboratories; exploration of the relation of the FIRO dimension of interpersonal needs to other dimensions, such as birth order; and experimentation with group composition, using the FIRO techniques of compatibility. 

Gough reports that the CPI (California Psychological Inventory) is intended primarily for use with normal, non-psychiatrically disturbed subjects. Its scales are addressed principally to personality characteristics important for social living and social interaction.

The test is a self-report instrument to be used primarily with normal adults and adolescents. The profile scores tell what sort of person the individual is "in the everyday common sense meaning of the phrase."  

---

7Ibid., p. 6.  
The three subscales of the CPI chosen by this author for this study are "tolerance," "flexibility" and "socialization." Harrison G. Gough defines tolerance as "permissive, accepting, and non-judgemental social beliefs and attitudes." He defines flexibility as the "degree of adaptability of a person's thinking and social behavior." He defines socialization as the "degree of social maturity, integrity and rectitude the individual has attained."\(^{10}\)

These three scales of the CPI were used because Webster, Friedman and Heist\(^{11}\) used these scales to describe the successful use of the CPI in research at Vassar and Bennington colleges. They found that seniors, in comparison with freshmen, were more flexible and impunitive. In addition, Chickering\(^{12}\) uses Webster, Friedman and Heist's study at Vassar and Bennington colleges to support his contention that certain kinds of college experiences have a substantial impact for developmental change in the freeing of interpersonal relationships.

The California Psychological Inventory is described by Gough\(^{13}\) as an inventory that is concerned with characteristics of personality which have a "wide and pervasive applicability to human behavior." He indicates that many of the standard

\(^{10}\)Harrison G. Gough, op. cit., p. 10.

\(^{11}\)H. Webster, M. B. Friedman and P. Heist, op. cit.

\(^{12}\)Arthur W. Chickering, op. cit., p. 97.

\(^{13}\)Harrison G. Gough, op. cit., p. 1.
personality tests and assessment devices available have been designed for use in special settings, such as the psychiatric clinic, or have been constructed to deal with a particular problem, such as a vocational choice.

Kelly\textsuperscript{14} states that the CPI was developed to make possible the "comprehensive, multidimensional assessment of normal persons in a variety of settings." He finds that the inventory is:

\ldots essentially self-administering for literal subjects who are instructed to respond to each item on a separate answer sheet, "True or False" according to whether they agree or disagree with a statement or feel that "it is" or "is not" true about them.\textsuperscript{15}

Kelly adds that the number of items contributing to the different scales varies from 22 to 56. Test-retest reliabilities based on 200 male prisoners retested after one to three weeks range from .49 to .87, with a median of .80. The specific scales of tolerance, flexibility and socialization for male prisoners have reliabilities of .87, .49 and .80, respectively; the median test-retest correlations are .65 for males and .68 for females. The specific scales of "tolerance," "flexibility" and "socialization" for the high school subjects have reliabilities of .71, .60 and .65, respectively, for males and females.


\textsuperscript{15}Ibid., p. 169.
There is convincing evidence that each of the scales on the CPI has validity when judged against life performance criteria. Gough\textsuperscript{16} states that "tolerance" scores correlated negatively (-.46) with the California F (facism: authoritarian personality) scale and positively (.34) with the Chicago Inventory of Social Beliefs (a measure of fair-mindedness and humanitarian values). "Flexibility" scores correlated negatively (-.48) with staff ratings of rigidity for 40 University of California graduate students. They also correlated negatively (-.36) with staff ratings of frigidity for 40 University of California medical seniors and negatively (-.58) with the California F (authoritarian personality) scale for a college class of 180 students. "Socialization" scores have been listed in rank-order for all the samples for which socialization scores have been available. The psychometric continuum established was reviewed to determine whether it also constituted a sociological continuum. The two lists showed a biserial correlation of .76.

**SCORING**

Gough\textsuperscript{17} states that a person who scores above the mean standard score is functioning effectively both socially and intellectually. Conversely, if a person scores below the mean, chances are good that the individual is experiencing

\textsuperscript{16}Harrison G. Gough, op. cit., p. 20.

\textsuperscript{17}Ibid., p. 10-12.
significant difficulties in his interpersonal adjustment. He relates that the more extreme these scores are, the more adequately a particular set of adjectives in the summaries will characterize a person. Individuals with high scores for Fx (flexibility) are seen as "insightful, informal, confident, humorous..." Those with high scores for So (socialization) are seen as "serious, honest, industrious, modest, sincere and steady..." Those with high scores for To (tolerance) are seen as "enterprising, informal, quick, tolerant, clear thinking and resourceful..." 18

Summaries under the high scores for each scale indicate the desired personality characteristics to be utilized in interpersonal situations as the result of the human relations training experience in PSY 201. Therefore, a positive change on any of the three scales of the CPI used in this experiment will be defined as an increase in the score for any scale on the CPI.

For each of the interpersonal behaviors on the FIRO-B, three classifications are described. Schutz19 reports that low scores indicate that the individual is "deficient." When an individual is defined as deficient, it indicates that he is not trying directly to satisfy the need measured by that scale. High scores indicate that the individual is "excessive."

18Ibid., p. 10.

When an individual is defined as excessive on a scale, it indicates that he is constantly trying to satisfy the need measured by that scale. Middle scores are considered "ideal." When an individual is defined as ideal on a scale, it indicates that he is able to satisfy the need measured by that scale.

For each of the three types of interpersonal behavior, Schutz\(^2\) defines the characteristic interpersonal behavior of individuals with low, high or ideal scores as follows:

**Inclusive Types**

**Low Scores (the undersocial)**—The interpersonal behavior of the undersocial person tends to be introverted and withdrawn. Characteristically, he avoids associating with others and doesn't like to accept invitations to join others.

**High Scores (the oversocial)**—The oversocial person tends toward extraversion in his later interpersonal behavior. Characteristically, he seeks people incessantly and wants them to seek him out.

**Middle Scores (social)**—The social person is comfortable with people and comfortable being alone. Characteristically, he can be a high or low participator in a group, or can equally take a moderate role, without anxiety.

**Control Types**

**Low Scores (the abdicrat)**—The abdicrat is a person who tends toward submission and abdication of power and responsibility in his interpersonal behavior. Characteristically,

\(^2\)Ibid.
he gravitates toward the subordinate position, where someone else takes charge.

**High Scores (the autocrat)**--The autocrat is a person whose interpersonal behavior often tends toward the dominating. Characteristically, he tries to dominate people and strongly desires a power hierarchy with himself at the top.

**Middle Scores (the democrat)**--The democrat feels comfortable giving or not giving orders, and taking or not taking orders, as is appropriate to the situation.

**Affection Types**

**Low Scores (the underpersonal)**--The underpersonal type tends to avoid close personal ties with others. Characteristically, he maintains his dyadic relations on a superficial, distant level and is most comfortable when others do the same to him.

**High Scores (the overpersonal)**--The overpersonal type attempts to become extremely close to others. Characteristically, he strives in his interpersonal relations primarily to be liked.

**Middle Scores (the personal)**--The personal type does not experience any problem when he establishes close emotional relations with one other person. He is comfortable in such a personal relation, and he can also relate comfortably in a situation requiring emotional distance.

The summaries under the middle scores for each scale indicate the desired behavior in groups as the result of the
human relations training experiences in PSY 201. The range of scores for each of the six subscales of the FIRO-B is 0-9. For experimental purposes, a score of 4.5 will be considered as ideal. If for any of the six scales of the FIRO-B the absolute value of the difference between the individual's scores and 4.5 is less on the post-test than on the pre-test, the change will be considered positive.
DATA

Data for this experimental study was obtained by administering a pre-test in the first week of classes and a post-test in the last week of classes to five PSY 201 classes taught by MVCC counselors and nine non-randomized selected classes used as the control group. The pre- and post-tests consisted of the FIRO-B and three scales of the CPI ("socialization," "tolerance" and "flexibility"). Each student in the experimental and control groups provided the following biographical information at the time of the pre-test: age, sex and class code. The data was coded and keypunched for analysis. Data from subjects not completing post-tests are not included in the statistical analysis employed in the present experiment.

DESIGN

The experimental design of this study is "quasi-experimental." Campbell and Stanley describe it as a non-equivalent control design: \( O^xO \). The numerator is defined as pre-test \( o \), treatment \( x \) and post-test \( o \) for the experimental group. The denominator is defined as pre-test \( o \) and post-test \( o \) for the control group. Campbell and Stanley find

---

that the quasi-experimental design is one of the most widely used experimental designs in educational research. Both groups are given a pre- and post-test, but the control group and experimental group do not have pre-experimental sampling equivalences. The groups constitute "naturally assembled collectives such as classrooms, as similar as availability permits but yet not so similar that one can dispense with pre-test." Concerning this design they attest that:

The more similar the experimental and the control groups are in their recruitment, and the more their similarity is confirmed by the scores on the pre-test, the more effective the control becomes. Assuming that these desiderata are approximated for purposes of internal validity, we can regard the design as controlling the main effects of history, maturation, testing and instrumentation, in that the differences for the experimental group between pre-test and post-test (if greater than that for the control group) cannot be explained by main effects of these variables such as would be found affecting both the experimental and the control group.23

Campbell and Stanley further add:

...an effort to explain away a pretest-posttest gain specific to the experimental group in terms of such extraneous factors as history, maturation or testing must hypothesize an interaction between these variables and the specific selection differences that distinguish the experimental and control groups. While in general such interactions are unlikely, there are a number of situations in which they might be involved. Perhaps most common are interactions involving maturation.24

This interaction threat to internal validity can be resolved only by using a true experimental design which is

22 Ibid.
23 Ibid.
24 Ibid., p. 218.
impossible in most school settings, including the setting of this experiment. E. F. Lindquist points out:

Complete freedom from bias and perfect precision in an experiment are, of course, both impossible and unnecessary. How unbiased or how precise an estimate need be depends upon the broader purposes of the experiment. Some experiments are intended to determine only whether an effect exists at all, or whether there is any relationship between the experimental and criterion variables. Some experiments are intended to determine only whether an effect exists at all. In that case, if the true effect is considerable, or if the true relationship is pronounced, even a very crude experiment may reveal the presence of the effect or relationship.25

Therefore, in designing this experiment the author attempted to provide for the highest possible degree of accuracy and freedom from bias that is possible for this type of study. The author's objective was to design an experiment that will serve the specified purposes of this study with maximum efficiency.

DATA ANALYSIS TECHNIQUE

A non-randomized control group design with multivariate analysis of covariance was used to determine the group outcomes. Analysis of covariance controls non-equivalence between experimental and control groups on the pre-test. McNemar specifies that analysis of covariance...

...is applicable whenever it seems desirable to correct a difference on a dependent variable for a known difference and another variable which for some reason could not be controlled by matching or by random sampling procedures. Analysis of covariance will provide an adjustment for, and a test of significance of, the differences between two or more groups...It is assumed that the dependent variable has a distribution which does not depart too far from the normal type and that the variances from group to group are similar.26

Since there is more than one dependent variable in the present experimental design, a multivariate analysis of covariance was performed on the six scales of the FIRO-B and on the three scales of the CPI to test the hypothesis of the present experiment. The pre-test served to determine the distribution of the covariate, and the post-test served to determine the distribution of the dependent variables. In addition, a multivariate analysis of variance was conducted on the pre-test data to determine the equivalence of the experimental and control groups.

The computer program employed in analyzing the data was the MANOVA\textsuperscript{27} (multiple analysis of variance) with covar­iates. It is briefly described by Cooley and Lohnes as:

...a model which makes it possible to explore the surplus influences of additional measurements on a taxonomy (or vice versa) when the known influences of a set of related measurements are partialled out.\textsuperscript{28}

SUMMARY

The method chosen for the assessment of the experimental aspect of this study was a field experiment. The experimental design of the study was "quasi-experimental." A multivariate analysis of covariance (MANCOVA) was performed to test each of the null hypotheses. In the next chapter, analyses of the data and a summary of the results will be presented.


\textsuperscript{28}Ibid., p. 287.
CHAPTER IV

RESULTS

INTRODUCTION

The field experiment portion of the present study was concerned with an assessment of the effects of the Human Relations class, PSY 201, upon participants' personality characteristics in interpersonal situations and behavior characteristics in groups. The six scales of the B form of the Fundamental Interpersonal Relations Orientation test and three scales of the California Psychological Inventory test were used to test a main research hypothesis, a major hypothesis and three minor hypotheses related to age, and a major hypothesis and three minor hypotheses related to sex.

Of the original 274 subjects in experimental and control groups who completed pre-tests, 217 (79%) completed post-tests. Of the 107 experimentalists who completed pre-tests, 89 (83%) completed post-tests. Of the 167 controls who completed pre-tests, 128 (76%) completed post-tests. Only data from students completing pre- and post-tests was used in the study.

The author administered all tests. The pre-test was administered in the first week of the 1974 fall term and the post-test in the last week of the term.

94
ANALYSIS OF DATA

Table 1 presents results of the analyses of pre-test equivalence of experimental and control groups on mean FIRO-B and CPI scores. Presented in Tables 2, 4, 6, 8, 10, 12 and 14 are experimental and control groups' means adjusted for covariance and differences between means. Univariate analyses of post-test scores adjusted for covariance are presented in Tables 3, 5, 7, 9, 11, 13 and 15.

The data presented in Table 1 indicate equivalence between experimental and control groups on the pre-test in terms of similar mean scores and standard deviations. The multivariate F-value was 1.68 with 9 and 207 degrees of freedom (P.05 = 1.92 with 9 and 207 d.f.). Since an F-value as large as this would be expected more than one time in 20 by chance alone, the pre-test scores between experimental and control groups are considered statistically equivalent.

MAIN RESEARCH HYPOTHESIS: Using the pre-test measures as covariates there will be no significant post-test differences between the experimental and control groups on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.

RESULTS: MANCOVA disclosed that the systematic variation between experimentals and controls reflected in post-test scores adjusted for covariance was statistically not significant. Presented in Table 2, the multivariate F-value
<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental</th>
<th>Control</th>
<th>Pre-test Differences of Experimentals and Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$\bar{X}^*$</td>
<td>$\bar{X}^*$</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>SD</td>
<td></td>
</tr>
<tr>
<td>Socialization</td>
<td>35.18</td>
<td>35.48</td>
<td>$-0.30$</td>
</tr>
<tr>
<td></td>
<td>5.48</td>
<td>6.09</td>
<td></td>
</tr>
<tr>
<td>Tolerance</td>
<td>18.43</td>
<td>17.52</td>
<td>$0.91$</td>
</tr>
<tr>
<td></td>
<td>4.10</td>
<td>5.19</td>
<td></td>
</tr>
<tr>
<td>Flexibility</td>
<td>10.93</td>
<td>10.51</td>
<td>$0.42$</td>
</tr>
<tr>
<td></td>
<td>3.88</td>
<td>3.93</td>
<td></td>
</tr>
<tr>
<td>Expressed</td>
<td>3.71</td>
<td>3.58</td>
<td>$0.13$</td>
</tr>
<tr>
<td>Inclusion</td>
<td>1.13</td>
<td>1.20</td>
<td></td>
</tr>
<tr>
<td>Wanted Inclusion</td>
<td>2.69</td>
<td>2.42</td>
<td>$0.27$</td>
</tr>
<tr>
<td></td>
<td>1.39</td>
<td>1.41</td>
<td></td>
</tr>
<tr>
<td>Expressed</td>
<td>3.07</td>
<td>2.63</td>
<td>$0.44$</td>
</tr>
<tr>
<td>Control</td>
<td>1.44</td>
<td>1.38</td>
<td></td>
</tr>
<tr>
<td>Wanted Control</td>
<td>3.33</td>
<td>3.10</td>
<td>$0.23$</td>
</tr>
<tr>
<td></td>
<td>1.31</td>
<td>1.21</td>
<td></td>
</tr>
<tr>
<td>Expressed</td>
<td>3.47</td>
<td>3.36</td>
<td>$0.11$</td>
</tr>
<tr>
<td>Affection</td>
<td>1.24</td>
<td>1.20</td>
<td></td>
</tr>
<tr>
<td>Wanted Affection</td>
<td>3.25</td>
<td>3.46</td>
<td>$0.21$</td>
</tr>
<tr>
<td></td>
<td>1.63</td>
<td>1.45</td>
<td></td>
</tr>
</tbody>
</table>

*Experimentals $N = 89$; Control $N = 128$

F-Ratio for 9 and 207 df, Overall Discrimination, $= 1.68$

$P.05 = 1.92$
for the main hypothesis was 1.15 with 9 and 198 degrees of
freedom (P.05 = 1.92 with 9 and 198 d.f.). Because an
F-value as large as this would be expected more than one time
in 20 by chance alone, the null hypothesis is not rejected.
The conclusion drawn from this analysis is that the mean
post-test responses for the experimental groups do not differ
from the mean responses for the control group.

Although the "mean difference" null hypothesis has not
been rejected, further examination of the univariate F's pre-
sented in Table 3 reveals that the evaluative criterion
"wanted affection" has an associated univariate value of 6.38
with p. less than .05, implying that an F-value as large as
6.38 would occur by chance only one time in 20. The means of
the nine evaluative criteria taken simultaneously are not
significantly different.

MINOR HYPOTHESIS NO. 1.1: Using the pre-test measures
as covariates there will be no significant post-test differ-
ences between the students in the experimental group falling
above the age median of all subjects and the students of the
control group falling above the age median of all subjects
on the six subscale scores of the FIRO-B and the three sub-
scale scores of the CPI.

RESULTS: MANCOVA disclosed that the systematic varia-
tion between experimentals above the age median and controls
above the age median reflected in post-test scores adjusted
for covariance was statistically not significant. Presented
### TABLE 2

Main Research Hypothesis

Experimental and Control Post-test Means
Adjusted for Covariance, and Differences Between Means

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental*</th>
<th>Control*</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>36.0</td>
<td>35.8</td>
<td>0.2</td>
</tr>
<tr>
<td>Tolerance</td>
<td>18.8</td>
<td>18.6</td>
<td>0.2</td>
</tr>
<tr>
<td>Flexibility</td>
<td>11.0</td>
<td>10.7</td>
<td>0.3</td>
</tr>
<tr>
<td>Expressed Inclusion</td>
<td>3.5</td>
<td>3.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Wanted Inclusion</td>
<td>2.4</td>
<td>2.3</td>
<td>0.1</td>
</tr>
<tr>
<td>Expressed Control</td>
<td>3.0</td>
<td>2.9</td>
<td>0.1</td>
</tr>
<tr>
<td>Wanted Control</td>
<td>3.0</td>
<td>3.2</td>
<td>-0.2</td>
</tr>
<tr>
<td>Expressed Affection</td>
<td>3.3</td>
<td>3.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Wanted Affection</td>
<td>2.9</td>
<td>3.4</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

*Experimental N = 89; Control N = 128

F-Ratio for 9 and 198 df, Overall Discrimination, = 1.15

P.05 = 1.92
TABLE 3
Main Research Hypothesis
Univariate Analyses of CPI and FIRO-B Post-test Scores Adjusted for Covariance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Among Mean Square</th>
<th>Within Mean Square</th>
<th>F-Ratio*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>2.23</td>
<td>12.49</td>
<td>0.18</td>
</tr>
<tr>
<td>Tolerance</td>
<td>0.83</td>
<td>9.40</td>
<td>0.00</td>
</tr>
<tr>
<td>Flexibility</td>
<td>3.56</td>
<td>7.38</td>
<td>0.48</td>
</tr>
<tr>
<td>Expressed Inclusion</td>
<td>0.00</td>
<td>1.28</td>
<td>0.00</td>
</tr>
<tr>
<td>Wanted Inclusion</td>
<td>0.59</td>
<td>1.67</td>
<td>0.35</td>
</tr>
<tr>
<td>Expressed Control</td>
<td>0.25</td>
<td>1.60</td>
<td>0.16</td>
</tr>
<tr>
<td>Wanted Control</td>
<td>1.27</td>
<td>1.60</td>
<td>0.80</td>
</tr>
<tr>
<td>Expressed Affection</td>
<td>0.24</td>
<td>1.58</td>
<td>0.15</td>
</tr>
<tr>
<td>Wanted Affection</td>
<td>12.46</td>
<td>1.95</td>
<td>6.38*</td>
</tr>
</tbody>
</table>

*Significant P.05 For 1 and 206 df, P.05 = 3.89
in Table 4, the multivariate F-value for Minor Hypothesis No. 1.1 was 1.46 with 9 and 90 degrees of freedom (P.05 = 1.98 with 9 and 90 d.f.). Because an F-value as large as this would be expected more than one time in 20 by chance alone, the null hypothesis is not rejected. The conclusion drawn from this analysis is that the mean responses for students in the experimental group falling above the age median of all subjects do not differ from the mean responses for the students in the control group falling above the age median of all subjects.

Although the "mean difference" null hypothesis has not been rejected, further examination of the univariate F's presented in Table 5 reveals that the evaluative criteria "flexibility" and "wanted affection" have associated univariate values of 4.53 (p. less than .05) and 8.46 (p. less than .01), respectively, implying that by chance alone an F-value of 4.53 would occur only one time in 20 and an F-value of 8.46 would occur only one time in 100. The means of the nine evaluative criteria taken simultaneously are not significantly different.

MINOR HYPOTHESIS NO. 1.2: Using the pre-test measures as covariates, there will be no significant post-test differences between the students in the experimental group falling below the age median of all subjects and the students in the control group falling below the age median of all subjects on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.
### TABLE 4

Above Age Median Experimental vs. Above Age Median Control

Experimental and Control Post-test Means
Adjusted for Covariance, and Differences Between Means.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental*</th>
<th>Control*</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>37.1</td>
<td>36.7</td>
<td>0.4</td>
</tr>
<tr>
<td>Tolerance</td>
<td>18.4</td>
<td>18.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Flexibility</td>
<td>11.9</td>
<td>10.6</td>
<td>1.3</td>
</tr>
<tr>
<td>Expressed Inclusion</td>
<td>3.5</td>
<td>3.6</td>
<td>-0.1</td>
</tr>
<tr>
<td>Wanted Inclusion</td>
<td>2.4</td>
<td>2.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Expressed Control</td>
<td>2.7</td>
<td>2.9</td>
<td>-0.2</td>
</tr>
<tr>
<td>Wanted Control</td>
<td>3.0</td>
<td>3.1</td>
<td>-0.1</td>
</tr>
<tr>
<td>Expressed Affection</td>
<td>3.0</td>
<td>3.2</td>
<td>-0.2</td>
</tr>
<tr>
<td>Wanted Affection</td>
<td>2.6</td>
<td>3.5</td>
<td>-0.9</td>
</tr>
</tbody>
</table>

*Experimental N = 37; Control N = 72

F-Ratio for 9 and 90 df, Overall Discrimination, = 1.46

P.05 = 1.98
### TABLE 5

**Above Age Median Experimental vs. Above Age Median Control**

Univariate Analyses of CPI and FIRO-B Post-test Scores Adjusted for Covariance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Among Mean Square</th>
<th>Within Mean Square</th>
<th>F-Ratio*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>3.25</td>
<td>12.77</td>
<td>0.25</td>
</tr>
<tr>
<td>Tolerance</td>
<td>1.23</td>
<td>10.51</td>
<td>0.12</td>
</tr>
<tr>
<td>Flexibility</td>
<td>33.88</td>
<td>7.48</td>
<td>4.53**</td>
</tr>
<tr>
<td>Expressed Inclusion</td>
<td>0.09</td>
<td>1.30</td>
<td>0.07</td>
</tr>
<tr>
<td>Wanted Inclusion</td>
<td>0.03</td>
<td>1.57</td>
<td>0.02</td>
</tr>
<tr>
<td>Expressed Control</td>
<td>0.80</td>
<td>1.56</td>
<td>0.51</td>
</tr>
<tr>
<td>Wanted Control</td>
<td>0.30</td>
<td>1.68</td>
<td>0.18</td>
</tr>
<tr>
<td>Expressed Affection</td>
<td>1.35</td>
<td>1.65</td>
<td>0.81</td>
</tr>
<tr>
<td>Wanted Affection</td>
<td>16.23</td>
<td>1.92</td>
<td>8.46*</td>
</tr>
</tbody>
</table>

*Significant P.01 For 1 and 98 df, P.01 = 6.90

**Significant P.05 For 1 and 98 df, P.05 = 3.94
RESULTS: MANCOVA disclosed that the systematic variation between experimentals falling below the age median and controls falling below the age median reflected in post-test scores adjusted for covariance was statistically not significant. Presented in Table 6, the multivariate F-value for Minor Hypothesis No. 1.2 was 0.96 with 9 and 89 degrees of freedom (P.05 = 1.98 with 9 and 89 d.f.). Because an F-value as large as this would be expected more than one time in 20 by chance alone, the null hypothesis is not rejected. The conclusion drawn from this analysis is that the mean responses for students in the experimental group falling below the age median of all subjects do not differ from the mean responses of the students in the control group falling below the age median of all subjects.

MINOR HYPOTHESIS NO. 1.3: Using the pre-test measures as covariates, there will be no significant post-test differences between the students in the experimental group falling above the age median of all subjects and the students in the experimental group falling below the age median of all subjects on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.

RESULTS: MANCOVA disclosed that the systematic variation between experimentals above the age median and experimentals below the age median reflected in post-test scores adjusted for covariance was statistically significant. Presented in Table 8, the multivariate F-value for minor hypothesis No. 1.3 was 2.51 with 9 and 70 degrees of freedom.
TABLE 6

Below Age Median Experimental vs. Below Age Median Control

Experimental and Control Post-test Means
Adjusted for Covariance, and Differences Between Means

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental*</th>
<th>Control*</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>35.0</td>
<td>34.8</td>
<td>0.2</td>
</tr>
<tr>
<td>Tolerance</td>
<td>19.2</td>
<td>19.0</td>
<td>0.2</td>
</tr>
<tr>
<td>Flexibility</td>
<td>10.3</td>
<td>10.8</td>
<td>-0.5</td>
</tr>
<tr>
<td>Expressed Inclusion</td>
<td>3.5</td>
<td>3.5</td>
<td>0.0</td>
</tr>
<tr>
<td>Wanted Inclusion</td>
<td>2.5</td>
<td>2.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Expressed Control</td>
<td>3.2</td>
<td>2.8</td>
<td>0.4</td>
</tr>
<tr>
<td>Wanted Control</td>
<td>3.1</td>
<td>3.3</td>
<td>-0.2</td>
</tr>
<tr>
<td>Expressed Affection</td>
<td>3.5</td>
<td>3.1</td>
<td>0.4</td>
</tr>
<tr>
<td>Wanted Affection</td>
<td>3.2</td>
<td>3.3</td>
<td>-0.1</td>
</tr>
</tbody>
</table>

*Experimental N = 52; Control N = 56

F-Ratio for 9 and 89 df, Overall Discrimination, = 0.96

P.05 = 1.98
<table>
<thead>
<tr>
<th>Variable</th>
<th>Among Mean Square</th>
<th>Within Mean Square</th>
<th>F-Ratio*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>0.71</td>
<td>13.09</td>
<td>0.05</td>
</tr>
<tr>
<td>Tolerance</td>
<td>0.77</td>
<td>7.98</td>
<td>0.10</td>
</tr>
<tr>
<td>Flexibility</td>
<td>6.21</td>
<td>6.27</td>
<td>0.99</td>
</tr>
<tr>
<td>Expressed Inclusion</td>
<td>0.07</td>
<td>1.28</td>
<td>0.05</td>
</tr>
<tr>
<td>Wanted Inclusion</td>
<td>3.81</td>
<td>1.76</td>
<td>2.16</td>
</tr>
<tr>
<td>Expressed Control</td>
<td>3.28</td>
<td>1.60</td>
<td>2.05</td>
</tr>
<tr>
<td>Wanted Control</td>
<td>1.00</td>
<td>1.54</td>
<td>0.65</td>
</tr>
<tr>
<td>Expressed Affection</td>
<td>3.41</td>
<td>1.52</td>
<td>2.24</td>
</tr>
<tr>
<td>Wanted Affection</td>
<td>0.26</td>
<td>2.00</td>
<td>0.13</td>
</tr>
</tbody>
</table>

*Significant P.05 For 1 and 97 df, P.05 = 3.94
(P.05 = 2.01 with 9 and 70 d.f.). Because an F-value as large as this would not be expected more than one time in 20 by chance alone, the null hypothesis is rejected. The conclusion drawn from this analysis is that the mean responses for students in the experimental group falling above the age median of all subjects differ from the mean responses of the students in the experimental group falling below the age median of all subjects.

Further examination of the univariate F's presented in Table 9 reveals that the evaluative criteria "flexibility," "expressed affection" and "wanted affection" have associated univariate values of 11.60 (p. less than .01), 5.64 (p. less than .05) and 4.90 (p. less than .05), respectively. This implies that by chance alone an F-value of 11.60 would occur only one time in 100 and F-values of 5.64 and 4.90 would occur only one time in 20. Apparently, "flexibility," "expressed affection" and "wanted affection" contribute substantially to the significant multivariate F-value. The means of the nine evaluative criteria taken simultaneously are significantly different.

MAJOR HYPOTHESIS NO. 1: Using the pre-test measures as covariates there will be no significant post-test difference among experimental groups and between experimental and control groups according to age on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Above Age Median Experimental</th>
<th>Below Age Median Experimental</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>36.0</td>
<td>35.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Tolerance</td>
<td>19.0</td>
<td>19.2</td>
<td>-0.2</td>
</tr>
<tr>
<td>Flexibility</td>
<td>12.3</td>
<td>10.4</td>
<td>1.9</td>
</tr>
<tr>
<td>Expressed Inclusion</td>
<td>3.4</td>
<td>3.6</td>
<td>-0.2</td>
</tr>
<tr>
<td>Wanted Inclusion</td>
<td>2.3</td>
<td>2.6</td>
<td>-0.3</td>
</tr>
<tr>
<td>Expressed Control</td>
<td>2.8</td>
<td>3.2</td>
<td>-0.4</td>
</tr>
<tr>
<td>Wanted Control</td>
<td>3.1</td>
<td>3.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Expressed Affection</td>
<td>2.9</td>
<td>3.5</td>
<td>-0.6</td>
</tr>
<tr>
<td>Wanted Affection</td>
<td>2.4</td>
<td>3.2</td>
<td>-0.8</td>
</tr>
</tbody>
</table>

*Above Age Median Experimental N = 37; Below Age Median Experimental N = 52
F-Ratio for 9 and 70 df, Overall Discrimination, = 2.51
P.05 = 2.01
<table>
<thead>
<tr>
<th>Variable</th>
<th>Among Mean Square</th>
<th>Within Mean Square</th>
<th>F-Ratio*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>4.59</td>
<td>13.49</td>
<td>0.34</td>
</tr>
<tr>
<td>Tolerance</td>
<td>0.64</td>
<td>9.92</td>
<td>0.06</td>
</tr>
<tr>
<td>Flexibility</td>
<td>75.36</td>
<td>6.50</td>
<td>11.60**</td>
</tr>
<tr>
<td>Expressed Inclusion</td>
<td>0.70</td>
<td>1.33</td>
<td>0.53</td>
</tr>
<tr>
<td>Wanted Inclusion</td>
<td>1.65</td>
<td>1.72</td>
<td>0.96</td>
</tr>
<tr>
<td>Expressed Control</td>
<td>4.17</td>
<td>1.70</td>
<td>2.46</td>
</tr>
<tr>
<td>Wanted Control</td>
<td>0.06</td>
<td>1.58</td>
<td>0.04</td>
</tr>
<tr>
<td>Expressed Affection</td>
<td>8.77</td>
<td>1.55</td>
<td>5.64*</td>
</tr>
<tr>
<td>Wanted Affection</td>
<td>10.45</td>
<td>2.13</td>
<td>4.90*</td>
</tr>
</tbody>
</table>

*Significant P.01 For 1 and 78 df, P.01 = 6.96

**Significant P.05 For 1 and 78 df, P.05 = 3.96
RESULTS: MANCOVA disclosed that the systematic variation between experimentals above the age median and experimentals below the age median (Hypothesis No. 1.3) reflected in post-test scores adjusted for covariance was statistically significant. The conclusion drawn from this analysis is that the mean scores for students in the experimental group falling above the age median do differ from the mean scores for the students in the experimental group falling below the age median. The null hypothesis that there would be no significant post-test differences according to age is rejected.

MINOR HYPOTHESIS NO. 2.1: Using the pre-test measures as covariates, there will be no significant post-test differences between the male students in the experimental group and the male students in the control group on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.

RESULTS: MANCOVA disclosed that the systematic variation between experimental males and control males reflected in post-test scores adjusted for covariance was statistically not significant. Presented in Table 10, the multivariate F-value for Minor Hypothesis No. 2.1 was 0.67 with 9 and 105 degrees of freedom (P.05 = 1.97 with 9 and 105 d.f.). Because an F-value as large as this would be expected more than one time in 20 by chance alone, the null hypothesis is not rejected. The conclusion drawn from this analysis is that the mean responses for students in the male experimental group do not differ from the mean responses for the male control group.
TABLE 10
Male Experimental vs. Male Control
Experimental and Control Post-test Means
Adjusted for Covariance, and Differences Between Means

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental*</th>
<th>Control*</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>35.4</td>
<td>35.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Tolerance</td>
<td>17.7</td>
<td>17.8</td>
<td>-0.1</td>
</tr>
<tr>
<td>Flexibility</td>
<td>10.4</td>
<td>10.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Expressed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusion</td>
<td>3.6</td>
<td>3.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Wanted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusion</td>
<td>2.4</td>
<td>2.5</td>
<td>-0.1</td>
</tr>
<tr>
<td>Expressed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>3.2</td>
<td>3.1</td>
<td>0.1</td>
</tr>
<tr>
<td>Wanted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>3.0</td>
<td>3.2</td>
<td>-0.2</td>
</tr>
<tr>
<td>Expressed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affection</td>
<td>3.3</td>
<td>3.1</td>
<td>0.2</td>
</tr>
<tr>
<td>Wanted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affection</td>
<td>2.8</td>
<td>3.3</td>
<td>-0.5</td>
</tr>
</tbody>
</table>

*Experimental N = 43; Control N = 81
F-Ratio For 9 and 105 df, Overall Discrimination, = 0.67
P.05 = 1.97
<table>
<thead>
<tr>
<th>Variable</th>
<th>Among Mean Square</th>
<th>Within Mean Square</th>
<th>F-Ratio*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>0.57</td>
<td>13.87</td>
<td>0.04</td>
</tr>
<tr>
<td>Tolerance</td>
<td>0.84</td>
<td>9.18</td>
<td>0.09</td>
</tr>
<tr>
<td>Flexibility</td>
<td>1.48</td>
<td>7.09</td>
<td>0.21</td>
</tr>
<tr>
<td>Expressed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusion</td>
<td>0.06</td>
<td>1.29</td>
<td>0.05</td>
</tr>
<tr>
<td>Wanted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inclusion</td>
<td>0.54</td>
<td>1.60</td>
<td>0.34</td>
</tr>
<tr>
<td>Expressed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>0.16</td>
<td>1.84</td>
<td>0.09</td>
</tr>
<tr>
<td>Wanted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>0.71</td>
<td>1.78</td>
<td>0.40</td>
</tr>
<tr>
<td>Expressed</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affection</td>
<td>0.61</td>
<td>1.70</td>
<td>0.36</td>
</tr>
<tr>
<td>Wanted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affection</td>
<td>6.68</td>
<td>1.85</td>
<td>3.61</td>
</tr>
</tbody>
</table>

*Significant P.05 For 1 and 113 df, P.05 = 3.91
MINOR HYPOTHESIS NO. 2.2: Using the pre-test measures as covariates, there will be no significant post-test differences between the female students in the experimental group and the female students in the control group on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.

RESULTS: MANCOVA disclosed that the systematic variation between experimental females and control females reflected in post-test scores adjusted for covariance was statistically not significant. Presented in Table 12, the multivariate F-value for Minor Hypothesis No. 2.2 was 1.42 with 9 and 73 degrees of freedom (P.05 = 2.00 with 9 and 73 d.f.). Because an F-value as large as this would be expected more than one time in 20 by chance alone, the null hypothesis is not rejected. The conclusion drawn from this analysis is that the mean responses for students in the female experimental group do not differ from the mean responses for the female control group.

Although the "mean differences" null hypothesis has not been rejected, further examination of the univariate F's presented in Table 13 reveals that the evaluative criterion "wanted inclusion" has an associated univariate value of 9.01 (p. less than .01), implying that an F-value of 9.01 would occur only one time in 100 by chance. The means of nine evaluative criteria taken simultaneously are not significantly different.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental*</th>
<th>Control*</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>36.7</td>
<td>36.6</td>
<td>0.1</td>
</tr>
<tr>
<td>Tolerance</td>
<td>20.1</td>
<td>19.5</td>
<td>0.6</td>
</tr>
<tr>
<td>Flexibility</td>
<td>11.7</td>
<td>11.3</td>
<td>0.4</td>
</tr>
<tr>
<td>Expressed Inclusion</td>
<td>3.4</td>
<td>3.4</td>
<td>0.0</td>
</tr>
<tr>
<td>Wanted Inclusion</td>
<td>2.7</td>
<td>1.8</td>
<td>0.9</td>
</tr>
<tr>
<td>Expressed Control</td>
<td>2.8</td>
<td>2.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Wanted Control</td>
<td>3.1</td>
<td>3.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Expressed Affection</td>
<td>3.3</td>
<td>3.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Wanted Affection</td>
<td>3.2</td>
<td>3.4</td>
<td>-0.2</td>
</tr>
</tbody>
</table>

*Experimental N = 46; Control N = 46

F-Ratio For 9 and 73 df, Overall Discrimination, = 1.42
P.05 = 2.00
<table>
<thead>
<tr>
<th>Variable</th>
<th>Among Mean Square</th>
<th>Within Mean Square</th>
<th>F-Ratio*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>0.08</td>
<td>10.94</td>
<td>0.01</td>
</tr>
<tr>
<td>Tolerance</td>
<td>6.84</td>
<td>9.76</td>
<td>0.70</td>
</tr>
<tr>
<td>Flexibility</td>
<td>2.14</td>
<td>8.26</td>
<td>0.26</td>
</tr>
<tr>
<td>Expressed Inclusion</td>
<td>0.01</td>
<td>1.34</td>
<td>0.01</td>
</tr>
<tr>
<td>Wanted Inclusion</td>
<td>14.55</td>
<td>1.62</td>
<td>9.01**</td>
</tr>
<tr>
<td>Expressed Control</td>
<td>1.97</td>
<td>1.25</td>
<td>1.58</td>
</tr>
<tr>
<td>Wanted Control</td>
<td>0.00</td>
<td>1.38</td>
<td>0.00</td>
</tr>
<tr>
<td>Expressed Affection</td>
<td>0.13</td>
<td>1.29</td>
<td>0.10</td>
</tr>
<tr>
<td>Wanted Affection</td>
<td>0.93</td>
<td>2.16</td>
<td>0.43</td>
</tr>
</tbody>
</table>

*Significant P.01 For 1 and 81 df, P.01 = 6.96

**Significant P.05 For 1 and 81 df, P.05 = 3.96
MINOR HYPOTHESIS NO. 2.3: Using the pre-test measures as covariates, there will be no significant post-test differences between the male students in the experimental group and the female students in the experimental group on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.

RESULTS: MANCOVA disclosed that the systematic variation between experimental males and experimental females reflected in post-test scores adjusted for covariance was statistically not significant. Presented in Table 14, the multivariate F-value for Minor Hypothesis No. 2.3 was 0.30 with 9 and 70 degrees of freedom (p.05 = 1.99 with 9 and 70 d.f.). Because an F-value as large as this would be expected more than one time in 20 by chance alone, the null hypothesis is not rejected. The conclusion drawn from this analysis is that the mean responses for students in the male experimental group do not differ from the mean responses for the female experimental group.

MAJOR HYPOTHESIS No. 2: Using the pre-test measures as covariates, there will be no significant post-test differences among experimental groups and between experimental and control groups related to sex on the six subscale scores of the FIRO-B and the three subscale scores of the CPI.

RESULTS: MANCOVA disclosed that the systematic variation between experimental males and control males, between experimental females and control females and between experimental males and experimental females reflected in post-test
TABLE 14
Male Experimental vs. Female Experimental
Male Experimental and Female Experimental Post-test Means
Adjusted for Covariance, and Differences Between Means

<table>
<thead>
<tr>
<th>Variable</th>
<th>Male Experimental*</th>
<th>Female Experimental*</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>35.6</td>
<td>35.8</td>
<td>-0.2</td>
</tr>
<tr>
<td>Tolerance</td>
<td>18.9</td>
<td>19.4</td>
<td>-0.5</td>
</tr>
<tr>
<td>Flexibility</td>
<td>11.3</td>
<td>11.0</td>
<td>0.3</td>
</tr>
<tr>
<td>Expressed Inclusion</td>
<td>3.6</td>
<td>3.5</td>
<td>0.1</td>
</tr>
<tr>
<td>Wanted Inclusion</td>
<td>2.4</td>
<td>2.6</td>
<td>-0.2</td>
</tr>
<tr>
<td>Expressed Control</td>
<td>3.1</td>
<td>3.0</td>
<td>0.1</td>
</tr>
<tr>
<td>Wanted Control</td>
<td>3.0</td>
<td>3.2</td>
<td>-0.2</td>
</tr>
<tr>
<td>Expressed Affection</td>
<td>3.2</td>
<td>3.3</td>
<td>-0.1</td>
</tr>
<tr>
<td>Wanted Affection</td>
<td>2.7</td>
<td>3.0</td>
<td>-0.3</td>
</tr>
</tbody>
</table>

*Male Experimental N = 43; Female Experimental N = 46
F-Ratio For 9 and 70 df, Overall Discrimination, = 0.30
P.05 = 1.99
TABLE 15
Male Experimental vs. Female Experimental
Univariate Analyses of CPI and FIRO-B Post-test Scores Adjusted for Covariance

<table>
<thead>
<tr>
<th>Variable</th>
<th>Among Mean Square</th>
<th>Within Mean Square</th>
<th>F-Ratio*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Socialization</td>
<td>0.21</td>
<td>13.55</td>
<td>0.02</td>
</tr>
<tr>
<td>Tolerance</td>
<td>4.33</td>
<td>9.87</td>
<td>0.44</td>
</tr>
<tr>
<td>Flexibility</td>
<td>1.65</td>
<td>7.44</td>
<td>0.22</td>
</tr>
<tr>
<td>.Expressed Inclusion</td>
<td>0.42</td>
<td>1.34</td>
<td>0.32</td>
</tr>
<tr>
<td>Wanted Inclusion</td>
<td>0.24</td>
<td>1.74</td>
<td>0.14</td>
</tr>
<tr>
<td>Expressed Control</td>
<td>0.11</td>
<td>1.75</td>
<td>0.06</td>
</tr>
<tr>
<td>Wanted Control</td>
<td>0.55</td>
<td>1.58</td>
<td>0.35</td>
</tr>
<tr>
<td>Expressed Affection</td>
<td>0.27</td>
<td>1.66</td>
<td>0.16</td>
</tr>
<tr>
<td>Wanted Affection</td>
<td>1.51</td>
<td>2.25</td>
<td>0.67</td>
</tr>
</tbody>
</table>

*Significant P.05 For 1 and 78 df, P.05 = 3.96
scores adjusted for covariance were statistically not significant. The conclusion drawn from these analyses is that there is no difference in the mean responses for students in the experimental groups and students in the experimental and control groups. The null hypothesis that there would be no significant post-test differences according to sex is not rejected.

SUMMARY

The main research hypothesis, written in null form, was not rejected. An analysis of the data for the main research hypothesis indicated that the mean responses for the experimental and control groups did not differ significantly. The conclusion drawn from this analysis is that the students in the human relations classes when compared with students in the control classes did not show significantly more favorable characteristic behavior in interpersonal situations.

Minor hypotheses Nos. 1.1 and 1.2 written in null form were not rejected. An analysis of the data for minor hypotheses Nos. 1.1 and 1.2 indicated that the mean responses for the experimental and control groups did not differ significantly. The conclusion drawn from this analysis is that the older students and the younger students in the human relations classes when compared with the older students and the younger students in the control classes respectively did not show significantly more favorable characteristic behavior in interpersonal situations.
Minor Hypothesis No. 1.3, written in null form, was rejected. An analysis of the data for minor hypothesis No. 1.3 indicated that the mean responses for the two experimental groups did differ significantly. The conclusion drawn from this analysis is that the older students in the human relations classes tended to be more "flexible" than the younger students and that the younger students in the human relations classes moved toward the "wanted" and "expressed affection" ideal significantly more than the older students.

Because the null statement of minor hypothesis No. 1.3 was rejected, major hypothesis No. 1, written in null form, was rejected. It was concluded that there was significant post-test differences between experimental groups in regards to age.

Minor hypotheses Nos. 2.1, 2.2 and 2.3, written in null form, were not rejected. An analysis of the data for minor hypotheses Nos. 2.1, 2.2 and 2.3 indicated that the mean responses between experimental groups and between experimental and control groups did not differ significantly. The conclusion drawn from this analysis is that the male students and the female students in the human relations classes, when compared with the male students and female students in the control classes respectively did not show significantly more favorable characteristic behavior in interpersonal situations. It was also concluded that the male students of the human relations classes did not show significantly more favorable characteristic behavior in interpersonal situations.
Because the null statements of minor hypotheses Nos. 2.1, 2.2 and 2.3 were not rejected, major hypothesis No. 2, written in null form, was not rejected. It was concluded that there was no significant post-test differences between groups with regards to sex.

Although only the data which measured minor hypothesis No. 1.3 indicated significant mean differences, the data which measured several other hypotheses indicated mean differences which approached significance. The univariate analyses of the CPI and FIRO-B post-test scores of these hypotheses indicate one or more univariates with significant differences.

The multivariate F-value for the main research hypothesis was 1.15 with 9 and 198 degrees of freedom \( (P.05 = 1.92 \text{ with 9 and 198 d.f.}) \). The univariate analyses for the main research hypothesis indicates that the evaluative criteria for wanted affection had an associate univariate value which was significant.

The multivariate F-value for minor hypothesis No. 1.1 was 1.46 with 9 and 90 degrees of freedom \( (P.05 = 1.98 \text{ with 9 and 90 d.f.}) \). The univariate analyses for minor hypothesis No. 1.1 indicates that the evaluative criteria "flexibility" and "wanted affection" have associated univariate values which are significant.

The multivariate F-value for minor hypothesis No. 2.2 was 1.42 with 9 and 73 degrees of freedom \( (P.05 = 2.00 \text{ with 9 and 73 d.f.}) \). The univariate analyses for minor hypothesis
No. 2.2 indicates that the evaluative criteria for "wanted inclusion" had an associated univariate value which was significant.
CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The importance of the involvement of counselors in student development instruction was indicated. Because of their student-centered commitments, O'Banion states that counselors would be able to exercise more influence in humanizing education than any other group functioning in education today. He added that the experience of the student is an important part of the subject matter that would help humanize the educational process.

Ernest H. Berg sees the emerging role of the counselor as heavily involved in the instructional program. He feels that the counselor can demonstrate a humanistic emphasis in the instructional program by having cognitive and affective learning take place simultaneously in the classroom. Brown proposed that counselors should develop departments of human relations which present theoretical concepts but emphasize skill development and personal growth.

The survey of literature included several author's definitions of laboratory training, encounter groups and group counseling; the goals of each, and the results of studies made on the outcomes of several groups in each classification. Outcome research in the areas of laboratory training and encounter groups, although equivocal, indicated generally that individuals gain from such experiences. Individuals who are
responsive and outgoing persons are more likely to gain the most. Outcome research in the area of group counseling was inconsistent but seemed to indicate that, in general, participation in a group could have beneficial effects upon the students' academic performance and retention in college.

In addition, the survey of literature described student-development courses taught in institutions of higher education. These student development courses were described as courses of introspection. The experience of the students is part of the subject matter in the course. The human growth potential techniques of laboratory training, encounter groups and group counseling are used by the instructors of these courses.

PROBLEM

The present study assessed the educational effectiveness of the Human Relations course, PSY 201, as taught by counselors at MVCC. The experimental aspect of the study was concerned with an assessment of the effects of the human relations class upon participants' behavior in groups and upon personality characteristics important for social living and social interaction.

METHODOLOGY USED

The method chosen for the assessment of the experimental aspect of this study was a field experiment. The experimental
design of the study was "quasi-experimental." All five human relations classes taught by counselors at MVCC in the fall semester of 1974 were pre- and post-tested and were compared with available control classes. The control classes consisted of students enrolled in transfer and occupational programs. Classes selected for the control group represented transfer and occupational classes from each cluster college.

The B form of the Fundamental Interpersonal Relations Orientation test and three scales of the California Psychological Inventory test (socialization, tolerance and flexibility) were employed to measure changes in participants' behavior in groups and in personality characteristics used in interpersonal situations. A multivariate analysis of covariance (MANCOVA) was performed to test all hypotheses. A multiple regression for the six scores of the FIRO-B and the three scores of the CPI was performed on each of the nine post-test scores to test each of the null hypotheses. Significant differences were tested at the $P \leq .05$ level.

HYPOTHESES AND RESULTS

For experimental purposes, research hypotheses were proposed for this study. The author stated that, as measured by the B form of the Fundamental Interpersonal Relations Orientation test and three scales of the California Psychological Inventory, participants in the experimental group would show more favorable interpersonal behavior.
Participants who would show more favorable interpersonal behavior would be:

(a) Students in the experimental group compared with students in the control group.

(b) Students in the experimental group falling above the age median of all subjects compared with students in the control group falling above the age median of all subjects.

(c) Students in the experimental group falling below the age median of all subjects compared with students in the control group falling below the age median of all subjects.

(d) Students in the experimental group falling above the age median of all subjects compared with students in the experimental group falling below the age median of all subjects.

(e) Male students in the experimental group compared with male students in the control group.

(f) Female students in the experimental group compared with female students in the control group.

(g) Male students in the experimental group compared with female students in the experimental group.

Data for the main research hypothesis indicated no significant differences in the results for the experimental and control groups. Moreover, data which compared the older and younger students, respectively, in the control groups indicated no significant differences in the results. There was a significant difference in the mean responses of the older and younger participants in the experimental group.

Data which compared males and females in the experimental group with males and females, respectively, in the control groups indicated no significant differences in the results. Again, data which compared males and females in the
experimental groups revealed no significant differences in the results.
SYNTHESIS OF RESULTS AND CONCLUSIONS

Data for the main research hypothesis indicated no significant differences in the results for the experimental and control groups. The conclusion drawn from these results is that the students' participation in the human relations classes taught by counselors did not significantly improve their behavior in groups or their personality characteristics important for social living.

To interpret why the mean scores of the experimental group did not significantly differ from the mean scores of the control group is difficult. Perhaps, personality characteristics remain more constant over time and across situations than is often supposed. Cattell\(^1\) states that this is particularly true of personality traits, specific attitudes and interests. Pervin\(^2\) relates that research evidence indicates that personality characteristics are stable. However, he says, this is not to say that behavior does not change, particularly in relation to the form of expression of some personality characteristics. Pervin feels that a "drastic change in the environment" will exert an important impact on personality.


\(^{2}\)Ibid., p. 542.
Zucker\(^3\) avers that people do not change readily, even when they want to. He adds that people have more or less permanent modes of behaving (character traits) that present firmly consolidated obstacles to the development of insight that would assist in the change of behavior.

A second interpretation of why the mean scores of the experimental group did not significantly differ from the mean scores of the control group is that the wrong univariates (dependent variables) were tested. It is possible that the treatment, the human relations class, may produce desired changes in behavior other than those that this author attempted to measure.

As stated in Chapter II, Jack M. Gibb\(^4\) suggests "six major rubrics" of human relations training as areas other than basic personality change that may be tested for the effects of human relations training. Gibb's theory suggests that human relations training produces greater awareness of the feelings and perceptions of others, greater awareness and acceptance of the feeling components of one's own actions, and greater self-acceptance and self-esteem. Campbell and Dunnette\(^5\) suggest that a T-Group experience should produce increased self-insight, one's self-awareness of one's own behavior and increased sensitivity to the behavior of others.

\(^4\)Morton A. Lieberman, Irvin D. Yalom, and Matthew B. Miles, op. cit., p. 92.
\(^5\)John P. Campbell and Marvin D. Dunnette, op. cit., p. 75.
Perhaps, the use of different instruments would have produced significantly different mean scores between experimental and control groups. In their study on encounter groups, Lieberman, Yalom and Miles suggest several instruments that might be used to test "sensitivity" and "functional attitude toward self." A Life-Space Questionnaire used by Lieberman, Yalom and Miles tests for self-acceptance, identity and self-understanding. A second instrument used by them is an 11-item Gutman scale by Rosenberg that tests for self-esteem.

Data, which compared the older and younger students in the experimental group with older and younger students in the control groups, indicated no significant differences in the results. The conclusion drawn from these results is that, regardless of their age, all students who participated in the human relations classes, did not significantly improve their behavior in groups.

There was a significant difference in the mean responses of the older and younger participants in the experimental group. The conclusion drawn from this is that the human relations class significantly affected the student participants' behavior in groups and personality characteristics important for social living. Older students tended to be significantly more flexible than the younger, and younger students tended to

---

approach the "ideal" in "expressed" and "wanted inclusion" significantly more than the older.

Data which compared males and females in the experimental groups revealed no significant differences in the results. The conclusion drawn from these results is that the sex of students in the human relations class did not significantly affect their behavior in groups and their personality characteristics important for social living. Data which compared males and females in the experimental group with males and females, in the control groups indicated no significant differences in the results.

The conclusion drawn from the data on the hypotheses related to sex support conclusions drawn by Hippie\textsuperscript{7} and by Lieberman, Yalom and Miles\textsuperscript{8} as a result of their studies. Hippie attempted to assess whether laboratory training had differential effects on male and female college students. Hippie concluded that few, if any, differences exist between male and female participants. Lieberman Yalom and Miles concluded that encounter group experiences did not affect men and women differently.

\textsuperscript{7}John L. Hippie, op. cit., p. 162.

\textsuperscript{8}Ibid., p. 157.
RECOMMENDATIONS FOR FURTHER STUDY

The contributions made by a student development course to the development of a student's behavior in groups and to the student's personality characteristics have been described and have been experimentally attempted in the present study. More studies are needed to provide further theoretical and experimental support to the need for student development courses in today's changing college curriculum.

Colleges offering student development courses need to conduct experimental studies to determine causal relationships between changes in students' attitudes and behavior and treatment effects. This author recommends that the quasi-experimental design and the multivariate analysis of covariance statistical analyses described in Chapter III be used in future studies on student development courses. The task in providing an adequate experimental methodology under field conditions showed the difficulty with the design and analyses of this study.

Future experiments on student development courses dealing with human relations training might use the FIRO-B and CPI in pre-post-test measurements. One suggested modification to the present study is to use one multiple regression on the variables measured by the FIRO-B and another multiple regression on the variables measured by the CPI.
The univariate analysis of the variables of the CPI and the FIRO-B for several hypotheses of this study indicated significance for the "wanted affection" variable on the FIRO-B. Based on this information, another suggested modification to the present study is to use the FIRO-B in a pre-post-test measurement and to use a single analysis of covariance on the "wanted affection" variable. This recommendation is supported by a study conducted by William C. Schutz and Vernon L. Allen.9 The FIRO-B was administered by Schutz and Allen before and after a training laboratory in human relations. They found significant differences on the variable of "wanted affection."

Future studies conducted on human relations classes, including human relations classes taught at MVCC, could measure dependent variables associated with "sensitivity" and "the functional attitudes toward self." It is also recommended that instruments other than the FIRO-B and the three scales of the CPI used in this study be tried. The Life-Space Questionnaire and the 11-item Gutman scale used by Lieberman, Yalom and Miles should be considered.

Finally, perhaps one human relations class is not sufficient treatment to bring about the desired personality changes that would contribute to more effective interpersonal competency. This author recommends that a human relations class be taught for two semesters. In addition, the human relations class should be supplemented by other student

development courses. Such a student development program could provide the "drastic change in the environment" needed to bring about the desired change in behavior.

This author believes the present study may encourage further experimental studies on student development courses.
REFERENCES


APPENDIX A

Human Relations

Class Syllabus
HUMAN RELATIONS--PSY 201
Class Syllabus--Fall, 1974

Text


I. Initiating Relationships

Week 1: August 26

Cognitive Material: Overview of course: The Importance of Interpersonal skills, self-actualization, interpersonal skills, application of behavioral science research to interpersonal skills.

Experience: Get Acquainted Exercises

Process:

Outside Readings:
A. Text: Reaching Out, Chapter 1

Weeks 2 & 3: September 2 and September 9


Experience: Initiating Relationships; Team Building, milling exercise; Friendship Relations Exercise; Friendship Relations Survey.

Process:

Outside Readings:
A. Text: Reaching Out, Chapter 2
II. Building Interpersonal Trust

Weeks 4 & 5: September 16 and September 23

Cognitive Material: Personality Structure; TA: Rogers; Self-Image, Self-Esteem, Self-Acceptance; Film, Personality.

Experience: TA Exercises; Self-Image Inventory

Process:

Outside Readings:


Weeks 6 & 7: September 30 and October 7

Cognitive Material: The Development and Maintenance of Trust; climate of trust, definition of trust, building of interpersonal trust, responding to other person's risk in a trustworthy way, trusting as a self-fulfilling prophecy.

Experience: Prisoners Dilemma Game; Win As Much As You Can; Non Verbal Trust Exercises; trust cradle, trust fall.

Process:
Outside Readings:  
A. Text: Reaching Out, Chapter 3.

III. Effective Communication  

Week 8: October 14
Cognitive Material: Increasing Communication Skills; What is communication; sending messages effectively.
Experience: One and Two-Way Communication; Exercises for increasing your communication skills; Exercise on observing communication behavior.

Process:
Outside Readings:
A. Text: Reaching Out, Chapter 4, p. 61-74.

Week 9: October 21
Cognitive Material: Listening Skills; Selective Perceptions; Movie, Eye of the Beholder.
Experience: Listening Skills, no listening vs. closely listening; partial listening vs. listening for meaning.

Process:
Outside Readings:
A. Text: Reaching Out, Chapter 4, p. 74-83.

Week 10: October 28
Cognitive Material: Non-Verbal Communication
Experience: Exercise on Communication without words, interpreting others non-verbal cues, the use of non-verbal cues to express warmth and coldness.

Process:
Week 11: November 4

Cognitive Material: Communication Styles, Virginia Satir; blamer, avoider, placator, conniver (reasonable), leveler.

Experience: Open Communication--Closed Communication

Process:

Outside Readings:

Week 12: November 11

Cognitive Material: Response styles: listening and responding styles, intentions underlying the responses.

Experience: Exercise on listening and response styles; practicing the five responses, the phrasing of an accurate understanding response.

Process:

Outside Readings:
A. Text: Reaching Out, Chapter 7.

IV. Constructive Confrontation

Weeks 13 & 14: November 18 and November 25

Cognitive Material: Interpersonal confrontation; Types of Confrontation; Skills involved in confronting another person.

Experience: Practicing Confrontation; Role-Playing Confrontations.

Process:

Outside Readings:
A. Text: Reaching Out, Chapter 9 & 12.

V. Conflicts Resolution

Weeks 15 & 16: December 2 and December 9

Cognitive Material: Handling Conflict.

Experience: Didactic game to improve conflict resolution skills.

Process:

Outside Readings:
A. Text: Reaching Out, Chapter 13.

VI. Summary & Evaluation

Week 17: December 16
APPROVAL SHEET

The dissertation submitted by Philip C. Theodorou has been read and approved by the following Committee:

Dr. John A. Wellington, Chairman
Professor, Guidance and Counseling, Loyola

Dr. John P. Eddy
Professor, Guidance and Counseling, Loyola

Dr. Gloria J. Lewis
Assistant Professor, Guidance and Counseling, Loyola

Dr. C. John McCann
Assistant Professor, Mathematics, Loyola

Dr. Manuel S. Silverman
Associate Professor, Guidance and Counseling, Loyola

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

May 11, 1976
Date

[Signature]
Director's Signature