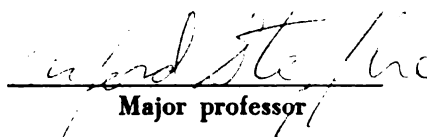




This is to certify that the
thesis entitled
Psychological Group Counseling
with Socially Isolated
Seventh Grade Girls--
An Exploratory Study
presented by

Marie A. Ferguson

has been accepted towards fulfillment
of the requirements for
Ph. D. degree in Education


Major professor

Date August 1, 1961

O-169



PLACE IN RETURN BOX to remove this checkout from your record.
TO AVOID FINES return on or before date due.
MAY BE RECALLED with earlier due date if requested.

DATE DUE	DATE DUE	DATE DUE
NOV 21 2001		

The s
licator of
mental heal
vestigation
counseling
seventh gra
ten weeks of
mental group

Subject
ric tests to
mentally inte
number of sc
low quartile
were randoml
One of the e
the other in
groups was g

It was
ience improv

ABSTRACT

PSYCHOLOGICAL GROUP COUNSELING WITH SOCIALLY ISOLATED SEVENTH GRADE GIRLS-- AN EXPLORATORY STUDY

by Marie A. Ferguson

The study was concerned with social isolation which, as an indicator of personal or social maladjustment, is a facet of the total mental health problem of the public school. The purpose of the investigation was to explore the possibility that psychological group counseling might be an effective treatment for socially isolated seventh grade girls. An experiment was conducted which consisted of ten weeks of semi-weekly group counseling sessions with two experimental groups in a public school.

Subjects for the study were selected by first giving sociometric tests to the eight seventh grade rooms of the school, and subsequently interviewing the girls who comprized the low quartile in number of sociometric choices received. The twenty-four girls in the low quartile who indicated willingness to participate in the study were randomly assigned to two experimental and two control groups. One of the experimental groups was composed entirely of isolates and the other included three highly chosen girls. One of the control groups was given bibliotherapy and the other no special treatment.

It was hypothesized that the experimental groups would experience improved self-concept, anxiety, and sociometric scores after

counseling and that the control groups would not improve in these variables during the experimental period. It was predicted that the mixed group would improve more than the group composed entirely of isolates. It was also hypothesized that subjects who perceived the group experience most positively would experience the most significant improvement in self-concept.

Self-concept and anxiety tests were administered to all the research subjects, and sociometric tests to all the seventh grade rooms, at the beginning and at the end of the experimental period and again six weeks after the experimental period. A Perception of Group Experience Scale was administered to the counseled subjects at the end of the counseling period. Comparisons were made between the pre-experimental and post-experimental mean scores and between the pre-experimental and follow-up mean scores of each group on the sociometric, self-concept and anxiety tests. The t-test was used to test for significance at the .05 level. Self-concept scores were correlated with each of the eight sub-scales of the Perception of Group Experience Scale by applying the Fisher's Exact Probability test.

The statistical analysis showed that there were significant improvements in mean scores of the counseled group composed entirely of isolates on the self-concept scale both on the post and follow-up tests, on the anxiety scale only on the post test, and in sociometric choice score only on the follow-up test. No significant improvements were found in the mixed counseling group, composed of isolates and stars. In the control groups no significant improvements were found in self-concept or anxiety scores. However, significant increase in

the sociometric score of the bibliotherapy group was observed on the follow-up test, and also a significantly improved follow-up sociometric score resulted when the data relating to the control groups were combined for analysis. No significant correlations were obtained in comparing self-concept scores with the Perception of Group Experience Scales.

The findings suggest that group counseling is not effective with a mixed group composed of isolates and stars, but that it might be an effective way to improve the self-concept score and temporarily reduce the anxiety score in a group composed entirely of isolates. Implications are that improvement in sociometric score may result from chance or from other unknown variables with or without group counseling, since sociometric improvement was found in the follow-up scores of one of the control groups and in the analysis of the data from the combined control groups as well as in the one counseled group composed entirely of isolates.

PSYCHOLOGICAL GROUP COUNSELING
WITH SOCIALLY ISOLATED
SEVENTH GRADE GIRLS--
AN EXPLORATORY STUDY

by
Marie A. Ferguson

A THESIS

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

DOCTOR OF PHILOSOPHY

College of Education

1961

3 20797
5/24/62

ACKNOWLEDGEMENTS

Sincere appreciation is hereby expressed to Dr. Buford Stefflre, Professor of Education, for his wise guidance throughout the planning, executing, and reporting of the research. Gratefulness is also extended to Dr. Bill Kell, Professor of Psychology, who provided supervision for the counseling, and to Dr. John Jamrich, Professor of Education and Dr. John Useem, Professor of Sociology and Anthropology, who supplied helpful suggestions.

The writer is indebted to Mr. Nicholas Martinez, principal of Windemere Park School, for permitting the experiment to be held at the school and making the necessary schedule adjustments, and to Mr. John Grabow, Guidance Director of Waverly School District, who assisted in the testing and other phases of the investigation. The cooperation and assistance of Mrs. Josephine Dutcher, the school secretary, and of the seventh grade teachers is gratefully acknowledged.

Thanks are also extended to Mr. John Paterson of the Bureau of Educational Research for assistance in selecting statistical procedures, and to the graduate students who helped to administer the sociometric tests.

Acknowledgements are due Dr. Paul Bruce, of San Diego State College for permission to use the Self-Acceptance Scale, and to the Society for Research in Child Development, Inc. and Dr. Alfred Castaneda of the Department of Psychology, University of Texas, and his associates for permission to use the Children's Manifest Anxiety Scale.

Finally gratitude is expressed to Dr. Clark Moustakas, Professor of Psychology at Merrill-Palmer Institute, who inspired the writer in the selection of the research area and in the pursuit of the investigation.

TABLE OF CONTENTS

	Page
LIST OF TABLES	vi
LIST OF ILLUSTRATIONS	ix
LIST OF APPENDICES	x
 Chapter .	
I. THE PROBLEM	1
A. Statement of the Problem	1
B. Purpose of the Study	2
C. Delineation of the Study	3
D. Theoretical Frame of Reference	4
Phenomenological Point of View	4
Perceptual Field	5
Self-Concept	5
Psychological Maladjustment	7
Alteration of Self-Concept	8
Summary	9
E. Hypotheses	11
Statement of the Hypotheses	11
Basic Assumptions	12
Definition of Terms	13
F. Methodology	14
The Sample	14
Administration of Tests	15
Treatment of the Data	15
G. Summation of the Chapter	16
II. REVIEW OF RELEVANT LITERATURE	17
Part One: MENTAL HEALTH	18
A. Introduction and Definition	18
B. Prevalence of Mental Health Problems	19
C. Diagnosis and Analysis of Mental Health Problems	21
Factors Affecting Mental Health	22
Special Problem Areas	24
Diagnostic Approaches	25
Summary	25
D. Prevention and Treatment Programs	26
Schools	27
Agencies	28
Summary	30
E. Summary of Mental Health Literature	30

Chapter	Page
II. Part Two: PSYCHOLOGICAL GROUP COUNSELING	32
A. Introduction	32
B. Function, Nature, and Theoretical Assumptions	33
Terminology and Personnel	33
Group Versus Individual Counseling	34
Requirements for Success	35
Theoretical Assumptions	36
Summary	36
C. Historical Backgrounds	37
D. Group Counseling with Adolescents	38
Agencies and Institutions	39
Schools	41
Summary	42
E. Summary of Group Counseling Literature	43
Part Three: THE LITERATURE OF SOCIOMETRY	44
A. Origins and Development	44
Definition and Theoretical Framework	45
Origins and Early Development	46
Tabulating and Analytical Techniques	47
Summary	48
B. Relevant Research in Sociometry	49
1. Relation of Sociometric Choices to	
Personal Factors	49
Personality Traits	49
Physical Factors	51
Personality Adjustment	52
Social Adjustment	54
School Adjustment: Intelligence and Achievement	54
Summary.	57
2. Relation of Sociometric Status to	
Social Factors	49
Demographic Factors	57
Proximity and Degree of Acquaintance	58
Family Factors	60
Summary	62
3. The Application of Sociometry in	
Improvement Activities	63
Sociometric Grouping	63
Other Remedial Approaches	65
C. Summary of Sociometry Literature	66
III. METHODOLOGY	69
A. Selection and Description of Experimental Subjects	69
Selection of Subjects and Composition of Groups	69

Chapter	Page
Family Size, Social Class, Intelligence Level . .	69
B. Hypotheses	74
Predictions of Improvement in Self-Concept Scores during Counseling	74
Predictions of Improvement in Anxiety Scores during Counseling	75
Predictions of Improved Sociometric Scores during Counseling	76
Predictions of Correlation Between Gain in Self-Concept and Scores Made on the Perception of Group Experience Scales	77
C. Treatment of Groups	78
Control Groups	78
Experimental Treatment	78
D. Testing Instruments and their Use	79
The Self-Acceptance Scale	80
The Children's Manifest Anxiety Scale	82
The Sociometric Scale	83
The Perception of Group Experience Scale	86
The Testing Program	87
E. Treatment of the Data	89
Predicted Changes	89
Predictions of Which Subjects would Change	90
F. Summary	
IV. THE FINDINGS	93
A. The Data Relating to Change in Self-Concept Scores	94
B. The Data Relating to Improvement in Anxiety Scores	102
C. The Data Relating to Change in Sociometric Scores	107
D. Findings Relating to Correlations between Gain in Self-Concept Scores and Perception of Group Exper- ience Scale	116
E. Summary of Findings	123
Experimental Groups	124
Control Groups	125
V. SUMMARY, CONCLUSIONS AND IMPLICATIONS FOR FURTHER RESEARCH	131
APPENDICES	137
BIBLIOGRAPHY	151

LIST OF TABLES

Table	Page
1. Distribution of Sociometric Choices to Girls by Rooms . .	70
2. Composition of Groups by Homeroom	72
3. Means and Ranges on Lorge-Thorndike Intelligence Tests .	73
4. Test-Retest Correlation Coefficients for the SAS Scales .	81
5. Rank Order Correlation Coefficients between Teacher Estimates and Sociometric Scores	85
6. Pre and Post-Counseling Scores in Self-Concept and Self-Ideal Discrepancy for Group A	94
7. Pre and Follow-up Scores in Self-Concept and Self-Ideal Discrepancy made by Group A	95
8. Pre and Post-Counseling Scores in Self-Concept and Self- Ideal Discrepancy for Group B	96
9. Pre and Follow-up Scores in Self-Concept and Self-Ideal Discrepancy made by Group B	96
10. Results of t-Tests of the SAS Scores Comparing Pre and Post Scores for Combined Groups A and B	97
11. Results of t-Tests of the SAS Scores Comparing Pre and Follow-up Scores for Combined Groups A and B	98
12. Pre and Post-Test Scores in Self-Concept and Self-Ideal Discrepancy for Group C	98
13. Pre and Follow-up Scores in Self-Concept and Self-Ideal Discrepancy Made by Group C	99
14. Pre and Post-Test Scores in Self-Concept and Self-Ideal Discrepancy Made by Group D	99
15. Pre and Follow-up Scores in Self-Concept and Self-Ideal Discrepancy Made by Group D	100
16. Results of t-Tests of Comparing SAS Scores for Combined Groups C and D Before and After the Experimental Period.	101
17. Results of t-Tests of the SAS Scores Comparing Pre and Follow-up Scores for Combined Groups C and D	101

Table	Page
18. Comparison of Pre and Post Counseling Anxiety Scores and Pre and Follow-up Scores of Group A	103
19. Comparison of Pre and Post Counseling Anxiety Scores and Pre and Follow-up Scores of Group B	103
20. Comparison of Pre-Counseling Anxiety Scores with Post and with Follow-up Scores of Combined Groups A and B . .	104
21. Comparison of Pre and Post-Counseling Anxiety Scores and Pre and Follow-up Scores of Group C	105
22. Comparison of Pre and Post-Experimental Anxiety Scores and Pre and Follow-up Scores of Group D	106
23. Comparison of Pre-Experimental Anxiety Scores with Post and with Follow-up Scores of Combined Groups C and D	106
24. Comparison of Pre and Post-Counseling Choice Scores and Pre and Follow-up Scores of Group A	108
25. Comparison of Pre and Post-Counseling Choice Scores and Pre and Follow-up Scores of Group B	109
26. Results of Combining Sociometric Scores of Groups A and B	110
27. Comparison of Pre and Post-Experimental Choice Scores and Pre and Follow-up Scores of Group C	110
28. Comparison of Pre and Post-Experimental Choice Scores and Pre and Follow-up Scores of Group D	111
29. Results of Combining Sociometric Scores of Groups C and D	112
30. Comparison of Pre and Post-Counseling Rejection Scores and Pre and Follow-up Scores of Group A	113
31. Comparison of Pre and Post-Counseling Rejection Scores and Pre and Follow-up Scores of Group B	113
32. Comparison of Pre and Post-Experimental Rejection Scores and Pre and Follow-up Scores of Group C	114
33. Comparison of Pre and Post-Experimental Rejection Scores and Pre and Follow-up Scores of Group D	114
34. SAS Difference Scores and PGES Subscale Scores for Counseled Subjects	117

Table	Page
35. Relationship Between Scale I and SC Scores	118
36. Relationship Between Scale I and SID Scores	118
37. Relationship Between Scale IIa and SC Scores	119
38. Relationship Between Scale IIa and SID Scores	119
39. Distribution of Scale II Scores by Group B Isolates . .	119
40. Relationship Between Scale III and SC Scores	120
41. Relationship Between Scale III and SID Scores	120
42. Relationship Between Scale IV and SC Scores	120
43. Relationship Between Scale IV and SID Scores	120
44. Relationship Between Scale V and SC Scores	121
45. Relationship Between Scale V and SID Scores	121
46. Relationship Between Scale VI and SC Scores	121
47. Relationship Between Scale VI and SID Scores	121
48. Relationship Between Scale VII and SC Scores	122
49. Relationship Between Scale VII and SID Scores	122
50. Relationships Between Scale VIII and SC Scores	122
51. Relationships Between Scale VIII and SID Scores	122
52. Summary of Findings Concerning Improvement in Experi- mental Groups	125
53. Summary of Findings Concerning Change in Control Groups..	126
54. Condensation of Table 52: Summary of Findings Concern- ing Improvement in Experimental Groups	128
55. Condensation of Table 53: Summary of Findings Concern- ing Change in Control Groups	128
56. Comparison of Number of Changes in the Desired Direc- tion in the Experimental Groups and in the Control Groups	129

LIST OF ILLUSTRATIONS

Chart	Page
1. Sequence of Experimental Procedures	89

LIST OF APPENDICES

Appendix	Page
A. Summary of Group Counseling Sessions	137
B. Testing Instruments	141

CHAPTER I

THE PROBLEM

"No one is an island entire of itself," wrote John Donne; and this sentiment is true in a sense. Yet in a certain sense everyone is an island,* isolated by the physical and psychological processes and perceptions which constitute the individual organism. Because of this existential isolation, meaningful interpersonal relationships are necessary to enable persons to become fully themselves. Northway, in commenting on this quotation from John Donne, wrote: "Sociometry simply demonstrates that the fundamental bonds which hold man to the Continent are his own personal relationships." She spoke of man's "need to free himself from his own insularity in a security which is greater than himself and through which he himself becomes greater."^{317:45}

A. Statement of the Problem

The problem of concern in this study is the condition of social isolation. The center of interest is the person who does not have meaningful personal relationships, who has not, for some reason, been able to "free himself from his own insularity." The particular focus of the study is on social isolation in the public school where, as sociometric studies have shown, between eleven and twenty-two per cent of pupils at all grade levels receive one choice or no choices on

*The Italian form of island is isola, which is related to the English isolation.

sociometric tests.¹⁷⁴ Since healthy personality development is dependent upon satisfying interpersonal relationships, the implications suggested by these statistics are that up to six children in the average room suffer personality handicaps from want of satisfying interpersonal relationships. Gronlund has stated that although in early childhood personality development depends primarily on relationships with parents, from the time of entering school peer relationships count most and will "determine to a large extent how the person views the world about him and how he views himself."^{174:232}

Another facet of the problem of social isolation is its relationship to the total mental health problem. There is evidence that isolation sometimes indicates deep psychological problems.³¹⁷ In addition to the loss to society of the positive contributions normally expected from the healthy personality, the social isolate represents a potential danger to society. In a study of over 5,000 pupils, in grades 3 to 8 in New York State it was found that social isolation and truancy were good measures of future delinquency.³¹⁴ In other studies social isolation has been explored as a possible predictor of schizophrenia⁸⁸ or mental illness.¹⁹⁷

B. Purpose of the Study

This study was done as an exploratory experiment to determine if psychological group counseling might be an effective way to treat the problem of social isolation at the early adolescent level in the public school. Because no other study has been reported in which sociometrically determined isolates and underchosen were the subjects of an

interview group counseling experiment,* and because of the complex nature of the variables involved, an exploratory study was indicated. Psychological group counseling was chosen as the treatment method on the premise that within the therapeutic atmosphere the reality factor of an interpersonal situation would be conducive to solving problems which were rooted in the lack of adequate interpersonal experiences. Group counseling has been found to be a particularly appropriate technique to use with adolescents because of their strong need for peer acceptance and their struggle for independence from adults.^{62,94,174,325} The school was chosen as the locale for the experiment because it is the place of "total population exposure"³⁸³ and has responsibilities for conducting mental hygiene preventive and therapeutic programs.^{54,187}

C. Delineation of the Study

The subjects of the study were seventh grade girls who received few or no choices on a sociometric test which was administered to all the seventh grade rooms of the school. The choice of seventh grade students seemed appropriate because they are young enough to have some of the "resiliency of childhood"^{58:82} and yet old enough to participate in interview group therapy. Also the time of transfer into junior high school has been considered as one of the periods of greatest need for mental hygiene programs.³³⁸ Although there is no consensus with respect to homogeneous or heterogeneous grouping by sex in counseling, some authorities have advocated homogeneous grouping of the same sex as the counselor.^{147,408} This plan was adopted.

*Two sociometric studies with younger children using a play group therapy technique have been reported.^{100,109}

The experiment was performed at a new consolidated school where students from four different districts were for the first time together in the seventh grade. The school is on the outskirts of a state capital city, where all socioeconomic levels are represented. In the eight seventh grade rooms there were approximately 225 students, which provided the minimum number required to yield the sample that was called for.

Ten weeks of semi-weekly counseling sessions were held between the Christmas and Easter vacations. The group meetings were held at the home room period, which was manipulated to allow about thirty minutes for the sessions. Follow-up tests were given six weeks after the counseling experiment was over.

D. Theoretical Frame of Reference

The theoretical frame of reference that underlies the approach to counseling and the hypotheses of this experiment is a general phenomenological point of view. Certain basic concepts are included which belong to organismic or holistic theory. Inasmuch as Rogers has combined and integrated phenomenological and organismic concepts in his approach to personality theory, his formulations are most relevant to this discussion ^{376,377} The works of Combs and Snygg⁹³ and of certain organismic theorists^{162,276,240,277} have also been drawn upon.

Phenomenological point of view

The phenomenological point of view is essentially the notion that each individual lives in his own subjective world as he perceives it,³⁷⁷ and that from within this world all behavior is relevant and meaningful.⁹³

The only way to understand behavior is from the point of view of the behavior, himself.

Perceptual field

The phenomenal or perceptual field of an individual is "the entire universe, including himself, as it is experienced by the individual at the instant of action."^{93:20} There is, however, differentiation in this perceptual field. Combs and Saygg used the concept of figure and ground to indicate awareness of detail in relation to the total field. The rise of new figures and lapse into ground constitute the process of change.⁹³ This notion is similar to Lewin's field theory, but the important difference is that the phenomenologist includes the biological organism and the self as parts of the perceptual field.¹⁸⁰ According to Rogers that which is consciously perceived is only a small part of the total world of experience.³⁷⁶ The phenomenal field includes preconscious and unconscious elements as well as consciously perceived experience.

Self-concept

The major focus of personality theory from the phenomenological point of view is the self. Patterson has called self theory "the core or essence of the Rogerian approach," and has also indicated that it is coming to be the focus in psychoanalytic and other personality theories.^{335:3,4} Patterson defined self-concept as "the organization of the perceptions of the self."^{335:7} Combs and Saygg explained that the self is differentiated from the not-self in the perceptual field. The "patterned interrelationships" which an individual conceives as of "himself from his own point of view" comprise the phenomenal self.^{93:126}

The self-concept tends to remain stable. The need to maintain the self acts as an agent of selectivity of perceptions. Experience is perceived and interpreted in relation to the self as it has become established.⁹³ Those aspects of the environment which are inconsistent with the self-concept are likely to be ignored, rejected, or distorted,³⁷⁶ but may become symbolized and produce change in the self.

The social nature of the self-concept has been stressed by most theorists, particularly by Sullivan in his interpersonal theory;⁴¹⁴ by the sociologists, Cooley⁹⁷ and Mead;²⁸⁵ and more recently by social transaction theorists.²²⁴ Representing the latter point of view Kilpatrick stated that "self and otherness cannot be perceived apart from one another."^{224:17} Rogers represents a general position in his statement that the structure of the self is formed as a result of interactions with environment, particularly "evaluational interactions with others."^{376:498} Values are attached to these experiences of interaction in terms of their significance to the organism in its need for self-actualization or its need for positive regard. Values may also be taken directly from others and introjected into the self-concept when they are attached to an experience of positive regard.³⁷⁶

These two needs of the organism, namely, the need for self-actualization and the need for positive regard require further elucidation, since they are basic to an understanding of conflict and of change in self-concept. The notion that all behavior results from the one sovereign drive of the organism to actualize itself, a fundamental concept in organismic theory, is also basic to phenomenologists. Combs and Smygg⁹³ and Rogers³⁷⁶ referred to this motivating force as the drive to maintain and enhance the organism. It was Goldstein who named it the drive toward self-actualization, which he described as the need

of the organism to realize its potentials.¹⁶² Maslow spoke of an "essential inner nature" which is persistently "pressing for actualization."^{277:232-33} Lecky saw the one motivational source in human personality as "the necessity to maintain the unity of the system."^{240:88-89}

The need for positive regard was postulated by Rogers.³⁷⁷ He believed there is a basic need of the organism for acceptance and positive regard from others, and that the introjection of positive regard creates the need for self-regard. Although Rogers sees these as secondary or learned needs, Patterson suggests that they are inherent aspects of the drive for self-actualization and emerge with the emergence of the self-concept.³³⁵

Psychological maladjustment

Psychological maladjustment results from conflict of values within the organism. This conflict has been described by Rogers in several ways. It may be a conflict between the organismic pleasure derived from certain behavior and the need to avoid the punishment that accompanies the behavior. Maladjustment ensues from a consequent denial or distortion of the feelings of pleasure, which nevertheless remain unsymbolized in the unconscious to influence behavior. The conflict may be between conscious values on the one hand, which are spurious because they have been introjected from significant others without true meaning to the organism, and genuine values on the other hand, which have remained unconscious.³⁷⁶ In a more recent statement Rogers suggests that the conflict may be between needs of the organism and needs of the self-concept for positive self-regard.³⁷⁷ Patterson has summarized this thought of Rogers as follows:

When positive self-regard depends on evaluations of behavior of others, discrepancies may develop between the need of the organism and the needs of the self-concept for positive self-regard. There is thus incongruence between the self and

experience, or psychological maladjustment. Maladjustment is thus the result of attempting to preserve the existing self-concept from the threat of experiences which are inconsistent with it, leading to selective perception and distortion or denial of experience.^{335:7,8}

Rogers introduced the concept of the symbolization of experience to explain the process that occurs when experience is accepted and integrated into the self-concept. Organismic experiences and needs which are selectively denied or distorted in the service of maintaining the self-concept fail to become symbolized and integrated into the self structure. Such experiences are viscerally felt or "subceived" as threatening, and therefore rejected. Although behavior is usually consistent with the self-concept, it may on occasion result from these unsymbolized aspects of experience; but the behavior will be denied or explained away by the individual as not belonging to him. The unconscious recognition of threat evokes mechanisms which defend the self image by denial or distortion of the experience. The greater the incongruency between the self-image and organismic reality, the more rigid the defenses will be built and the greater will be the resultant tension and maladjustment.³⁷⁶

Maslow's explanation of psychopathology is similar to that of Rogers in his statement that "psychopathology in general results from the denial or the frustration or the twisting of man's essential nature."²⁷⁶

Alteration of self-concept

Rogers' approach to personality theory has been through his own observations of behavior change as a result of psychotherapy. His thesis that behavior is usually consistent with the self-concept leads to the postulate that behavior change will be affected by altering the

self-concept. Alteration in the self-concept, therefore, is the aim of psychotherapy.

Change in the self-concept is possible in the therapeutic situation when an atmosphere is provided which is free from threat to the individual. The therapist enters into a relationship with the counselee which communicates to the counselee the therapist's empathic understanding and acceptance of the counselee, unconditioned by value judgments. The unconditional acceptance, even of the ambivalence and conflict felt by the counselee, frees him from a sense of threat and enables him to explore his own denied feelings and experiences. A new structure of the self emerges as these experiences are symbolized and integrated into the self-concept. When full experience is accepted, defensiveness is no longer needed and the individual is freed for spontaneous growth and enhancement of the organism. In the words of Maslow, psychotherapy helps "to restore the person to the path of self-actualization and of development along the lines that his inner nature dictates."^{276:341}

A further postulate of Rogers was that when a person is freed to accept his own experience he also becomes more accepting of other individuals.³⁷⁶ Gordon, in reporting changes during group therapy, observed this tendency in a group which was tested by a Q-technique before and after participation in the group.¹⁶⁴

Summary

The phenomenological view of personality theory has been presented as an approach which gives primary focus to the self-concept and to the subjective perceptions and meanings of the individual's

world of experience. Behavior is best understood from the point of view of the behavior. The motivation for all behavior is the drive toward self actualization and self maintenance. The need to maintain this self-concept results in selective perceptions of the environment. This need for self-maintenance and the need for positive regard are sometimes in conflict with organismic experience. This conflict may result in the rejection of the organismic experience or its distortion, with a consequent incongruency between the self image and organismic reality. Defensive mechanisms are evoked to maintain the self-concept and maladjustment occurs. In the non-threatening situation of a therapeutic relationship an individual is freed to explore the denied aspects of his experience and integrate them into the self structure.

Relating this reasoning to the present study suggests that for social isolates who defend the self by withdrawal or other isolating behavior, an experience of group counseling can provide an opportunity for the emergence of a new self structure. To experience relatedness, acceptance, and a sense of worth in a situation free from threat, and to be able to incorporate this experience into the self-concept could produce significant change in perception of the self. To experience acceptance and identification with their peers in the group could enhance the emergence of a new self structure. With increased self-acceptance the defensive and isolating types of behavior could give way to relatedness and friendliness.

E. Hypotheses

Statement of the hypotheses

Three groups of hypotheses were formulated to indicate the kinds of changes which group counseling might be expected to produce in social isolates. The areas of expected change were in self-concept, level of anxiety, and sociometric status. A fourth set of hypotheses suggested certain correlations between the changes that might be observed and perceptions group members might hold concerning the group experience. There were two counseling groups, one which was composed entirely of isolates and another which included isolates and highly chosen individuals. It was hypothesized that the mixed group would change more than the group composed entirely of isolates. This prediction was based on the assumption that an experience of acceptance by highly chosen persons and identification with them would be conducive to greater positive change in the self-concept. In summary the hypotheses were stated as follows:

1. The mean score on a self-concept scale in each of the two experimental groups will improve significantly as a result of group counseling and will remain at a significantly higher level than the pre-test score in a six week follow-up test. There will be a trend toward greater change in the isolates of the mixed group which includes non-isolates, than in the group composed only of isolates.

2. The mean score of an anxiety scale in each of the two experimental groups will improve significantly as a result of group counseling and will remain at a significantly lower level than the pre-test score in a six week follow-up test. There will be a trend toward

greater change in the isolates of the mixed group than in the group composed only of isolates.

3. The mean sociometric score in each of the two experimental groups will improve significantly as a result of group counseling and will remain at a significantly higher level than the pre-test score in a six week follow-up test. There will be a trend toward greater change in the isolates of the mixed group which includes non-isolates than in the group composed only of isolates.

4. There will be positive correlation between gain in self-concept and the perceived level of identification with others in the counseling group and the perceived level of acceptance in the counseling situation.

5. In a control group which receives bibliotherapy there will be no significant change in self concept, anxiety level, or sociometric score.

6. In a control group which receives no special treatment there will be no significant change in self concept, anxiety level, or sociometric score.

Basic assumptions

The basic operational assumptions which underlie this study are as follows:

1. That sociometric screening is a reliable means of discovering social isolates.
2. That self-concept can be measured by the instrument used.
3. That the level of anxiety can be ascertained by the Children's Form of the Manifest Anxiety Scale.

4. That the perceptions concerning the group counseling experiences can be measured by the Perception of Group Experience Scales.

Definition of terms

Social isolation.--In this study social isolation is operationally defined as the experience of those individuals who fall in the lowest quartile of the class in the number of sociometric choices they received. This delineation indicates the inclusion of isolates and near-isolates, actually those persons with less than three choices, in the study. It is important to note, however, that a definition of social isolation may be approached in various ways, each of which differentiates among social isolates. Not necessarily all of the unchosen on sociometric tests are insulated from meaningful relationships. Sociological aspects of social isolation include such factors as social class, racial cleavage and newness to the group. Another differentiation is between voluntary and involuntary isolation, the former including persons with strong individual interests. In terms of group dynamics the isolate is one who is unable to play his role in the group⁴² or lacks orientation to the total group.²⁰⁹ Sociometric patterns of social isolation vary from the extreme of inability either to receive or give either choices or rejections to the various combinations of these four variables.³⁰⁰

Highly chosen persons.--The category of highly chosen persons signifies those individuals who fall in the upper quartile of sociometric choices. These individuals are sometimes referred to as stars or leaders,

Psychological group counseling.--signifies the process of interacting and relating in a group which includes individuals who have

problems and a counselor-therapist who seeks to provide a non-threatening atmosphere of permissiveness, understanding, and acceptance. The term will be used interchangeably with group psychotherapy.

Perception of counseling experience--refers to an attempt to measure the degree to which group participants identified themselves with other group members and the degree to which they felt accepted by other group members and by the counselor. Operationally, perception of counseling experience will refer to scores made on the eight subscales of the instrument designed to measure and quantify each individual's perception of the group experience.

Improved self-concept--refers to positive change in scores which may occur between two administrations of the Bruce Self-Acceptance Scale.

Improved anxiety level--refers to positive change in scores which may occur between two administrations of the Children's Manifest Anxiety Scale.

Improved sociometric level--refers to an increase in the number of positive choices received on a sociometric scale.

F. Methodology

The sample

Twenty-five subjects were selected as the sample from the seventh grade of the Windemere Park School in the outskirts of Lansing, Michigan. Two selection procedures were used: first, a sociometric test was administered to all eight of the seventh grade rooms at the school in order to identify the isolates; and second, individual interviews were conducted to determine the willingness of individuals to

participate in the experiment. Subjects were than randomly assigned to four groups differentially composed and/or treated as follows:

Experimental Group A was composed of eight isolates who participated in group counseling.

Experimental Group B was composed of five isolates and three highly chosen individuals who participated in group counseling.

Control Group C was composed of five isolates who were given bibliotherapy.

Control Group D was composed of seven isolates who received no special treatment.

Administration of tests

Four measuring instruments were used, namely, a sociometric test, a Self-Acceptance Scale, the Children's Manifest Anxiety Scale, and the Perception of Group Experience Scale. The first three instruments were each administered three times: pre-testing at the beginning of the experimental period, post-testing at the end of the experimental period, and follow-up testing six weeks after the experimental period. The sociometric test was given to the total seventh grade, while the self-acceptance and anxiety tests were given to the individuals who made up the two counseling and the two control groups. The Perception of Group Experience Scale was administered only once, and only to the participants in the two counseling groups.

Treatment of the data

To test the first three sets of hypotheses in which change was predicted for the counseling groups, comparisons were made between the pre- and post-test scores and between the pre- and follow-up test scores

in sociometric choice, self-concept and anxiety. The t-test was used to determine whether significant change could be observed between pre- and post-testing in either of the experimental or control groups, and whether any change was observable between pre-test and follow-up test in any of the four groups. To test the fourth set of hypotheses, which predicted correlation between gain in self-concept and the various subscores on the Perception of Group Experience Scale, the Fisher's Exact Probability Test was used.

G. Summation of the Chapter

The problem of this study has been presented as social isolation and the purpose as stated was to explore the possibility that group counseling might be an effective way to treat the problem of social isolation at the early adolescent level in the public school. It was indicated that the study was limited to seventh grade girls in a certain school. The phenomenological approach to personality theory was reviewed as a theoretical framework for the study. The summarized hypotheses having to do with expected changes were stated, as well as the basic assumptions and the definitions of significant terms relating to the hypotheses. An overview of the methodology described the sample, the testing program, and the treatment of the data.

The plan for the remainder of the thesis is that Chapter II will review relevant literature; Chapter III will describe the methodology in more detail, Chapter IV will present the data and discuss their treatment and results; and Chapter V will suggest the implications of the study. In the appendix an overview of the group counseling sessions will be presented.

CHAPTER II

REVIEW OF RELEVANT LITERATURE

There are three main areas of literature which are related to this study. Part one will review the literature of mental health; part two will review the literature of psychological group counseling; and part three will survey the literature on sociometry. This review will not be exhaustive in any of these areas but will concentrate on material that relates to children and youth of elementary and high school age. The survey of mental health literature will include discussions of (A) definitions of mental health, (B) the prevalence of mental health problems, (C) analysis of mental health problems, and (D) prevention and treatment programs. The section on psychological group counseling will comprise (A) discussions of the nature, function and theoretical assumptions of psychological group counseling, (B) materials concerned with the historical setting, and (C) studies of group counseling with adolescents. The third section will consider (A) the origins and development of sociometry, and (B) relevant research.

Since most of the literature is of comparably recent origin, that is, within the last two or three decades, the treatment will tend to be topical rather than chronological, except when historical sequence is of moment.

Part One: MENTAL HEALTH

A. Introduction and Definition

Since the present experiment falls within the general category of mental health, it is relevant to examine the literature in this field, particularly that which pertains to the mental hygiene of school aged children. Inasmuch as mental health has been a dominant concern in recent decades, volumes of literature have been written on the subject and numerous research studies have been made. Nine hundred and fifty-four entries were included in an evaluation of mental health published in 1955 by the United States Department of Health, Education and Welfare.⁴²⁹ In this publication and others¹³⁷ the need for a more adequate base for research was pointed out, unsolved problems were indicated,²⁴⁷ and the theoretical assumptions of the mental health movement were discussed.¹⁵⁵ In the introduction to the volume the committee pertinently states:

Evaluation of 'Mental Health Activities' is necessarily difficult. It must cope with the influences of numerous variables, consider the validity of those basic assumptions upon which mental health relies at the present time, and take into account the personal beliefs and attitudes of both the evaluators and those whose activities are being evaluated.^{429:1}

Mental health has been discussed in terms of having "global meaning"^{429:7} and the admonition has been given that it is not to be equated with absence of disease.³⁸³ Bonney stated that it is "a very broad term which includes physical, mental, emotional, and social aspects of adjustment."^{54:7} Jahoda summarized theoretical statements about what mental health consists of by listing six "categories of

criteria of positive mental health" as follows: attitudes toward the self, style and degree of growth or self-actualization, integration, autonomy, perception of reality, and environmental mastery.^{205:23} The multiple criterion approach, she suggests, provides for the recognition of different types of mental health. Earlier²⁰⁶ she had listed five such categories.

Research which adds to the understanding of what mental health consists of includes longitudinal studies of normal children,^{269,288} Olson and Hughes' study of "The Child as a Whole,"³³³ Langdon's report from interviews with parents of well-adjusted children,²³⁵ the Toronto studies of "Well Children"³¹⁸ and a conference report on healthy personality development.²⁰¹

It may be stated in summary that while mental health has been an area of voluminous writing and research, there are unsolved problems both in those aspects related to research and in the more theoretical areas related to definition. With respect to both research in mental health and definition of the concept the theoretical assumptions of each particular writer has been determinative. Jahoda's statement of six "categories of criteria of positive mental health"²⁰⁵ suggests an approach in arriving at meaningful definitions.

B. Prevalence of Mental Health Problems

That the dimensions of the mental health problem in the United States are of shocking proportions is made clear by numerous writers.^{54,92,217} Bonney reported on summaries of research^{92,217} which indicate that there are "approximately one million psychotics, between eight and ten million psychoneurotics, over two-thirds of a million

chronic alcoholics, fifty thousand drug addicts, seven million people with criminal records, and 250,000 first admissions to mental hospitals every year.^{54:18} Relating these figures to the school population would suggest that an alarming number of children now in school will constitute the disturbed and antisocial population of the future.

Research which has examined the mental health problem as it is found in schools reports varying figures^{33,58,133,217,280,327,374,379,427} but indicates in general that approximately twenty-five per cent of the public school population have personality handicaps serious enough to interfere with achievement and happiness. Dorothy Rogers made predictions that from thirty to fifty out of any one hundred typical children might be expected to experience some measure of social or personal failure because of maladjustment.³⁷⁹

Several investigators^{87,374,332} have reported on the differences found between various schools in the number of disturbed children. Clancy and Smitter found this difference to range from five per cent in some schools to thirty-five per cent in others in their study of the schools of Santa Barbara County, California.⁸⁷ Rogers' investigation in Columbus, Ohio yielded figures which indicated that on the average, twelve per cent of school children show poor mental health, and another thirty per cent have moderately poor adjustment.³⁷⁴

Various area surveys have concentrated on certain segments of the population or on limited aspects of the problem. A study in Miami County, Ohio included studies of the mental health of high school students,²⁷³ elementary school children,²⁷² of rural students,²⁷¹ and a study of nervous traits among first graders.⁴⁴⁵ Andrew¹² studied the mental health needs of public school children in Battle Creek,

Michigan. In another study¹¹ Andrew compared two communities with different social backgrounds and found a similar number of mental health problems in each. An investigation of seven to sixteen year old children in a Baltimore district discovered 3.8 cases of epilepsy and 37.9 cases of mental deficiency per thousand.²⁴²

Foreign studies have reported maladjustment problems comparable in size to those in this country. The Somerset Survey in England found eleven per cent of the children emotionally disturbed with eight per cent needing psychiatric treatment.³⁶⁹ A UNESCO study reported that in eight investigations of school maladjustment in Paris four to twelve per cent of the children were "seriously disturbed."⁴³² Similar situations were indicated in New Zealand, France, and the United Kingdom.

Summarizing these reports suggests that there are presently in the United States some fifteen or twenty million seriously disturbed and antisocial individuals and that the prevalence of mental health problems in the schools ranges from five to thirty-five per cent. The variance in the statistics reported by different investigators is due in part to the differences in research instruments, criteria, and interpretation of the data, as well as to the differential between schools.

C. Diagnosis and Analysis of Mental Health Problems

Literature which related to the diagnosis and analysis of mental health problems will be considered under three headings: first, factors affecting mental health, second special problem areas in mental health, and third, diagnostic approaches.

Factors affecting mental health

Investigators have sought to determine what are the etiological and conditioning factors in the occurrence of mental health problems. Personal, familial, societal, and school factors have been explored in their relationship to adjustment problems. Among those who have studied personal factors are Young,⁴⁵⁰ who related personality to adjustment, Redl, who analyzed ego-frustration in "children who hate,"³⁶⁴ and Ives and her associates, who studied the "Neurotic Rorschachs of Normal Adolescents."²⁰² Richards³⁷¹ made a study of the causes of variation over a period of years in a child's adjustment and Anderson looked at developmental level and adjustment.⁹ Landis and Page, from their analysis of multiple factors related to mental disease, concluded that mental illness is caused by physiological and constitutional factors rather than psychological.²³³ Northway supported this view.³¹⁸ Jersild developed the theory that mental health is related to self-concept.²¹¹

The relation of familial factors to mental health has also been considered. Rabinovitch examined the relationship between personality development and the quality of the early mothering experience.³⁵⁷ Henry investigated the relationship between family interaction patterns and children's emotional problems.¹⁸⁷ Bruch's preliminary findings from a study of families indicated that inconsistencies in parents caused disturbance in children.⁶⁹ Despert concluded, from her study of children whose parents were divorced, that the emotional climate was determinative of the child's adjustment, with or without divorce.¹¹² Orr investigated factors related to sibling rivalry and why rivalry disturbs differentially.³³⁴ Two studies^{124,243} examined the effects of

of television on children. Evry¹²⁴ found that 59.3 per cent of the six-year olds in her study who watch murder programs were sometimes frightened by them and one-third were considered restless by their teachers. Bender³¹ diagnosed as results from emotional deprivation in infancy the cases she found which presented syndromes resembling the "so-called constitutional psychopathic personality." Five to ten per cent of the 5,000 children over a ten year period in Bellevue Hospital fell in this category. Two reports considered factors which affect institution-reared children.^{30,161}

Sociologically oriented investigators have looked at cultural and social factors as they relate to mental health problems. Rennie made such a study in subcommunities of New York.³⁶⁸ Mental disorder has been related to race and nationality,¹⁹⁹ and to social structure.³⁶⁵ Anderson¹⁰ analyzed the relation of background to adjustment. Swanson⁴¹⁷ was interested in the effect of social class membership on personality development. Maccoby and Gibbs,²⁶⁸ Sears,³⁹³ and others³⁹⁴ investigated child-rearing practices as differentiated by social class and resultant effects on personality adjustment. Hunt¹⁹⁷ reported on the five-year study of the Wellesley Human Relations Service which investigated a community in searching for causes of mental illness. The study examined the effect of group belongingness and of isolation. Barker and Wright²² studied a small midwest town to discover the psychological conditions and behavior of children as related to mental illness and health. A community study was made in St. Paul, Minnesota concerning which Kilinski²²³ and Buck⁷¹ reported. It was found that multiple problem families representing five per cent of the city's families absorbed forty-six per cent of the community's health services.

The relation between various school factors and mental health status has attracted some investigators. The bearing of teacher personality on children's adjustment has been explored.^{101,238} The question of how teachers judge children's adjustment interested Wickman,⁴³⁸ who found in 1928 that overt behavior concerned teachers more than fundamental problems. A reversal of this trend has been discovered in more recent studies.^{58,148,198} The findings are relevant here which have indicated a wide variation among schools in percentage of adjustment problems. Rogers³⁷⁴ felt this differential between schools was conclusive evidence that school policies and practices do effect the emotional adjustment of children.

While the literature indicates a wide range of interest and orientation from which investigators have explored factors that might bear on mental health, it is evident that the variables which have been considered are interrelated. Personal, familial, societal, and school influences in varying degrees have their influence on society's children. Difficulties have previously been indicated (p. 2, above) which render much of the research inconclusive.

Special problem areas

Much attention has been given to the search for predispositional factors in delinquency and for background factors in schizophrenia. Gough and Peterson¹⁶⁶ applied the role-taking theory and Hathaway¹⁸³ used the MMPI to identify predelinquency factors. Personality characteristics of juvenile delinquents have been examined.³⁸⁶ Wattenberg and Faigenbaum,⁴³⁶ finding no predictive trend between first and last offense of 1,170 delinquents, concluded that delinquency stems from a

generalized personality disorder. Truancy and social isolation were found to be good measures of future delinquency in one study.³¹⁴ The Gluecks¹⁵⁷ determined that certain kinds of specific relationships between a boy and each of his parents were predictive of juvenile delinquency. Reviews of the Glueck study,¹⁵³ followup studies,^{158,159} and assessment of the Glueck scales^{156,160} have appeared. A followup study of delinquent and problem children in Ohio was reported,¹⁷⁷ and material was published from a conference on drug addiction.⁹⁵ General sources of information on the incidence, origins, and prevention of juvenile delinquency are Bovet's report to WHO⁵⁷ and Vedder's book.³³⁰

Research on background factors that give rise to schizophrenia included investigations by Plank³⁴⁷ and Lidz²⁴⁴ of family environment. The latter found that out of fifty patients studied who developed schizophrenic patterns before the age of twenty-one, twenty had lost a parent from suicide, instability, or divorce before their nineteenth year. The hypothesis was tested in another study⁸⁸ that social isolation is related to the development of schizophrenia. Mark²⁷⁴ examined attitudes of mothers of male schizophrenics toward child behavior. Rabinovitch³⁵⁶ and Beck²⁶ studied factors in childhood schizophrenia.

These studies indicated a general concern to locate predispositional factors of delinquency and schizophrenia in personality characteristics and familial relationships. Particularly pertinent to this study were the investigations of social isolation as a possible predictive factor in both delinquency and schizophrenia.

Diagnostic approaches

Many of the studies already cited have included descriptions of tools and methods used in diagnosis. Some other references are

included here. Lorr²⁵⁵ used a factor method for analyzing maladjustment patterns in children. Shoben³⁹⁹ developed a scale to differentiate between mothers of problem children and mothers of nonproblem children. Ullmann^{426,428} compared three methods of identifying maladjusted children. A California study,⁵⁸ involving thirty-seven school districts in twenty counties, compiled an adjustment index composed of I.Q. and achievement scores, self-inventory, sociometric and teacher rating scales. The Quincy Youth Development Project of the University of Chicago⁵⁹ used a rather large battery of tests for screening, including standardized tests and instruments developed for the project.

Summary

In this survey of the literature which has discussed diagnostic and analytical aspects of mental health research was cited which has related various factors to mental health problems, including personality, physical constitution, and self-concept, family interaction patterns, social structure and child-rearing patterns, and teacher personality. Certain personal and family factors have been investigated as possible background factors in delinquency and schizophrenia. Particularly pertinent were the investigations of social isolation as related to delinquency and to schizophrenia. Diagnostic approaches mentioned included simple measuring instruments and complex screening devices with which maladjustment might be identified.

D. Prevention and Treatment Programs

Prevention programs and treatment programs in the field of mental health so frequently have overlapping aims that they shall be

considered together in this review. The reason for the overlap appears to be that discovery and treatment at an early stage of maladjustment is the approach to prevention of more serious problems. This remedial treatment given when problems have begun to appear is what Ojemann³³¹ called "secondary prevention," while "primary prevention" refers to the prenatal and environmental experiences which are conducive to healthy neurological and dispositional development.

Reports of mental hygiene programs in schools will be reviewed first, including both curricular and clinical types of approaches and broad community plans. Studies which have evaluated agency programs, including followup studies, will close the section.

Schools

An evaluation of mental health activities was made in 1938 by Ryan,³⁸² who had made extensive visits to schools and clinics in many parts of the United States. He indicated the need for an understanding approach to mental health and recommended that schools engage in mental health activities. In the two decades since his report many schools have incorporated mental hygiene projects at various levels of intensity and scope. Abrahamsen et al.¹ gave a progress report of the status of mental hygiene activities in 1953, compiled from samplings of public and private schools in forty-eight states.

The most frequent approach to mental hygiene in schools has been the provision for lectures, discussions, or other curricular activities on mental health.^{13,186,189,418} Delta County, Texas³⁸⁰ attempted to construct an entire curriculum on mental health as a base. Four projects, the Bullis plan,⁷⁵ the Force project,¹³² the Ojemann

plan,^{328,329,330} and the Forest Hill Village project,³⁹⁵ were all directed toward the integration into the regular school curriculum of techniques to improve adjustment. These four plans were evaluated by the Group for the Advancement of Psychotherapy.¹⁷⁶ The Forest Hill Village project³⁹⁵ and others,^{182,216,337,440,131,396} included clinical treatment for disturbed children within the school setting, with clear aims directed toward delinquency prevention and reduction of maladjustment. Most of these projects^{182,216,337,395} included designs for evaluation. Early discovery of problems was emphasized,^{439,58} and mass screening for optimum mental health was the stated purpose in one city.¹⁸⁹ Mental hygiene for teachers was emphasized.³⁴ Concern for teacher self growth and achievement of good interpersonal classroom relationships were expressed by Moustakas,^{305,306} Jersild²¹¹ and others,^{358,309} while teacher training was the emphasis in several reports.^{6, 189,200,342,344,358,363,324} Parent education, the major focus in the St. Louis approach,⁷⁰ has also been included as a part of other comprehensive plans.^{342,395} Cooperation of within school services,¹⁸¹ or between school and other community agencies^{80,186,342,440} was emphasized. The focus was on mental health services on a broad community base in Bowman's discussion of the Quincy youth project⁵⁹ and in other reports.^{79,84,167,217,287,73,119,184,191}

Agencies

The reports of various child and family agencies comprise evaluation and followup studies of delinquency prevention and treatment programs. Evaluations were published of preventive programs in group work agencies,^{366,367} family agencies,^{66,234} a youth agency,³¹³

child guidance clinics and agencies^{203,215,433,177} and the Jewish Board of Guardians.^{241,425} The comparison of results reported by different agencies yields interesting contrasts. Brown stated that 59 per cent of adolescents treated in a family agency were making good adjustment when the case closed.⁶⁶ Jacobsen reported nine successful and eight unsuccessful cases after treatment for school phobia.²⁰³ In followup studies a child guidance center reported that 74 per cent of 430 cases treated were successful after ten years.²¹⁵ The Jewish Board of Guardians reported that after one year 32 per cent of an untreated control group and 51 per cent of a treated group had made successful adjustment.²⁴¹

A carefully designed ten-year action-research program conducted in the Cambridge-Somerville, Massachusetts area³⁵² produced results which throw some light on other evaluation studies. Two reports^{352,420} indicated that results of counseling therapy were inconclusive. Witmer and Tufts⁴⁴² reported that the control groups provided a means of testing the effectiveness of the program and led to the conclusion that the project did not reduce or prevent delinquency. The rather high instance of successfully adjusted problems was not significantly different between experimental and control groups.

While the results of this study would lead to the suspicion of the unreliability of followup studies reporting success when control groups were lacking, it was noted by Bovet⁵⁷ that other preventive programs, for example the work of the Jewish Board of Guardians, might be effective in preventing delinquency. The studies would seem to indicate that many problems tend to solve themselves without treatment if given time. Two followup reports are related to this assumption.

Witmer⁴⁴¹ found that behavior disorders do not effect later adjustment. A 17-year followup investigation³⁰⁸ of individuals who had been diagnosed as "subnormal" reported that only a few lived up to the prediction of social inadequacy. One hundred and twenty-two of the original 166 were contacted, of whom three-fourths were found to be economically self-supporting. Other evaluation studies of treatment programs have been reported.^{303,362,413,151}

Summary

The intention of this division on treatment and prevention programs has been to indicate the main types of school approaches to mental hygiene, to point out the major kinds of agencies which engage in preventive and treatment programs, and to suggest the kinds of results which are obtained from evaluation and followup programs. Literature which bears on the residential type of treatment institution has been purposely omitted since the main interest in this study is the "normal" child. References have been indicated in each of the categories mentioned, where descriptions of the programs and details of the evaluative processes are available to the interested reader.

E. Summary of Mental Health Literature

The review of literature on mental health began with two general observations: (1) that there is need for a more adequate base in the evaluation of mental health programs, and (2) that the concept of mental health is difficult to define and can be understood best in terms of theoretical points of view or of empirical research with normal children. The incidents of mental health problems in the United States

was shown to be from 15 to 20 million, and the prevalence of serious maladjustment in the schools to be from five to fifteen per cent of the student population.

Factors in the etiology of mental illness were differentially conceived of by different investigators, including personality and constitutional factors, interaction patterns in the family, social structure and teacher personality. The special problems relating to delinquency and schizophrenia were considered. Some of the predictive factors of future delinquency were found to be truancy, social isolation, and family relationships. Studies of the background of schizophrenics suggested that family situations may be significant.

The kinds of mental hygiene activities that are to be found in school programs of prevention and treatment were noted. These included both specialized and integrated curriculum approaches, school based clinical programs, and plans which focused on teacher growth and classroom relationships, or parent education. Broad community programs were reported. Evaluation and followup studies of agency prevention and treatment programs were observed. The results obtained in one study through the use of a control group indicated that results of evaluation without control groups are apt to be unreliable. This concluding statement serves to underscore the earlier observation that in the present stage of development the base for evaluation in mental health programs is inadequate.

Part Two: PSYCHOLOGICAL GROUP COUNSELING

A. Introduction

Psychological group counseling is one kind of treatment which has sometimes been utilized in mental health programs. This section will be concerned with relevant literature on this subject. To prevent confusion it needs to be pointed out that the terms "group counseling" and "group psychotherapy" will be used indiscriminately in this review when both are equally applicable, although in general the usage will be in accord with the literature under discussion. The literature from clinical sources consistently has used the expressions "group psychotherapy" and "group therapy," while the educational literature tends to speak of "group" or "multiple counseling." The subject of terminology will be further discussed in a later paragraph.

There is a sizable quantity of clinical literature on group psychotherapy. Five years ago Corsini⁹⁹ listed over 1700 titles, more than four-fifths of which appeared after 1945. On the other hand, there is a paucity of educational literature on the subject. While group techniques have always been included in guidance programs, the group therapy procedure is quite recent. In the three-year cyclical reviews of "Guidance through Groups" in the Review of Educational Research the first volume to include a subsection on group therapy was 1951,⁴³⁵ although an article on group therapy in the schools appeared as early as 1945.²⁰⁴

This review will select from the available sources the literature which (a) defines the nature, function and theoretical assumptions of psychological group counseling; (b) indicates the historical

backgrounds, and (c) describes experiments in group counseling with adolescents.

B. Function, Nature, and Theoretical Assumptions

There is a considerable amount of discussion in the literature which revolves around the attempt to define and understand the function and nature of psychological group counseling. This section will review the discussions and studies on (a) terminology and personnel, (b) comparison of individual and group therapy, (c) requirements for success, and (d) theoretical points of view.

Terminology and personnel

One dominant theme in the school literature has been the inter-related questions of terminology and personnel. Scheidlinger³⁸⁹ expressed the view that group therapy involves attempts to heal and is the prerogative of skilled psychotherapists, while mental hygiene and group dynamics concepts are available to educators in their attempts to enhance growth. Dreese,¹¹⁵ on the other hand, and Lifton²⁴⁵ took the position that group guidance methods are applicable to problems basically informational or choice making, but therapeutic methods are required in the educational setting to serve people with problems in personal or interpersonal areas, particularly as these relate to educational adjustment. Wrenn stated that "the differences between counseling and psychotherapy appear to be differences in degree not in kind, as existing on a continuum rather than being of a dichotomous nature."⁴⁴⁷ Froelich introduced the term "multiple counseling" to correct the confusion with respect to the indiscriminant use of "group counseling"

for both psychotherapy and "nonego-involving group discussions."¹⁴²

It should be noted that the term "multiple therapy" was introduced by Dreikers to indicate two or more therapists working with a single client.¹¹⁶

Another focus of discussion has been the question of whether teachers or counselors should function in group counseling. Koile²²⁷ held that there would be less need for guidance personnel if regular teachers were qualified to use group guidance techniques in the process of regular instruction. On the other hand Super,⁴¹⁵ Laycock,²³⁷ and Lifton²⁴⁶ took the position that therapeutic growth cannot occur where the teacher represents an evaluating authoritative figure.

Group versus individual counseling

In the dialogue that has been in process concerning the function and nature of group therapy, one point of emphasis¹⁹² has been that group therapy is an economical use of the therapist's time in the light of the growing number of persons needing help. Others^{98,300,403} insisted that group therapy has its own unique values. The advantages and requirements of the group approach have been noted.^{119,446} These, the Woolfs indicate, are that the group represents society and that the individual discovers that others have problems similar to his own.⁴⁴⁶ Corsini felt that there was a "cultural demand" for group therapy, which grew out of the "social isolation engendered by technological improvement."^{98:7} Similarities between group and individual counseling have been noted.¹⁵² Others have indicated the complementary nature of individual and group counseling.³²

Several experiments have been made to compare individual and group counseling. Frank evaluated group and individual psychotherapy.¹³⁹ Froelich found significant increases in his group counseling participants and none in those who had individual counseling in two of his statistical comparisons on the criteria of self-knowledge.^{143,144} Wright found no difference between group and individual counseling on any of his four criteria.¹⁴⁸ Two studies^{195,37} found individual and group counseling equally effective. Luchins²⁵⁹ and Hoyt and Moore¹⁹⁶ both pointed to the need of controlled experiments comparing the two methods.

Requirements for success

A number of writers^{109,259,270,341,403,339} have recognized that effective results come from different procedures. The basic requirement seems to be that which was stated by Redl,³⁶¹ as the recognition of the "psychology of group life." Others^{412,190,226,98} have underscored the importance of the personality of the counselor and his experience and values. Studies have been made of the role of leader and of group in group psychotherapy.^{90,349}

Researchers have sought to discover the factors which make for success or failure in group therapy.^{91,341,270,219} Malone's twelve-month experimental program²⁷⁰ suggested that success is most likely when there is strong group sentiment, commonality of interests, intergroup mobility, and democratic organization. Kaufman studied social, familial, and personality factors as related to success.²¹⁹ Cohn et al. studied the roles played in an unproductive group.⁹¹

Theoretical assumptions

Practitioners who use group therapy represent different theoretical orientations. Peres³⁴¹ and Gorlow, Hoch, and Telschow¹⁶⁵ have written on nondirective group counseling, based on Carl Rogers' theoretical principles.³⁷⁶ Slavson⁴⁰⁶ and others,^{2,120,416} described analytical group counseling on the basis of Freudian assumptions.¹⁴¹ Dreikurs¹¹⁶ has presented the Adlerian individual psychology base for group psychological counseling. Moreno has written extensively on group psychotherapy based on the assumptions of his spontaneity-sociometric theory.^{297,299,300} It has been pointed out that the procedures employed by practitioners who represent the various points of view are not necessarily contradictory, but differ only in emphasis.⁹⁸

Summary

It has been indicated that in the field of education there is considerable ambiguity in the usage of the terms group and multiple counseling, disagreement with respect to the propriety of using the therapy concept in the school, and conflict between protagonists who hold on the one hand that trained counselors, and on the other that teachers, should practice group methods of guidance.

There is a fair measure of concensus that group therapy, as opposed to individual therapy, has unique values, and that basic to successful practice is a recognition of group psychology. It was indicated that procedure employed by group therapists with divergent theoretical orientations, although different in emphases, are not necessarily conflicting. Similar results obtain from all approaches; and the personality of the therapist and composition of the group appear to be

highly determinative of procedures to be used and success to be obtained in each situation.

C. Historical Backgrounds

The historical backgrounds of group psychotherapy are in a sense as old as man's experience of wellbeing gained through group associations,^{98:9,10} but as a conscious discipline it is very recent. Reputedly the earliest intentionally therapeutic practice of mental healing in groups was that begun by Mesmer in 1776.⁹⁸ However, the period from 1905 through 1931 is considered the pioneer period of modern group psychotherapy.^{98,226} Pratt's "class method" with tubercular patients begun in 1905 appears to be the earliest deliberate use of group therapy in the modern era.³⁵³ A number of other physicians and psychiatrists^{77,123,239,256,275,390,437} published accounts of group approaches to therapy in this period. Corsini stated that "at least twenty different people entirely independently of one another have discovered group psychotherapy."^{98:7}

The contributions of Moreno and of Adler to the early development of group psychotherapy call for further observation. Moreno, as early as 1908, published a book²⁹² describing his approaches with children in Vienna which were to lead him later to the development of psychodrama and the Spontaneity Theater in 1911²⁹⁵ as a group method of therapy. Moreno is also credited as having first introduced the term "group psychotherapy" in 1932 at a conference of the American Psychological Association, when he recommended the "group method" for placing prisoners.²⁹⁷ Meiers affirmed that Moreno has been the "chief

over in the development of a scientifically based group psychotherapy."^{286:267}

Adler¹⁴ is given credit by Bierer³⁶ as the first to use group therapy systematically and formally. Adler began the practice in 1921 of interviewing children in the presence of parents and clinic staff. It has been commented, however, that Adler's method was in reality not group therapy, but "individual therapy in front of a group."^{98:14}

In summary, the sources indicate that the origins of group psychotherapy reside in the history of man's beneficial association in groups. Mesmer in the eighteenth century and some twenty therapists in the early part of the twentieth century seem to have independently discovered group methods of therapy. Pratt is accredited with the earliest publication of a group method of treatment in 1906, Adler with the first formalized use of the method in 1921, and Moreno with the introduction of the term "group psychotherapy" in 1932.

D. Group Counseling with Adolescents

Although the girls who were the subjects of this study were only at the threshold of adolescence as twelve and thirteen year olds, the literature which treats on group counseling at the adolescent level is more nearly relevant than the material on group counseling at other ages. Because the technique used in this study was interview group therapy, the literature to be reviewed will be generally limited to that which deals with interview group therapy, although some of the studies to be reported included other techniques.

It has been pointed out that group therapy is especially appropriate for adolescents because they are "too old to relate themselves

quickly to adults as substitute parents and too young to see the need for help with their problems.⁴⁰⁸ Others^{20,74,86,381,411} have noted the effectiveness of group therapy as a treatment for adolescents.

The literature to be reviewed in this section will include that which is concerned with group therapy with adolescents (a) in agencies and institutions, and (b) in schools.

Agencies and institutions

In a report to the World Federation of Mental Health⁹⁴ in 1952, nine persons* were listed as having worked and published in the area of interview group therapy with adolescents. Most of these were persons connected with the Jewish Board of Guardians in New York City, from which the most prolific reports of group therapy with adolescents have come. This agency began the practice of group therapy with children and adolescents in 1934.⁴⁰⁵ Different methods according to age level were utilized.⁴⁰⁴ Activity and psychodrama techniques as well as interview therapy were used with adolescents.¹⁰⁴ Most of the experiments reported were with long-term groups lasting from several months^{289,408} to three years,²⁸³ and were a part of programs which included individual therapy. McCormick²⁸³ reported concerning the three-year group that in three persons there was marked change, three improved somewhat, and one did not improve. There was a relation between parental rejection and lack of improvement. Gabriel reported the formation of a mixed group of children 9 to 11 through their chance dropping in at the same time while in individual therapy,¹⁴⁵ but the usual practice at the Jewish Board of Guardians was reported to be

*The nine persons were: P. L. Axelrod, M. S. Cameron, F. J. Curran, B. Gabriel, I. P. Glauber, L. Lucas, S. R. Slavson, J. C. Solomon and H. Spohnitz.

homogeneous grouping by sex.^{18,289,147} A masculine, nonthreatening environment was considered crucial in the case of a younger boy,²⁸⁹ and for a group of 15 to 17 year old girls it was reported that they gained insight by seeing themselves in others, in a less threatening way.¹⁴⁷ A permissive, nonthreatening environment was considered essential.¹⁴⁶

Besides the Jewish Board of Guardians' work with adolescents, two other agency studies will be mentioned. Ackerman³ reported ten years of weekly group therapy meetings with mixed groups of adolescents in which three or four therapists were present. Groups included all categories of diagnostic types except psychoses. Schulman³⁹² investigated and treated anti-social psychopathology in adolescents through group therapy.

Institutions have also been the setting for group therapy practice. Kotkov²²⁸ and Patterson³³⁶ reported improved adjustment after a series of group therapy sessions with institutionalized delinquent girls. Wollan,^{443,444} Gersten,¹⁵⁴ Newburger and Schauer,³¹² Hill,¹⁹¹ and DeMacedo¹¹¹ employed group therapy with institutionalized delinquent boys and reported certain values gained. Most of these studies did not report on control groups. Newburger and Schauer³¹² reported that isolation in the institutional setting developed faster in the therapy group than in the control group. This phenomenon was interpreted as due to a maturation process, whereas in the control group superficial relationships were formed. Eliasoph used group therapy and psychodrama procedures with adolescent drug addicts.¹²¹ A group approach treatment was used at Boys House.¹⁷⁸ Inpatient adolescent⁸² and mentally retarded females¹⁴ were also treated by group therapy.

Schools

Experiments in the school milieu have met with varying degrees of success on various criteria. Two investigators^{117,373} reported that group members enjoyed the experience. No objective data was reported for these two groups, each of which discussed common problems. A junior high school experiment in group counseling⁶¹ resulted in the motivation of the members to seek individual counseling.

Several studies were concerned with behavior change and citizenship grades. In an experiment involving 121 subjects in fifteen small groups Driver¹¹⁸ reported that about 80 per cent improved in behavior and personal growth. Shulman⁴⁰¹ reported "gratifying and profound changes" brought about through group therapy with the nineteen more troublesome boys from two high schools, who met with a counselor from the Community Child Guidance Center in a neutral setting. Criteria of change included grades and various interpersonal relationships. Davis¹⁰⁷ compared group and individual counseling in terms of equivalent counselor time, measuring change in citizenship behavior. The group participants changed the most. Both group and individual counselees made significant change in comparison with a control group which had no treatment and did not change. Richards³⁷⁰ and Caplan⁸¹ experimented with group counseling at the junior high level. Caplan reported significant changes in self-concept and citizenship marks in a group of boys after group counseling, while there were no significant changes in a control group, even though individual counseling was available to both groups. One investigator¹³¹ reported negative results in a followup study of emotionally disturbed boys who had participated in school-based group therapy.

Several exper

technique was used w

one study¹³⁰ retarded

in addition to remed

provided only with

technique in an eva

achievers. Baymur

tended to be more e

while group counse

did an intensive s

high school studen

achieved positive

others, and improv

Analysis by means

to profit indicat

paired" members.⁹

Summary

This rev

and senior high

counseling exper

this area have

Guardians, whic

Some effective

correctional an

usually met wi

much of the re

Several experiments have been noted in which a group therapy technique was used with underachievers and with retarded readers. In one study¹³⁰ retarded readers who received help through group therapy in addition to remedial reading profited more than subjects who were provided only with remedial reading. Sanborn³⁸⁴ used a projective technique in an evaluation study of group guidance with twelve under-achievers. Baymur and Patterson²⁵ found that individual counseling tended to be more effective in the improvement of personal factors while group counseling tended to increase achievement. Broedal et al.⁶² did an intensive study with twenty-nine gifted underachieving freshmen high school students in four therapy groups. Three of the groups achieved positive changes in achievement scores, acceptance of self and others, and improved ability to relate to peers, siblings, and parents. Analysis by means of kinescoped recordings of the group which failed to profit indicated obstruction of the group process by two "neurotically paired" members.⁹¹

Summary

This review has indicated some of the studies in which junior and senior high school aged boys and girls have participated in group counseling experiences. Most of the publications of agency work in this area have been produced by staff members of the Jewish Board of Guardians, which began experimenting with group therapy methods in 1934. Some effective group therapy with teen-agers has been carried out in correctional and other institutions. School-based group therapy has usually met with success, although instances of failure were noted. In much of the research there was failure to provide control groups or an

abse

evide

desl

from

as

new

ter

cus

the

rec

to

be

th

t:

o.

g

v

n

t

t

a

t

t

t

absence of objective data, with a consequent reliance on subjective evidence of success. Some notable exceptions were described in which designs were adequate and reliable results seemed evident.

E. Summary of Group Counseling Literature

The literature of group psychotherapy has included material from both clinical and educational sources. The recency of its origin as a method is in evidence in a number of ways in the literature. The newness is implied by the semantic problem and the search for definitive terminology, the concern about proper place and personnel, and the discussions and research revolving around the question of whether group therapy is a method unique and worthy in itself. In spite of the recency of the method and the ardency of the discussions there appears to be considerable agreement on procedural techniques, even by therapists belonging to opposing schools of thought. There is also agreement on the basic requirements for success, which are thought to be a recognition of the psychology of the group and also the quality of personality of the leader and participants.

The literature suggests that Mesmer was the forerunner of group therapy, which was discovered as a method by some twenty individuals independently between 1905 and 1931. Pratt with his "class method" approach for tubercular patients, Moreno in his spontaneity theater in Vienna, and Adler with his plan of individual child therapy in the presence of a group of adults are accredited as being the originators.

Group psychotherapy with adolescents was noted as an ongoing program at the Jewish Board of Guardians in New York City. Of the few

school experiments reported most were concerned with citizenship behavior, while four experiments with underachievers and retarded readers were noted. The research and subjective feelings dealing with experiments in which adolescents have been exposed to group therapy suggests that the method is a good one for this age youth, but that more objective research data is needed.

Part Three: THE LITERATURE OF SOCIOMETRY

Sociometry is related to mental health both as a method of identifying maladjusted persons and as an approach to treatment. In the present study it was used as the means of identifying social isolates. A voluminous quantity of literature on the subject has appeared in the three decades since its emergence as a scientific system in the United States. For a discussion of the scattered sources which combined give a complete review of the literature, the reader is referred to Mehneva's chapter in The Sociometry Reader.³¹⁰ Lindzey and Borgatta's chapter in Handbook of Social Psychology²⁴⁸ is another excellent source for a review of sociometry literature.

This section will consist of (A) an overview of the origins and development of sociometry and (B) relevant research in sociometry.

A. Origins and Development

The purpose of this section will be to provide orientation concerning the definitions and theoretical base, origins and early development, and evolution of tabulating and analytical techniques of sociometry.

Definition and theoretical framework

The basic sources which define sociometry and present its theoretical assumptions are the writings of Jacob Moreno, particularly his definitive work, Who Shall Survive?²⁹⁹ A year prior to this book's publication Moreno's definition of sociometry was stated as "...the mathematical study of psychological properties of populations, the experimental technique of and the results obtained by application of quantitative methods." Discussions by various writers^{19,85,76,179,262,431,453} as to what constitutes sociometry underscore the fact that it is quantitative measurement of qualitative relationships, the word itself having been derived from the Latin words, socius, meaning social, and metrum, meaning measure.

It was important to Moreno that the qualities of spontaneity and creativity in intergroup relations be recognized, and this concept he called the "cornerstone of sociometry."^{301:x} His theoretical assumptions were of a philosophical nature, based on his faith that mankind is a unity. He introduced the concept tele to account for "group cohesiveness, reciprocity of relationships, communication, and shared experiences."^{301:17} The tendencies of the different parts of the whole, of which man is a part, to draw apart and draw together at different times Moreno called repulsions and attractions. He asserted: "These attractions and repulsions must be related to an index of biological, social and psychological facts, and this index must be detectable."^{301:3}

Moreno was interested in more than merely measuring the structure of society, however. In 1949 he wrote that sociometry was concerned to discover the "deeper levels of society's structure" and also to promote change in society based on the "dynamic facts found in its

structure."⁴⁰¹ This concern to change society has operated through the therapeutic function which has been an integral part of sociometry from the time of its first emergence. Mehnevaiksa called sociometry a combination of science, therapy and philosophy - all intertwined in much of sociometric work..."^{310:707} He showed that this was a result of the kind of person Moreno was--a healer, scientist, poet, and philosopher.

Origins and early development

Although the publication of Who Shall Survive?²⁹⁹ is considered to have initiated the science of sociometry,^{248:407;208:xiii} the basic techniques were generated in Germany between 1918 and 1923.^{293,294}

In spite of this German background, however, Moreno stated that "sociometry owes its origin to the U.S.A." He believed it was in sociometry that "collective originality" was found by social sciences in the United States, and that sociometry's rapid success was because it fulfilled an important need.^{301:vi-vii}

The publication of Sociometric Review in 1936, superseded by Sociometry: A Journal of Interpersonal Relations in 1937-38 was of crucial significance in the development of the field of sociometry. Lindzey and Bergatta noted that by having had a psychologist, Gardner Murphy, and a sociologist, George Lundberg, respectively, as its first two editors, Sociometry was prevented from becoming the primary property of either psychology or sociology.^{248:407}

The ground rules of sociometric measurement technique as Moreno set them forth were based on a simple measuring instrument which asks that each member of a defined group register his choice of a companion for a specified activity. Jennings, Moreno's early collaborator,

adapted the sociometric test for school room use and also made extensive studies in an institutional setting.²⁰⁸ She was interested in the psychology of choice, the concept of emotional expansiveness, and choice stability.²⁰⁸ Northway and her associates at the University of Toronto exercised early influence on the development of technique in sociometrics³¹⁵ and contributed to the understanding of the relationships between sociometric measures and personal factors.³²¹

Tabulating and analytical techniques

Methods for tabulating and analyzing sociometric data have been continuously under development. Moreno²⁹⁹ contrived the sociogram which was refined by Northway³¹⁵ into the target sociogram, with concentric circles representing levels of choice. Later Northway and Quarrington³¹⁹ introduced the idea of sectors in the target sociogram to provide for the identification of secondary characteristics. Forsyth and Katz¹³⁶ suggested the matrix as a procedure for recording social structure of a group. Individual and group profiles which would reveal choice and rejection patterns were developed by Jennings²⁰⁸ and later refined by Bjerstedt³⁸ so that more information could be recorded.

Criswell¹⁰² offered the first of several methods of statistically testing differential choice patterns within a group. His chi-square test was expanded by Loomis and Pepinsky.²⁵³ An analysis of variance approach was suggested by Seeman.³⁹⁷ Brofenbrenner⁶⁴ introduced probability statistics to provide a "constant frame of reference" for analyzing sociometric data. Standard deviations²⁰⁸ and percentiles³¹⁶ were the usual analytic units of measurement for the data. Luce and Perry²⁵⁸ with Festinger¹²⁷ worked out a method of analysis based on

matrix algebra. Indices of social status were contributed by Proctor and Loomis,³⁵⁵ Katz,²¹⁸ and Jamrich.²⁰⁷ The latter two provided ways to consider the position of choosers in determining the status of the chosen.

Summary

This overview of literature has shown that Moreno not only originated sociometry but also provided its basic theoretical assumptions and procedural methods. Sociometry is a method for measuring the structure of society in depths, based on the assumption of the unity of mankind, and is also a process of therapeutic change. Although Moreno's early experiments were in Germany, he considered the United States as the place of origin of sociometry as a science.

In the early development of sociometry in the United States important influences were the publication of a journal, the work of Jennings, who collaborated with Moreno, and Northway's Toronto studies. Among contributions in the development of tabulating techniques were Northway's target sociograms, the matrix procedure of Forsyth and Katz, and Jennings' development of individual and group profiles. Statistical methods of testing were contributed by Criswell, Loomis and Pepinsky, and Seeman. An analytical method using probability statistics was developed by Brofenbrenner; and methods using matrix algebra were evolved by Luce and Perry with Festinger. Social status indices were provided by Proctor and Loomis, by Katz, and by Jamrich.

B. Relevant Research in Sociometry

Research in sociometry has covered broad fields both in terms of purpose and function and in areas of exploration. The many studies which have concentrated on the development of method and on perceptual sociometry will be omitted in this review, as will also most of those studies which have been directed towards the areas of college, community, industry and the armed forces. The material will be limited chiefly to studies at the elementary and high school levels which have related sociometric choices to personal factors and social factors, and which have evaluated the use of sociometry in treatment or improvement activities. Exceptions will be an occasional study at other age levels which is particularly relevant to the point under discussion.

Relation of sociometric choices to personal factors

Much interest has been displayed by various investigators concerning the relations that exist between sociometric choice and personal factors. Some of the designs have been comprehensive, attempting to discover the relations among a number of variables, while others have focused on one or a few factors. To be reviewed here will be studies which have examined the relations that exist between sociometric scores and personality traits, physical factors, personal adjustment, social adjustment, and school adjustment.

Personality traits

One of the major concerns in the study of personality traits has been to compare the characteristics of the highly chosen with those of the least chosen. Such a study was done by Jennings²⁰⁸ in her work at the New York Training School for Girls. Choices were made

differentially according to two major criteria which she described as working-living associations and leisure associations. The former she called sociogroups and the latter psychegroups. Her analysis which is relevant at this point is with the sociogroup. Jennings found certain personality traits to be descriptive of highly chosen girls and quite opposite traits to characterize the underchosen. The traits of the highly chosen, in summary, were those of understanding helpfulness, insight into group welfare, ability to relate and establish rapport with a wide range of persons, demanding of "impersonal" fairness, and taking definite stands on matters considered to be "right." The least chosen were described as interfering with the group's activities, being resentful of criticism, quarrelsome and irritable, aggressive and dominant.^{208,56,210} Other studies^{46,316} have produced results which were in agreement that the general patterns found in leaders are expansiveness, sympathy, dynamic energy, and objectivity, and that least accepted individuals are the "retiring, lethargic, ingrown, and self-centered" persons.^{321:57} Baron²⁴ characterized the low status people among the fifth and sixth grade girls he studied as defeatist, seclusive, and unrealistic. Other studies^{46,172,232,236} have found the highly chosen to be characterized by their peers as happy, friendly, cheerful, and attractive in appearance. Two studies^{322,360} found that highly chosen children were able to satisfy the needs of their choosers; and one investigator²⁵⁰ reported that the highly chosen were sensitive to the feelings of others.

A study of Bonney⁵⁰ which compared five highly chosen with five highly unchosen children on ten personality "trait-syndromes" found the popular children as a group to rate higher on the desirable

trait-syndromes than the unpopular, but no particular type characterized the individual children who received either exceptionally high or exceptionally low ratings by their peers. Other studies^{46,172,232} tend to support this conclusion that individual children of high or low status do not fit any particular personality type. Bonney and Northway underscored this fact when they stated that "...there is no one combination of traits that is invariably found to be true of particular individuals in either of these extreme categories."^{56:403} Related to this notion is the research^{16,48,65,354} which has shown the existence of similarity of interests and values between choosers and chosen, and similarity^{46,48,168} or perceived similarity^{110,129} of personal qualities among mutual friends.

Two other studies have related choice level with personal types of factors. Relating a single factor to sociometric status, McCallum,²⁷⁹ in studying creativity at the pre-school level, found that children of high sociometric status did less copying of adult models than those of average status, while those with low scores copied almost entirely. A group of investigators designed a study to determine if role-playing skill was associated with sociometric status. Highly chosen children had significantly more favorable observer ratings on role-playing performance than under chosen. The findings were interpreted as suggesting that significant components involved in peer status are the same as those needed for successful role playing.³⁰⁷

Physical factors

Physical factors which have been studied in relation to sociometric choice include age, appearance, and athletic skill. Bedolian found that overaged sixth grade pupils received low choices and tended

to be rejected, while underage children were highly chosen, except when the age difference extended to more than nine months under the average age.²⁹ Morrison and Perry³⁰⁴ found similar results in grades four through six, but found no such differentiation in grades seven and eight, where there was a tendency for girls to choose older boys. Several studies^{16,46,232,451} found that highly chosen children were characterized as attractive in appearance. This was found to be true at all levels but was most pronounced in girls at the junior and senior high levels. One study¹⁷² reported that rejected persons were considered unattractive. Best liked persons have been rated as possessing a high degree of athletic skill by their peers.³⁴⁸ Two studies^{284,35} found that high choice status boys actually did rate high in athletic prowess as measured by performance.

Personality adjustment

The relation between sociometric choices and personal adjustment has been explored through the use of various self-rating questionnaires and through projective techniques. The California Test of Personality, which falls in the former category, has been used with varying results, which tend to be significant. Forlano and Wrightstone,¹³⁵ Scandrette,³⁸⁷ Phillips and DeVault,³⁴⁶ Bjerstedt,³⁹ and Grossman and Wrighter¹⁷⁵ each reported certain correlations between various subscores on the California Test of Personality and sociometric choices. The findings indicated that the discrepancy value of the California test scores is less when applied to all levels of sociometric choices than when applied only to the extremes. More of the personal adjustment than social adjustment subscores on the California Test of Personality were found to be related to sociometric measures.³⁸⁷ Forlano and Wrightstone¹³⁵ found that "rejection-by" scores had greater

diagnostic value than the "chosen-by" scores. Grossman and Wrighter¹⁷⁵ found that questions dealing with nervous symptoms differentiated the high from the low scorers most frequently, and "feeling of belonging" was next in significance. Permach³⁴³ related California Test of Personality profiles of kindergarten children to the particular "stars" they chose and found an indication of difference in personal adjustment between those who chose one star and those who chose the other stars.

Other instruments have been used to measure personal adjustment in sociometric studies. Bedolian²⁸ working with sixth grade children, and Baron^{23,24} working with fifth and sixth grades, measured mental health with the Mental Health Analysis of Thorpe, Clark, and Tiegs and found that highly chosen children scored significantly higher in mental health than least chosen children. Kahlen and Bretsch²³⁰ found the measure of adjustment indicated by using the Mooney Problem Check List to be associated with acceptability score. The number of problems checked "often" rather than total number of problems checked was the discriminating factor. Keislar's similar study²²⁰ was less discriminatory in design and resulted in little difference between high and least chosen. Feinberg¹²⁶ found highly accepted high school boys to have higher marks on the favorable items of his Personal History Questionnaire. Bower⁵⁸ reported that on a sociometric instrument which called for selection by peers for roles, emotional disturbance characterized a significant number of those chosen for hostile roles. Bonney⁴⁹ found personality test scores not related to friendship formations at the elementary level but definitely related at the high school and college levels. Contrary findings were reported by French and Mensh¹⁴⁰ and by Powell³⁵¹ in college level experiments, where very little relationship

was found between choice status and self-ratings on personality traits.

Projective instruments that have been used to determine personal adjustment in sociometric studies have included the Thematic Apperception Test and the Rorschach. The Alexanders⁵ reported that choices of fourth grade children were not related to adjustment as measured by the TAT. Northway and Wigdor³²⁰ found certain Rorschach factors which differentiated between high and low sociometric scores. Tindall⁴²³ found a correlation coefficient of .32 between the Rorschach and sociometric status. Nowell³²³ and Pepinsky, Siegel and Vanatta,³⁴⁰ on the other hand, found no correlation between the Rorschach test and sociometric measures.

It is very clear that lack of agreement characterized the studies reported. This is doubtless due in part to the present lack of refinement in personality measuring instruments. Bonney and Northway explained this conflict of evidence in terms of the differences between kinds of measurement techniques employed, the content of the instruments, and the nature of the group studied. They suggest that correlation with sociometric status is apt to be higher when more specific and overt problems are measured.⁵⁶

Social adjustment

While various aspects of social adjustment are implied in the above discussion, other facets need to be pointed out which have been related to sociometric status, particularly the areas of social skills and behavior.

Bretsch,⁶⁰ Feinberg,¹²⁶ and Kuhlen and Bretsch²³⁰ found some correlation between sociometric acceptance and social skills or

participation. Bonney⁴⁹ found significant difference in five out of twenty-five social behavior categories he examined. Highly chosen children were more conforming, more cooperative in group activities, and smiled oftener. Northway³¹⁷ indicated that there is a slight correlation between sociometric status and social adjustment, and that choice status is related to skills when these are important to the group. Schoeppe and Havighurst's study³⁹¹ of boys and girls at the ages of ten, thirteen, and sixteen, with respect to achievement of developmental tasks, indicated a high correlation at each of these age levels between sociometric score and the tasks which reflect social adjustment.

School adjustment: intelligence and achievement

Studies which have explored the relation between sociometric scores and qualities which constitute school adjustment have produced conflicting results. A group of Toronto studies^{169,251,257} found no significant relationships between peer choice and chronological age, mental age, intelligence quotient, school achievement, or subject achievement when these were studied as single measures. Loeb found, however, that children who were higher in school achievement than mental age ranked significantly higher in sociometric choice than those whose school achievement was lower than mental age.²⁵¹ Other investigators^{108,175} have found low but significant correlation between sociometric choice on the one hand and I.Q. and reading ability on the other.

A series of studies by Bonney^{45,47} and Laughlin²³⁶ covered grades two to seven in computing correlation coefficients between sociometric and intelligence test scores with results ranging from .27

to .45. Children with low intelligence tend to be rejected,^{213,214} while pupils with high intelligence tend to be overchosen.^{150,55,53} The findings of Bonney⁵³ and Grossman and Wrighter¹⁷⁵ indicate that children of high intelligence tend more frequently to have low sociometric status than do those of low intelligence tend to be highly chosen. Barbe found that although children tend to choose slightly above their own intelligence level, mutual choices are usually made among individuals who are more alike than those who do not choose each other.²¹ Potashin³⁵⁰ and Bonney⁴⁸ also found the tendency for children to choose at their own level of intelligence.

The relationship between peer choice and achievement has been found to be similar to that between choice and intelligence. Bonney⁴⁵ and Laughlin²³⁶ found the range of correlation between achievement and sociometric status in grades two to seven to be from .14 to .36. Studies which have compared the highly chosen with those of low choice status have found significant differences in achievement scores at the sixth-grade level,¹⁷⁵ with fifth and sixth graders,⁷⁸ and with high school students.⁶⁵ Feinberg¹²⁶ reported similar findings in a study of 2000 adolescent boys, and Ohlsen and Dennis³²⁶ in a study of college students. Keislar²²⁰ found higher correlation between prestige and achievement than between sociometric status and achievement. Gronlund suggests that the meaning of this phenomenon might be that achievement places one in an attractive position but choice depends on other factors.¹⁷⁴ It was found that there is a tendency for mutual choices to be made by individuals who are similar in achievement.^{48,407}

Summary

In reviewing the literature relating personal factors to sociometric measures it was found that in general the highly chosen tend to be expansive and aware of group needs, while the least chosen tend to be self-centered. Researchers have indicated that there is no particular combination of traits that characterizes the individual persons who fall at either extreme level. It was indicated that over-age children are more likely to be underchosen, that the highly chosen are thought by their peers to be attractive and skilled in athletics. Notwithstanding conflicting evidence, significant relationships have been found between acceptance scores and the California Test of Personality and other self-rating instruments. Agreement is also lacking between various investigators concerning the relation of the Thematic Apperception Test or the Rorschach with sociometric status. Social skills, social behavior, and the achievement of developmental tasks have each been found to correlate in some degree with sociometric choice level. Disagreement has been noted with respect to results obtained from investigators who have been interested in correlating sociometric status with intelligence and with achievement, but considerable data has been produced which indicates some correlation at the extreme of sociometric measures.

Relation of sociometric status to social factors

Under this heading the research will be reviewed which has explored the relationship of sociometric choices to demographic factors, proximity and degree of acquaintance, and family factors.

Demographic factors

Sociometric status and also the direction of choices have been studied with respect to their relation to social class and social cleavage. There is a fair measure of agreement that sociometric status and socioeconomic status are related. Bonney and Northway suggested that "traits are always perceived, not as isolated psychological variables, but as 'figures on a ground'," and that individual traits can operate fairly only where socioeconomic and ethnic similarities exist.^{56:403} Bonney,⁴⁷ Loomis and Proctor,²⁵⁴ Lundberg and Steele,²⁶⁶ Grossman and Wrighter,¹⁷⁵ Brown,⁶⁵ Stendler,⁴¹⁰ Cook,⁹⁶ and Neugarten³¹¹ have all achieved results which indicate significant correlation between sociometric choice status and socioeconomic status. Potashin³⁵⁰ and Phelps and Horrocks³⁴⁵ found positive but not determinative relationship between the two types of factors. On the other hand, Davis,¹⁰⁸ Dahlke,¹⁰⁵ and Young and Cooper⁴⁵¹ found no significant relation, and Brown and Bond⁶⁷ found no correlation for boys but high correlation for girls. Davis¹⁰⁸ indicated that his findings might be peculiar to the particular situation and not subject to generalization. Gronlund¹⁷⁴ suggests the contradictory results are perhaps because of varying degrees of social stratification in the areas studied. Another study on the relation between acceptance and social class was one by Tiffin.⁴²²

There is even more agreement in the research concerning the tendency for sociometric choices to be given to persons at the same or a higher level of socioeconomic status, and this has been shown at the elementary, high school, and college levels.^{48,96,193,261,263,265,266,311,407,410} Stendler found that the socioeconomic factors had greater influence with respect to choices for out-of-school activities than

in-school criteria.⁴⁸ Maas found a sociometric differential on the basis of class in the relationships between club members and the adult leader and also among members, in a study of club membership of lower and middle class adolescents.²⁶⁷

The relations between sociometric measures and race, religion, and urban-rural cleavage have been explored. In the thirties Moreno²⁹⁹ and Crisswell¹⁰² found a definite racial cleavage between Negro and white school children in metropolitan communities which practiced segregation. Rath and Schweikart³⁵⁹ and Gronlund¹⁷⁴ found a tendency for children in the upper elementary grades to choose within their own race, but free crossing of lines by both white and Negro children was noted. Goodnow and Tagiuri's study¹⁶³ showed the tendency to form cleavages around religious-ethnic groupings. Lundberg and Steele²⁶⁶ found clique structure along lines of church membership. Bonney⁵¹ studied seven college groups and found the tendency in six of them to choose within the same religious group. Three studies concerned with urban-rural cleavage in consolidated high schools found differing results: Bonney found a cleavage, with urban students scoring higher in sociometric status;⁵² Blanchard found similar score status between rural and urban students and only a slight tendency towards within-group choices;⁴¹ and Becker and Loomis found good integration between rural and urban students.²⁷

Proximity and degree of acquaintance

Studies which have related residential proximity or length of acquaintanceship with sociometric choice have produced varied results. Lundberg and Bamsley²⁶³ and others^{128,261,264} found significant relationship between choice status and proximity. Segoe³⁹⁸ found the

average distance between homes of mutual friends in grades three to eight to be .26 mile as compared with .96 mile for unselected children. In Gallagher's study¹⁴⁹ about 77 per cent of children in grades two through five chose friends who lived nearer than the average distance between each child and all his classmates. Gronlund commented that sociometric choice is a different phenomenon than a child's actual friends, and is less effected by proximity. Potashin³⁵⁰ found 62 per cent of mutually chosen children living near each other, but 52 per cent of nonfriends also lived close together. DeVault¹¹³ found no relationship between the frequency of choice by mutual pairs and distance between homes. His study included grades one through twelve, and indicated an increase in average distance between homes of mutual pairs as age increased. Gronlund and Whitney¹⁷¹ found that there was no difference in number of neighborhood play companions between the highly chosen and least chosen. Brown⁶⁵ found no relationship between sociometric status and location of the home in a study of 1600 high school students. Scandrette³⁸⁸ found that degree of acquaintanceship was significantly related to frequency of choice as a friend, although the pattern might be reversed because of undesirable personality traits. The evidence with respect to the bearing of proximity on choice as indicated by these studies is inconclusive.

Family factors

Conflicting data have resulted also from the explorations of relationships between sociometric choice and such factors as number of siblings, position in the family, and family experiences and relationships. Bonney^{43,44,47,51} and Damrin¹⁰⁶ found a tendency for highly

chosen students to come from small families and for "only children" to receive high choices, while children from large families tended to receive fewer choices. No overall correlation between choice status and family size was found by investigators,^{421,451,65,252} nor between choice status and position in family,^{65,106,125} although Thorpe⁴²¹ reported a slight tendency for younger members of families to have higher choice status. In extensive studies^{65,451} no evidence was found that children from broken homes were thereby effected in choice status. Permanence of residence proved to be significantly related to acceptance in a study which retained "new pupils" in the study²⁷⁸ but was not significantly related in another study⁴⁵¹ from which the "new pupils" were eliminated. One study²³⁶ found the tendency for sociometric status to be maintained when pupils changed schools.

The effect of family experiences and relationships on sociometric patterns has been a somewhat neglected area, although a few studies have produced positive findings. Two investigators^{65,126} found that children whose parents are interested in sports and social activities tend to receive high acceptance scores. Feinberg's study¹²⁶ found this to be true at all economic levels. Family cohesiveness⁴³⁴ and absence of favoritism¹²⁶ have been observed as tendencies relating to high sociometric choice, while parental rejection tended to be related to peer rejection in a study by Ausubel.¹⁷ Helper's study showed a direct relationship between the "incident of reward indicated by mothers for daughters" and sociometric status.¹⁸⁵ Gronlund commented on the fact that investigators have concentrated on the "relatively unimportant" objective types of factors about families and have neglected the more important area of parent-child relationships.^{174:214}

Summary

In the studies that have related social factors to sociometric ratings certain areas of agreement have been pointed out as well as areas of disagreement. With respect to demographic factors, several investigators have found positive relationships between socioeconomic level and sociometric status, although a few contrary findings have been noted. There seems to be little or no disagreement that sociometric choices tend to be given to persons who are at the same or higher socioeconomic levels. With respect to racial, religious, and urban-rural cleavages sociometric choosing seems to reflect the degree of integration in the particular community. The influence of proximity on sociometric choice has been inconclusive in the studies. Degree of acquaintanceship appears to have a relationship to choice.

Conflicting evidence has been found with respect to certain family factors, and scarcity of data is noted concerning others. There is some tendency for children from small families and the "only child" to rank in the higher choice status and for those from large families to rank low, but this was not supported in certain investigations. Position in the family does not seem to be significant, nor does the broken home. Some evidence was presented that residential permanency gives children a better chance to be well chosen, and that parental interest in sports and social activities may be reflected in high choice scores. The little available evidence was undisputed that family cohesiveness and good parent-child relationships are related to high sociometric status.

The application of sociometry in improvement activities

Sociometry has been applied in various ways to particular and general problems of inter-relations among group members. Most of the studies to be noted here will refer to school experiments, although note will be taken of the application of sociometric methods in other settings. The kinds of problems which have been of concern have included isolation and low choice status, class cleavage, social climate, and the delinquency behavior of a subgroup. Sociometric grouping as an improvement measure will be considered first, followed by an examination of the use of sociometry in other remedial approaches.

Sociometric grouping

Jennings and Moreno explored the results of grouping based on sociometric choice at the New York Training School for Girls. Experimental subjects who were assigned to living quarters on the basis of sociometric choices found a better position within the group from the start and achieved social integration more quickly than control subjects.³⁰² When sociometric grouping was applied to seating in the dining room, the number of isolates decreased and the number of mutual choices increased in the experimental group, while the control group experienced the opposite effects. Faunce and Beegle¹²⁵ reported the use of sociometric grouping in a summer camp to achieve social integration.

Most of the studies describing the use of sociometric grouping in the school have involved the assignment of students to small work groups. The method has also been applied to seating assignments and to home room assignments. It is to be noted that most of the studies did not extract out of the experiments other kinds of influence which

had a bearing upon the particular problems studied. This is true even in studies which included a control group.

Several studies at the elementary level^{15,291,400,452} reported that the number of isolates was reduced after a period during which the students worked in small groups constituted on the basis of sociometric choice. These experiments all lacked controls and included, in addition to grouping, special efforts on the part of teachers to direct the attention of others to the isolates to help them gain recognition from their peers. Kerstetter and Sargent²²² described a project which was directed toward the improvement of a situation involving a closed subgroup of boys who manifested delinquent type behavior. Members of the subgroup were divided and placed in two different groups sociometrically assigned when work groups were formed. The result was that delinquent behavior was reduced and the problem boys were integrated into the classroom. An incidental result was that two isolates achieved higher status.

On the basis of sociometric seating alone Dineen and Garry¹¹⁴ reported reduction in social class cleavage between children from upper and lower socioeconomic levels. The six elementary grades were alternately assigned to experimental and control programs, and after sixteen weeks improvement was noted only in the experimental rooms. An eighth grade project⁷² combining sociometric assignments for seating, work, and laboratory partners in science resulted in greater increase of mutual choices in the experimental group than in a control room which worked in the traditional method. Amundson⁷ reported increase in the degree of sociometric acceptance as a result of homeroom assignments on the basis of sociometric choices at the high school level; however, control of extraneous factors was not indicated.

Other remedial approaches

The use of sociometry in diagnosing group needs and in measuring effects of remedial programs has been the focus in the studies to be noted in this final section. Three of these studies^{129,225,409} used the small group as the remedial measure, although sociometric assignments to the groups were not indicated. Sociometric tests were used to measure the effects of the experiment. After several months of experimenting with small groups two^{129,409} reported that social acceptance had increased and the number of rejections had decreased. The third²²⁵ reported reduction in the number of isolates and low chosen in the experimental rooms and an increase of these in the control rooms.

Studies which were concerned with the identification of isolates through the use of sociometric tests in order to institute remedial programs are of particular relevance to this study. In Northway's study of "Outsiders"³¹⁶ a combination of analytical devices were used to classify children who were sociometrically located as isolates. Three distinct categories were discovered which Northway called recessive, socially uninterested, and socially ineffective. The true recessive children she considered as presenting pre-psychotic symptoms which were beyond the power of the school to remedy. Children in the other two categories, she found from her studies, were amenable to redirection by interested teachers. Roberts³⁷² identified the isolates in fifteen elementary school classes and developed a six step program whereby teachers could help them develop insight and social effectiveness. Post testing proved the effectiveness of the program. McClelland and Ratcliffe²⁸² felt that it was important to appoint isolates to positions

of responsibility. Cunningham¹⁰³ and Taba⁴¹⁹ both emphasized the need to modify the values of the group and their attitudes toward children who were being isolated. Cox¹⁰⁰ and Davis¹⁰⁹ experimented with play therapy as a way to help children who were rejected or isolated.

In summary, it has been shown that sociometric grouping and other types of grouping have resulted in reduction of the number of isolates in the total group and have remedied behavior problems associated with a subgroup. Seating, work group, and homeroom assignments on the basis of sociometric choice are approaches which have differentially reduced social class cleavage and increased mutual choices and social acceptance. It has been noted that in general the grouping experiments have been contaminated with the inclusion of other procedures.

Sociometry has provided a useful technique for the identification of isolates in order to apply remedial steps. Improvement procedures have included individual attention directed toward isolates by class room teachers, play therapy and a concern for the modification of group values.

C. Summary of Sociometry Literature

The first part of this section noted the literature which points to the origins and development of sociometry. The undisputed credit for the discovery of a scientific method for measuring aspects of group relationships belongs to Jacob Moreno. Although this one man developed the procedural method, the theoretical framework, and the recording and analyzing techniques, the method has drawn the interest of psychologists, sociologists, and statisticians, who have contributed to the development and refinement of sociometric technique.

The review of sociometric research has indicated the prevalence of conflicting data in many of the areas studied. Nevertheless, there are trends in the studies which give indication of the kinds of qualities children possess who are usually highly chosen by their peers. As a group these children are friendly, outgoing, expansive, dynamic individuals who relate well to many types of persons, who are concerned about the welfare of the group, and who take strong stands on questions of fairness and of right and wrong as they see it. They are physically attractive, athletically skilled, and are no older, but perhaps younger than their classmates. They are well adjusted personally, skilled in social behavior, and are intelligent, and high achievers. They are apt to be members of small permanently located families which belong to the higher socioeconomic levels. The parents are interested in sports and social activities and the parent-child relations are good.

It is important, however, to note that such a description refers only to statistical averages, and not to any individual or single personality type. It is also pertinent to point out that in many of the studies there was no control for interacting variables. In general the research which has dealt with personal factors has been more conflicting in results produced than have investigations which have compared social factors with sociometric choice. Research in the areas of the more significant interpersonal family relationships has been scanty.

Evaluations of sociometric methods in treatment activities have in general indicated positive results. Sociometric grouping has resulted in reduction of the number of isolates and underchosen; it has helped to remedy behavior problems; it has reduced class cleavage and

increased social acceptance and mutual choices. Sociometric methods have also been useful in identifying isolates and measuring the effectiveness of remedial programs. However, the point has been made that in most of these programs the effect of other remedial efforts which were combined with the sociometric techniques has contaminated the data to an extent that it is impossible to perceive the effect of sociometrically applied interaction as an isolated phenomenon.

CHAPTER III

METHODOLOGY

This chapter will discuss the procedural aspects of the experiment including the following areas: (A) the selection and description of the subjects, (B) the hypotheses, (C) the treatment of the groups, (D) the testing instruments and their use, and (E) the treatment of the data.

A. Selection and Description of Subjects

Selection of subjects and composition of groups

To identify the isolates data from the first administration of a sociometric test were analyzed on the basis of the number of persons who chose each of the 114 girls in the class. This analysis indicated that there were twenty-eight girls in the low quartile who received two choices or less, and twenty-seven highly chosen girls who received between nine and twenty-five choices, with the remaining fifty-nine falling in the middle range. Table 1 shows this distribution by homerooms.

The twenty-eight in the low quartile, defined herein as isolates, were interviewed individually to assess their willingness to participate in the experiment. They were told that an opportunity would be offered to a few girls to participate in small experimental groups where participants could discuss matters which seemed important to them. Minimum explanation was given concerning randomization, since not all who

expressed willingness could be placed in the experimental groups. Twenty-five of the twenty-eight isolates were willing to participate and were randomly assigned, eight to Experimental Group A, five to Experimental Group B, five to a Bibliotherapy Control Group C, and seven to Control Group D.

TABLE 1.--Distribution of sociometric choices to girls by rooms

Home- Room	Number of Choices Received (PC Scores) ^a													Total N
	Low Q.			Middle 50%						High Quartile				
	0	1	2	3	4	5	6	7	8	9	10	11- 15	12- 25	
1	0	1	3	1	1	0	0	0	2	1	0	2	1	12
2	0	2	0	1	0	2	0	1	1	1	2	1	0	11
3	0	4	0	2	2	0	0	2	1	2	0	1	0	14
4	2	0	0	3	3	2	1	1	1	0	1	1	1	16
5	1	2	0	1	2	3	1	0	0	1	1	1	0	13
6	1	4	0	1	0	0	1	1	3	1	0	0	2	14
7	1	2	2	2	3	2	0	0	0	2	0	3	0	17
8	2	1	0	2	3	0	2	4	1	0	1	1	0	17
Total	7	16	5	13	14	9	5	9	9	8	5	10	4	114
Q. Total	28			59						27				114

^aNumber of persons choosing subject.

From twenty-seven highly chosen girls there were seven who received no rejections. Three of the seven were randomly selected, interviewed individually, and assigned to Experimental Group B. Thus the Experimental Groups A and B were initially equal in size, but differentially constituted, Group A containing eight isolates and Group B containing five isolates and three stars.

Minor changes which occurred during the experimental period reduced the number of isolates in the experimental groups but not in the control groups. One girl dropped out of Group A the third week because her mother felt she should use her time for study. An isolate was lost from Group B the fourth week when her family moved away. The seventh week a "star" was lost from Group B when she became ill with rheumatic fever. At the end of the experiment and before the post-tests were given another girl from Group A moved to another district. It was possible, however, to have the post-tests administered to her by the school counselor. Thus for the post-testing there were seven isolates in Group A, four isolates and two stars in Group B, and the initial numbers, five and seven, respectively, in Control Groups C and D, while for the follow-up test, Group A was reduced to six isolates. Table 2 shows the composition of the groups by home room membership, with footnotes indicating losses at the time of the post and followup tests.

TABLE 2.--Composition of groups by homeroom

Homeroom	Exper. Gr. A (Isolates)	Exper. Gr. B (Isolates)	(Stars)	Control Gr. C	Control Gr. D
1	. . . . . 2 ^a	. . . . . 2	. . . . . 1		
2	. . . . . 1	. . . . . 1 ^a	. . . . .	
3	. . 3 ^a	. . . . .	. . . . .		1
4	. . . . .	. . . . . 1	. . . . . 1	. . . . . 1	
5	. . . . .	. . . . .	. . . . . 2	. . . . . 1	
6	. . 2 . . . . .	. . . . . 1	. . . . .	
7	. . 2 ^b . . . . .	. . . . . 1	. . . . . 1	. . . . . 3	
8	. . 1 . . . . .	. . . . .	. . . . .
Total	8	5	3	5	7

^aOne less than this number at the post-test period and follow-up period.

^bOne less than this number at the follow-up test period.

Family size, social class, intelligence level

Items of descriptive data were obtained from school files and a questionnaire filled out by the subjects concerning the number of siblings, socioeconomic level, and intelligence scores of the subjects. It was found that the average number of siblings in each of the two experimental groups was about three and one-fourth, in Control Group C over one and one-half, and in Control Group D over four and one-half. In each of the groups there were only one or two individuals whose fathers were white collar workers, with the majority belonging to lower middle or upper lower class families. Intelligence scores on the

Lorge-Thorndike Intelligence Tests became available a few weeks after the experiment was over. The range for all the experimental subjects was from 82 to 139 on the verbal and from 82 to 128 on the nonverbal. The means and ranges for each of the four groups are presented in Table 3.

TABLE 3.--Means and Ranges on Lorge-Thorndike Intelligence Tests

Group	Verbal			Non-Verbal		
	N ^a	Range	Mean	N ^a	Range	Mean
Exper. Gr. A	5	90-128	104.6	5	82-125	94.8
Exper. { Isolates Gr. B { Stars	3 ^b	99-111	104.67	3 ^b	109-125	116.67
	2	94-112	103	2	92-111	101
Control Gr. C	5	106-139	118.4	4	101-124	108
Control Gr. D	7	82-116	99.43	6	84-119	103.33

^aN refers to the number of subjects for whom Lorge-Thorndike Intelligence Test scores were available.

^bNo scores were available for one subject who was in an ungraded special room for part of her work. Her scores would have reduced the averages of Group B considerably.

If allowance is made for the one subject in Group B known to rate low in scholastic ability, for whom there were no Lorge-Thorndike Test scores, then it is apparent that mean scores for Groups A, B, and D were very similar while scores of Group C were comparably higher. Both verbal and nonverbal mean scores for Groups A, B, and D fell within the eleven point range between 94 and 105. However, both range and mean scores for Group C, particularly on the verbal test, were higher. It appears that there were no differences in intellectual

level among the experimental and control groups with the exception of Group C, which did on the average have higher intelligence scores.

B. Hypotheses

The hypotheses were stated in summary form, along with a statement of basic assumptions and the definitions of terms, in the first chapter. Now they will be stated in detail. There are six predictions of change regarding each of three variables: self-concept scores, anxiety scores, and sociometric scores. Furthermore, predictions were made of correlations between improvement in self-concept measures and eight subscales concerned with aspects of perception of the counseling experience, in an attempt to predict which subjects would change through counseling. The precise hypotheses are as follows:

Predictions of improvement in self-concept scores during counseling

- 1a. In Experimental Group A the mean score on a self-concept scale will improve significantly after a series of psychological group counseling sessions.
- b. Six weeks after counseling the mean score will remain significantly greater than it was before counseling.
- 2a. In the isolates of Experimental Group B the mean self-concept score will improve significantly after counseling.
- b. Six weeks after counseling the mean score will remain significantly greater than it was before counseling.
- c. Gain in self-concept scores after counseling will be greater in the isolates of Experimental Group B than in those of Group A.
- 3a. In the isolates of the combined Experimental Groups A and B the mean self-concept score will improve significantly after counseling.
- b. Six weeks after counseling the mean score will remain significantly greater than it was before counseling.

- 4a. In a Bibliotherapy Control Group C there will not be a significant change in self-concept score following an experimental period.
- b. Six weeks after the experimental period the mean self-concept score will not be significantly changed from the pre-experimental score.
- 5a. In Control Group D there will not be significant change in self-concept score after the experimental period.
- b. Six weeks after the experimental period the mean self-concept score will not be significantly changed from the pre-experimental score.
- 6a. In the combined Control Groups C and D there will not be significant change in self-concept score after the experimental period.
- b. Six weeks after the experimental period the mean score will not be significantly changed from the pre-experimental score.

Predictions of improvement in anxiety score during counseling

- 7a. In Experimental Group A the mean score on an anxiety scale will improve significantly after a series of psychological group counseling sessions.
- b. Six weeks after the experimental period the mean score will remain significantly lower than the pre-counseling score.
- 8a. In the isolates of Experimental Group B the mean anxiety score will improve significantly after counseling.
- b. Six weeks after counseling the mean score will remain significantly lower than the pre-counseling score.
- c. Reduction of anxiety after counseling will be greater in the isolates of Experimental Group B than in those of Group A.
- 9a. In the isolates of the combined Experimental Groups A and B the mean anxiety score will improve significantly after counseling.
- b. Six weeks after counseling the mean score will remain significantly lower than the pre-counseling score.
- 10a. In Control Group C there will not be significant change in the mean anxiety score after the experimental period.
- b. The mean score six weeks after the experimental period will not be significantly changed from the mean score at the beginning of the period.

- 11a. In Control Group D there will not be significant change in the mean anxiety score after the experimental period.
- b. Six weeks after the experimental period the mean score will not be significantly changed from the mean score at the beginning of the period.
- 12a. In the combined Control Groups C and D there will not be significant change in the mean anxiety score after the experimental period.
- b. Six weeks after the experimental period the mean score will not be significantly changed from the mean score at the beginning of the period.

Predictions of improved sociometric score during counseling

- 13a. In Experimental Group A the mean sociometric score will significantly increase after a series of group counseling experiences.
- b. Six weeks after counseling the mean score will remain significantly greater than the pre-counseling score.
- 14a. In the isolates of Experimental Group B the mean sociometric score will significantly increase after counseling.
- b. Six weeks after counseling the mean score will remain significantly greater than the pre-counseling score.
- c. There will be a greater increase in sociometric scores in the isolates of Experimental Group B than those of Group A after counseling.
- 15a. In the isolates of the combined Experimental Groups A and B the mean sociometric score will significantly increase after counseling.
- b. Six weeks after counseling the mean score will remain significantly greater than the pre-counseling score.
- 16a. In Control Group C there will not be significant change in sociometric score after the experimental period.
- b. Six weeks after the experimental period the mean score will not be significantly changed from the score at the beginning of the period.
- 17a. In Control Group D there will not be significant change in sociometric score during the experimental period.
- b. Six weeks after the experimental period the mean score will not be significantly changed from the score at the beginning of the experiment.

- 18a. In the combined Control Groups C and D there will not be significant change in sociometric score after counseling.
- b. Six weeks after the experimental period the mean score will not be significantly changed from the mean score at the beginning of the experiment.

Predictions of correlation between gain in self-concept and scores made on the Perception of Group Experience Scale (PGES)

- 19. Isolates in the two experimental groups who achieve higher self-concept scores after the experimental period will have felt significantly more identified with other members of the counseling group than those who do not achieve higher scores. (Scale I of PGES)
- 20a. Isolates in the experimental groups who achieve higher self-concept scores after the experimental period will have felt a greater desire to be like others in the counseling group than those who do not achieve higher scores. (Scale II of PGES)
- b. Isolates of the mixed Group B will show a significantly greater desire to be like the non-isolates than like the isolates in the group. (Scale II)
- 21. Isolates in the experimental groups who achieve higher self-concept scores after the experimental period will have felt significantly more acceptance by other group members than those who fail to achieve higher scores. (Scale III)
- 22. Isolates in the experimental groups who achieve higher self-concept scores after the experimental period will have perceived other group members as significantly more accepted by other people than those who do not achieve higher scores. (Scale IV)
- 23. Isolates in the experimental groups who achieve higher self-concept scores will have had a significantly more positive attitude towards the group leader than those who do not. (Scale V)
- 24. Isolates of the experimental groups who achieve higher self-concept scores will perceive the leader as being significantly more accepting than those who fail to achieve higher scores. (Scale VI)
- 25. There will be positive correlation between achievement of higher self-concept scores and perception of group experience. (Scale VII)
- 26. The isolates of the experimental groups who achieve higher self-concept scores will perceive the experience of others

in the group as significantly more positive than those who fail to achieve higher scores. (Scale VIII)

C. Treatment of Groups

Control groups

Treatment of the control groups was differentiated in that members of Control Group C were given copies of the booklet, How to Get Along with Others,* while Control Group D received no special treatment. Brief individual interviews were held with the members of Group C to tell them that although they were not selected for the group experiment they were being given an opportunity to read a book which they might find useful. The purpose of this procedure was to determine if bibliotherapy alone, with no opportunity for interaction, would affect the variables of concern in this study. It was ascertained later that only one subject read the booklet through and that one other girl read part of it and lost it.

Experimental treatment

The treatment of the two experimental groups was meant to be the same. Each group met regularly twice a week for half an hour or less, with somewhat irregular attendance. The intent of the counselor was to provide a nondirective relationship therapy experience, although some structuring proved to be essential in each group. However, the group climate and experience differed fundamentally between the two groups. In Group A from the first day there were indications of a group relationship and group awareness which would be important to the creation of a therapeutic climate, whereas the mixed Group B

*Bernice L. Neugarten, How to Get Along with Others, Chicago: Science Research Associates, Inc., Junior Guidance Series No. 5-1051, 1953.

seldom achieved an open, free atmosphere which would be conducive to a genuine counseling experience. Films and other devices were used in both groups as these seemed appropriate, but more structuring was necessary in Group B. The lack of significant interchange and relating in this group would seem to indicate that individuals from two widely contrasting sociometric levels have serious difficulties relating at a personal level. A fuller discussion of this question is in the last chapter which discusses the implications of the study. An overview of the group counseling sessions is included as Appendix A.

D. Testing Instruments and Their Use

The investigator who attempts to quantify personality variables is confronted with numerous problems, not the least of which is the choice of instruments. As Anastasi and others have pointed out, at the present stage of personality research most available instruments lack refinement and adequate validation.⁸ Wylie has discussed nine types of contaminating variables and other problems which are difficult to control in the establishment of construct validity of phenomenological data.⁴⁴⁹

Since the focus of the present research was not on the construction of instruments but rather on the measurement of the effects of group counseling on certain variables, it was felt that the use of existing tests was the preferred procedure if usable ones could be found. No instruments were found which seemed altogether adequate; however, the search led to the selection of a self-concept measure and an anxiety scale, the use of which seemed justifiable within the scope of this exploratory study. It was necessary to develop a sociometric instrument and a scale to measure the perception of group members with

respect to the counseling experience. Each of these instruments will be discussed in this section and will be exhibited in Appendix B.

The Self-Acceptance Scale

In selecting an instrument to measure self-concept, a major problem was to find a scale suitable for the seventh grade level. The Self-Acceptance Scale by Bruce (which will be referred to as the SAS), although standardized on sixth grade children, was found to be adaptable for the purpose of this study. Bruce's instrument was designed to produce a Self-Concept score, an Ideal-Self score, and a Self-Ideal Discrepancy score, the latter intended to be a self-acceptance measure. The scale consists of ten descriptive statements which reflect "affective characteristics about which individuals in our culture were thought to have substantial feelings."⁶⁸ One item found by Bruce to be ambiguous, though modified in the present study still tended toward ambiguity, and was therefore not scored. Two additional scores, social desirability and becoming like one's ideal, were omitted as not pertinent to the present study. The ten items were each checked on a five point rating scale, first in answering the question, "Am I like this person?" and second, in answering the question, "Do I want to be like this person?"

Bruce established retest reliability by giving the test twice with a week's interval between administrations to two sixth grade classes. The resultant correlation coefficients for the three scales of the SAS are presented in Table 4. Lower reliability on the Ideal-Self

TABLE 4.--Test-retest correlation coefficients
for the SAS scales

	N	Self- Concept	Ideal- Self	Self-Ideal Discrepancy
Class I	21	.83	.69	.80
Class II	26	.93	.54	.86

scale was attributed to its higher sensitivity due to its more limited range, that is, the ideal-self concepts tended to be the same for all the pupils.⁶⁸ This result, it may be pointed out, is a confirmation of Wylie's criticism of such two-indices scales, that social desirability variables may distort the individual's reflection of his phenomenal field with respect to his ideal-self.⁴⁴⁹

Validity of the SAS was based on its correlation with two other measures. The author found a correlation coefficient of .35 (N=184) between the Self-Ideal Discrepancy measure of the SAS and the Children's Manifest Anxiety Scale, and a coefficient of .32 (N=184) between the discrepancy measure and the Kooker Security-Insecurity Rating Scale. Bruce pointed out that these relationships in sixth grade children corroborated the findings by investigators whose experiments were with older subjects.⁶⁸ In the present investigation a correlation coefficient of .58 was found between the Self-Ideal Discrepancy score of the SAS and the Children's Manifest Anxiety Scale. However, it is to be noted that the subjects for whom this correlation was made were the selected sample used in this research and not a random sample of a normal seventh grade population.

Although validity was dealt with in terms of the Self-Ideal Discrepancy score, the Self-Concept score might be a more useful measure because of the problem of contamination of reports of the Ideal-Self by social desirability factors. Such contamination would affect the validity of the Discrepancy score. Also, Bruce himself found evidence which he felt cast doubt on the adequacy of the Self-Ideal Discrepancy score as a measure of self-acceptance. His subjects with high Self-Ideal Discrepancy scores who had experienced two years of self-understanding classes scored significantly lower in anxiety than subjects with high discrepancy scores in a group which did not have the self-understanding orientation. Bruce concluded that it was "not the discrepancy itself, but the feelings about it" that mattered.⁶⁸

The Children's Manifest Anxiety Scale

Since a dominant factor in most maladjustment problems is anxiety this variable was included as an area in which change was predicted as a result of counseling. Choice of an instrument was limited; the Children's Manifest Anxiety Scale was the only instrument which appeared to be usable for the age level and needs of the experiment. Although the normative data for this scale had been obtained for children no higher than the sixth grade, it was selected as a suitable instrument for this study. The Children's Manifest Anxiety Scale (to be referred to as the CMAS) was adapted for children by Castaneda, McCandless, and Palermo from the Taylor Manifest Anxiety Scale and consists of forty-two statements to be answered by Yes or No. The total of the statements marked "yes" indicates the anxiety level. The scale also contains eleven statements called an L scale which is intended to indicate the falsifying tendency of the subject.

The test-constructors reported one-week retest reliability correlations for grades four, five, and six, with separate figures for girls and boys in each grade which averaged about .90 (N=361) for the anxiety scale and .70 (N=336) for the L scale. The authors reported that intercorrelations between the anxiety and L scale scores were about zero for most of the groups.⁸³ In another study the constructors of the CMAS compared anxiety scores with sociometric scores and found a correlation coefficient of 0.32 as the overall average for the several rooms studied, that is, low status subjects tended to be high in anxiety.²⁸¹

Sarason, in a discussion of problems concerning anxiety scales, commented that construct validation of such scales is at a "rudimentary stage." He pointed out variables which tend to contaminate the results, but stated that available evidence indicates that anxiety scales are "tapping tendencies towards neuroticism, maladjustment, and self-dissatisfaction."³⁸⁵

The sociometric scale

The purpose of the sociometric test was twofold: first, to discover the isolates and second, to measure change in sociometric status which might result from group therapy. The interest of the investigator was in what Jennings called the "psychegroup...where the uniqueness of the individual as a personality is appreciated."^{210:438} Three choice criteria were therefore selected from leisure time activities, which were differentially popular in the school. A fourth criterion was "your favorite activity." First and second choices were called for as well as "least preferred" companion. Each category asked

for choices directed to boys and choices directed to girls. Choices on these criteria were limited to persons within the homeroom. A second section of the test asked who was the individual's best and second best friend in the entire grade. This was to discover if there were people who had friends only outside of their homeroom. A third section of the test was designed to gather background information, not connected with the hypotheses, concerning perceived characteristics which were associated with high and low choices.

An early form of the test was administered to a seventh grade room in another school, with the result that minor changes were made to simplify instructions and scoring. It has been pointed out by Gronlund that the concern in sociometric testing is with the reliability of test results rather than with the test itself.¹⁷⁴ Correlation coefficients of test scores separated by the ten-week period between the pre and post tests in this study would not be expected to be very high. These coefficients ranged from .72 to .97 for the eight rooms, with a mean of .88.

With respect to validity of sociometric tests, Gronlund commented on difficulties resulting "from the fact that there is little agreement as to what the sociometric test is supposed to measure."^{174:182} It is sometimes considered to be valid by definition as a simple measurement of choice behavior, but wider use calls for validation by relating results to "significant psychological and sociological variables."^{174:182-83} In this study rank order correlations were made between homeroom teacher judgments of sociometric structure, limited to girls only, and the sociometric test scores. Correlation coefficients by room are indicated in Table 5. It is noteworthy that the teacher whose scores correlated

most highly (.79) with the test scores taught the girls physical education and home economics, which gave her opportunity to observe the girls in less formal activities than the normal classroom.

TABLE 5.--Rank order correlation coefficients between teacher estimates and sociometric scores

Homeroom	N	r	Homeroom	N	r
1	13	.20	5	13	.49
2	11	--- ^a	6	14	.57
3	14	.37	7	17	.79
4	16	.45	8	17	.68

^aThe teacher was absent when the correlations were asked for.

The question of scoring sociometric results has been a subject of controversy. Weights may be applied in terms of choice levels; sociometric status of the chooser may be considered; or a ratio may be computed on the basis of the number of persons in the room. It was decided to use unweighted raw scores in this study on the following grounds. On the matter of assigning arbitrary weight according to choice levels on the assumption that a first choice should weigh more than a second choice, both Gronlund¹⁷⁴ and Lindzey and Borgatta²⁴⁸ point out that there is little evidence to support this practice. Two studies were reported showing that weighting did not improve the stability of results.^{40,170} On the question of sociometric status of the chooser, the concern in this study was whether or not an individual was chosen rather than with the sociometric structure of the room or the status of the chooser. Also a practical problem was that this

study did not analyze choice status of boys, but did include their choices directed to girls. On the third question of analysis by a ratio based on the number of persons in the room, two authorities^{174,248} have pointed out that such indices do not necessarily produce improvement over raw scores for comparisons within or between groups. Gronlund demonstrated the lack of validity in the assumption that more choices should be received by individuals in larger groups by observing that there are also more persons to be chosen. While Brofenbrenner's "constant frame of reference"⁶⁴ is a useful method to determine isolates and stars on the basis of statistical probability, this study used the more arbitrary method of delineation by quartiles for the practical consideration of securing a sample large enough to meet the requirements of the investigation. Northway³¹⁶ is representative of those who have used the quartile method for delineation of "outsiders."

Perception of Group Experience Scale

The Perception of Group Experience Scale (which shall be called PGES) was devised as a criterion for predicting which subjects would profit from psychotherapy. The scale was composed of eight subscales which were intended to measure the aspects of the counseling experience which were theoretically required as the conditions for improvement. The specific aspects of the counseling experience which the scale was designed to measure were as follows:

1. Subject's perception of identification with other group members.
2. Subject's desire for identification with other group members.
3. Subject's perceived level of acceptance by the other group members.

4. Subject's perception of the level of acceptability of other group members.
5. Subject's feeling toward the counselor.
6. Subject's perceived level of acceptance by the counselor.
7. Subject's perception of the group experience for self.
8. Subject's perception of the group experience for the group as a whole.

In constructing the scale the investigator received helpful suggestions concerning items and wording from a seventh grade teacher and from a research technician who had worked with material at this age level. A preliminary form of the test, adapted for a school room, was given in another school to determine the suitability of form and language for the seventh grade. Inasmuch as the experimenter knew of no similar attempt to measure these variables, and inasmuch as the instrument was fashioned for the particular experience, the construction of the instrument was entirely exploratory. The determination of reliability and validity was not thought to be essential.

The testing program

The testing program included three administrations of all the tests except the PGES, which was given only once, at the end of the counseling period. The procedure for administering the sociometric test was approximately the same on each of the three occasions. A team of eight testers, mostly graduate students in counseling or psychology, with one or two school counselors, gave the test simultaneously to the eight rooms. Instructions given to the students assured them that the testing was unrelated to school and that their answers would remain confidential. Students did not write their names on the tests, which

1

1

were numbered and distributed in order. Teachers provided seating charts, and were then asked to leave the room during the testing. Each student was provided with a roster of homeroom students.

The investigator administered the Self-Acceptance and Anxiety Scales. On all testing occasions the same general instructions were given which are outlined above. After the initial screening of isolates and stars who were to compose the experimental and control groups, the Self-Acceptance Scale was given to all these subjects in one group. The first administration of the Children's Manifest Anxiety Scale was to the separate counseling groups at the second meeting of each and to the combined control groups on another day. The second administration of the SAS and CMAS came the last week of the experimental period. The two tests were given at one time to the entire group of isolates and stars who were in the experimental and control groups. The follow-up tests, given six weeks later, were also administered at one time to all the subjects in the study.

The Perception of Group Experience Scale was administered by the guidance director of the school to the combined experimental subjects who had composed the two counseling groups, including the "stars" of Group B. This test was given the week after counseling was over. Since in the original interviews with the subjects the experimental nature of the program had been indicated, this test was interpreted to the subjects as an evaluation procedure.

The sequence of testing and other experimental procedures is presented in summary form in Chart 1.

Date	Experimental Activity	Subjects
Week of Dec. 12 ^a	Sociometric Tests	Entire 7th grade
	SAS	Research subjects
	Individual interviews . .	Research subjects
Week of Jan. 9	CMAS	Research subjects
Jan. 9 - Mar. 10	Group Counseling	Groups A and B
Week of Mar. 13	SAS	Research subjects
	CMAS	Research subjects
	PGES	Groups A and B
	Sociometric Tests	Entire 7th grade
Week of April 24	SAS	Research subjects
	CMAS	Research subjects
	Sociometric Tests	Entire 7th grade

^aSome pre-testing was done before the Christmas holidays since the experiment was to begin shortly after the holidays.

CHART 1.--Sequence of Experimental Procedures

E. Treatment of the Data

Predicted changes

The statistic which was used to test the various predictions of change in the first three sets of hypotheses (Numbers 1-36) was the t-test. With the small size of the sample the t-test was chosen as

having the greatest power. For each of the experimental and control groups the difference between pre-test and post-test scores for each isolate in the particular group was noted. The group variance of these differences was found: $Sd^2 = \frac{N\sum d^2 - (\sum d)^2}{(N)(N-1)}$ and the t-test formula

applied: $t = \frac{\frac{\sum d}{N} - 0}{\sqrt{\frac{Sd^2}{N}}}$. A one-tailed test of significance at the .05 level

was used. The same procedure was also followed with data from the combined Experimental Groups A and B, and for the combined Control Groups C and D. Data that concerned the stars in the Experimental Group B was omitted from the statistical analysis. The procedure as outlined here was applied in comparing both the pre-test and post-test scores, and the pre-test and follow-up scores.

In testing the prediction of change in self-concept, both the Self-Concept scores of the SAS and the Self-Ideal Discrepancy scores were analyzed. Only the anxiety measures of the CMAS were analyzed, although the L scores were observed. Four categories of sociometric scores were processed: (1) the number of persons choosing each isolate, (2) number of choices received by each isolate, (3) number of persons rejecting each isolate, and (4) number of rejections received by each isolate.

Predictions of which subjects would change

To test the fourth set of hypotheses (Numbers 37-44) which predicted correlation between gain in self-concept and perception of the counseling experience, the Fisher's Exact Probability Test was employed. This test is useful for analyzing data from two independent

samples which are small in size.⁴⁰² Using the Fisher's method, each of the eight subscores of the Perception of Group Experience Scale was compared first with gain in the Self-Concept score, and second with gain in the Self-Ideal Discrepancy score of the Self-Acceptance Scale. Since the Fisher method requires that the scores of each of two random samples fall into one of two discrete categories, differentiation was made between "gain" and "no gain" in self-concept, and between "high" scores and "low" scores on the perception scale. To achieve these differentiations the median was used in both instances. First the differences between self-concept scores before and after counseling were determined and the median of these differences was noted. All scores which fell at or above the median were considered as "gain" scores and those which fell below the median were called "no gain" scores. Likewise the scores on the PGES which fell on or above the median were considered to be the "high" scores and those below the median the "low scores." Then the Fisher method was applied to make the statistical comparisons. The same procedure was repeated in comparing gains in self-ideal discrepancy scores and PGES scores. The Fisher Exact Probability formula is:

$$r = \frac{(A + B)! (C + D)! (A + C)! (B + D)!}{N! A! B! C! D!}$$

Siegel's Table of Critical Values in the Fisher Test^{402:256-270} was utilized in the analysis.

F. Summary

The methodological approach which was pursued in this study has been discussed in this chapter. It was shown that subjects were selected by sociometric testing and randomly assigned to two experimental

and two control groups. The differentiation in composition of the two experimental groups was described and descriptive data about the subjects were given. Four sets of hypotheses were presented, which are related to the four variables under observation: self-concept scores, anxiety scores, sociometric scores, and perception of group experience scores. The approach to group counseling as the experimental treatment was presented and the difference in procedure followed with the control groups was explained.

A discussion of the testing program included descriptions of the testing instruments, together with a report of the difficulties involved in validating such instruments. The final section discussed the treatment of the data and indicated the statistical formulae which were applied to the data to test the hypotheses.

Chapter IV will present the data and indicate the results of the statistical analyses, and Chapter V will suggest the conclusions and implications of the study.

CHAPTER IV

THE FINDINGS

In this chapter the data will be presented which will show how each of the specific hypotheses was statistically tested. For the hypotheses which predicted improvement during counseling and maintenance of improvement six weeks after counseling tables will be presented which compare the pre-experimental scores with the post-experimental scores and with the follow-up scores in self-concept, anxiety, and sociometric status. Improvement in self-concept and anxiety scores is indicated by lowered scores, while improvement in sociometric choice scores is indicated by higher scores. One-tailed t-tests will be used to test for significance at the .05 level. In each table the group variance (Sd^2) and the "t" will be shown and an indication will be made of whether there was significant improvement (Sig.) or no significant improvement (N.S.). The term "after" or "post" will refer to the testing period immediately after the ten weeks of counseling, while "follow-up" (Fol) will indicate the testing period six weeks after the end of counseling. For the last eight hypotheses which predicted correlation between change in self-concept scores and the scores on the Perception of Group Experience Scale (PGES) two by two contingency tables will show the frequencies of "gain" or "no-gain" self-concept scores in combination with "high" or "low" PGES scores. Whenever the interest is in the self-concept score throughout this chapter,

the discrepancy score as a measure of self perception, it follows that Hypothesis 1 may be accepted as true by using the SC score.

Hypothesis 1b.--The mean score six weeks after counseling will remain significantly greater than the pre-counseling score.

Table 7 compares the pre-counseling and follow-up SAS scores of Group A. It is clear from the data and statistical analysis that the gain in the Self-Concept score made by Group A after counseling was maintained for six weeks after the end of counseling at the .05 level of significance. The gain in Self-Ideal discrepancy score is not significant, but on the basis of the Self-Concept score the hypothesis may be accepted.

TABLE 7.--Pre and follow-up scores in self-concept and self-ideal discrepancy made by Group A

Subject	Self-Concept Scores			Self-Ideal Discrepancy Scores		
	Pre	Follow-up	Dif.	Pre	Follow-up	Dif.
S1	26	27	1	17	18	1
S2	21	12	-.9	14	1	-13
S3	29	17	-12	25	8	-17
S4	25	21	-4	9	12	3
S5	29	20	-9	20	12	-8
S6	22	22	0	10	13	3

$Sd^2 = 28.3$ $t = -2.53$ $Sd^2 = 73.16$ $t = -1.45$
 Sig. N.S.

Hypothesis 2a.--In the isolates of Experimental Group B the mean self-Concept score will improve significantly after counseling.

Table 8 compares the pre-counseling and post counseling SAS scores of Experimental Group B. The analysis shows that there was no significant improvement during counseling. The hypothesis is rejected.

TABLE 8.--Pre and post-counseling scores in self-concept and self-ideal discrepancy for Group B

Sub- ject	Self-Concept Scores			Self-Ideal Discrepancy Scores		
	Pre	Post	Dif.	Pre	Post	Dif.
S1	25	26	1	6	15	9
S2	34	36	2	16	22	6
S3	39	26	-13	30	15	-15
S4	21	23	2	3	13	10

$$Sd^2 = 54 \quad t = -.54$$

N.S.

$$Sd^2 = 28 \quad t = .94$$

N.S.

Hypothesis 2h.--The mean score six weeks after counseling will remain significantly improved over the pre-counseling score.

Table 9 shows the pre-test and follow-up SAS scores with the differences between them for Group B.

TABLE 9.--Pre and follow-up scores in self-concept and self-ideal discrepancy made by Group B

Sub- ject	Self-Concept Scores			Self-Ideal Discrepancy Scores		
	Pre	Follow-up	Dif.	Pre	Follow-up	Dif.
S1	25	28	3	6	15	9
S2	34	43	9	16	34	18
S3	39	36	- 3	30	23	- 7
S4	21	21	0	3	18	15

$$Sd^2 = 26.25 \quad t = .087$$

N.S.

$$Sd^2 = 124.25 \quad t = 1.57$$

N.S.

The analysis shows no significant improvement. Since there was not significant improvement at the end of counseling it would seem unlikely that there would be significant difference at the time of the follow-up test. The hypothesis is rejected.

Hypothesis 2c.--Gain in self-concept scores after counseling will be greater in the isolates of Group B than in those of Group A.

Since there was no improvement in Group B but significant improvement in Group A, this hypothesis is rejected.

Hypothesis 3a.--In the isolates of the combined Groups A and B the mean self-concept score will improve significantly after counseling.

Applying the t-test to the combined data contained in Tables 6 and 8 produces results as shown in Table 10. The analysis shows that there was no significant improvement in mean score and therefore the hypothesis is rejected.

TABLE 10.--Results of t-tests of the SAS scores comparing pre and post scores for combined Groups A and B

N = 11	Sd ²	t	Sig. L.
Self-Concept	32.8	-1.03	N.S.
Self-Ideal			
Discrepancy	81.45	- .60	N.S.

Hypothesis 3b.--The mean score six weeks after counseling will remain significantly improved over the pre-counseling score.

Table 11 shows the results of the t-test when the combined comparisons of Groups A and B are analyzed, using the data from Tables 7 and 9.

The data show that there was no significant improvement in mean score in the combined groups A and B between the pre-counseling test and the follow-up test. The hypothesis is rejected.

TABLE 11.--Results of t-tests of the SAS scores comparing pre and follow-up scores for combined Groups A and B

N = 10	Sd ²	t	Sig. L.
Self-Concept	40.49	-1.19	N.S.
Self-Ideal Discrepancy	133.7	.11	N.S.

Hypothesis 4a.--In Group C there will not be significant improvement in self-concept scores after the experimental period.

Table 12 compares the pre-experimental and post-experimental SAS scores of Group C. The analysis shows that there was no significant improvement in mean score after the experimental period. The hypothesis is therefore accepted.

TABLE 12.--Pre and post-test scores in self-concept and self-ideal discrepancy for Group C

Subject	Self-Concept Scores			Self-Ideal Discrepancy Scores		
	Pre	Post	Dif.	Pre	Post	Dif.
S1	16	16	0	7	7	0
S2	16	18	2	4	5	1
S3	23	28	5	12	19	7
S4	29	24	- 5	13	17	4
S5	12	10	- 2	1	1	0
<div> $Sd^2 = 14.5$ $t = 0$ N.S. </div> <div> $Sd^2 = 9.3$ $t = .66$ N.S. </div>						

Hypothesis 4b.--The mean score six weeks after the experimental period will not be significantly improved over the pre-experimental score.

Table 13 shows the pre-experimental and follow-up SAS scores with the differences between them for Group C.

TABLE 13.--Pre and follow-up scores in self-concept and self-ideal discrepancy made by Group C

Subject	Self-Concept Scores			Self-Ideal Discrepancy Scores		
	Pre	Follow-up	Dif.	Pre	Follow-up	Dif.
S1	16	16	0	7	6	- 1
S2	16	13	- 3	4	1	- 3
S3	23	24	1	12	15	3
S4	29	23	- 6	13	14	1
S5	12	12	0	1	3	2

$Sd^2 = 8.3 \quad t = -1.24$ $Sd^2 = 5.8 \quad t = 1.07$
 N.S. N.S.

Analysis of the data shows that there was no significant difference between the pre-test and follow-up scores. The hypothesis is accepted.

Hypothesis 5a.--In Control Group D there will not be significant improvement in self-concept scores after the experimental period.

Table 14 compares the pre and post-experimental SAS scores of Group D. The analysis shows that there was no significant improvement after the experimental period. The hypothesis is therefore accepted.

TABLE 14.--Pre and post-test scores in self-concept and self-ideal discrepancy made by Group D

Subject	Self-Concept Scores			Self-Ideal Discrepancy Scores		
	Pre	Post	Dif.	Pre	Post	Dif.
S1	17	17	0	6	6	0
S2	31	25	- 6	22	16	- 6
S3	15	14	- 1	7	5	- 2
S4	15	13	- 2	4	4	0
S5	16	13	- 3	7	3	- 4
S6	18	18	0	7	11	4
S7	9	20	11	0	9	9
$Sd^2 = 28.48$			$t = -.029$	$Sd^2 = 25.47$		
N.S.				N.S.		

Hypothesis 5b.--The mean score six weeks after the experimental period will not be significantly improved over the mean score at the beginning of the experiment.

Table 15 compares the pre-test and follow-up SAS scores of Group D.

TABLE 15.--Pre and follow-up scores in self-concept and self-ideal discrepancy made by Group D

Subject	Self-Concept Scores			Self-Ideal Discrepancy Scores		
	Pre	Follow-up	Dif.	Pre	Follow-up	Dif.
S1	17	19	2	6	9	3
S2	31	33	2	22	24	2
S3	15	13	- 2	7	4	- 3
S4	15	13	- 2	4	2	- 2
S5	16	13	- 3	7	4	- 3
S6	18	18	0	7	9	2
S7	9	16	7	0	7	7

$$Sd^2 = 11.95 \quad t = .437 \\ \text{N.S.}$$

$$Sd^2 = 13.8 \quad t = .61 \\ \text{N.S.}$$

The statistical analysis shows that there was no significant improvement in self-concept scores between the pre-test and the follow-up test six weeks after the experimental period. The hypothesis is accepted.

Hypothesis 6a.--In the combined Control Groups C and D there will not be significant improvement in self-concept scores after the experimental period.

Table 16 shows the statistical results of combining the SAS scores of Groups C and D as presented in Table 12 and 14.

The data show that there was no significant improvement in the combined Groups C and D; and therefore the hypothesis is accepted.

TABLE 16.--Results of t-tests of comparing SAS scores for combined Groups C and D before and after the experimental period

N = 12	Sd²	t	Sig. L.
Self-Concept	20.81	-.019	N.S.
Self-Ideal Discrepancy	19.9	.25	N.S.

Hypothesis 6b.--The mean self-concept score six weeks after the experimental period will not be significantly improved from the pre-experimental scores.

Table 17 shows the results of the t-test when the data from Tables 13 and 15 relating to Groups C and D were combined and analyzed. The analysis shows that there was no significant improvement in self-concept score in the combined Groups C and D between pre-experimental and follow-up testing. The hypothesis, therefore, is accepted.

TABLE 17.--Results of t-tests of the SAS scores comparing pre and follow-up scores for combined Groups C and D

N = 12	Sd²	t	Sig. L.
Self-Concept	10.8	-.34	N.S.
Self-Ideal Discrepancy	9.69	.74	N.S.

Summary of findings concerning improvement in self-concept scores

Analysis of the data related to improvement in self-concept scores has shown that in Group A there was significant improvement in the mean Self-Concept score after counseling and that this improvement was

maintained for six weeks after the end of the counseling period. There was no significant improvement in the Self-Ideal Discrepancy score in this group and no other significant changes in the self-concept measures were observed in any of the groups or combinations of groups.

B. The Data Relating to Improvement in Anxiety Scores

The hypotheses 13 to 24 made predictions about improvement in anxiety scores. Data relating to these hypotheses will be presented in Tables 18 to 23. Each table will show the scores of one of the groups or group combinations and will compare the pre-experimental with the post-experimental scores, and the pre-experimental with the follow-up scores.

Hypothesis 7a.--In Experimental Group A the mean score on an anxiety scale will improve significantly after counseling.

Hypothesis 7b.--The mean score will remain significantly lower six weeks after counseling.

Table 18 presents the data and indicates the results of comparing pre-counseling anxiety scores with post counseling and with follow-up scores.

The comparison of pre-counseling and post-counseling anxiety scores indicates a reduction of the anxiety scores of Group A at a significance level of .05, which warrants the acceptance of Hypothesis 7a. The lower score was not maintained at the .05 significance level when the follow-up testing was done six weeks later. Therefore Hypothesis 7b is to be rejected.

TABLE 18.--Comparison of pre and post counseling anxiety scores and pre and follow-up scores of Group A

Sub- ject	Pre to Post			Pre to Follow-up	
	Pre	Post	Dif.	Follow-up	Dif.
1	32	33	1	31	- 1
2	18	11	- 7	9	- 9
3	26	11	-15	5	-21
4	32	25	- 7	36	4
5	29	31	2	28	- 1
6	12	7	- 5	n.s. ^a	
7	19	16	- 3	15	- 4

^aNo score: subject moved away.

$$Sd^2 = 32.33 \quad t = -2.26$$

Sig.

$$Sd^2 = 78.86 \quad t = -1.47$$

N.S.

Hypothesis 8a.--In the isolates of Experimental Group B the mean anxiety score will improve significantly after counseling.

Hypothesis 8b. The mean anxiety score six weeks after counseling will remain significantly lower than the pre-counseling score.

Table 19 presents the data and indicates the results of comparing pre-counseling anxiety scores with post-counseling and with follow-up scores of Group B. The analysis of the data in both cases indicates that there was no significant difference between mean scores. Therefore both Hypothesis 8a and 8b are rejected.

TABLE 19.--Comparison of pre and post counseling anxiety scores and pre and follow-up scores of Group B

Sub- ject	Pre to Post			Pre to Follow-up	
	Pre	Post	Dif.	Follow-up	Dif.
1	13	20	7	17	4
2	28	27	- 1	30	2
3	36	40	4	38	2
4	26	25	- 1	20	- 6

$$Sd^2 = 15.58 \quad t = 1.14$$

N.S.

$$Sd^2 = 20 \quad t = .22$$

N.S.

Hypothesis 8c.--Reduction of anxiety during counseling will be greater in the isolates of Group B than in those of Group A.

Since there was significant reduction of the mean anxiety score of Group A and no reduction of the mean score of Group B, the hypothesis is rejected.

Hypothesis 9a.--In the isolates of the combined Groups A and B the mean anxiety score will improve significantly after counseling.

Hypothesis 9b.--The mean score six weeks after counseling will remain significantly lower than the pre-counseling score.

Table 20 shows the results of combining the data from Tables 18 and 19 relating to change in anxiety scores in Groups A and B.

TABLE 20.--Comparison of pre-counseling anxiety scores with post and with follow-up scores of combined Groups A and B

	N	Sd ²	t	Sig. L.
Pre to Post	11	37.22	-1.24	N.S.
Pre to Follow-up	10	52.44	-1.23	N.S.

Since neither the lower post-counseling score nor the lower follow-up score represents a significant change from the pre-counseling anxiety score, both hypothesis 9a and 9b are rejected.

Hypothesis 10a.--In Control Group C there will not be significant improvement in the mean anxiety score after the experimental period.

Hypothesis 10b.--Six weeks after the experimental period the mean anxiety score will not be significantly improved from the score at the beginning of the experiment.

Table 21 presents the data and indicates the results of comparing pre-counseling anxiety scores with post-counseling and with follow-up scores of Group C.

TABLE 21.--Comparison of pre and post-counseling anxiety scores and pre and follow-up scores of Group C

Subject	Pre to Post			Pre to Follow-up	
	Pre	Post	Dif.	Follow-up	Dif.
1	3	6	3	7	4
2	21	17	- 4	14	- 7
3	23	19	- 4	23	0
4	7	6	- 1	6	- 1

$Sd^2 = 11 \quad t = -.90$ $Sd^2 = 20.66 \quad t = .44$
 N.S. N.S.

The analysis of the data shows that there was no significant difference between the pre-experimental and post score or between the pre score and the follow-up anxiety score in Group C. Therefore both Hypothesis 10a and 10b are to be accepted.

Hypothesis 11a.--In Control Group D there will not be significant improvement in the mean anxiety score after the experimental period.

Hypothesis 11b. The mean score six weeks after the experimental period will not be significantly improved over the pre-experimental score.

Table 22 presents the data and indicates how pre-experimental anxiety scores of Group D compared with post-experimental and with follow-up scores.

Since the analysis of the data shows that there was no significant difference between pre and post-experimental anxiety scores, or between

pre and follow-up scores in Group D, both Hypothesis 11a and 11b are accepted.

TABLE 22.--Comparison of pre and post-experimental anxiety scores and pre and follow-up scores of Group D

Sub- ject	Pre to Post			Pre to Follow-up	
	Pre	Post	Dif.	Follow-up	Dif.
1	20	14	- 6	16	- 4
2	22	29	7	33	11
3	14	4	-10	11	- 3
4	18	6	-12	6	-12
5	10	6	- 4	13	3
6	10	13	3	13	3
7	23	28	5	14	- 9

$Sd^2 = 56.28$ $t = -.856$
N.S.

$Sd^2 = 61.95$ $t = -.528$
N.S.

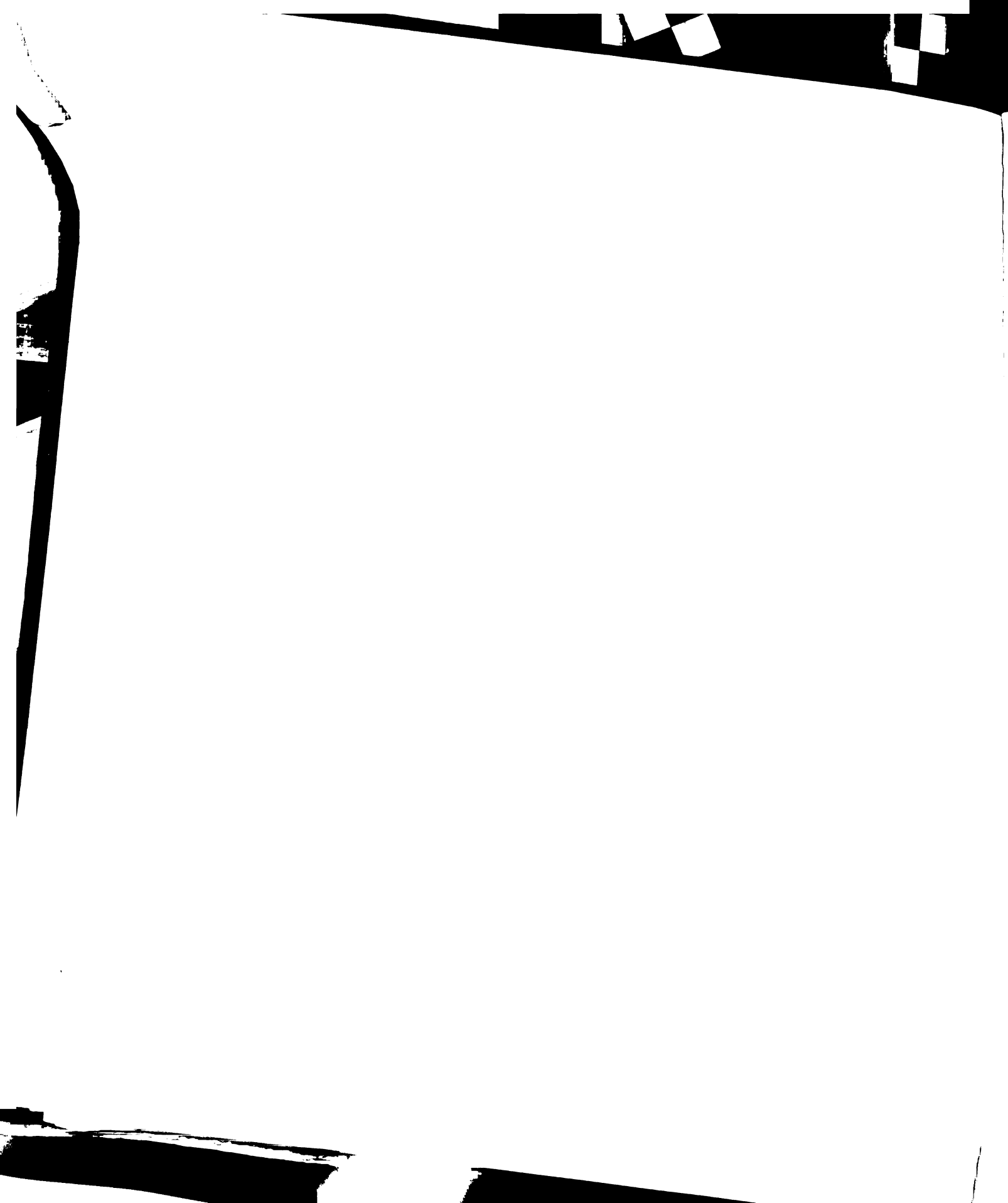
Hypothesis 12a.--In the combined Control Groups C and D there will not be significant improvement in the mean anxiety score after the experimental period.

Hypothesis 12b.--Six weeks after the experimental period the mean score will not be significantly changed from the pre-experimental mean score.

Table 23 shows the results of combining the data from Tables 21 and 22 relating to improvement in anxiety score in Groups C and D. The statistical analysis shows that there was not significant improvement between pre and post-experimental scores nor between pre and follow-up scores. Therefore, both Hypothesis 12a and 12b are accepted.

TABLE 23.--Comparison of pre-experimental anxiety scores with post and with follow-up scores of combined Groups C and D

N = 11	Sd^2	t	Sig. L.
Pre to Post	37.29	-1.05	N.S.
Pre to Follow-up	43.45	- .686	N.S.



Summary of findings concerning change in anxiety scores

The comparison of pre and post-experimental mean anxiety scores of the Experimental and Control Groups has shown that there was improvement in mean anxiety score, significant at the .05 level, in Experimental Group A. The reduced anxiety score for this group was not maintained at a significant level six weeks after counseling. There were no significant changes in anxiety scores, either between pre and post-experimental scores or pre and follow-up scores, in the Experimental Group B or in either of the two Control Groups C and D.

C. The Data Relating to Change in Sociometric Scores

Data derived from the sociometric tests included four types of scores: (1) number of persons choosing the subject (PC scores), (2) total choices received by the subject (TC scores), (3) number of persons rejecting the subject (PR scores), and (4) total rejections received by the subject (TR scores). A table for each of the research groups will compare the pre-experimental with the post-experimental choice scores, both PC and TC, and the pre-experimental with the follow-up scores. Since the hypotheses concerning improvement in sociometric status referred only to choice scores, the rejection scores will not be presented until a later section, where they will be examined for whatever additional understanding they might add to the experiment.

Hypothesis 13a.--In Experimental Group A the mean sociometric score will significantly increase after a series of group counseling sessions.

Hypothesis 13b.--The mean score six weeks after counseling will remain significantly greater than the pre-counseling score.

Table 24 shows the comparison of pre and post-counseling choice scores and of pre and follow-up scores of Group A.

TABLE 24.--Comparison of pre and post-counseling choice scores and pre and follow-up scores of Group A

Sub- ject	PC ^a Scores					TC ^b Scores				
	Pre	Post	Dif.	Fol	Dif.	Pre	Post	Dif.	Fol	Dif.
1	1	1	0	3	2	3	3	0	7	4
2	1	2	1	2	1	1	2	1	3	2
3	1	0	-1	2	1	1	0	-1	2	1
4	1	1	0	2	1	1	1	0	4	3
5	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0
Sd ²			.40			.566			2.66	
t			0			2.72			2.5	
Sig.			N.S.			Sig.			Sig.	

^aPersons choosing subject

^bTotal choices given subject

No significant increase was observed between pre- and post-counseling scores. Therefore Hypothesis 13a is rejected. There were significant differences between pre-counseling and follow-up choice scores in both the PC and TC scores. Therefore Hypothesis 13b is accepted.

Hypothesis 14a.--In the isolates of Experimental Group B the mean sociometric score will significantly increase after counseling.

Hypothesis 14b.--The mean score six weeks after counseling will remain significantly greater than the pre-counseling score.

The comparison of pre and post-counseling choice scores and of pre and follow-up scores is presented for Group B in Table 25.

TABLE 25.--Comparison of pre and post-counseling choice scores and pre and follow-up scores of Group B

Sub- ject	PC Scores					TC Scores				
	Pre	Post	Dif.	Fol	Dif.	Pre	Post	Dif.	Fol	Dif.
1	0	0	0	1	1	0	0	0	1	1
2	1	1	0	0	-1	2	1	-1	0	-2
3	1	0	-1	0	-1	4	0	-4	0	-4
4	1	1	0	4	3	3	3	0	6	3
S_d^2	.25			3.66		3.58			9.66	
t	-1.00			.52		-1.32			- .32	
Sig.	N.S.			N.S.		N.S.			N.S.	

No significant increase was observed between pre-counseling and post-counseling scores. Therefore Hypothesis 14a is rejected. Likewise, there was no significant difference between the pre-counseling and follow-up scores; therefore Hypothesis 14b is rejected.

Hypothesis 14c.--There will be a greater increase in sociometric scores in the isolates of Group B than those of Group A during counseling.

Observation of Tables 24 and 25 shows that the comparison of pre and post counseling choice scores resulted in a "t" of zero for Group A, and in a negative, though nonsignificant "t" for Group B. Therefore the hypothesis is rejected.

Hypothesis 15a.--In the isolates of the combined Groups A and B the mean sociometric score will significantly increase during counseling.

Hypothesis 15b.--The mean score six weeks after counseling will remain significantly greater than the pre-counseling score.

Using the data which has been presented in Tables 24 and 25 the scores of the combined groups A and B were analyzed. The results are

presented in Table 26. The analysis shows that there were no significant increases in any of the comparisons either after counseling or at the follow-up period. Therefore the hypothesis is rejected.

TABLE 26.--Results of combining sociometric scores of Groups A and B

N = 10	Pre to Post			Pre to Follow-up		
	Sd ²	t	Sig.	Sd ²	t	Sig.
PC Score	32	.56	N.S.	1.56	1.77	N.S.
TC Score	1.83	-1.17	N.S.	5.95	1.037	N.S.

Hypothesis 16a.--In Control Group C there will not be significant increase in sociometric score during the experimental period.

Hypothesis 16b.--The mean score six weeks after the experimental period will not be significantly increased over the score at the beginning of the period.

The comparison of pre and post-experimental choice scores and pre and follow-up scores is presented for Group C in Table 27.

TABLE 27.--Comparison of pre and post-experimental choice scores and pre and follow-up scores of Group C

Subject	PC Scores					TC Scores				
	Pre	Post.	Dif.	Fol	Dif.	Pre	Post	Dif.	Fol	Dif.
1	2	1	-1	3	1	2	1	-1	3	1
2	2	4	2	4	2	5	7	2	6	1
3	0	1	1	2	2	0	2	2	5	5
4	1	3	2	2	1	2	4	2	3	1
5	1	0	-1	1	0	3	0	-3	1	-2
Sd ²	2.3			.70		5.3			6.2	
t	.884			3.208		.388			1.078	
Sig.	N.S.			Sig.		N.S.			N.S.	

Analysis of the data indicates that there were no significant increases in either of the choice scores of Group C after the experimental period. Therefore Hypothesis 16a is sustained. However, in comparing the pre-experimental with the follow-up scores for this group, significant increase is noted in the number of persons choosing the subject. This indication of improvement in sociometric score at the time of the follow-up test denotes the rejection of Hypothesis 16b. Control Group C did experience improved choice level.

Hypothesis 17a.--In Control Group D there will not be significant increase in sociometric score during the experimental period.

Hypothesis 17b.--The mean score six weeks after the experimental period will not be significantly increased over the pre-experimental score.

The data and necessary comparisons for testing these two hypotheses are presented in Table 28, which compares the choice scores of the two testing period. It is apparent that there were no significant increases at the time of the post-experimental testing. Therefore Hypothesis 17a is accepted. It is also true that no significant changes were observed between the pre-experimental and follow-up testing. Therefore Hypothesis 17b is accepted.

TABLE 28.--Comparison of pre and post-experimental choice scores and pre and follow-up scores of Group D

Subject	PC Scores					TC Scores				
	Pre	Post	Dif.	Fol	Dif.	Pre	Post	Dif.	Fol	Dif.
1	2	0	-2	2	0	2	0	-2	2	0
2	1	1	0	1	0	1	1	0	1	0
3	0	0	0	0	0	0	0	0	0	0
4	0	2	2	1	1	0	2	2	1	1
5	2	6	4	4	2	5	15	10	10	5
6	0	0	0	0	0	0	0	0	0	0
7	2	2	0	5	3	5	5	0	13	8
Sd ²	3.62			1.47		15.61			10.33	
t	.79			1.87		.95			1.64	
Sig.	N.S.			N.S.		N.S.			N.S.	

Hypothesis 18a.--In the combined Control Groups C and D there will not be significant increase in sociometric score during the experimental period.

Hypothesis 18b.--The mean score six weeks after the experimental period will not be significantly increased over the mean score at the beginning of the experiment.

Making use of the data which has been presented in Tables 27 and 28 the scores of the combined groups C and D were analyzed. The results are presented in Table 29.

TABLE 29.--Results of combining sociometric scores of Groups C and D

N = 12	Pre to Post			Pre to Follow-up		
	Sd ²	t	Sig.	Sd ²	t	Sig.
PC Score	2.81	1.2	N.S.	1.09	3.32	Sig.
TC Score	10.7	1.06	N.S.	8.06	2.03	Sig.

As this table shows, there was no significant increase in either of the sociometric scores between the pre-experimental and post-experimental testing. Hypothesis 18a is accepted. Comparing pre-experimental and follow-up scores shows that there were significant improvements in number of persons choosing the subject, and in total number of choices received by subject. It is obvious, therefore, that Hypothesis 18b must be rejected.

Findings that relate to rejection scores

Although no hypotheses were made concerning rejection scores, the differences between pre and post experimental scores and between pre and follow-up scores were tested by two-tailed t-tests. Tables

30 to 33 present the findings. They show that there were no significant changes in either direction in any of the comparisons.

TABLE 30.--Comparison of pre and post-counseling rejection scores and pre and follow-up scores of Group A

Sub- ject	PR ^a Scores					TR ^b Scores				
	Pre	Post	Dif.	Fol	Dif.	Pre	Post	Dif.	Fol	Dif.
1	2	12	10	15	13	2	32	30	35	33
2	7	8	1	6	- 1	7	12	5	11	4
3	5	8	3	2	- 3	6	15	9	2	- 4
4	6	9	3	8	2	8	21	13	15	7
5	13	7	- 6	9	- 4	25	9	-16	15	10
6	8	15	7	17	9	15	33	18	42	27
Sd ²	30			47.46		234.9			291.5	
t	1.34			.94		1.57			1.36	
Sig.	N.S.			N.S.		N.S.			N.S.	

^aPersons rejecting subject

^bTotal rejections given subject

TABLE 31.--Comparison of pre and post-counseling rejection scores and pre and follow-up scores of Group B

Sub- ject	PR Scores					TR Scores				
	Pre	Post	Dif.	Fol	Dif.	Pre	Post	Dif.	Fol	Dif.
1	1	7	6	6	5	2	12	10	12	10
2	17	15	- 2	7	-10	36	33	- 3	13	-23
3	8	11	3	15	7	14	18	4	26	12
4	7	8	1	3	- 4	9	10	1	3	6
Sd ²	11.33			63		30			265.58	
t	1.18			.126		1.09			.21	
Sig.	N.S.			N.S.		N.S.			N.S.	

TABLE 32.--Comparison of pre and post-experimental rejection scores and pre and follow-up scores of Group C

Sub- ject	PR Scores					TR Scores				
	Pre	Post	Dif.	Fol	Dif.	Pre	Post	Dif.	Fol	Dif.
1	3	1	- 2	0	- 3	3	1	- 2	0	- 3
2	8	6	- 2	7	- 1	11	13	2	17	6
3	4	4	0	2	- 2	7	5	- 2	6	- 1
4	5	3	- 2	3	- 2	7	6	- 1	4	- 3
5	4	6	2	8	4	4	8	4	13	9
Sd^2	3.2			7.7		7.2			30.8	
t	- 1			- .64		.16			.64	
Sig.	N.S.			N.S.		N.S.			N.S.	

TABLE 33.--Comparison of pre and post-experimental rejection scores and pre and follow-up scores of Group D

Sub- ject	PR Scores					TR Scores				
	Pre	Post	Dif.	Fol	Dif.	Pre	Post	Dif.	Fol	Dif.
1	11	9	- 2	5	- 6	14	12	- 2	7	- 7
2	5	2	- 3	0	- 5	6	3	- 3	0	- 6
3	14	13	- 1	15	1	29	32	3	37	8
4	7	10	3	9	2	8	16	8	21	13
5	3	3	0	4	1	4	3	- 1	5	1
6	14	11	- 3	10	- 4	23	20	- 3	19	- 4
7	4	3	- 1	1	- 3	6	3	- 3	3	- 3
Sd^2	4.33			10.5		17.47			57.23	
t	- .12			- 1.63		- .08			.09	
Sig.	N.S.			N.S.		N.S.			N.S.	

None of the changes in number of rejections received or number of persons rejecting the subject were significant when tested by a two-tailed t-test. Direction of change in the Experimental Groups A and B

tended to be towards receiving more rejections and in the Control Groups C and D towards receiving less rejections, particularly on the PR score.

Summary of findings concerning change in sociometric scores

An overview of the findings concerning change in sociometric scores suggests that the pattern of change among the various groups was erratic. There were no significant changes in any of the groups during the experimental period of ten weeks, but five significant increases in choice scores in the longer sixteen week period. Increases at the .05 level of significance or better occurred in the choice scores of Experimental Group A, in both number of persons choosing the subject and total choices received; in Control Group C, in number of persons choosing the subject; and in the combined Control Groups C and D in both types of choice scores. No significant changes in either direction were observed in rejection scores. Tendencies were observed which could be attributed to chance, since they were statistically not significant, towards increase of the mean choice score (FC) of the combined Experimental Groups A and B, increased choice scores (both FC and TC) of Control Group D, and decrease in the PR rejection score of Group D.

When both significant changes and directional trends are taken into account, the overall picture suggests that the isolates of Experimental Group B tended to receive less choices after counseling. The isolates of both counseling groups tended to receive more rejections after the experiment. In both control groups there was a tendency toward gain in choices and toward reduction of rejections. Since gain

in choices received was statistically as significant for the control groups as for Experimental Group A, it is to be concluded that the gain in Group A was not necessarily related to the experimental treatment.

The tendency for both of the experimental groups to gain in number of rejections received while the control groups tended to receive fewer rejections might have a relationship to the experiment. Circumstances made it obvious to classmates that the counseling subjects were receiving special attention. This could have had a negative effect. The semi-weekly exit of the counselees during the homeroom period could have invoked negative responses. Or the counseling experience could have given the counseling subjects a stronger sense of self which was negatively received by peers. Whether for these or some other reasons, gain in rejections by counseling subjects would tend to reduce rejections received by the control subjects, because there were a specified number of rejections to be distributed.

D. Findings Relating to Correlations Between Gain in Self-Concept Scores and Perception of Group Experience Scale

This section will show the relationships between gain in self concept scores and the Perception of Group Experience Scale (PGES).

Gain in self-concept will be indicated by difference scores between pre and post counseling in both the Self-Concept (SC) and Self-Ideal Discrepancy (SID) scores of the Self-Acceptance Scale (SAS). Perception of Group Experience will be indicated by the scores on each of the eight sub-scales of the PGES listed below. The scales will later be referred to by Roman numeral. In the following list the range of possible scores for each subscale is noted in parenthesis.

Scale I (0 to 12) Identification with group members

Scale II (0 to 12) Desire to be identified with group members

Scale III (0 to 12) Feeling accepted by group members

Scale IV (0 - 12) Perceived sociometric status of group members

Scale V (-5 to +5) Positive feelings toward counselor

Scale VI (0 to 8) Feeling of being accepted by counselor

Scale VII (-4 to +4) Positiveness of total experience for subject

Scale VIII (-4 to +4) Positiveness of total experience for others

Table 34 gives the various scores made by the counseled subjects.

The "SC" and "SID" columns refer to difference between pre-counseling and post-counseling scores, with an adjustment of the sign so that positive scores indicate change in the desired direction. High scores on the PGES scales indicate positive perceptions.

TABLE 34.--SAS difference scores and PGES subscale scores for counseled subjects

Subject	Difference Scores		PGES Scores							
	SC	SID	I	II	III	IV	V	VI	VII	VIII
1	13	15	6	6	6	6	5	5	4	4
2	10	15	3	3	3	3	3	4	3	-2
3	5	11	1	0	10	12	5	7	4	3
4	5	1	0	0	1	1	-2	5	-4	-3
5	4	-1	7	5	8	3	4	5	1	1
6	3	5	6	8	4	9	-3	4	1	-1
7	2	2	4	3	6	6	5	8	4	-4
8	-1	-9	8	6	9	12	2	4	3	1
9	-2	-5	6	4	4	4	0	6	2	1
10	-2	-6	6	6	5	6	-2	5	-3	-3
11	-2	-10	2	0	12	12	2	4	1	1

SC difference scores and SID difference scores at or above the median were considered "gain" and those below the median "no gain."

PGES subscale scores at or above the median were called "high" and those below the median "low." When several scores were identical with the median score, as in Scales IV and V, they were all considered to be "high." Relationships between the variables are presented in two by two contingency tables.

Hypothesis 19.--Isolates who achieve higher self-concept scores after counseling will have felt more identified with other members of their counseling group than those who do not.

Table 35 shows the relationships between Scale I and the SC difference scores. Table 36 relates Scale I scores with SID difference scores.

TABLE 35.--Relationship between Scale I and SC scores

	Low	High	Total
Gain	3	3	6
No Gain	2	3	5
Total	5	6	11

TABLE 36.--Relationship between Scale I and SID scores

	Low	High	Total
Gain	4	2	6
No Gain	1	4	5
Total	5	6	11

The table of critical values in the Fisher test shows that these relationships are not significant. The hypothesis is therefore rejected.

Hypothesis 20a.--Isolates who achieve higher self-concept scores after counseling will have felt a greater desire to be like others in their counseling group than those who do not.

Tables 37 and 38 show the relationships between Scale II scores and the SC and SID difference scores. The relationships are not significant and the hypothesis is therefore rejected.

TABLE 37.--Relationship between Scale IIA and SC scores

	Low	High	Total
Gain	3	3	6
No Gain	2	3	5
Total	5	6	11

TABLE 38.--Relationship between Scale IIA and SID Scores

	Low	High	Total
Gain	4	2	6
No Gain	1	4	5
Total	5	6	11

Hypothesis 20b.--Isolates of the mixed Group B will show a significantly greater desire to be like the non-isolates than like the isolates in the group.

Table 39 indicates how Scale II scores were distributed by isolates of Group B. The difference between the number of scores given to other isolates and number given to stars was tested for significance by the t-test.

TABLE 39.--Distribution of Scale II scores by Group B Isolates

Subject	Scores given to Isolates	Scores given to stars	Difference	$Sd^2 = 2.66$ $t = 2.45$ Significant at .05
1	2	4	2	
2	1	5	4	
3	0	0	0	
4	2	4	2	

Since the difference in preference of stars was significant at the .05 level the hypothesis is accepted.

Hypothesis 21.--Isolates who achieve higher self-concept scores after counselling will have felt more acceptance by other group members than those who do not achieve higher scores.

Table 40 shows the relationships between Scale III scores and Self-Concept difference scores, and Table 41 shows how Scale III scores

relate to Self-Ideal Discrepancy difference scores. The table of critical values indicates that these relationships are not significant. The hypothesis is therefore rejected.

TABLE 40.--Relationship between Scale III and SC scores

	Low	High	Total
Gain	3	3	6
No Gain	2	3	5
Total	5	6	11

TABLE 41.--Relationship between Scale III and SID scores

	Low	High	Total
Gain	3	3	6
No Gain	2	3	5
Total	5	6	11

Hypothesis 22.--Isolates who achieve higher self-concept scores will have perceived other group members as more accepted by other people than those who do not.

Tables 42 and 43 show the relationships between Scale IV scores and the SC and SID difference scores.

TABLE 42.--Relationship between Scale IV and SC scores

	Low	High	Total
Gain	3	3	6
No Gain	1	4	5
Total	4	7	11

TABLE 43.--Relationship between Scale IV and SID Scores

	Low	High	Total
Gain	2	4	6
No Gain	2	3	5
Total	4	7	11

The relationships are not significant and therefore the hypothesis is rejected.

Hypothesis 23.--Isolates who achieve higher self-concept scores will have a significantly more positive attitude toward the leader than those who do not.

Relationships between Scale V and the self-concept scores are shown in Tables 44 and 45. The relationships are not significant and

therefore the hypothesis is to be rejected.

TABLE 44.--Relationship between Scale V and SC scores

	Low	High	Total
Gain	2	4	6
No Gain	3	2	5
Total	5	6	11

TABLE 45.--Relationship between Scale V and SID scores

	Low	High	Total
Gain	2	4	6
No Gain	2	3	5
Total	4	7	11

Hypothesis 24.--Isolates who achieve higher self-concept scores will perceive the leader as more accepting than those who do not.

Relationships between Scale VI and the self-concept difference scores are presented in Tables 46 and 47. Since the relationships are not significant the hypothesis is rejected

TABLE 46.--Relationship between Scale VI and SC scores

	Low	High	Total
Gain	2	4	6
No Gain	2	3	5
Total	4	7	11

TABLE 47.--Relationship between Scale VI and SID scores

	Low	High	Total
Gain	2	4	6
No Gain	2	3	5
Total	4	7	11

Hypothesis 25.--There will be positive correlation between gain in self-concept and perception of group experience.

Relationships between Scale VII scores and the two types of self-concept difference scores are presented in Tables 48 and 49.

The relationships are not significant and therefore the hypothesis is rejected.

TABLE 48.--Relationship between Scale VII and SC Scores

	Low	High	Total
Gain	3	3	6
No Gain	2	3	5
Total	5	6	11

TABLE 49.--Relationship between Scale VII and SID Scores

	Low	High	Total
Gain	2	4	6
No Gain	3	2	5
Total	5	6	11

Hypothesis 26.--Isolates who gain in self-concept scores will perceive the experience of others in the group as more positive than those who do not.

Tables 50 and 51 present the relationships between Scale VIII scores and the SC and SID scores.

TABLE 50.--Relationships between Scale VIII and SC Scores

	Low	High	Total
Gain	2	4	6
No Gain	1	4	5
Total	3	8	11

TABLE 51.--Relationships between Scale VIII and SID Scores

	Low	High	Total
Gain	4	2	6
No Gain	1	4	5
Total	5	6	11

The relationships are not significant and the hypothesis is rejected.

Summary and discussion of relationships between gain in self-concept difference scores and PGES scores

Analysis of the data shows that there were no significant relationships between the subscale scores of the perception instrument and achievement of high self-concept scores. This lack of correlation might be due to the inadequacy of the instrument to measure significant variables. At least three types of contamination could be present.

It is possible that subjects were not motivated to indicate their true feelings about the group experience. Since the test questions were not disguised this factor might be operative. Another relevant factor might be the mood fluctuation which characterizes adolescents. Feelings about the group experience at the time the PGES was administered might not have adequately reflected the overall perceptions relating to the counseling experience. A third consideration, at a theoretical level, would be the question of conscious and unconscious perception, that is, whether subjects who achieved high self-concept scores and low perception scores were consciously aware of what they were experiencing, or whether subjects who made no gain in self-concept scores but high perception scores were experiencing acceptance at a level deep enough to dissolve the existing defenses of the self. Perhaps the most that can be said is that evidence is lacking concerning the validity of the instrument, and therefore the hypotheses relating to it have not really been tested.

The one result which proved to be significant, that the isolates of Group B would prefer to be like the stars rather than like the other isolates, has certain implications which will be discussed later.

E. Summary of Findings

The experiment was to determine if group counseling is effective in producing desirable change in self-concept, anxiety and sociometric scores of isolates. The hypotheses predicted desirable changes for counseled groups and no significant changes in the desirable direction for control groups. The t-tests were one-tailed to determine if desirable changes occurred in any of the groups.

Experimental groups

The findings that concerned the experimental groups are summarized in Table 52, which identifies each hypothesis by number, shows the direction of predicted change, whether or not the mean changed in the predicted direction, and whether such changes are significant at the .05 level. The symbol $<$ will be used throughout to indicate improvement. That is, SC pre $<$ SC post means the post-counseling score was predicted to be improved over the pre-counseling score (not greater raw score.) In the prediction column "A" denotes "anxiety score" in Hypotheses 7 to 9, and throughout the table "fol" has been used for "follow-up scores."

The table shows that there were not significant improvements in any of the variables except in Group A, and that Group A did experience improved scores in at least one aspect of each of the three basic variables under observation. Significant improvement in Self-Concept score was observed in both post and follow-up test results, in Anxiety score in the post testing; and improvement was observed in the number of persons choosing the subject and in total choices received in the follow-up testing. In Group B not only was there lack of significant change, but in only one variable was there change in the desired direction, namely, the Self-Concept post-counseling mean score. When the combined scores of Groups A and B were analyzed the means tended to change in the desired direction in the Self-Concept and Anxiety scores and in the followup Sociometric scores.

TABLE 52.--Summary of Findings Concerning Improvement
in Experimental Groups

Group	Hypothesis	Prediction	Mean Direction	Sig
A	1a	SCpre \sim SCpost	yes	yes
		SIDpre \sim SIDpost	yes	no
	b	SCpre \sim SCfol	yes	yes
		SIDpre \sim SIDfol	yes	no
B	2a	SCpre \sim SCpost	yes	no
		SIDpre \sim SIDpost	no	
	b	SCpre \sim SCfol	no	
		SIDpre \sim SIDfol	no	
	c	SC(A) \sim SC(B)gain	no	
		SID(A) \sim SID(B)gain	no	
A + B	3a	SCpre \sim SCpost	yes	no
		SIDpre \sim SIDpost	yes	no
	b	SCpre \sim SCfol	yes	no
		SIDpre \sim SIDfol	no	
A	7a	A-pre \sim A-post	yes	yes
	b	A-pre \sim A-fol	yes	no
B	8a	A-pre \sim A-post	no	
	b	A-pre \sim A-fol	no	
	c	A(A) \sim A(B)gain	no	
A + B	9a	A-pre \sim A-post	yes	no
	b	A-pre \sim A-fol	yes	no
A	13a	PCpre \sim PCpost	no	
		TCpre \sim TCpost	no	
	b	PCpre \sim PCfol	yes	yes
		TCpre \sim TCfol	yes	yes
B	14a	PCpre \sim PCpost	no	
		TCpre \sim TCpost	no	
	b	PCpre \sim PCfol	no	
		TCpre \sim TCfol	no	
	c	PC(A) \sim PC(B)gain	no	
		TC(A) \sim TC(B)gain	no	
A + B	15a	PCpre \sim PCpost	no	
		TCpre \sim TCpost	no	
	b	PCpre \sim PCfol	yes	no
		TCpre \sim TCfol	yes	no

Control groups

Findings relating to the control groups are summarized in Table 53. Here the symbol \sim (approximately equal to) is used to indicate

the prediction of no significant improvement between pre and post counseling. An arbitrary $t = .6$ has been selected to determine whether change has occurred. Direction of change will be indicated when the derived "t" is .6 or greater. If change is in the desirable direction, significance (.05) will be indicated.

TABLE 53.--Summary of Findings Concerning Change
in Control Groups

Group	Hypothesis	Prediction	Mean Direction	Sig
C	4a	SCpre ~ SCpost	no change	no
		SIDpre ~ SIDpost	✓	
	b	SCpre ~ SCfol	✓	
		SIDpre ~ SIDfol	✓	
D	5a	SCpre ~ SCpost	no change	
		SIDpre ~ SIDpost	no change	
	b	SCpre ~ SCfol	no change	
		SIDpre ~ SIDfol	✓	
C + D	6a	SCpre ~ SCpost	no change	
		SIDpre ~ SIDpost	no change	
	b	SCpre ~ SCfol	no change	
		SIDpre ~ SIDfol	✓	
C	10a	A-pre ~ A-post	✓	no
	b	A-pre ~ A-fol	no change	
D	11a	A-pre ~ A-post	✓	no
	b	A-pre ~ A-fol	no change	
C + D	12a	A-pre ~ A-post	✓	no
	b	A-pre ~ A-fol	✓	no
C	16a	PCpre ~ PCpost	✓	no
		TCpre ~ TCpost	no change	
	b	PCpre ~ PCfol	✓	yes
		TCpre ~ TCfol	✓	no
D	17a	PCpre ~ PCpost	✓	no
		TCpre ~ TCpost	✓	no
	b	PCpre ~ PCfol	✓	no
		TCpre ~ TCfol	✓	no
C + D	18a	PCpre ~ PCpost	✓	no
		TCpre ~ TCpost	✓	no
	b	PCpre ~ PCfol	✓	yes
		TCpre ~ TCfol	✓	yes

The table shows no significant changes in self-concept or anxiety scores but three significant changes in sociometric scores, all of which

were observed in follow-up testing. In Group C the number of persons choosing the subject significantly increased, and in the analysis of the combined scores of Groups C and D, both number of persons choosing and total choice scores increased. Change in the desired direction was observed in the follow-up Self-Concept score and post-counseling anxiety score of Group C, in the post counseling anxiety score of Group D, in both post and follow-up mean scores of the combined groups C and D, and in the majority of the sociometric scores.

The overall trend indicated by Tables 52 and 53 appears to be that significant changes in self-concept, anxiety, and sociometric scores were affected in the Counseling Group A, and that positive results were not achieved in any of the variables for Counseling Group B. The control groups tended not to change in self-concept and anxiety scores, but to change in the desired direction in sociometric scores, with three significantly improved mean scores. Significant improvement was observed in the follow-up scores of Group C in number of persons choosing the subject, and in the combined Groups C and D in both number of persons choosing and total choices received.

Tables 54 and 55 are condensations of Tables 52 and 53, and are useful in making further comparisons of the experimental and control groups. Table 54 refers to the experimental groups and shows the totals of number of predictions made, changes in the desired direction, and number of significant changes. Table 55 refers to the control groups and shows the totals for each variable in number of predictions made, number of changes in the desired direction, and number of significant changes.

TABLE 54.--Condensation of Table 52: Summary of findings concerning improvement in experimental groups

Group	Variable	Predictions	Desired Dir.	Sig.
A	Self Concept	4	4	2
	Anxiety	2	2	1
	Sociometric	4	2	2
	Total	10	8	5
B	Self Concept	6	1	0
	Anxiety	3	0	0
	Sociometric	6	0	0
	Total	15	1	0
A + B	Self Concept	4	3	0
	Anxiety	2	2	0
	Sociometric	4	2	0
	Total	10	7	0
Total		35	16	5

TABLE 55.--Condensation of Table 53: Summary of findings concerning change in control groups

Group	Variable	Predictions	Desired Dir.	Sig.
C	Self Concept	4	1	0
	Anxiety	2	1	0
	Sociometric	4	3	1
	Total	10	5	1
D	Self Concept	4	0	0
	Anxiety	2	1	0
	Sociometric	4	4	0
	Total	10	5	0
C + D	Self Concept	4	0	0
	Anxiety	2	2	0
	Sociometric	4	4	2
	Total	10	6	2
Total		30	16	3

Table 54 shows that although five out of ten predictions made about Group A resulted in significant change, when the total predictions relating to the experimental groups are observed only five out of thirty-five resulted in significant change. At the .05 level of confidence two changes would be expected by chance. Table 55 shows that in the control groups, out of thirty observations there were three significant changes in the desirable direction. Again, somewhat less than two changes would be expected by chance. This comparison points up the narrow range of overall difference between the results observed in the experimental groups and those observed in the control groups. Furthermore, if number of changes in the desirable direction are compared between the experimental groups and the control groups the t-test shows the difference to be zero. This analysis is shown in Table 56.

TABLE 56.--Comparison of number of changes in the desired direction in the experimental groups and in the control groups

Variable	Number of Changes in Desired Direction		Difference
	Experimental Groups	Control Groups	
Self-Concept	8	1	-7
Anxiety	4	4	0
Sociometric	4	11	7
$Sd^2 = 49$		$t = 0$	

A recapitulation based on the summed totals of Tables 54 and 55 and the analysis shown in Table 56 indicates that five out of thirty-five predictions relating to the experimental groups and three out of thirty relating to the control groups resulted in significant desirable changes, while there was no difference in the mean number of changes

in the desirable direction between experimental and control groups. Thus, when comparisons are made in terms of grouped variables and summed totals the differences in results between experimental and control groups are seen to be slight.

CHAPTER V

SUMMARY, CONCLUSIONS AND IMPLICATIONS FOR FURTHER RESEARCH

Summary

The foregoing pages have described an experiment which was designed to explore the possibility that group counseling would be an effective treatment for socially isolated seventh grade girls. Chapter I stated the problem, introduced the hypotheses, and set forth a phenomenological personality theory as a basis for counseling. Chapter II reviewed the relevant literature in the areas of mental health, group counseling, and sociometry. The third chapter stated twenty-six hypotheses which were to be tested and described the procedures that were used in conducting the experiment. The fourth chapter presented the data and the results of the statistical analysis and indicated which hypotheses were to be accepted and which were to be rejected.

The experimental procedure consisted of identifying social isolates through the use of sociometric tests and randomly assigning them to two experimental and two control groups. One of the experimental groups consisted entirely of isolates, while the other included isolates and highly chosen girls. One of the control groups received bibliotherapy and the other received no special treatment. The experimental groups were given the experience of psychological group counseling twice a week for ten weeks. Dependent variables included self-concept scores, anxiety scores, and sociometric scores. All of the research

subjects were tested at the beginning of the experiment, at the end of the experiment and six weeks later, to discover if group counseling was effective in producing change in these variables. In addition the counseled subjects were tested to determine how they perceived the counseling experience, in order to make predictions concerning which subjects would change through counseling.

The analysis of the data showed that the experimental group composed entirely of isolates did experience significant positive change in self-concept and anxiety mean scores, and that the improved self-concept score was significantly maintained for six weeks after counseling. There was no significant change in the self-concept mean score or anxiety mean score in the mixed counseling group or in either control group. The fact that there was positive change maintained for six weeks in self-concept mean score and temporary change in anxiety score in the one counseled group which was perceived by the investigator to have developed therapeutically and no significant changes in these variables in the other three groups suggests that group counseling might have been effective in producing change. However, it should be noted that the pre-test self-concept and anxiety mean scores of Group A were significantly less desirable than the pre-test scores of the control groups. Consequently the observed changes could be regressions toward the mean.

Although this same counseled group also achieved significant increase in number of sociometric choices received, similar sociometric change was likewise observed in the bibliotherapy control group and in the combined control group mean scores. Therefore the increase in sociometric level in the one experimental group cannot be attributed to the counseling experience.

The attempt to predict which counseling subjects would change by the use of a test to measure how the group experience was perceived proved to be barren. It was suggested in Chapter IV that this ineffectiveness might have been due to lack of validity of the instrument.

The perception instrument was useful as a measure of expressed desires of the isolates to be like other individuals in the group. Their significant preference to be like the stars rather than like other isolates has implications which relate to the design of this study. It was hypothesized that isolates of the mixed group would experience more significant change in the dependent variables than those in the group composed entirely of isolates. Although the hypothesis was not sustained, it has been pointed out that there was failure to achieve a therapeutic relationship within the mixed group. This expressed preference to be like nonisolates would suggest that stars might in fact serve as valences to isolates in a group if a therapeutic atmosphere could be achieved.

Why a therapeutic climate was not achieved is unknown. A lack of significant interchange and relating characterized the group. Members seemed not to perceive the situation as other than a school experience where the habits of politeness and respect take precedence over communication at affective and meaningful levels. The reasons for the superficiality in the relatedness of the group are difficult to assess beyond the general obvious conclusions that unknown personal factors in the dynamics of the group were operating to inhibit meaningful communication. A tentative conclusion, based on the fact that a deeper level of relationship was achieved in the group composed entirely of isolates, would be that individuals from two widely contrasting sociometric levels

have serious difficulties in relating at a personally meaningful level, and in perceiving themselves as a group. Another tentative diagnosis would point to factors in the group's perception of the counselor. One of the few unstructured evaluative statements written in the space provided on the perception instrument by one "star" from Group B was this: "I think they did not like the group because of the leader."

Conclusions

Assuming that the test scores which were used in this experiment reflected true experience, it seems appropriate to conclude that, with a qualification, psychological group counseling is an effective treatment for isolates in producing desired changes in the self-structure and in temporarily reducing anxiety. The qualification implied by the outcomes of the study is that homogeneous grouping of isolates is necessary, that is, psychological group counseling is not effective with a mixed group composed of isolates and stars. Furthermore, the study implies that psychological group counseling of isolates is not effective as a means of improving their sociometric status. It appears that if left to chance improvement in sociometric choice status would occur as readily as through counseling. It was earlier suggested that the incidental effects of group counseling may have tended to increase the number of sociometric rejections of counselees.

Relating the results of the study to the theoretical assumption that improved self-concept would be reflected in improved sociometric status leads to further comments. It might be that behavior patterns by which the isolate is judged may not change as rapidly as self-perceptions change. It might be that habitual isolates lack knowledge

or skill to make changes in patterns of interpersonal relationships. It might also be that their peers lack insight or ability to change their habitual ways of perceiving and judging individuals who have occupied the sociometric status of social isolation. It should be remembered that there was change in sociometric status which did accompany change in self-concept, but there is lack of evidence that the change was due to counseling, since there was also change in the control groups.

A final note, implied throughout this report, needs to be underscored. This study has dealt with a very small number of research subjects. The smallness of the sample would tend to obscure the results of the statistical analyses. The exploratory nature of the problem precludes the unqualified acceptance of the conclusions but points toward areas where further exploration is needed.

Implications for further research

When this experiment was planned a number of alternatives in design were examined which for various reasons were eliminated. The results of the study as it developed bear implications that further research, including some of these eliminated alternatives and other aspects of design, might be fruitful. The following suggestions are approaches to further research which might contribute to the understanding of the value of psychological group counseling as a treatment for socially isolated adolescents.

1. A replication of the study by another counselor might help to isolate the factors which inhibited a therapeutic experience in the mixed group, and to confirm or refute the probability of achieving desirable results in other homogeneous groups of isolates.

2. A design which included a mixed group composed of isolates and of the particular stars sociometrically chosen by the isolates of the group would throw additional light on certain variables: whether a group thus composed could relate more significantly, or whether, on the other hand, the significant factor in the homogeneous group might have been the change of climate from the habitual low sociometric status experienced in the homeroom to a climate of comparable equality in the homogeneous group of isolates.

3. A study might be quite valuable which could be conducted in a school district large enough to yield a more selective sample, from which highly rejected subjects would be eliminated, and "pure isolates" alone would be used.

4. A replication of the study might be done using boys instead of girls, or using a mixed group of boys and girls.

5. Work might be done to modify and validate the Perception instrument or to create another such instrument which would be useful in predicting improvement in counseling subjects.

6. Since social isolation was measured only in terms of sociometric choices by schoolmates, a study which would take into account sociometric status outside of school would help to refine the results and clarify the implications of the study.

APPENDIX A

SUMMARY OF GROUP COUNSELING SESSIONS

APPENDIX A

SUMMARY OF GROUP COUNSELING SESSIONS

Group A--composed entirely of isolates

From the first meeting there were elements of dynamic interaction felt to be present in Group A. Counselor felt she successfully communicated to the group a sense of group responsibility, and of her relationship to the group. In an early session the remark by one girl that "no one in here likes to talk," indicated the sense of identification with each other which characterized the group. At the fourth and fifth sessions there were vigorous discussions, with several speaking at once, on topics including an exciting school dance, criticism of teachers and school, and complaints of a sports decision deemed unfair. Counselor attempted to restructure, encouraging subjects to listen while one person talked.

The tape recorder had been used in the first three sessions, and was brought again for the sixth session. This occasioned an expression of panic from one member who had several times discussed at length her feeling of panic when teachers called on her in class. Other group members offered understanding and support. Counselor decided not to use the tape recorder.

At the eighth session there was decline in enthusiasm and complaints about the adjusted lunch hour, which was later than the rest of the seventh grade. The ninth session was a peak with good interaction and almost unanimous participation. Complaints about certain

teachers were expressed. One girl told of being teased repeatedly by the boys, and other members gave her advice. After that there were times that morale slipped and the various structuring devices discussed at the end of this section were needed to keep the group going. At times there were indications of veiled hostility towards the counselor, for example, when the group decided to "organize" with a president and other officers.

A crisis developed shortly before the end of the experiment. The group had decided to write. One girl, who had wanted to stop coming a week or so earlier and had shown a great deal of general hostility, read to the group what she had written, which was that she hated everyone in the group, particularly one girl whom she named. The girl named had been the most verbal in expressing her own problems throughout the experiment, and registered some shock. Counselor offered support by saying that everyone wants to be like, but also tried to convey acceptance to the hostile girl. The following week a filmstrip had been planned: "How to Understand Other People," which included a bit about forgiveness. The girl for whom hate had been expressed said to the hostile girl that she must forgive. The hostile girl said: "Forgive, but not forget." A truce seemed to take effect but there was not time enough to work out the involved feelings.

Structure provided for this group included name cards at the first session and the suggestion for the group members to introduce themselves and tell a bit about their families, hobbies, and other items of interest. Other structural elements came at varied intervals as needed. Several times paper and pencils were supplied for drawing, scribbling, or writing, when the group desired them, which appeared to

be useful in releasing tensions. Role playing was introduced as a game on one occasion when group morale was rather low and members had proposed playing "gossip." The role playing was used by the group to express hostility towards certain teachers. On another occasion mounted magazine pictures were used as a projective technique to induce stories and discussion from the group. A film, "You and Your Friends," stimulated some meaningful discussion, and the filmstrip, "How to Understand Other People," evoked some affective interacting.

Group B--composed of isolates and stars

The mixed group got off to a bad start. There was a fire drill at the time the first session was to meet. After the fire drill subjects were called on the public address system for the counseling group meeting. Self-introductions were stereotyped, with no feeling of involvement apparent. The early sessions of the group were without active participation by group members except as counselor directed questions or comments to individuals. A typed list of "problems" was used as a possible stimulus for discussion but there was no response. By the fifth meeting there was some sharing of problems about disagreement with parents and about test difficulties, but only in response to questioning by the counselor. However, one person who arrived early talked freely and with affect before other members arrived about her difficulties at home. Many silences characterized this group and enthusiasm was never in evidence.

Toward the middle of the experimental period stimulus techniques were introduced which were mildly effective. Passages in which students discussed personal problems were read from The Teacher and the Child.³⁰⁵

This reading evoked some sharing of similar experiences. Another time subjects were encouraged to write either a topic for discussion or their biggest wish. The results provided material for two sessions. The film, filmstrip, and mounted magazine pictures used with Group A were particularly useful with this group, stimulating discussion and questions about dating and interpersonal behavior.

Attendance and punctuality was irregular, but on a few occasions when attendance was unusually small there was freer communication. The group never relaxed enough to speak out without raising their hands first for acknowledgement.

APPENDIX B

TESTING INSTRUMENTS

- 1. Sociometric Test**
- 2. Self-Acceptance Scale**
- 3. Children's Manifest
Anxiety Scale**
- 4. Perception of Group
Experience Scale**

YOU AND YOUR FRIENDS

Your answers to the questions on these pages are to help us find out how seventh graders feel about each other. What you write has nothing to do with school, and no one in your room will see your answers, so answer with your true feelings. Do not show your paper to others or discuss your answers. You may use the same person's name as often as you wish in order to answer with your true feelings. Write each person's full name, first and last. Do not write your name on the paper.

.

Section A These questions refer only to the boys and girls in your home room.

With whom would you most like to do each of the following activities? With whom would you least like to do them? In the spaces below write the names of your first and second choices of girls and first and second choices of boys, for each activity, and also the name of the girl and the boy with whom you would least want to do the activity. If it is an activity you would only want to do with girls - or only with boys - leave the other spaces blank. Please answer as you really feel.

1. Attend a basketball game

1st choice (girl) _____ (boy) _____

2nd choice (girl) _____ (boy) _____

I would least want
to do it with (girl) _____ (boy) _____

2. Go swimming

1st choice (girl) _____ (boy) _____

2nd choice (girl) _____ (boy) _____

I would least want
to do it with (girl) _____ (boy) _____

3. Attend a dance

1st choice (girl) _____ (boy) _____

2nd choice (girl) _____ (boy) _____

I would least want
to do it with (girl) _____ (boy) _____

4. Write your favorite activity: _____
(If it is one of the three above, leave the choice spaces blank below.)

1st choice (girl) _____ (boy) _____

2nd choice (girl) _____ (boy) _____

I would least want
to do it with (girl) _____ (boy) _____

Section B These questions refer to the entire seventh grade in your school, all the seventh grade rooms.

1. Who is your best friend in your grade at school? _____
2. Who is your second best friend in your grade? _____

(If you have finished Section A and Section B, do as much of Section C as you have time for.)

Section C These questions refer only to the people in your home room. Answer as you really think.

1. Who is the most popular girl in your home room? _____
Who is the least popular girl? _____
2. What girl do you think has the most fun at school? _____
What girl has the least fun? _____
3. Who is the best looking girl in the room? _____
Who is the least good looking? _____
4. Who is the most popular boy in your home room? _____
Who is the least popular boy? _____
5. What boy do you think has the most fun at school? _____
What boy has the least fun? _____
6. Who is the best looking boy in the room? _____
Who is the least good looking boy? _____

THINKING ABOUT YOURSELF AND OTHERS

General Introduction: Your answers to the questions on these pages are to help us find out what seventh grade girls think about themselves and others. There are no "right" or "wrong" answers. Each girl will answer differently. No one in your room will ever see your answers, so answer with your true feelings, and do not show your paper to those around you. So that your answers will remain secret, you are asked to put the number assigned to you on the page instead of your name.

General Instructions: You are to indicate your answers by placing an "X" in the column which tells how you feel about each question.

SECTION I

Directions: Read the sentences which tell about different kinds of boys and girls your age. After reading each sentence, answer the question which asks to what extent you feel you are like the person described. Then answer the second question which asks to what extent you would like to be like the person described.

	VERY MUCH SO	QUITE A BIT	SOME- WHAT	NOT VERY MUCH	NOT AT ALL
1. This is someone who feels that others don't like her - someone whom nobody seems to care about.					
Am I like this person?	—	—	—	—	—
Would I like to be like this person?	—	—	—	—	—
2. Here is someone who has lots of friends; people seem to like her.					
Am I like this person?	—	—	—	—	—
Would I like to be like this person?	—	—	—	—	—
3. This is someone who is thought to be a nice looking person - to be reasonably clean and neat in appearance.					
Am I like this person?	—	—	—	—	—
Would I like to be like this person?	—	—	—	—	—
4. Here is a person who loses her temper and becomes angry because some little thing goes wrong.					
Am I like this person?	—	—	—	—	—
Would I like to be like this person?	—	—	—	—	—
5. This person's feelings are hurt easily, and she is often upset and almost in tears.					
Am I like this person?	—	—	—	—	—
Would I like to be like this person?	—	—	—	—	—

6. Here is someone who is a hard worker - who tries to do his or her best in important things that have to be done.

Am I like this person?

Would I like to be like this person?

7. This is someone who doesn't care at all about schoolwork or what is going on and who just sits and daydreams a lot.

Am I like this person?

Would I like to be like this person?

8. This person is happy and cheerful most of the time - and seems to enjoy what she does.

Am I like this person?

Would I like to be like this person?

9. Here is a girl who thinks she can do many things about as well as most people her age.

Am I like this person?

Would I like to be like this person?

10. This is someone who feels scared when meeting new people and dislikes being in new and different situations.

Am I like this person?

Would I like to be like this person?

VERY MUCH SO	QUITE A BIT	SOME- WHAT	NOT VERY MUCH	NOT AT ALL
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—
—	—	—	—	—

Children's Manifest Anxiety Scale

QUESTIONS ABOUT YOU

Instructions: Read each question carefully. Put a circle around the word YES if you think it is true about you. Put a circle around the word NO if you think it is not true about you.

- | | | |
|---|-----|----|
| 1. It is hard for me to keep my mind on anything. | YES | NO |
| 2. I get nervous when someone watches me work. | YES | NO |
| 3. I feel I have to be best in everything. | YES | NO |
| 4. I blush easily. | YES | NO |
| 5. I like everyone I know. | YES | NO |
| 6. I notice my heart beats very fast sometimes. | YES | NO |
| 7. At times I feel like shouting. | YES | NO |
| 8. I wish I could be very far from here. | YES | NO |
| 9. Others seem to do things easier than I can. | YES | NO |
| 10. I would rather win than lose in a game. | YES | NO |
| 11. I am secretly afraid of a lot of things. | YES | NO |
| 12. I feel that others do not like the way I do things. | YES | NO |
| 13. I feel alone even when there are people around me. | YES | NO |
| 14. I have trouble making up my mind. | YES | NO |
| 15. I get nervous when things do not go the right way for me. | YES | NO |
| 16. I worry most of the time. | YES | NO |
| 17. I am always kind. | YES | NO |
| 18. I worry about what my parents will say to me. | YES | NO |
| 19. Often I have trouble getting my breath. | YES | NO |
| 20. I get angry easily. | YES | NO |
| 21. I always have good manners. | YES | NO |
| 22. My hands feel sweaty. | YES | NO |
| 23. I have to go to the toilet more than most people. | YES | NO |
| 24. Other children are happier than I. | YES | NO |
| 25. I worry about what other people think about me. | YES | NO |
| 26. I have trouble swallowing. | YES | NO |

- | | |
|--|--------|
| 27. I have worried about things that did not really make any difference later. | YES NO |
| 28. My feelings get hurt easily. | YES NO |
| 29. I worry about doing the right things. | YES NO |
| 30. I am always good. | YES NO |
| 31. I worry about what is going to happen. | YES NO |
| 32. It is hard for me to go to sleep at night. | YES NO |
| 33. I worry about how well I am doing in school. | YES NO |
| 34. I am always nice to everyone. | YES NO |
| 35. My feelings get hurt easily when I am scolded | YES NO |
| 36. I tell the truth every single time. | YES NO |
| 37. I often get lonesome when I am with people. | YES NO |
| 38. I feel someone will tell me I do things the wrong way. | YES NO |
| 39. I am afraid of the dark. | YES NO |
| 40. It is hard for me to keep my mind on my school work. | YES NO |
| 41. I never get angry. | YES NO |
| 42. Often I feel sick in my stomach. | YES NO |
| 43. I worry when I go to bed at night. | YES NO |
| 44. I often do things I wish I had never done. | YES NO |
| 45. I get headaches. | YES NO |
| 46. I often worry about what could happen to my parents. | YES NO |
| 47. I never say things I shouldn't. | YES NO |
| 48. I get tired easily. | YES NO |
| 49. It is good to get high grades in school. | YES NO |
| 50. I have bad dreams. | YES NO |
| 51. I am nervous. | YES NO |
| 52. I never lie. | YES NO |
| 53. I often worry about something bad happening to me. | YES NO |

Perception of Group Experience Scale

HOW YOU FEEL ABOUT YOUR GROUP

General Instructions: We want to know how you feel about this group. Your answers to these questions will have nothing to do with school, so answer as you really feel. Do not show your answers to anyone. Read each question carefully and follow instructions. Cross out your own name each time it appears.

I. We want to know if you think that other members of the group have the same kind of feelings you have. Write in front of each girl's name one letter, a, b, or c, which best describes what you think.

a. I think she feels a lot like I feel.

b. I think she feels a little like I feel.

c. I think she does not feel at all like I feel.

___S₁ ___S₂ ___S₃ ___S₄ ___S₅ ___S₆ ___S₇

II. We want to know if you would like to be like others in the group. Write in front of each person's name one letter, a, b, or c, which best describes how you feel about her.

a. I would like to be a lot like her.

b. I would like to be a little like her.

c. I would not like to be at all like her.

___S₁ ___S₂ ___S₃ ___S₄ ___S₅ ___S₆ ___S₇

III. We want to know how you think each member of this group feels about you. Write in front of each person's name one letter, a, b, or c, which describes best how you think she feels about you.

a. I think she likes me.

b. I think she does not like me.

c. I think she does not care, neither likes nor dislikes me.

___S₁ ___S₂ ___S₃ ___S₄ ___S₅ ___S₆ ___S₇

IV. We want to know how you think most students feel about each girl in this group. Write a, b, or c, which tells how you think they feel.

a. They like her.

b. They do not like her.

c. They neither like nor dislike her, just don't care.

s₁ s₂ s₃ s₄ s₅ s₆ s₇

- V. We want to know how you feel about the group leader. Please put an X in front of each item that describes how you feel.

___ It's easy to talk with her.

___ I do not like her.

___ I sometimes feel afraid of her.

___ I would feel free to talk with her about things that are important to me.

___ I could not trust her with my secrets.

___ I feel it's hard to talk with her.

___ I feel I could trust her with my secrets.

___ I would not want to talk with her about important matters.

___ I like her.

___ I feel comfortable with her.

- VI. We want to know how you think the leader of the group feels about you. After each of the statements listed below there are three blank spaces. Put an X in the first space under a if you think the statement is true most of the time; put an X in the second space under b if you think the statement is true some of the time; put an X in the third space under c if you think the statement is almost never true. Be sure and put an X in one space after each of the four statements.

a. Most of the time b. Some of the time c. Almost never

She likes my ideas.

☐
☐
☐

She understands how I feel.

☐
☐
☐

She likes me.

☐
☐
☐

She is interested in me.

☐
☐
☐

VII. We want to know how you feel about your experience in the group. Place an X in front of each statement that you feel is true.

- ☐ It has helped me to understand myself better.
- ☐ It has helped me to understand the others better.
- ☐ It has been a waste of time.
- ☐ It has not helped me in understanding others.
- ☐ I would not want to do it again.
- ☐ It has not helped me in understanding myself.
- ☐ I would like to do it again.
- ☐ I suggest that other people do this.

VIII. We want to know how you think the other members of the group feel about the experience of the group. Place an X in front of each statement that tells how you think they feel.

- ☐ They feel it has helped them understand each other.
- ☐ They feel it has been a waste of time.
- ☐ It has helped them understand themselves better.
- ☐ They would not want to do it again.
- ☐ They feel it has not helped them understand each other.
- ☐ They feel it would be worth doing again sometime.
- ☐ They feel it has not helped them understand themselves.
- ☐ They feel it has been a good way to spend the time.

IX. If there is anything else you would like to say about this experience, please write it here.

BIBLIOGRAPHY

1. Abrahamsen, David, et al. "Status of Mental Hygiene and Human Relations Programs for Children in Private and Public Primary and Secondary Schools," (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress. Washington, D. C.: U. S. Department of Health, Education, and Welfare. Bulletin II (Reported January-October, 1952), 1953. Item 63E, p. 364.
2. Ackerman, Nathan W., "Some Theoretical Aspects of Group Psychotherapy," (In) J. L. Moreno (Editor): Group Psychotherapy, a Symposium, New York: Beacon House, 1946, pp. 117-124.
3. ———. "Group Psychotherapy with a Mixed Group of Adolescents," International Journal of Group Psychotherapy, 5:249-60, 1955.
4. Adler, A., Guiding the Child, New York, Greenberg, 1931.
5. Alexander, Theron, and Alexander, Marie, "A Study of Personality and Social Status," Child Development, 23:207-13, September, 1952.
6. American Council on Education, Staff of the Division on Child Development and Teacher Personnel, Helping Teachers Understand Children, Washington, D. C., 1945.
7. Amundson, C. L., "Increasing Interpersonal Relationships in the High School with the Aid of Sociometric Procedures," Group Psychotherapy, 6:183-88, 1954.
8. Anastasi, Anne, Psychological Testing, New York: MacMillan Co., 1954, 664 pp.
9. Anderson, John E., Developmental Level and Adjustment in Children and Youth, Minneapolis, Minn.: University of Minnesota, Institute of Child Welfare. Study in progress, 1952.
10. ———, and Harris, Dale B., "The Prediction of Good and Poor Adjustment in Children," Minneapolis, Minn.: University of Minnesota, Study in progress, 1953. NIMH grant.
11. Andrew, Gwen, "A Comparison of the Mental Health Status of School Children in Two Communities," Lansing, Mich: Unpublished study of Research Section of the Michigan Department of Mental Health. September, 1952, 6 pp.

12. Andrew, Gwen, "A Report on a Survey of the Mental Health Status of Battle Creek Public School Children--A Survey Carried out by the Battle Creek Schools and the Research Section of the Michigan State Department of Health," Lansing, Mich.: Unpublished report 1951 available from Dr. Ralph E. Walton, Research Coordinator, Department of Mental Health.
13. Association for Supervision and Curriculum Development, National Education Association, Fostering Mental Health in Our Schools--1950 Yearbook, 1201 Sixteenth Street NW, Washington 6, D. C.: Association for Supervision and Curriculum Development, National Education Association. 320 pp.
14. Astrachan, U., "Group Psychotherapy with Mentally Retarded Female Adolescents and Adults," American Journal of Mental Deficiency, 60:152-60, 1955.
15. Atkinson, G., "The Sociogram as an Instrument in Social Studies Teaching and Evaluation," Elementary School Journal, 50:74-85, 1949.
16. Austin, M. C., and Thompson, G. G., "Children's Friendships: A Study of the Bases on Which Children Select and Reject Their Best Friend," Journal of Educational Psychology, 39:101-116, 1948.
17. Ausubel, D. P., Theory and Problems of Adolescent Development, New York, Grune and Stratton, 1954.
18. Axelrod, P. L., Cameron, M. S. and Solomon, J. C., "Group Therapy Experiment with Stry Adolescent Girls," American Journal of Orthopsychiatry, 14:616-27, 1944.
19. Bain, Read, "Sociometry and Social Measurement," Sociometry, 6:206-213, 1943.
20. Balser, Benjamin Harris, (editor), Psychotherapy of the Adolescent, New York: International Universities Press, Inc., 1957, 270 pp.
21. Barbe, W. B., "Peer Relationships of Children of Different Intelligence Levels," School and Society, 80:60-62, 1954.
22. Barker, Rober G., and Wright, Herbert F. Midwest U.S.A. and Its Children. Evanston, Ill.: Row, Peterson and Co., In press.
23. Baron, D., "Mental Health Characteristics and Classroom Social Status," Education, 69:306-310, 1949.
24. _____. "Personal-Social Characteristics and Classroom Social Status: A Sociometric Study of Fifth- and Sixth-Grade Girls," Sociometry, 14:32-42, 1951.

25. Baymur, Feriha and Patterson, C. H., "Three Methods of Assisting Underachieving High School Students," Journal of Counseling Psychology, 7, No. 2:83-90, Summer, 1960.
26. Beck, Samuel J. Psychological Study of Schizophrenic Children in a Therapeutic School, Chicago: University of Chicago, Study in progress, 1953. NMH grant.
27. Becker, M. G., and Loomis, C. P., "Measuring Rural-Urban and Farm and Non-Farm Cleavages in a Rural Consolidated School," Sociometry, 11:246-61, 1948.
28. Bedoian, V. H., "Mental Health Analysis of Socially Over-Accepted, Socially Under-Accepted, Overage and Underage Pupils in the Sixth Grade," Journal of Educational Psychology, 44: 366-71, 1953.
29. ———. "Social Acceptability and Social Rejection of the Underage, At-Age, and Overage Pupils in the Sixth Grade," Journal of Educational Research, 47:513-20, 1954.
30. Bellefaire Children's Home, "Effect of Life in the Bellefaire Children's Home Upon Children Under Care," Cleveland, Ohio: Bellefaire Children's Home (for disturbed Jewish children), Study in progress, 1952.
31. Bender, Laretta, "Psychopathic Behavior Disorders in Children," (In) Lindner, R. M., and Seliger, R. V.: Handbook of Correctional Psychology. New York: Philosophical Library, 1947. pp. 360-77.
32. Bennett, Margaret E., Guidance in Groups, New York: McGraw-Hill Book Co., 1955, 411 pp.
33. Benson, G. P., "An Evaluation of Teacher Identification of Mal-adjusted Children," Ph.D. dissertation, University of Colorado, 1956.
34. Bernard, Harold W., Mental Hygiene for Classroom Teachers. New York: McGraw-Hill Book Company, 1952, 472 pp.
35. Biddulph, L. G., "Athletic Achievement and the Personal and Social Adjustment of High School Boys," Research Quarterly, 25:1-7, 1954.
36. Bierer, J., "Psychotherapy in Mental Hospital Practice," Journal of Mental Science, 86:928-47, 1940.
37. Bilovsky, David and others, "Individual and Group Counseling," Personnel and Guidance Journal, 31:363-65, March, 1953.
38. Bjerstedt, A., "A 'Chess-Board Sociogram' for Sociographic Representation of choice directions and for the analysis of 'sociometric locomotions'," Sociometry, 15:244-62, 1952.

39. Bjerstedt, A., "The Interpretation of Sociometric Status Scores in the Classroom," Nordisk Psychologi, 8:1-14, 1956.
40. _____. Interpretations of Sociometric Choice Status, Lund, Sweden: Gleerup, 1956.
41. Blanchard, B. E., "A Social Acceptance Study of Transported and Non-Transported Pupils in a Rural Secondary School," Journal of Experimental Education, 15:291-303, 1947.
42. Bonner, Hubert, Group Dynamics, New York: The Ronald Press Co., 1959, 531 pp.
43. Bonney, Merl E., "A Study of Social Status on the Second Grade Level," Journal of Genetic Psychology, 60:271-305, 1942.
44. _____. "The Constancy of Sociometric Scores and Their Relationship to Teacher Judgments of Social Success, and to Personality Self-Ratings," Sociometry, 6:409-24, 1943.
45. _____. "The Relative Stability of Social, Intellectual, and Academic Status in Grades II to V, and Inter-Relationships Between These Various Forms of Growth," Journal of Educational Psychology, 34:88-102, 1943.
46. _____. "Personality Traits of Socially Successful and Socially Unsuccessful Children," Journal of Educational Psychology, 34:449-72, 1943.
47. _____. "Relationships Between Social Success, Family Size, Socio-Economic Home Background and Intelligence Among School Children in Grades III to V," Sociometry 7:26-39, 1944.
48. _____. "A Sociometric Study of the Relationship of Some Factors to Mutual Friendships on the Elementary, Secondary, and College Levels," Sociometry, 9:21-47, February, 1946.
49. _____. "A Sociometric Study of the Relationships of Some Factors to Mutual Friendships on the Elementary, Secondary, and College Levels," Sociometry, 9:21-47, February, 1946.
50. _____. "Popular and Unpopular Children, a Sociometric Study," Sociometry Monographs, No. 9, New York: Beacon House, 1947.
51. _____. "A Study of Friendship Choices in College in Relation to Church Affiliation, In-Church Preferences, Family Size, and Length of Enrollment in College," Journal of Social Psychology, 29:153-66, 1949.
52. _____. "A Sociometric Study of the Peer Acceptance of Rural Students in Three Consolidated High Schools," Educational Administration and Supervision, 37:234-40, 1951.

53. Bonney, Merl E. , "Social Behavior Differences Between Second Grade Children of High and Low Sociometric Status," Journal of Educational Research, 48:481-95, 1955.
54. _____. Mental Health in Education. Boston: Allyn and Bacon, Inc., 1960, 434 pp.
55. _____, and Powell, J., "Differences in Social Behavior Between Sociometrically High and Sociometrically Low Children," Journal of Educational Research, 46:481-95, 1953.
56. _____, and Northway, Mary L., "Major Areas of Exploration: A. Childhood and Early Adolescent, High School and College Level," (In) J. L. Moreno (Editor): The Sociometry Reader, Glencoe, Illinois: The Free Press, 1960, pp. 401-05.
57. Bovet, Lucien, "Psychiatric Aspects of Juvenile Delinquency--A Study on Behalf of the World Health Organization as a Contribution to the United Nations Programme for the Prevention of Crime and Treatment of Offenders." Palais Des Nations, Geneva: World Health Organization, Monograph Series, No. 1, 1951, 90 pp.
58. Bower, Eli M., "A Process For Early Identification of Emotionally Disturbed Children," Bulletin of the California State Department of Education, 37, No. 6, Sacramento, August, 1958.
59. Bowman, Paul H., Dehan, Robert F., Kough, John K., and Liddle, Gordon P., Mobilizing Community Resources for Youth, The University of Chicago Press: Supplementary Educational Monographs, Number 85, Chicago, October, 1956.
60. Bretsch, H. S., "Social Skills and Activities of Socially Accepted and Unaccepted Adolescents," Journal of Education Psychology, 43:449-504, 1952.
61. Brewer, Anna L., "An Experiment with Multiple Counseling," National Association of Secondary School Principals Bulletin, 42: 152-53, November, 1958.
62. Broedel, John, et al., "The Effects of Group Counseling on Gifted Underachieving Adolescents," Journal of Counseling Psychology, 7, No. 3:163-70, 1960.
63. _____. "A Study of the Effects of Group Counseling on the Academic Performance and Mental Health of Underachieving Gifted Adolescents," Doctor's thesis, Urbana: University of Illinois, 1958, 182 pp.
64. Brofenbrenner, U., "The Measurement of Sociometric Status, Structure and Development," Sociometry Monographs, No. 6, New York, Beacon House, 1945.

65. Brown, D., "Factors Affecting Social Acceptance of High-School Students, School Review, 42:151-55, 1954.
66. Brown, Marjorie, "Adolescents Treatable by a Family Agency," Smith College Student Social Work, 18:37-67, 1947.
67. Brown, W. H., and Bond, L., "Social Stratification in a Sixth Grade Class," Journal of Educational Research, 48:539-43, 1955.
68. Bruce, Paul, "Relationship of Self-Acceptance to Other Variables with Sixth Grade Children Orientated in Self-Understanding," The Journal of Educational Psychology, 49:229-38, October, 1958.
69. Bruch, Hilde, "Influence of Parent Education on Child Rearing," (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress. Washington, D. C.: U. S. Department of Health, Education, and Welfare. Bulletin II (Reported January-October, 1952), 1953, Item 186B, pp. 112-13.
70. Buchmeuller, A. D., and Gildea, Margaret C. L., "Group Therapy for Parents of Behavior Problem Children in Public Schools," International Journal of Social Psychiatry, 1:51-56, Winter, 1955.
71. Buck, Carl E., Buell, Bradley, and Kandle, Roscoe P., "Family Health in Tomorrow's Community," American Journal of Public Health, 41, No. 10, pp. 258-62, October, 1951.
72. Buck, J. V., "The Sociometric Technique and the Teaching of General Science," School Science and Mathematics, 52:456-61, 1952.
73. Buell, Bradley, "Preventing and Controlling Disordered Behavior: A Community Experiment," Mental Hygiene, 39:365-75, July, 1955.
74. Buhler, C., "Group Therapy with Adolescents," (In) Group Psychotherapy Association of Southern California, First Annual Report, pp. 17-19.
75. Bullis, H. Edmund and O'Malley, Emily E., Human Relations in the Classroom, Wilmington: Delaware State Society for Mental Hygiene, 1947.
76. Burgess, E. W., "Discussion of Papers on Sociometry," Sociometry, 6:223-24, 1943.
77. Burrow, Trigant, "The Group Method of Analysis," Psychoanalytical Review, 12:1-5, 1925.

78. Buswell, M. M., "The Relationship Between the Social Structure of the Classroom and the Academic Success of the Pupils," Journal of Experimental Education, 22:37-52, 1953.
79. Carr, Lowell Juliard, "Organizing to Reduce Delinquency--The Michigan Plan for Better Citizenship," Ann Arbor: The Michigan Juvenile Delinquency Information Service, 1952.
80. Caplan, Gerald, "Mental Health Consultation in Schools," Milbank Memorial Fund: The Elements of a Community Mental Health Program, pp. 77-86, 1956.
81. Caplan, Stanley William, "The Effect of Group Counseling on Junior High School Boys' Concepts of Themselves in School," Journal of Counseling Psychology, 4:124-28, 1957.
82. Cameron, K., "Group Approach to Inpatient Adolescents," American Journal of Psychiatry, 109:675-61, 1953.
83. Castaneda, Alfred, McCandless, Boyd R., and Palermo, David, "The Children's Form of the Manifest Anxiety Scale," Child Development, 27:317-23, 1956.
84. Chamberlain, Herbert E., and De Schweinitz, Elizabeth, "Nine Programs for the Promotion of Mental Health," Community Programs for Mental Health, (Edited by Ruth Kotinsky and Helen L. Wilmer) Cambridge: Harvard University Press, 1955, pp. 46-157.
85. Chapin, F. Stuart, "Trends in Sociometrics and Critique," Sociometry, 3:245-62, 1940.
86. Chase, C. Thurston, "The Psychotherapy of the Adolescent from a Schoolmaster's Point of View," (In) Benjamin Harris Balser (Editor) Psychotherapy of the Adolescent, New York: International Universities Press, Inc., 1957.
87. Clancy, Morah, and Smither, Faith, "A Study of Emotionally Disturbed Children in the Santa Barbara County Schools," California Journal of Educational Research, 4:209-18, November, 1953.
88. Clausen, John A., and John, Melvin L., A Study of Mental Illness in Hagerstown, Maryland, Bethesda, Maryland: Laboratory for Socio-environmental Studies, National Institute of Mental Health. Study in progress, 1953.
89. Cleary, F. D., and others, Individual and Group Guidance, Detroit: Wayne University Press, 1953.
90. Coffee, Hubert S., and Pope, Saxon, Function of Leader and Group in Group Psychotherapy, Berkeley: University of California, Study in progress, 1953, NIMH grant.

91. Cohn, B., et al., "Roles Played by Adolescents in an Unproductive Counseling Group," Personnel and Guidance Journal, 38:724-31, May, 1960.
92. Coleman, J. C., Abnormal Psychology and Modern Life, Chapter I, New York: Scott, Foresman and Company, 1956.
93. Combs, A. W., and Smygg, D., Individual Behavior, Revised edition, New York: Harper, 1959.
94. Commission on Group Psychotherapy, "Report to the World Federation for Mental Health. III. Group Psychotherapy with Adolescents," International Journal of Group Psychotherapy, 2:173-76.
95. Committee on Public Health Relations of the New York Academy of Medicine with the Assistance of the Josiah Macy, Jr. Foundation, Conferences on Drug Addiction Among Adolescents, Garden City, N. Y.: Doubleday and Company, Inc., 1953, 320 pp.
96. Cook, L. A., "An Experimental Sociographic Study of a Stratified Tenth Grade Class," American Sociological Review, 10:250-61, 1945.
97. Cooley, C. H., Human Nature and the Social Order, New York: Scribner's, 1902.
98. Corsini, Raymond J., Methods of Group Psychotherapy, New York, Toronto, London: The Blakiston Division, McGraw-Hill Book Company, Inc., 1957, 251 pp.
99. ———, and Putzey, L. J., Bibliography of Group Psychotherapy (1906 through 1955), Beacon, New York: Beacon House, Psychodrama and Group Psychotherapy Monographs, No. 29, 1957, 75 pp.
100. Cox, F. N., "Sociometric Status and Individual Adjustment Before and After Play Therapy," Journal of Abnormal and Social Psychology, 48:354-56, 1953.
101. Crawford, Ronald E., "The Relationship Between the Personality of the Elementary School Teacher and Changes Which Occur in the Personalities of His Pupils During the School Year," New York City: New York University, Ph.D. dissertation in preparation, 1952.
102. Criswell, J. H., "A Sociometric Study of Race Cleavage in the Classroom," Archives of Psychology, No. 325, 1939.
103. Cunningham, R., Understanding Group Behavior of Boys and Girls, New York: Bureau of Publications, Teachers College, Columbia University, 1951.

104. Curran, J. J., "The Drama as a Therapeutic Measure in Adolescents," American Journal of Orthopsychiatry, 9:215-31, 1939.
105. Dahlke, H. O., "Determinants of Sociometric Relations Among Children in the Elementary School," Sociometry, 16:327-38, 1953.
106. Darrin, D. E., "Family Size and Sibling Age, Sex, and Position as Related to Certain Aspects of Adjustment," Journal of Social Psychology, 29:93-102, 1949.
107. Davis, Donald A., "Effect of Group Guidance and Individual Counseling on Citizenship Behavior," Personnel and Guidance Journal, 38:142-45, 1960.
108. David, Junius A., "Correlates of Sociometric Status Among Peers," Journal of Educational Research, 50:561-69, 1957.
109. Davis, R. G., "Group Therapy and Social Acceptance in a First-Second Grade," Elementary School Journal, 49:219-23, 1948.
110. Davitz, J. R., "Social Perception and Sociometric Choice of Children," Journal of Abnormal and Social Psychology, 50:173-76, 1955.
111. DeMacedo, G., "Group Psychotherapy in Criminology," International Journal of Group Psychotherapy, 5:54-60, 1955.
112. Despert, J. Louise, Children of Divorce. Garden City, N.Y.: Doubleday and Company, Inc., 1953, 282 pp.
113. DeVault, M. V., "Classroom Sociometric Mutual Pairs and Residential Proximity," Journal of Educational Research, 50:605-10, 1957.
114. Dineen, M. A., and Garry, R., "Effect of Sociometric Seating on a Classroom Cleavage," Elementary School Journal, 56:358-62, 1956.
115. Dreese, Mitchell, "Group Guidance and Group Therapy," Review of Educational Research, 27:219-28, April, 1957.
116. Dreikurs, R., "Techniques and Dynamics of Multiple Psychotherapy," Psychiatric Quarterly, 24:788-99, 1950.
117. Driver, Helen I., "Small-Group Discussion As an Aid in Counseling," School Review, 59:525-30, December, 1951.
118. _____. Multiple Counseling: A Small-Group Discussion Method for Personal Growth, Madison, Wisconsin: Monona Publications, 1954, 280 pp.

119. Eiserer, Paul E., "Group Psychotherapy," Journal of National Association of Women Deans and Counselors, 19:13-22, March, 1956.
120. Eliasberg, Wladimir, "New Viewpoint in the Application and Research of Group Psychotherapy," (In) J. L. Moreno (editor) Group Psychotherapy, A Symposium, New York: Beacon House, 1946, pp. 112-116.
121. Eliasoph, E., "Group Therapy and Psychodrama Approaches with Adolescent Drug Addicts," Group Psychotherapy, 8:161-67, 1955.
122. Elliott, H. Aubrey, and Smith, Bert K., Pillars of Support, Austin: Hogg Foundation for Mental Hygiene, University of Texas, 1956, 63 pp.
123. Emerson, W. R. P., "The Hygienic and Dietetic Treatment of Delicate Children in Groups," Boston Medical and Surgical Journal, 163:326-28, 1910.
124. Evry, Hal., "TV Murder Causes Bad Dreams," Film World, Volume 8, 1952, 247 pp.
125. Faunce, D., and Beegle, J. A., "Cleavages in a Relatively Homogeneous Group of Rural Youth: An Experiment in the Use of Sociometry in Attaining and Measuring Integration," Sociometry, 11:207-16, 1948.
126. Feinberg, M. R., "Relation of Background Experience to Social Acceptance," Journal of Abnormal and Social Psychology, 48:206-14, 1953.
127. Festinger, L., "The Analysis of Sociograms Using Matrix Algebra," Human Relations, 2:153-58, 1949.
128. ———, Schachter, S., and Back, K., Social Pressures in Informal Groups: A Study of Human Factors in Housing, New York: Harpers, 1950.
129. Fiedler, F. E., Blaisdell, F. J., and Warrington, W. G., "Unconscious Attitudes and the Dynamics of Sociometric Choice in a Social Group," Journal of Abnormal and Social Psychology, 47:790-96, 1952.
130. Fisher, Bernard, "An Investigation of the Effectiveness of Group Therapy for the Remediation of Reading Disabilities," Doctor's Thesis, New York: New York University, 1953, 210 pp.
131. Folick, Mordecai L., Rubenstein, Ben, and Levitt, Morton, "A Critical Evaluation of the Therapeutic Use of a Club in a School-Based Mental Hygiene Program," Mental Hygiene, 39:63-78, January, 1955.

132. Force, Elizabeth S., Family Relationships--Ten Topics Toward Happier Homes, A Handbook for administrators and teachers, and study guide. Elizabethtown, Pa.: The Continental Press, 1948.
133. Ford Foundation, Mental Health, New York: The Foundation, 1958, 40 pp.
134. Forlano, G., "Measuring the Quality of Social Acceptance in Some Ninth Grade Core and Noncore Classes," High School Journal, 38:12-16, 1954.
135. ———, and Wrightstone, J. W., "Sociometric and Self-Descriptive Techniques in Appraisal of Pupil Adjustment," Sociometry, 14:340-50, 1951.
136. Forsyth, Elaine, and Katz, Leo, "A Matrix Approach to the Analysis of Sociometric Data: Preliminary Report," Sociometry, 9:340-47, 1946.
137. Foster, Robert G., "Do We Know Enough to Do Mental Hygiene?" Menninger Quarterly, 5:7-11, 1951.
138. Fox, William H. and Segel, David, "The Validity of the Choice of Friends Method of Measuring Social Adjustment," Journal of Educational Research, 47:389-401, January, 1954.
139. Frank, Jerome D., Evaluation of Group and Individual Psychotherapy, Baltimore: Johns Hopkins University, Study in progress, 1952, NIMH grant.
140. French, Robert L., and Mensh, Ivan N., "Some Relationships Between Interpersonal Judgments and Sociometric Status in a College Group," (In) J. L. Moreno (Editor), The Sociometry Reader, Glencoe, Illinois: The Free Press, 1960, pp. 417-27.
141. Freud, S., Collected Papers, London: International Psychoanalytic Press, 1924-25.
142. Froehlich, Clifford P., "Group Guidance Approaches in Educational Institutions," Review of Educational Research, 24:147-55.
143. ———. "Must Counseling Be Individual?" Educational and Psychological Monographs, 18, No. 4:681-89, Winter, 1958.
144. ———. "Multiple Counseling--A Research Proposal," Berkeley: University of California, Department of Education
145. Gabriel, B., "An Experiment in Group Treatment," American Journal of Orthopsychiatry, 9:792-97, 1939.
146. ———. "Group Therapy of Six Adolescent Girls," News Letter American Association of Psychiatric Social Work, 13:65-72, 1943.

147. Gabriel, B., "Interview Group Therapy for Adolescent Girls," American Journal of Orthopsychiatry, 14:593-602, 1944.
148. Gaier, Eugene L., and Jones, Stewart, "Do Teachers Understand Classroom behaviors?" Understanding the Child, 20:204-10, 1951.
149. Gallagher, J. J., "Social Status of Children Related to Intelligence, Propinquity, and Social Perception," Elementary School Journal, 59:225-31, 1958.
150. ———, and Crowder, T., "The Adjustment of Gifted Children in the Regular Classroom," Exceptional Children, 23:306-12, 317-19, 1957.
151. Gardner, George E., "Evaluation of Therapeutic Results in Child Guidance Programs," (In) Association for Research in Nervous and Mental Diseases: Psychiatric Treatment--Proceedings of the Association, December 14, 15, 1951, New York. Baltimore: Williams and Wilkins, 1953, pp. 131-37.
152. Gaskill, Evelyn R., and Mudd, Emily Hartshorne, "A Decade of Group Counseling," Social Casework, 31:194-201, 1950.
153. Gault, Robert H., Bates, Sanford, Sellin, Thorsten, Hooten, S., Alexander, Franz, and Dession, George H., "Unraveling Juvenile Delinquency--A Symposium of Reviews," Journal of Criminal Law, Criminology and Police Science, 41:732-59, 1951.
154. Gersten, Charles, "An Experimental Evaluation of Group Therapy with Juvenile Delinquency," International Journal of Group Psychotherapy, 1:311-18, 1951.
155. Ginsburg, Sol W., "The Mental Health Movement and Its Theoretical Assumptions," Community Programs for Mental Health, Edited by Ruth Kotinsky and Helen L. Wilner, Cambridge: Harvard University Press, 1955.
156. Glueck, Eleanor T., "Identifying Juvenile Delinquents and Neurotics," Mental Hygiene, 40:24-43, January, 1956.
157. Glueck, Sheldon, and Glueck, Eleanor T., Unraveling Juvenile Delinquency, New York: Commonwealth Fund, 1950, 399 pp.
158. ———. "Reinvestigation at Age 25 of 500 Delinquents and 500 Nondelinquents," (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress, Washington, D. C.: United States Department of Health, Education, and Welfare, Bulletin II (Reported January-October, 1952), 1953, Item 46C, p. 155.

159. Glueck, Sheldon, and Glueck, Eleanor T., "Validation of Series of Predictive Tables Presented in Juvenile Delinquents Grown Up," (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress. Washington, D. C.: United States Department of Health, Education, and Welfare. Bulletin II (Reported January-October, 1952), 1953, Item 46C, pp. 154-55.
160. _____. "Early Detection of Future Delinquents," Journal of Criminal Law, 47:174-82, July-August, 1956.
161. Goldfarb, William, "Variations in Adolescent Adjustment of Institutionally Reared Children," American Journal of Orthopsychiatry, 17:449-57, 1947.
162. Goldstein, Kurt, "The So-Called Drives," in Clark E. Moustakas (Editor): The Self--Explorations in Personal Growth, New York: Harper, 1956, pp. 15-24.
163. Goodnow, R. E., and Tagiuri, R., "Religious Ethnocentrism and Its Recognition Among Adolescent Boys," Journal of Abnormal and Social Psychology, 47:316-20, 1952.
164. Gordon, Thomas, "Some Theoretical Notions Regarding Changes During Group Psychotherapy," Group Psychotherapy, 4:172-78, 1951.
165. Gorlow, L., Hoch, E. L., and Telschow, E. F., The Nature of Non-directive Group Psychotherapy, An Experimental Investigation, New York: Bureau of Publication, Teachers College, Columbia University, 1952.
166. Gough, Harrison G., and Peterson, Donald R., "The Identification and Measurement of Predispositional Factors in Crime and Delinquency," Journal of Consulting Psychology, 16:207-12, 1952.
167. Great Britain, Ministry of Education, Committee of Maladjusted Children, Report, London: H.M. Stationery Office, 1956, 180 pp.
168. Greenblatt, E. L., "Relationship of Mental Health and Social Status," Journal of Educational Research, 44:193-204, 1950.
169. Greenbloom, T., and Rotenburg, E. M., "A Study of the Relationship Between Pupil Adjustment and Social Acceptance," Undergraduate thesis, University of Toronto, 1946.
170. Gronlund, M. E., "The Relative Stability of Classroom Social Status Scores," Journal of Educational Psychology, 46:345-54, 1955.

171. Gronlund, N. E., and Whitney, A. P., "Relation Between Pupils' Social Acceptability in the Classroom, in the School, and in the Neighborhood," School Review, 64:267-71, 1956.
172. _____, and Anderson, L., "Personality Characteristics of Socially Accepted, Socially Neglected, and Socially Rejected Junior High School Pupils," Educational Administration and Supervision, 43:329-38, 1957.
173. _____, and Holmlund, W. S., "The Value of Elementary School Sociometric Status Scores for Predicting Pupils' Adjustment in High School," Educational Administration and Supervision, 44:255-60, 1958.
174. Gronlund, Norman E., Sociometry in the Classroom, New York: Harper and Brothers, 1959, 340 pp.
175. Grossman, B., and Wrighter, J., "The Relationships Between Selection-Rejection and Intelligence, Social Status, and Personality Amongst Sixth Grade Children," Sociometry, 11: 346-55, 1948.
176. Group for the Advancement of Psychiatry, Committee on Preventive Psychiatry, "Promotion of Mental Health in the Primary and Secondary Schools; An Evaluation of Four Projects," GAP Report, No. 18, 1951, 15 pp.
177. Growdon, C. H., "Three Years of Follow-up; Covering 1,616 Delinquent and Problem Children Studied in Residence at the State Bureau of Juvenile Research, Columbus, Ohio, During 1944, 1945, and 1946." Columbus: State Bureau of Juvenile Research, 1951, 20 pp.
178. Gula, M., "Boys' House--The Use of a Group for Observation and Treatment," Mental Hygiene, 28:430-37, 1944.
179. Gurvitch, Georges, Sociometry in France and the United States, 1949, p. 2.
180. Hall, Calvin S., and Lindzey, Gardner, Theories of Personality, New York: John Wiley & Sons, Inc., 1957, Chap. 8, pp. 296-335, and Chap. 12, pp. 467-502.
181. Harlington Public Schools and (Texas) State Committee on Integration of Counseling, School Nursing, and Visiting Teachers, "The Teamwork Project with Special Service Staff-Counselor, School Nurse, and Visiting Teacher; a Progress Report of the Harlingen Project after Six Months' Operation, 1950-51," 406 East Fifth Street, Austin, Texas: State Committee on Integration of Counseling, School Nursing, and Visiting Teachers. Charles F. Mitchell, Executive Secretary. Progress report, Fall, 1951, 85 pp.

182. Harris, Virgil, "Kansas City Schools Mental Health Project," Kansas City, Mo: Kansas City Public Schools. Study in progress, 1952.
183. Hathaway, Starke R., and Monachesi, Elio D. (Editors), Analyzing and Predicting Juvenile Delinquency with the MMPI, Minneapolis: University of Minnesota Press, 1953, 153 pp.
184. Havighurst, Robert J., and Scott, Emma, "What Would Happen...?", New York State Education, 40:320-23, February, 1953.
185. Helper, Malcolm, "Learning Theory and Self-Concept," Journal of Abnormal and Social Psychology, 51:184-94, 1956.
186. Hempel, Martia, and Laid, Melba, "Group Discussion as a Method of Mental Hygiene Education," Denver: Denver Council of Social Agencies. Unpublished report of the Family and Child Welfare Committee, 1950.
187. Henry, Jules, "Family Structure and Emotional Disorders in Children," (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress. Washington, D. C.: United States Department of Health, Education, and Welfare. Bulletin II (Reported January-October, 1952), 1953, Item 207B, p. 122.
188. Herminghouse, Earl G., "The Effect of Bibliotherapy on the Attitudes of Personal and Social Adjustment of a Group of Elementary School Children," Doctor's Thesis, St. Louis: Washington University, 1954, 246 pp.
189. Hertzman, Jack, "School Mental Hygiene--A Public Health Approach," American Journal of Orthopsychiatry, 20:529-44, 1950.
190. Hewitt, H., and Gildea, M. C. L., "An Experiment in Group Psychotherapy," American Journal of Orthopsychiatry, 15:112-27, January, 1945.
191. Hill, B., "An Experiment in Treating Seriously Disturbed Juvenile Delinquent Boys," Psychiatric Quarterly Supplements, 27: 105-19, 1953.
192. Hobbs, Nicholas, "Group Psychotherapy in Preventive Mental Hygiene," Teachers College Record, 50:170-78, December, 1948.
193. Hollingshead, A. B., Elmtown's Youth, New York: John Wiley, 1949.
194. Holzberg, J. D., and Posner, Rita, "The Relationship of Extra-punitiveness on the Rosenzweig Picture-Frustration Study to Aggression in Overt Behavior and Fantasy," American Journal of Orthopsychiatry, 21:767-79, 1951.

195. Hoyt, Donald P., "An Evaluation of Group and Individual Programs in Vocational Guidance," Journal of Applied Psychology, 39: 26-30, February, 1955.
196. Hoyt, Kenneth B., and Moore, Gilbert D., "Group Guidance Procedures in Guidance and Personnel Work," Review of Educational Research, 30:158-67, April, 1960.
197. Hunt, Morton M., "The Wellesley Experiment--A Pioneer Undertaking in Psychiatry for the Community," Harper's Magazine, 207, No. 1238:75-81, July, 1953.
198. Hunter, E. C., "Changes in Teachers' Attitudes Toward Children's Behavior Over the Last Thirty Years," Mental Hygiene, 41:3-11, January, 1957.
199. Hyde, Robert W., and Chisholm, Roderick, M., "Studies in Medical Sociology: III, The Relation of Mental Disorders to Race and Nationality," New England Journal of Medicine, 231: 612-18, 1944.
200. International Congress on Mental Health, "Mental Health and the Selection and Training of Teachers," Understanding the Child, 21:49-50, 1952.
201. Interagency Conference on Healthy Personality Development in Children, Healthy Personality Development in Children as Related to Programs of the Federal Government, New York: Josiah Macy, Jr., Foundation, 1952, 154 pp.
202. Ives, Virginia A., Grant, Marguerite Q., and Ranzoni, Jane H., "The Neurotic Rorschachs of Normal Adolescents," Journal of Genetic Psychology, 83:31-61, 1953.
203. Jacobsen, Virginia, "Factors in the Outcome of Treatment of School Phobia," Smith College Student Social Work, 18, No. 3:181-202, June, 1948.
204. Jacobson, J. R., "Group Therapy in the Elementary Schools," Psychiatric Quarterly, 19:3-16, 1945.
205. Jahoda, Marie, Current Concepts of Positive Mental Health, New York: Basic Books, Inc., Publishers, 1958.
206. ———. "Toward a Social Psychology of Mental Health," Reprint from Problems of Infancy and Childhood, Milton J. E. Senn (Ed.) Trans. Fourth Conference Supplement II, New York: Josiah Macy, Jr. Foundation, 1950, 23 pp.
207. Jamrich, John, "Application of Matrices in the Analysis of Sociometric Data," Journal of Experimental Education, 28:249-52, March, 1960.
208. Jennings, Helen H., Leadership and Isolation, second edition, New York: Longmans, Green, 1950.

209. Jennings, Helen H., "Sociometric Structure in Personality and Group Formation," (In) Sherif, M., and Wilson, M. O. (eds.): Group Relations at the Crossroads, New York: Harper, 1953, pp. 332-63.
210. ———. "Leadership and Sociometric Choice," (In) J. L. Moreno (Ed.): Sociometry Reader, Glencoe, Illinois: The Free Press, 1960, pp. 437-54.
211. Jersild, Arthur T., In Search of Self, New York: Teachers College, Columbia University, 1952.
212. Jessor, Richard, "Some Methodological Issues," (In) Phenomenological Conceptions of Personality, A Symposium presented at the Annual Convention of the American Psychological Association, September 2, 1960.
213. Johnson, G. O., "A Study of the Social Position of Mentally-Handicapped Children in the Regular Grades," American Journal of Mental Deficiency, 55:60-89, 1950.
214. ———, and Kirk, S. A., "Are Mentally-Handicapped Children Segregated in the Regular Grades?" Journal of Exceptional Children, 17:65-68, 1950.
215. Johnson, Lillian J., and Reid, Joseph H., "Testing Casework Results--Hope for Three Out of Four," Survey Midmonthly, 83, No. 10:271-73, October, 1947.
216. Joint Advisory Committee on the Harlem Project, The Role of the School in Preventing Maladjustment and Delinquency. New York: New York Foundation and Board of Education of the City of New York, 1949, 154 pp.
217. Kaplan, Louis, Mental Health and Human Relations in Education, New York: Harper and Brothers, 1959, 476 pp.
218. Katz, Leo, "A New Status Index Derived from Sociometric Analysis," Psychometrika, 18:39-43, 1953.
219. Kaufman, Milton, "Readiness for, and Success in Group Psychotherapy: A Study of the Ability of Certain Social, Familial, and Personality Factors to Permit Prediction of Success in Group Psychotherapy," Doctor's thesis, New York: New York University, 1956, 163 pp.
220. Keislar, E. R., "Peer Group Judgments as Validity Criteria for the SRA Youth Inventory," California Journal of Educational Research, 5:77-79, 1954.
221. ———. "Distinction Between Social Acceptance and Prestige Among Adolescents," Child Development, 24:275-83, 1953.

222. Kerstetter, L. M., and Sargent, J., "Re-Assignment Therapy in the Classroom," Sociometry, 3:293-306, 1940.
223. Kilinski, Mildred, et al., "Pilot Study in Development of a Symptomatic and Diagnostic Classification of Family Disorganization," (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress. Washington: U. S. Dept. of Health, Education, and Welfare, Bulletin II, (Reported January-October, 1952), 1953, Item 218B, p. 127.
224. Kilpatrick, F. P., "Personality in Transactional Psychology," in Phenomenological Conceptions of Personality, A Symposium Presented at the Annual Convention of the American Psychological Association, September 2, 1960.
225. Kinney, E. E., "Study of Peer Group Social Acceptability at Fifth Grade Level," Journal of Educational Research, 47:57-64, 1953.
226. Klapman, J. W., Group Psychotherapy--Theory and Practice, Second Edition, New York and London: Grune and Stratton, 1959, 301 pp.
227. Koile, E. A., "Group Guidance, A Fringe Activity," School Review, 63:483-85, December, 1955.
228. Kotkov, B., "Group Psychotherapy with Wayward Girls," Diseases of the Nervous System, 14:308-12, 1953.
229. Krugman, Morris, "Appraisal and Treatment of Personality Problems in a Guidance Program," (In) Arthur E. Traxler (Ed.): Education in a Free World, Washington, D. C.: American Council on Education, 1955, pp. 114-21.
230. Kuhlen, R. G., and Bretsch, H. S., "Sociometric Status and Personal Problems of Adolescents," Sociometry, 10:122-32, 1947.
231. _____, and Collister, E. G., "Sociometric Status of Sixth and Ninth-Graders Who Fail to Finish High School," Educational and Psychological Measurement, 12:632-37, 1952.
232. _____, and Lee, B. J., "Personality Characteristics and Social Acceptability in Adolescence," Journal of Educational Psychology, 34:321-40, 1943.
233. Landis, Carney, and Page, James D., Modern Society and Mental Disease, New York: Farrar & Rinehart, 1938, 190 pp.
234. Lane, Lionel C., "'Aggressive' Approach in Preventive Casework with Children's Problem," Social Casework, 33:61-66, 1952.
235. Langdon, Grace, and Stout, Irving W., These Well-Adjusted Children, New York: John Day Company, 1951, 245 pp.

236. Laughlin, F., The Peer Status of Sixth- and Seventh-Grade Children, New York: Bureau of Publications, Teachers College, Columbia University, 1954.
237. Laycock, Samuel R., "Mental Hygiene of Classroom Teaching," Understanding the Child, 16:39-48, April, 1947.
238. _____. "Effect of the Teacher's Personality on the Behavior of Pupils," Understanding the Child, 19:50-55, 1951.
239. Lazell, E., "The Group Psychic Treatment of Dementia Praecox by Lectures in Mental Re-education," United States Veteran Medical Bulletin, 6:733-47, 1930.
240. Lecky, Prescott, "The Personality," (In) Clark E. Moustakas (Ed): The Self--Explorations in Personal Growth, New York: Harper, 1956, pp. 86-97.
241. Lehrman, Louis J., Sirluck, Hilda, Black, Bertram J., Glick, S. J., and Others, Success and Failure of Treatment of Children in the Child Guidance Clinics of the Jewish Board of Guardians, New York City. New York: Jewish Board of Guardians, Research Monograph No. 1, 1949, 85 pp.
242. Lemkau, P., Tietze, C., and Cooper, M., "Mental Hygiene Problems in an Urban District: Fourth Paper," Mental Hygiene, 27:279-95, 1943.
243. Lewis, Philip, "Impact of Television on Children," (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress, Washington, D. C.: United States Department of Health, Education and Welfare. Bulletin II (Reported January-October, 1952), 1953, Item 83F, p. 419, 420.
244. Lidz, Ruth Wilms, and Lidz, Theodore, "The Family Environment of Schizophrenic Patients," American Journal of Psychiatry, 106:332-45, 1949.
245. Lifton, Walter M., "Group Therapy in Educational Institutions," Review of Educational Research, 24:156-65, April, 1954.
246. _____. "Group Classroom Techniques," Progressive Education, 30:210-13, May, 1953.
247. Lindgren, Henry Clay, Mental Health in Education, New York: Henry Holt and Company, 1954, Chapter on "Evaluation of the School's Mental Health Program," pp. 497-506.
248. Lindzey, G., and Borgatta, E. F., "Sociometric Measurement," Chapter 11, in G. Lindzey (Ed.), Handbook of Social Psychology, Cambridge, Massachusetts: Addison-Wesley Publishing Company, 1954.

249. Lindzey, G., and Goldwyn, R., "Validity of the P-F Study," Journal of Personality, 22:519-47, 1954.
250. Loban, W., "A Study of Social Sensitivity (Sympathy) Among Adolescents," Journal of Educational Psychology, 44:102-12, 1953.
251. Loeb, H., "The Educational and Psychological Significance of Social Acceptability and Its Appraisal in an Elementary School Setting," Undergraduate thesis, University of Toronto, 1941.
252. Loomis, C. P., Baker, W. B., and Proctor, C., "The Size of the Family as Related to Social Success of Children," Sociometry, 12:313-320, 1949.
253. ———, and Pepinsky, H. B., "Sociometry, 1937-1947: Theory and Methods," Sociometry, 11:262-86, 1948.
254. ———, and Proctor, C., "The Relationship Between Choice Status and Economic Status in Social Systems," Sociometry, 13: 307-13, 1950.
255. Lorr, Maurice, and Jenkins, Richard L., "Patterns of Maladjustment in Children," Journal of Clinical Psychology, 9:16-19 1953.
256. Low, A. A., Mental Health Through Will Training, Boston: Christophers, 1950.
257. Lowry, C., "The Relationship of Interests, Social Acceptance and Personality," Undergraduate thesis, University of Toronto, 1946.
258. Luce, D. R., and Perry, A. D., "A Method of Matrix Analysis of Group Structure," Psychometrika, 14:95-116, 1949.
259. Luchins, Abraham S., "Methods of Studying the Progress and Outcomes of a Group Therapy Program," Journal of Consulting Psychology, 11:173-83, July, 1947.
260. ———. "Ego Determinants in Gestalt Theory," (In) Phenomenological Conceptions of Personality, A Symposium Presented at the Annual Convention of the American Psychological Association, September 2, 1960.
261. Lundberg, George A., "Social Attraction Patterns in a Rural Village: A Preliminary Report," Sociometry, 1:77-80, 1937.
262. ———. "Discussion of Sociometry," Sociometry, 6:219-20, 1943.
263. ———, and Beazley, Virginia, "'Consciousness of Kind' in a College Population," Sociometry, 11:59-74, 1948.

264. Lundberg, G. A., Hertzler, Virginia B., and Dickson, Lenore, "Attraction Patterns in a University," Sociometry, 12:158-69, 1949.
265. _____, and Lawsing, Margaret, "The Sociography of Some Community Relations," American Sociological Review, 2:318-35, 1937.
266. _____, and Steele, Mary, "Social Attraction-Patterns in a Village," Sociometry, 1:375-419, 1938.
267. Maas, Henry S., "The Role of Member in Clubs of Lower-Class and Middle-Class Adolescents," Child Development, 25:241-51, December, 1954.
268. Maccoby, Eleanor E., and Gibbs, Patricia K., "Social Class Differences in Child Rearing," Paper presented at American Psychological Association, Sixty-First Annual Convention, Cleveland, September 4-9, 1953.
269. Macfarlane, Jean Walker, "Personality Development from Birth to Maturity," Berkeley: University of California, Institute of Child Welfare, Study in Progress, 1952. NIH grant.
270. Malone, Thomas P., "Analysis of the Dynamics of Group Psychotherapy Based on Observations in a 12-Month Experimental Program," Journal of Personality, 16:245-77, March, 1948.
271. Mangus, A. Raymond, "Mental Health of Rural Children in Ohio," Columbus: Ohio State Department of Public Welfare, Division of Mental Hygiene, Research Bulletin, No. 682, March, 1949, 34 pp.
272. _____, and Woodward, Richard H., "Analysis of the Mental Health of Elementary School Children," Columbus: Ohio State University, Department of Rural Economics and Rural Sociology, July, 1949.
273. _____, and _____, "Analysis of the Mental Health of High School Students," Columbus: Ohio State University, Department of Rural Economics and Rural Sociology, July, 1949, 21 pp.
274. Mark, Joseph C., "The Attitudes of the Mothers of Male Schizophrenics toward Child Behavior," Journal of Social Psychology, 48:185-89, 1953.
275. Marsh, L. C., "Group Treatment of the Psychoses by the Psychological Equivalent of the Revival," Mental Hygiene, 15:328-40, 1931.
276. Maslow, A. H., Motivation and Personality, New York: Harper, 1954.

277. Maslow, A. H., "Personality Problems and Personality Growth," (In) Clark E. Moustakas (Ed.): The Self--Explorations in Personality Growth, New York: Harper, 1956, pp. 232-46.
278. Matlin, J. P., "The Social Acceptance and Adjustment of Fifth- and Sixth-Grade Children Analyzed on the Basis of Transiency in the School," California Journal of Educational Research, 6:129, 1955.
279. McCallum, Margaret, "An Experimental Study of Creativity in the Pre-School Child," M.A. thesis, 1954, Department of Psychology, University of Toronto.
280. McCandless, Boyd R., "The Emotionally Disturbed Child," Special Education for the Exceptional, Volume 3 (Edited by Marie E. Frampton and Elena D. Gall), Boston: Porter Sargent, 1956, Section IX, Chapter 1, pp. 274-307.
281. ———, Castaneda, Alfred, and Palermo, David, "Anxiety in Children and Social Status," Child Development, 27:385-91, 1956.
282. McClelland, F. M., and Ratcliff, J. A., "The Use of Sociometry as an Aid in Promoting Social Adjustment in a Ninth Grade Home-Room," Sociometry, 10:147-53, 1947.
283. McCormick, C. G., "Objective Evaluation of the Process and Effect of Analytic Group Psychotherapy with Adolescent Girls," International Journal of Group Psychotherapy, 3:181-90, 1953.
284. McCrow, L. W., and Tolbert, J. W., "Sociometric Status and Athletic Ability of Junior High School Boys," Research Quarterly, 24:72-80, 1953.
285. Mead, G. H., Mind, Self and Society, Chicago: University of Chicago Press, 1934.
286. Meiers, Joseph L., "Origins and Development of Group Psychotherapy," (In) J. L. Moreno: Group Psychotherapy, A Symposium, New York: Beacon House, 1946.
287. Milbank Memorial Fund, Progress and Problems of Community Mental Health Services, New York: Milbank Memorial Fund, 1959, 232 pp.
288. Millard, C. V., et al., "Holt Study--A Longitudinal Study of Individual Children," East Lansing: Holt Observation Center and Child Development Laboratories, Division of Education, Michigan State College, Reported (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress. Washington, D. C.: United States Department of Health, Education, and Welfare, Bulletin II (Reported January-October, 1952), 1953, Item No. 4B, p. 36.

289. Miller, C., and Slavson, S. R., "Integration of Individual and Group Therapy in the Treatment of a Problem Boy," American Journal of Orthopsychiatry, 9:792-97, 1939.
290. Miller, D. R., and Stine, Margaret E., "The Prediction of Social Acceptance by Means of Psychoanalytic Concepts," Journal of Personality, 20:162-74, 1951.
291. Minnis, M. I., "Sociometry as a Guidance Technique," National Elementary Principal, 34:180-83, 1954.
292. Moreno, Jacob L., Das Kinderreich, Vienna, 1908.
293. _____. "Die Gottheit als Komodiant," Der Neue Daimon, Vienna, 1919.
294. _____. "Der Koenigsroman," Potsdam, Verlag des Vaters (G. Kiepenhauer Verlag), 1922.
295. _____. "Das Stegreiftheater," Berlin: Gustav Kiepenhauer, 1923 (Translation in Sociometry, 4:205-26, May, 1941.)
296. _____. "Psychological Organization of Groups in the Community," Proceedings of the 57th Annual Session of the American Association on Mental Deficiency, Boston, June, 1933, read at the joint meeting of the American Psychiatric Association and the American Association on Mental Deficiency.
297. _____. Group Psychotherapy, A Symposium, New York: Beacon House Press, 1946.
298. _____. "Three Dimensions of Society," in Moreno: Sociometry, Experimental Method and Science of Society, 1949.
299. _____. Who Shall Survive? New York: Beacon Press, 1953.
300. _____. "Interpersonal Therapy, Group Psychotherapy and the Function of the Unconscious," Group Psychotherapy, 7:191-204, 1954.
301. _____. (Editor) The Sociometry Reader, Glencoe, Illinois: The Free Press, 1960, p. x.
302. _____, and Jennings, Helen H., "Sociometric Control Studies of Grouping and Regrouping, with Reference to Authoritative and Democratic Methods of Grouping," Sociometry Monographs, No. 7, New York: Beacon House, 1947.
303. Morris, Don P., "Followup Studies of Shy, Withdrawn Children--Evaluation of Later Adjustment," Paper presented at the Annual Meeting of the American Orthopsychiatric Association, February, 1953, Study carried on at the Dallas Child Guidance Clinic.

304. Morrison, I. A., and Perry, I. F., "Acceptance of Overage Children by Their Classmates," Elementary School Journal, 57: 217-20, 1956.
305. Moustakas, Clark E., The Teacher and the Child--Personal Interaction in the Classroom, New York: McGraw-Hill Book Company, 1956, 265 pp.
306. _____. The Alive and Growing Teacher, New York: The Philosophical Library, 1959.
307. Mouton, Jane Srygley, Bell, Robert L., Jr., and Blake, Robert R., "Role Playing Skill and Sociometric Peer Status," (In) J. L. Moreno, (Ed.): The Sociometry Reader, Glencoe, Illinois: The Free Press, 1960, pp. 388-98.
308. National Committee for Mental Hygiene, "The Subnormal Child--17 Years Later," (A followup study of the school population in the Locust Point District of Baltimore), Mental Hygiene, 17:177, April, 1933.
309. National Society for the Study of Education: Mental Health in Modern Education, Fifty-Fourth Yearbook Part II, Chicago: University of Chicago Press, 1955, 397 pp.
310. Nehnevajsa, Jiri, "Sociometry: Decades of Growth," in J. L. Moreno (Ed.): The Sociometry Reader, Glencoe, Illinois: The Free Press, 1960, pp. 707-53.
311. Neugarten, B. L., "Social Class and Friendship Among School Children," American Journal of Sociology, 51:305-13, 1946.
312. Newburger, H. M., and Schauer, G., "Sociometric Evaluation of Group Psychotherapy," Group Psychotherapy, 6:7-20, 1953.
313. New York City Youth Board, "Reaching the Unreached: Early Detection and Treatment, Redirecting Gangs, Group Work, and Recreation, Community Planning, Child Guidance, Aggressive Casework, Research, Group Therapy," 500 Park Ave., New York 22: New York City Youth Board, 1952. 147 pp.
314. New York State Youth Commission, Reducing Juvenile Delinquency--What New York State Schools Can Do, Albany: New York State Youth Commission, 1952.
315. Northway, Mary L., "A Method for Depicting Social Relationships Obtained by Sociometric Testing," Sociometry, 3:144-50, 1940.
316. _____. "Outsiders: A Study of the Personality Patterns of Children Least Acceptable to Their Age Mates," Sociometry, 7:10-25, 1944.
317. _____. A Primer of Sociometry, Toronto: University of Toronto Press, 1952.

318. Northway, Mary L. (editor), Well Children--A Progress Report, 1953-1955, The Institute of Child Study, University of Toronto, Toronto: University of Toronto Press, 1956.
319. _____, and Quarrington, B., "Depicting Inter-Cultural Relations," Sociometry, 9:334-39, 1946.
320. _____, and Wigdor, Blossom T., "Rorschach Patterns Related to the Sociometric Status of School Children," Sociometry, 10:186-99, 1947.
321. _____, Frankel, Esther B., and Potashin, Reva., "Personality and Sociometric Status," Sociometry Monographs, No. 11 New York: Beacon House, 1947.
322. _____, and Detweiler, J., "Children's Perception of Friends and Non-Friend," Sociometry, 18:271-75, 1955.
323. Howell, A., "Peer Status as Related to Measures of Personality," California Journal of Educational Research, 4:37-41, 1953.
324. Office of Education and National Institute of Mental Health, "Report of the Conference on Mental Health in Schools and Teacher Education Institutions, April 11 and 12, 1949," Washington, D. C.: Federal Security Agency, 1949, 69 pp.
325. Ohlsen, Merle M., "Counseling Within a Group Setting," National Association of Women Deans and Counselors Journal, 23: 104-109, April, 1960.
326. _____, and Denis, C. E., "Factors Associated with Education Students' Choices of Classmates," Educational Administration and Supervision, 37:277-90, 1951.
327. Ohio Commission on Children and Youth, Committee on Special Education, "Children Who Are Socially and Emotionally Maladjusted in School," Special Education for the Exceptional, Volume 3 (Edited by Merle E. Frampton and Elena D. Gall), Section IX, Chapter 1, Boston: Porter Sargent, 1956.
328. Ojemann, Ralph H., "The Effects of a Teaching Program in Human Behavior and Emotional Development on Children of Different Age Levels and Backgrounds," Iowa City: Preventive Psychiatry Project, Iowa Child Welfare Research Station, State University of Iowa, Unpublished study in progress, 1953.
329. _____. "An Integrated Plan for Education in Human Relations and Mental Health," Journal of National Association of Deans of Women, 16:102-108, March, 1953.
330. _____. "The Function of the Secondary School in an Integrated Plan for Education in Human Relations in Mental Health," Bulletin of National Association of Secondary School Principals, 37:82-89, November, 1953.

331. Ojemann, Ralph H., and Clark, Warren Joy, "School Community Programs," Review of Educational Research, 26, No. 5:479-801, 1956.
332. Olson, Willard C., Problem Tendencies in Children--A Method for Their Measurement and Description, Minneapolis: University of Minnesota Press, 1930.
333. _____, and Hughes, Byron O., "Child as a Whole," Ann Arbor: University of Michigan, Reported (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress, Washington, D. C.: United States Department of Health, Education, and Welfare, Bulletin II (Reported January - October, 1952), 1953, Item 3B, p. 35.
334. Orr, Frances G., Sibling Rivalry as a Psychological Hazard, Palo Alto: Stanford University, Study in progress, 1952, NIMH grant.
335. Patterson, C. H., "The Self in Recent Rogerian Theory," (In) Phenomenological Conceptions of Personality, A Symposium Presented at the Annual Convention of the American Psychological Association, September 2, 1960.
336. Patterson, R. M., "Psychiatric Treatment of Institutionalized Delinquent Adolescent Girls," Diseases of the Nervous System, 11:227-32, 1950.
337. Peddy, Lester (Project Coordinator), "Intensive Clinic Services in the School Setting," Three-School Project, Joint Board of Education--New York City Youth Board, (In) New York City Youth Board, Reaching the Unreached, New York: New York City Youth Board, 1952, pp. 62-72.
338. Peltz, William L., "Psychotherapy of Adolescents at Private Practice Plus School Practice Level," (In) Benjamin Harris Balser (Ed.): Psychotherapy of the Adolescent, New York: International Universities Press, Inc., 1957, pp. 39-66.
339. Pepinsky, Pauline Nichols, "The Meaning of 'Validity' and 'Reliability' As Applied to Sociometric Tests," Educational and Psychological Measurement, 9:39-49, Spring, 1949.
340. Pepinsky, H. B., Siegel, L., and Vanatta, E. L., "The Criterion in Counseling: A Group Participation Scale," Journal of Abnormal and Social Psychology, 47:415-19, 1952.
341. Peres, Hadassah, "An Investigation of Nondirective Group Therapy," Journal of Consulting Psychology, 11:159-72, July-August, 1947.
342. Perkins, Keith J., "Consultation Service to a School by a Mental Health Team," Mental Hygiene, 37, No. 4:585-95, October, 1953.

343. Perneck, Barbara A., "Teacher Rated Behavior and Sociometric Patterns in a Kindergarten Class," Diploma Study, Institute of Child Study Library, Toronto, University of Toronto, 1954.
344. Pfeleiger, Elmer F., and Weston, Grace L., "Emotional Adjustment-- A Key to Good Citizenship," A report of the Citizenship Education Study, Detroit Public Schools and Wayne University, Detroit: Wayne University Press, 1953, 152 pp.
345. Phelps, Harold R., and Horrocks, John E., "Factors Influencing Informal Groups of Adolescents," Child Development, 29:69-86, March, 1958.
346. Phillips, Beeman N., and DeVault, M. Vere, "Relation of Positive and Negative Sociometric Valuations to Social and Personal Adjustment of School Children," Journal of Applied Psychology, 39:409-12, December, 1955.
347. Plank, Robert, "The Family Constellation of a Group of Schizophrenic Patients," American Journal of Orthopsychiatry, 23, No. 4:817-25, October, 1953.
348. Polansky, N., Lippitt, R., and Redl, F., "The Use of Near-Sociometric Data in Research on Group Treatment Processes," Sociometry, 13:39-62, 1950.
349. Pope, Saxton, "A Study of the Role of Leadership and the Function of the Group in Group Psychotherapy," Berkeley: University of California, Study in Progress, 1952, NIMH grant.
350. Potashin, R., "A Sociometric Study of Children's Friendships," Sociometry, 9:48-70, 1946.
351. Powell, M. G., "Comparisons of Self-Ratings, Peer Rating, and Expert's Rating of Personality Adjustment," Educational and Psychological Measurement, 8:225-34, 1948.
352. Powers, Edwin, and Witmer, Helen, An Experiment in the Prevention of Delinquency--The Cambridge-Somerville Youth Study, New York: Columbia University Press, 1951.
353. Pratt, J. H., "The 'Home Sanatorium' Treatment of Consumption," Boston Medical and Surgical Journal, 154:210-16, 1906.
354. Precker, J. A., "Similarity of Valuing as a Factor in Selection of Peers and Near-Authority Figures," Journal of Abnormal and Social Psychology, 47:406-14, 1952.
355. Proctor, C. H., and Loomis, C. P., "Analysis of Sociometric Data," In Marie Jahoda, M. Deutsch, and S. W. Cook (Editors), Research Methods in Social Relations -- With Especial Reference to Prejudice, Part Two, New York: Dryden, 1951, pp. 561-85.

356. Ravinovitch, Ralph D., et al., "Etiology of Childhood Schizophrenia," (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress, Washington, D. C.: United States Department of Health, Education, and Welfare, Bulletin II (Reported January-October, 1952), 1953, Item 7C, p. 137.
357. _____. "Relationship of Early Mothering Experience to Later Personality Development in Children and Evaluation of Meaningfulness of Foster Home Experience to Children," (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress, Washington, D. C.: United States Department of Health, Education, and Welfare Bulletin II (Reported January-October, 1952), 1953, Item 168B, p. 105.
358. Rankin, Paul T., and Dorsey, John M., "The Detroit School Mental Health Project: A Five-Year Report," Mental Hygiene, 37:228-48, 1953.
359. Rath, L., and Schweikart, E. F., "Social Acceptance Within Inter-Racial School Groups," Educational Research Bulletin 25:85-90, 1946.
360. Reader, N., and English, H. B., "Personality Factors in Adolescent Friendships," Journal of Consulting Psychology, 11:212-20, 1947.
361. Redl, Fritz, "Resistance in Therapy Groups," Human Relations, 1:307-13, August, 1948.
362. _____. "Effect of Recreation and Other Activity Programs on the Emotional Adjustment of Children," Detroit: Wayne University School of Social Work, Study in progress, 1952, NIMH grant.
363. _____, and Wattenberg, William W., Mental Hygiene in Teaching, New York: Harcourt, Brace & Company, 1951, 454 pp.
364. _____, and Wineman, David, Children Who Hate--The Disorganization and Breakdown of Behavior Controls, Glencoe, Ill.: Free Press, 1951, 253 pp.
365. Redlich, Frederick C., Hollingshead, August B., Roberts, Bertram H., Robinson, Harvey A., Freedman, Lawrence Z., and Myers, Jerome K., "Social Structure and Psychiatric Disorders," American Journal of Psychiatry, 109, No. 10:729-34, April, 1953.
366. Reed, Ellery F., "How Effective Are Group Work Agencies in Preventing Delinquency?" Social Service Review, 22:340-48, September, 1948.

367. Reed, Ellery F., "Relation of Group Work and Casework Agencies to Delinquency: A Comparative Study of Juvenile Court Versus Group Work Youths," Cincinnati: Research Department, The Community Chest, November, 1944, 15 pp.
368. Rennie, Thomas A. C., Yorkville Community Mental Health Project, New York: Cornell University Medical College, Study in progress, 1952, NIMH grant.
369. Report of the Committee on Maladjusted Children, London: The Ministry of Education, 1956.
370. Richards, Clara, "Group Counseling at the Junior High School Level," School Counselor, 5:47, 58-59, back cover, March, 1958.
371. Richards, Thomas W., Causes of Variation in Child Adjustment Over a Period of Years, Evanston, Ill.: Northwestern University Study in progress, 1952, NIMH grant.
372. Roberts, J. D., "Improving the Status of Isolates," National Elementary Principal, 32:183-88, 1952.
373. Robinson, Jane, "Venture in Group Therapy on the Senior High School Level," Journal of the National Association of Women Deans and Counselors, 17:25-28, October, 1953.
374. Rogers, Carl R., "Mental Health Findings in Three Elementary Schools," Educational Research Bulletin, 21:86-91, 1942.
375. _____. Counseling and Psychotherapy, Boston: Houghton Mifflin, 1951.
376. _____. Client-Centered Therapy, Boston: Houghton Mifflin, 1951.
377. _____. "A Theory of Therapy, Personality, and Interpersonal Relationships, as Developed in the Client-Centered Framework," (In) S. Koch (Ed.): Psychology, A Study of a Science. Vol. 3, New York: McGraw-Hill, 1959, pp. 184-256.
378. _____, and Dymond, R. F., Psychotherapy and Personality Change, Chicago: University of Chicago Press, 1954.
379. Rogers, Dorothy, Mental Hygiene in Elementary Education, Boston: Houghton Mifflin Company, 1957.
380. Rucker, W. Ray, A Curriculum Focuses on Mental Health, Austin, Texas: Hogg Foundation, 1953, 20 pp.
381. Ruzicka, William J., "Effectiveness of Short-Term Group Therapy for High School Students," American Psychologist, 14:343-44 July, 1959.

382. Ryan, W. Carson, Mental Health Through Education, New York: Commonwealth Fund, 1938, 315 pp.
383. Samler, Joseph and others, "Basic Approaches to Mental Health in the Schools," A reprint series from The Personnel and Guidance Journal, Washington, D. C.: American Personnel and Guidance Association, Inc.
384. Sanborn, Sister Mary Harriet, "An Evaluation of Group Guidance Utilizing a Projective Technique with Twelve Underachieving Adolescent Boys," Doctor's thesis, Ann Arbor: University of Michigan, 1958, 176 pp.
385. Sarason, Irwin G., "Empirical Findings and Theoretical Problems in the Use of Anxiety Scales," Psychological Bulletin, 57:403ff, September, 1960.
386. Sarbin, Theodore R., Personality Characteristics of Juvenile Delinquents, Berkeley: University of California, Study in progress, 1953, NIMH grant.
387. Scandrette, O. C., "Classroom Choice Status Related to Scores on Components of the California Test of Personality," Journal of Educational Research, 47:291-96, December, 1953.
388. ———, "Social Distribution and Degree of Acquaintance," Journal of Educational Research, 51:367-72, January, 1958.
389. Scheidlinger, Saul, "Should Teachers Be Group Therapists?" Progressive Education, 32:70-74, May, 1955.
390. Schilder, P., "The Analysis of Ideologies As a Psychotherapeutic Method Especially in Group Treatment," American Journal of Psychiatry, 93:601-17, 1936.
391. Schoeppe, A., and Havighurst, R. J., "A Validation of Development and Adjustment Hypotheses of Adolescence," Journal of Educational Psychology, 43:339-53, 1952.
392. Schulman, I., "Dynamics and Treatment of Anti-Social Psychopathology in Adolescents," Nervous Child, 11:35-41, 1955.
393. Sears, Robert R., The Relation of Child-Rearing Practices to Personality Development of Young Children, Cambridge: Harvard University, Study in progress, 1952, NIMH grant.
394. ———, Whiting, John M., Nowlis, Vincent, and Sears, Pauline S., "Some Child-Rearing Antecedents of Aggression and Dependency in Young Children," Genetic Psychology Monographs, 47:135-236, 1953.

395. Seeley, John R., "The Forest Hill Village Project--A Preliminary Report Presented at the Conference of Clinical Personnel on Clinic Relations with Other Community Agencies, Syracuse, January 8-9, 1952," Toronto: Unpublished study in progress, 1953.
396. Seeman, Julius, "Child Therapy in Education - Some Current Trends," Education, 74:493-500, April, 1954.
397. Seeman, M., "A Situational Approach to Intra-Group Negro Attitudes," Sociometry, 9:199-206, 1946.
398. Segoe, M., "Factors Influencing the Selection of Associates," Journal of Educational Research, 27:32-40, 1939.
399. Shoben, Edward J., Jr., "The Assessment of Parental Attitudes in Relation to Child Adjustment," Genetic Psychological Monographs, 39:101-148, 1949.
400. Shoobs, M. E., "Sociometry in the Classroom," Sociometry, 10: 154-64, 1947.
401. Shulman, Bernard H., "Group Therapy with Adolescents: An Experiment," Individual Psychology Bulletin, 9:86-91, 1951.
402. Siegel, Sidney, Nonparametric Statistics for the Behavioral Sciences, New York: McGraw-Hill, 1956.
403. Slavson, Samuel R., (Editor), The Practice of Group Therapy, New York: International Universities Press, 1947, 271-pp.
404. _____. "Differential Methods of Group Therapy in Relation to Age Levels," The Nervous Child, 4:196-216, April, 1945.
405. _____. "Current Practices in Group Therapy: Group Therapy at the Jewish Board of Guardians," Mental Hygiene, 28:414-22, July, 1944.
406. _____. Analytic Group Psychotherapy with Children, Adolescents, and Adults, New York: Columbia University Press, 1950, 275 pp.
407. Smith M., "Some Factors in Friendship Selections of High School Students," Sociometry, 7:303-10, 1944.
408. Solomon, Joseph C., and Axelrod, Pearl L., "Group Psychotherapy for Withdrawn Adolescent Children," American Journal of Diseases of Children, 68:86-101, 1944.
409. Spector, S. I., "Climate and Social Acceptability," Journal of Educational Sociology, 27:108-14, 1953.
410. Stendler, C. B., "Children of Brasstown," University of Illinois Bulletin, Urbana, Illinois, The Bureau of Research and Service, College of Education, 1949.

411. Stramahan, Marion, Schwartzman, Cecile, and Atkin, Edith, "Group Treatment for Emotionally Disturbed and Potentially Delinquent Boys and Girls," American Journal of Orthopsychiatry, 27:518-27, July, 1957.
412. Strang, Ruth, "Newer Emphasis on Counseling and Group Techniques," National Association of Women Deans and Counselors Journal, 23:152-57, 1960.
413. Strillken, Edward, H., "How the Montefiore School Prevents Crime," Journal of Criminal Law, Criminology and Police Science, 26:228, July, 1935.
414. Sullivan, H. S., The Interpersonal Theory of Psychiatry, New York: Norton, 1953.
415. Super, Donald E., "Group Techniques in the Guidance Program," Educational and Psychological Measurements, 9:496-510. Autumn, 1949.
416. Sutherland, J. D., "Notes on Psychoanalytic Group Therapy: I. Therapy and Training," Psychiatry, 15:111-17, 1952.
417. Swanson, Guy E., Personality Development as Affected by Social Class Membership, Ann Arbor: University of Michigan, Study in progress, 1952, NIMH grant.
418. Taba, Hilda, "Evaluation of a Year's Program in Human Relations in an Eighth Grade," (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress, Washington, D. C.: United States Department of Health, Education and Welfare, Bulletin II (Reported January-October, 1952), 1953, Item 65E, p. 365.
419. ———. "Acceptance and Rejection," Childhood Education, 30, 423-26, 1954.
420. Teuber, Hans-Lucas, and Powers, Edwin, "Evaluating Therapy in a Delinquency Prevention Program," (In) Association for Research in Nervous and Mental Diseases: Psychiatric Treatment--Proceedings of the Association, December 14, 15, 1951, New York. Baltimore: Williams and Wilkins, pp. 128-147, 1953.
421. Thorpe, J. G., "Factors in Friendship Formation," Sociometry, 18:207-14, 1955.
422. Tiffin, R. E., "A Study of the Relationships Between Social Class Status and Social Acceptance," unpublished M.A. thesis, North Texas State College Library, 1951.
423. Tindall, R. H., "Relationships Among Indices of Adjustment Status," Educational and Psychological Measurement, 15:152-62, 1955.

424. Tomlinson, Paul J., and Bohn, Ralph W., "Mental Hygiene--A State Responsibility," Psychiatric Quarterly Supplement, 24:112-18, 1950.
425. Turteltaub, David, "Analysis of Trends in Development of Specialized Treatment Institutions for Care of Emotionally Disturbed Children," (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress, Washington, D. C.: United States Department of Health, Education and Welfare, Bulletin II (Reported January-October, 1952), 1953, Item 14C, pp. 140-41.
426. Ullmann, Charles A., "Identification of Maladjusted School Children--A Comparison of Three Methods of Screening," Public Health Monographs, No. 7, Washington, D. C.: United States Government Printing Office, 1952, 41 pp.
427. _____. "The Socially Maladjusted--A Review of Recent Research in the Areas of Social and Emotional Maladjustment," (In) Samuel A. Kirk (Chairman): "The Education of Exceptional Children," Review of Educational Research, 23, No. 5:431-52, December, 1953.
428. _____. "Teachers, Peers, and Tests as Predictors of Adjustment," Journal of Educational Psychology, 48:257-67, May, 1957.
429. United States Department of Health, Education and Welfare, Evaluation in Mental Health, Public Health Service Publication No. 413, Washington, D. C.: United States Government Printing Office, 1955.
430. Vedder, Clyde, B., The Juvenile Offender, Garden City, N.Y.: Doubleday and Company, Inc., 1953, 576 pp.
431. Von Wiese, Leopold, (In) Sociometry in France and the United States, p. 214, 1949.
432. Wall, William D., Education and Mental Health, UNESCO Problems in Education No. 11, Paris: UNESCO, 1955, 347 pp.
433. Walton, Ralph E., Michigan Evaluation Study of Child Guidance Clinics, Lansing: Michigan Department of Mental Health, Research Section, Study in progress, 1952.
434. Warnath, Charles F., "The Relation of Family Cohesiveness and Adolescent Independence to Social Effectiveness," Marriage and Family Living, 17:346-48, November, 1955.
435. Warter, Jane, "Guidance Through Groups," Review of Educational Research, 21:140-48, 1951.
436. Wattenberg, William W., and Faigenbaum, David, "Patterns in Delinquency," Journal of Clinical Psychology, 9:78-81, 1953.

437. Wender, L., "Dynamics of Group Psychotherapy," Journal of Nervous and Mental Diseases, 84:54-60, 1936.
438. Wickman, E. K., Children's Behavior and Teacher's Attitudes, New York: Commonwealth Fund, 1928.
439. Williams, Herbert D., et al., "Early Discovery and Treatment of Problem Children in Three Schools," (In) Children's Bureau: Research Relating to Children--An Inventory of Studies in Progress, Washington, D. C.: United States Department of Health, Education, and Welfare, Bulletin II (Reported January-October, 1953), 1953, Item 47E, p. 357.
440. Witmer, Helen L., "Judging the Results of the Cambridge-Somerville Youth Study," Smith College Student Social Work, 20, No. 1: 1-15, October, 1949.
441. _____, and Students, "The Later Social Adjustment of Problem Children--A Report of Thirteen Follow-Up Investigations," Smith College Student Social Work, 5:1-98, September, 1935.
442. _____, and Tufts, Edith, The Effectiveness of Delinquency Prevention Programs, Children's Bureau Publication Number 350, Washington, D. C.: United States Department of Health, Education, and Welfare, 1954, pp. 30, 31.
443. Wollan, K. I., "A New Treatment Program for Juvenile Delinquents," Journal of Criminal Law, 31:712-19, 1941.
444. _____. "Application of Group Therapy Principles to Institutional Treatment of Adolescents," International Journal of Group Psychotherapy, 1:356-64, 1951.
445. Woodward, Richard H., and Mangus, A. Raymond, Nervous Traits Among First-Grade Children in Butler County Schools, Columbus: Ohio State University, Department of Rural Economics and Rural Sociology, July, 1949.
446. Woolf, Maurice D., and Woolf, Jeanne A., The Student Personnel Program, New York, McGraw-Hill Book Company, 1953, 416 pp.
447. Wrenn, Gilbert C., and Parker, Clyde A., "Counseling Theory," Encyclopedia of Educational Research, Third edition, 1960, pp. 341-48.
448. Wright, E. Wayne, "A Comparison of Individual and Multiple Counseling in the Dissemination and Interpretation of Test Data," Unpublished doctoral thesis, Berkeley, University of California, 1957.
449. Wylie, Ruth C., The Self Concept--A Critical Survey of Pertinent Research Literature, Lincoln: University of Nebraska Press, 1961, 370 pp.

- 450. Young, Kimball, Personality and Problems of Adjustment, New York: Appleton-Century-Crofts, 1952 (second edition), 716 pp.
- 451. Young, L. L., and Cooper, D. H., "Some Factors Associated with Popularity," Journal of Educational Psychology, 35:513-35, 1944.
- 452. Zelensy, L. D., "The Value of Sociometry to Education," Sociometry, 6:247-48, 1943.
- 453. Znaniecki, Florian, "The Proximate Future of Sociology Controversies in Doctrine and Method," American Journal of Sociology, 50, No. 6:514-21, 1945.

ROOM USE ONLY

APR 15 1965 ~~1965~~ ROOM USE ONLY

~~AUG 1 1965~~

~~AUG 1 1965~~

AUG 11 1970

~~AUG 17 1970~~ 216 3

MICHIGAN STATE UNIV. LIBRARIES



31293010967606