The purpose of this study is to summarize and analyze the reported experimental research on group counseling in higher education between 1955 and 1967. The research is summarized and analyzed in terms of the problems, hypotheses, samples, treatments, measurements, analyses, and results. Thirty-one studies are evaluated. The findings suggest that, in general, the research in group counseling is not disciplined, controlled research. The mixed and conflicting results of the research are indicative of the methods and procedures utilized in the studies. The research neither proves nor disproves the usefulness of group counseling in improving academic achievement, changing attitudes, or modifying personality variables. Other problems found relate to: (1) lack of adherence to the experimental design employed; (2) lack of specifically stated hypotheses or the failure to adhere to the hypotheses in the course of the study; (3) failure to delineate treatments with hypotheses; and (4) failure to use adequate samples and criteria measurements. Recommendations for improvement in future research are also offered.
A Summary and Analysis of
Group Counseling Research In Higher Education

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A Summary and Analysis of
Group Counseling Research In Higher Education

During the past few years, there has been an increased utilization of group counseling in higher education. Between 1955 and 1959, numerous colleges and universities initiated group counseling adjunctively or supplementally (Kirkbride 1959).

Many reasons have been proffered for the increased usage of all types of group work including group counseling. It was reported by Ross and Feder (1960) that many of the problems and the increasing number of students in higher education stimulated interest and study in groups.

Group counseling has also been credited with advantages not found in individual counseling. Some have been enumerated by Spotnitz (1963) such as several persons being assisted at the same time, self-evaluation in view of similar concerns among group numbers, and the facilitation of communication about self. Volsky and Hewer (1960) explained also that the same benefits were the amount of time, the comparison of problems among group members, and facilitation of counselor understanding.

Few reviews of the reported experimental research dealing with group counseling in higher education have been presented in the literature. The reviews of the research on group counseling in educational institutions had negligible relevance for group counseling in higher education. LeMay (1967) reported that the bibliographies did not deal with higher education or reported only a few pertinent studies.

To remedy this dearth of information on group counseling in higher education, LeMay (1967), Hewer (1968) and Gazda and Larson (1968) and Anderson (1969) provided reviews of the research on group counseling. There were, however, some limitations in their methods. The authors neglected to define their terms precisely, to specify their procedures,
to cite the inclusive dates of the reviews, and to analyze critically the studies reported.

It was apparent, therefore, that a summary and analysis of the experimental research on group counseling in higher education could assist the counselor in the Junior College in implementing this approach or conducting research.

Problem

The purpose of this study was to summarize and analyze the reported experimental research on group counseling in higher education between 1955 and 1967. The research was summarized and analyzed in terms of the problems, hypotheses, samples, treatments, measurements, analyses, and results.

Definition of terms

Group Counseling: a process of verbal interaction and discussion of attitudes and feelings among individuals within the normal range of adjustment and a counselor in an attempt to understand and modify feelings and attitudes so they are better able to deal with developmental concerns and problems.

Reported Experimental Research: "An experiment...in which an investigator manipulates and controls one or more independent variables and observes the dependent variable or variables for variation concomitant to the manipulation of the independent variables." (Kerlinger 1967). Research contained in the professional journals, magazines and periodicals between 1955 and 1967.

Methods and Procedures

Thirty-two journals between 1955 and 1967 were search for relevant research. In addition, the bibliography in each report was scrutinized and supplementary references were noted and investigated for other reports. Bibliographies and indices relevant to counseling, group counseling, group dynamics and psychotherapy were also utilized in the review of the litera-
From the two hundred and ten references initially discovered in the search of the literature, thirty-one studies were identified as applicable to this study. Each study was read, summarized, and evaluated on the basis of the following criteria (Kerlinger 1967, 298-303).

1. Were the research questions proposed by the investigators answered in the research study?
2. Were the subjects selected and randomly assigned?
3. Were the experimental treatments randomly assigned to groups?
4. If the subjects were not randomly assigned, were they matched according to criteria relevant to the study?
5. If the subjects were neither randomly assigned nor matched, were the subjects selected from samples from the same population?
6. Was at least one independent variable manipulated?
7. Did the experimental manipulation make a significant difference?
8. Were at least two groups used, one as the experimental and one as the control group?
9. Was the research representative or generalizable.

After the studies were summarized and analyzed, the thirty-one studies were reviewed and the frequency and nature of the following noted: problems, hypotheses, samples, treatments, measurements, analyses, results and the results of the analyses according to the nine criteria employed. The findings are reported below and summarized in tables A and B.

FINDINGS

Problems. The problems investigated in the reported experimental research dealt with three specific areas: academic achievement, attitudes, and personality characteristics. Of the thirty-one studies, fourteen studies investigated the effects of group counseling upon the academic achievement of college students after participation in group counseling. Five studies
concentrated upon the effects of group counseling in producing significant changes in the attitudes of counselees from pre to post-testing. Five other studies were concerned with personality characteristics in group counseling or the effects of group counseling upon certain personality characteristics. The other problems investigated and their frequencies were as follows: the testing of an instrument or the analysis of interaction in three studies, vocational choice in two studies, roles in group counseling in one study and the ability to speak in class in one study.

Of the thirty-one studies, twenty-one employed group counseling versus no counseling. These studies employed either a control group and an experimental group or simply one experimental group. Ten studies, however, used group counseling in comparison with an individual counseling procedure or two different methods of group counseling to determine the differential effects.

Hypotheses. Seventeen of the thirty-one studies included specifically stated hypotheses for testing in the experiment. The remaining fourteen studies did not contain such stated hypotheses.

Sample. The population, the "N" in the thirty-one studies, was thirty or fewer in nine studies, thirty-one to sixty in eight studies, and sixty-one or more in thirteen studies. The population employed ranged from six subjects to three hundred subjects.

In sixteen studies the experimental group consisted of twenty-nine or fewer subjects. Thirteen studies had experimental groups of thirty or more subjects. The experimental groups ranged in size from six to two hundred and thirty-one subjects.

In terms of sex representation in the studies, six studies included males and females and another six studies used males only. Only one study had only females. In the remaining eighteen studies the sex of the participants was not specifically reported.
Undergraduate students were selected for group counseling more frequently than graduate students. Undergraduate students were selected for group counseling in twenty-six studies and graduate students were selected in five studies.

**Treatments.** In terms of a specifically delineated treatment associated with a particular psychological or counseling theory, twenty-one studies did not contain treatments as aligned with such theories. In ten studies the treatment was identified with a specific counseling position: five as client-centered, three as behavioral, and two as eclectic.

The duration of the experimental treatment ranged from a short-term counseling treatment of three hours to a maximum treatment of forty hours. In four studies the treatment was from one to six hours and in thirteen studies the treatment ranged from seven to fifteen hours. In nine studies the treatment was sixteen or more hours in duration. Two studies reported a one-semester treatment and the remaining three studies did not report the length of treatment.

**Measurements.** In measuring the effects of group counseling, twenty-five studies employed pre and post-testing. In the remaining six studies, one investigator used a pre-test only and five others used post-tests only.

In attempting to determine the pre to post-counseling changes or changes within the group counseling process, sixteen of the studies included one criterion as a measure. Six studies employed two criteria and seven used three criteria in evaluation. In one study only were more than three criteria used and in that instance the investigator used six separate criteria to evaluate the effects of group counseling.

A total of thirty-one separate instruments and criteria were employed in these studies. These ranged from personality inventories to semester hours earned to graduation rate. Criteria used two or more times were as follows with the criterion and the number of times used: grade point
average, 13; sundry rating scales, 7; MMPI, 5; withdrawal, 4; sundry questionnaires, 3; Jourard Self-Disclosure Questionnaire, 2; California Psychological Inventory, 2; Stern Activities Index, 2; Bills Inventory of Adjustment, 2; Edwards Personal Preference Schedule, 2; and Survey of Study Habits, 2.

Analysis. Fifteen different types of analyses were employed in the thirty-one reported experimental research studies. Correlation coefficient, analysis of variance, and the 't' test were each used in ten studies. Other methods of analysis used two or more times were: 't' ratio three times, percentages four times, content analysis three times, analysis of covariance two times, and chi square two times.

Results. In terms of the results from the studies, no conclusive results were obtained. In ten studies group counseling was supported. In twelve studies group counseling was not supported. Finally, in nine studies the results were mixed. Thus, the results were conflicting and inconclusive.

1. Were the research questions proposed by the investigators answered in the research study? According to the reported results in twenty-three of the studies the research questions were answered. In five studies the questions were not answered due to the lack of statistical data or inconclusive results. In three studies some of the questions were answered and some were not.

In the research studies in which the research questions were reported—ly answered, numerous difficulties and limitations were noted via the analyses. These problems and the number of times they occurred were as follows: small samples, thirteen; data not included, nine; statistical results unreported, nine; instruments lacked validity and reliability, seven, and differential treatments assumed to be the same or similar, six.
2. Were the subjects randomly selected and randomly assigned?
In terms of random selection and random assignment, both were used conjointly in three studies. Random selection was used in two studies and random assignment was used in four studies. In twenty-six studies the subjects were not randomly selected and in twenty-four studies the subjects were not randomly assigned.

3. Were the experimental treatments randomly assigned to groups?
In none of the thirty-one studies reviewed were the experimental treatments randomly assigned to groups after selection and assignment as an additional randomization technique.

4. If the subjects were not randomly assigned, were they matched according to criteria relevant to the study? Of the thirty-one studies, matching was employed in nine. In the nine studies with matching, one had one criterion, four studies had two criteria, and three studies had three criteria. One study included matching on four criteria. In six of the nine studies employing matching, however, the criteria were not relevant to the study. Scores on instruments used for evaluation, for example, were not used as criteria for matching the subjects prior to the experimental treatment.

5. If the subjects were neither randomly assigned nor matched, were the subjects selected from samples from the same population? Of the thirteen studies which contained neither random assignment nor matching, all of these studies had subjects selected from samples from the same undefined populations.

6. Was at least one independent variable manipulated? In all of the thirty-one studies at least one independent variable was manipulated, group counseling, was manipulated. In nine studies two independent variables, group and individual counseling or two methods of group counseling, were manipulated.
7. Did the experimental manipulation make a significant difference? Significant differences attributable to the experimental manipulation were reported in thirteen studies. In the remaining eighteen studies significant differences were not demonstrated due to the lack of change from pre to post-testing, inconclusive results, or the lack of retorted statistically significant differences.

8. Were at least two groups used, one as the experimental and one as the control group? In five of the studies, only an experimental group was used. In two studies, only two experimental groups were used. Sixteen studies had two experimental groups and one control group. One study had two control groups and one experimental group.

9. Was the research representative or generalizable? Of the thirty-one studies five were representative or generalizable to the populations employed since random selection and random assignment had been employed. Twenty-six studies were not representative or generalizable due to various limitations inherent within the studies. These limitations and the number of times discovered were as follows: self-selected subjects, twenty-five; no random assignment, twenty-two; students motivated for treatment and selected on that basis, nine; matching, nine; and lack of data analysis, fifteen.

CONCLUSIONS

From the two hundred and ten references to group counseling originally chosen, thirty-one studies were selected for inclusion in this study. One hundred and seventy-nine of the references were eliminated since they either did not fulfill the definitions used in the present study or did not contain sufficient information for analyses or review.

Concerning the thirty-one studies included in this study, it is important to note that they were not the original research reports but were the published reports of the experimental research. The original reports
submitted for publication may have been subsequently amended or deleted by the editors or editorial boards prior to publication. Thus, the review and analysis of these studies may not, in fact, have done justice to the original reports.

It is appropriate to note, however, that the published reports of the experimental research are the only accounts of research generally available to the counselor educator or the counseling practitioner. The worker in the field generally must rely upon the published reports for the results of research on counseling. Therefore, if a discrepancy exists between the original report and the published report, then it is mandatory that the editors of professional journals and periodicals ensure that accurate and precise accounts of the original research be published.

The findings of the present study on the basis of the thirty-one reported experimental research studies indicated that, in general, the research was not disciplined-controlled research. The mixed and conflicting results of the research were indicative of the methods and procedures utilized in the studies. The research neither proved nor disproved the usefulness of group counseling in improving academic achievement, changing attitudes, or modifying personality variables.

Numerous limitations and problems were inherent in the studies which prevented the attainment of statistically significant results regarding group counseling. In many of the studies the most salient problem remained a lack of adherence to the experimental design employed. Some of the investigators delineated the problems for investigation and in the course of the studies failed to provide the statistically significant results.

Another problem in the studies was the lack of specifically stated hypotheses or the failure to adhere to the hypotheses in the course of the study. Thus, what was stated in the hypotheses was not always what was presented in the results.
In reference to the hypotheses, the specific treatments were not generally delineated in relation to the hypotheses. The investigators did not attempt to align the treatments with hypotheses which were related to specific psychological or counseling theories. Thus, the research did not generally represent attempts to substantiate definite theoretical positions in counseling.

The samples were, in addition, generally small and consisted of twenty-nine or fewer subjects. In such cases the results required cautious interpretations which could have been prevented through the use of larger samples. Also in reference to the samples, it was evident that the investigators did not utilize relevant selection and assignment procedures. In the majority of the studies neither random selection nor random assignment were employed. Thus, the results were restricted by the initial step in the experimental design.

Another relevant problem in the research was the number of criteria and the types of criteria utilized in evaluating group counseling. More criteria were required than were used and these criteria should have been valid and reliable indices of modification or change in academic achievement, attitude, and personality variables.

In summary, therefore, two general conclusions of this study were suggested by the findings. First, the reported experimental research reviewed and analyzed in this study neither proved nor disproved the efficacy of group counseling. Secondly, the research was not in toto strictly disciplined-controlled research.
RECOMMENDATIONS

In view of the findings of the present study, it is recommended that additional experimental research on group counseling be conducted and include the following elements for an ideal presentation:

1. Experimental designs should be chosen appropriate to the research questions proposed.
2. Specific hypotheses should be stated for testing.
3. Large samples should be utilized in the research.
4. Random selection and random assignment, or, at least, random assignment should be employed.
5. Subjects should be selected from samples from defined and delimited populations.
6. Treatments should be randomly assigned to groups in addition to random assignment of the subjects to groups.
7. The treatment and its duration should be specifically delineated and related to a psychological or counseling theory.
8. Varied criteria with sufficient validity and reliability should be utilized in evaluation of group counseling.
9. Statistical analyses appropriate to the research design should be employed.
10. The statistical significance of the experimental manipulation should be tested.
11. The statistical data and the treatment of the data should be included in the reported experimental research.
12. The efficacy of group counseling has been neither proved nor disproved. Additional disciplined-controlled research is required to determine if this approach is effective.
**TABLE A**

**SUMMARY OF THE REVIEW**

\[ N = 31 \]

<table>
<thead>
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<th>Problems investigated:</th>
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<tr>
<td>Academic achievement</td>
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<td>Attitudes</td>
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<td>Personality characteristics</td>
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<td>Evaluation of an instrument</td>
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<tr>
<td>Vocational choice</td>
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<tr>
<td>Ability to speak in class</td>
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<tr>
<td>Interpersonal skills</td>
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| Group counseling versus no counseling | 21 |
| Group counseling versus individual counseling and/or another group counseling technique | 10 |

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<th>Hypotheses: stated specifically</th>
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<td></td>
<td>N 14</td>
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<tr>
<td>30 or more subjects</td>
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<td>females</td>
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<td>graduate students</td>
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<tr>
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<tr>
<td>Measurements:</td>
<td>Pre- and post-testing</td>
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<td>-----------------------</td>
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<th>MMPI</th>
<th>Withdrawal</th>
<th>Questionnaires</th>
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<th>Analysis of variance</th>
<th>'t' test</th>
<th>not reported</th>
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<th>Group counseling not supported</th>
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<tbody>
<tr>
<td>N</td>
<td>10</td>
<td>12</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>N = 31</td>
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<tr>
<td>---</td>
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<td>-----</td>
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<tr>
<td>1. Were the research questions proposed by the investigators answered?</td>
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<tr>
<td>2. Were the subjects randomly selected and randomly assigned?</td>
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<td>28</td>
<td></td>
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<tr>
<td>3. Were the experimental treatments randomly assigned to groups?</td>
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</tr>
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<td>4. If the subjects were not randomly assigned, were they matched according to criteria relevant to the study?</td>
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<tr>
<td>6. Was at least one independent variable manipulated?</td>
<td>31</td>
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<td>7. Did the experimental manipulation make a significant difference?</td>
<td>13</td>
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<td>8. Were at least two groups used, one as the experimental and one as the control?</td>
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<td>7</td>
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<td>9. Was the research representative or generalizable?</td>
<td>5</td>
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