

CHAPTER III

PROCEDURE

The purpose of this study was to examine the effect of three differing focal points for discussion in group therapy on group cohesion with adult chemically dependent clients in a group therapy session. The types of foci studied were (a) a poem, (b) a poem set to music in the form of a song, and (c) traditional discussion based on a predetermined topic. In addition, there was a no-treatment comparison group which consisted of subjects spending unstructured time together in the common room, a familiar area of the facility available during free time. Collection of the data required completion of the following tasks: (a) formulating the three differing focal points for discussion, (b) obtaining permission from the University of Iowa Human Subjects Committee to conduct research with patients at the University of Iowa Oakdale Chemical Dependency Center, (c) developing an instrument for measuring verbal participation, (d) constructing a sociometric questionnaire for measuring mutual positive attitudes, (e) selecting a group cohesion questionnaire for measuring attraction to the group, (f) testing the validity and reliability of the verbal participation and sociometric measures, (g) training two observers, (h) collecting data on 12 experimental groups, and (i) analyzing and interpreting the data.

The tasks summarized above will be described in the following sections: (a) subjects (selection of the target population), (b) materials (formulation and selection of the measurement devices and accompanying materials), and (c) procedure (collection and analysis of data).

Subjects

Subjects were randomly selected from patient lists of people receiving treatment for chemical dependency at the University of Iowa Oakdale Chemical Dependency Center, a 24-day inpatient treatment center where patients are admitted voluntarily or by court order. Formal permission for subject participation was granted by the University of Iowa Human Subjects Committee and Pat Jensen, the Director of the treatment center. Procedure for subject selection complied with criteria established by the University of Iowa Human Subjects Committee which required the experimenter to present prospective subjects with a brief information summary of the research project (APPENDIX A) and a consent form (APPENDIX B). Subjects were informed that (a) participation was voluntary, (b) they had the option to discontinue participation in the study at any time, (c) participation in the project would not affect any other part of their treatment at the facility, and (4) data would be collected by identifying subjects under an ID number rather than by name to ensure confidentiality.

Seventy-one chemically dependent patients (7 women and 64 men) consented to, and completed participation in the study. The large disparity between the numbers of men and women that participated reflects the average census at the treatment center: a much higher percentage of men than women are admitted. Patients are in treatment at the facility from 21 to 24 days. The mean number of days the subjects had been in treatment was 6.1 days. The subjects, ranging in age from 20 to 45 (mean age of 29.4) were randomly assigned to one of three treatment conditions (poem, song, or discussion) or a control group. Subjects attended their assigned experimental group in addition to receiving the following regularly scheduled therapies at the treatment center: art therapy, music therapy, occupational therapy, recreational therapy, traditional group therapy, patient teaching on chemical abuse issues and one-to-one counseling with a substance abuse counselor. Patients also attend two meetings per week of either Alcoholics Anonymous or Narcotics Anonymous. Table 1 (Page 41) summarizes subject characteristics.

Materials

Focal Points for Group Discussion

Three different treatment conditions were compared: (a) discussion based upon a poem, (b) discussion based upon a song (poem set to music), and (c) traditional discussion based upon prominent themes found within the poetry. Because conditioned responses to

Table 1. Subject Characteristics

Characteristics	Number	Percent
Drug of Choice		
Alcohol	39	54.9
Cocaine	14	19.7
Marijuana	10	14.1
Amphetamines	6	8.5
Heroin	2	2.8
Level of Education		
11th grade or less	26	37.0
High School Graduate	24	33.8
4 or fewer years of College	19	26.8
Post Graduate-College	1	1.4
Did not report	1	1.4
Previous Treatment History		
Treatment at Oakdale	14	19.7
Treatment at another facility	33	46.5
No previous treatment	24	33.8
Previous Music Therapy Sessions at Oakdale		
1-3	53	74.6
4-6	6	8.5
7-9	4	5.6
Unknown	8	11.3

familiar material or different levels of familiarity have been shown to influence response (Lundin, 1967), the poem and music for the song were newly composed by the experimenter specifically for this research project. The topics for the poem were selected by a poet and the experimenter based on poetry, song lyrics, and chants written by chemically dependent clients at the University of Iowa Oakdale Chemical Dependency Center from 1985 through 1988 (lyrics in APPENDIX C). This procedure ensured that the content of the poem was relevant to the research subjects, and complied with a basic tenet of poetry therapy; that poetry content should reflect the emotional state and the problems of the client (Silverman, 1977; Mazza, 1979; Goldstein, 1983; Leedy, 1985). A key element in chemical dependency treatment is to help the patients deal with their despair, while also instilling hope (Mazza, 1979). The lyrics were intended to assist the patient in remembering, and to open lines of communication between therapist and patient or among patients (Gilbert, 1977).

The poem served as the lyrics for the song in the music treatment condition. The musical style of the song was determined from results of a questionnaire (APPENDIX D) administered to approximately 60 Oakdale chemically dependent clients (in pilot testing), asking them to indicate their musical style of preference. Because rock music was the dominant style of preference determined from the questionnaire, the poem was set to music composed in a rock ballad style.

In order to ensure consistent content across the three experimental groups, a panel of three experts (Certified Substance Abuse Counselors with Master's degrees) reviewed the experimenter-composed poem and determined the prominent themes in the content. Consensus of the most prominent themes (past regrets, desperation, personal responsibility, and hope for the future) were used as topics for the traditional discussion treatment of the study.

The poem (spoken by the experimenter) and the song (sung by the experimenter and accompanied by other musicians on electric guitar, electric bass, keyboard, and drums) were recorded on high bias cassette tapes in the University of Iowa School of Music Recording Studio. The poem or song was played during treatment on a Panasonic (Model 6ECPA10542) portable tape player at a comfortable conversational level (approximately 50-60 dB HL). The use of recordings and congruous themes for the three differing focal points for group therapy (poem, song and discussion) ensured content consistency across treatment conditions.

Measurement

Measurement Scales

This study included the measurement of three dependent variables: (a) attraction to the group (an individual's desire to identify with and to be an accepted group member) (b) the number of mutual positive attitudes expressed among group members, and (c) verbal

participation (number of comments and depth of self-disclosures). Because measures of verbal participation used in previous studies lacked clarity and/or were not appropriate for this study (Bonny et al., 1965; Yalom, Houts, Newell, & Rand, 1967; Liberman, 1970; Dies & Hess, 1971; Ribner, 1974; Kirshner et al., 1978; Hoffman, 1981; Froehlich, 1984; Wylie, 1990), provided insufficient information about administration, or reported low reliability coefficients (Prueter & Mezzano, 1973; Coven, 1984; Friedlander et al., 1985), an experimenter-constructed device was used to measure verbal participation. Several writers assume a close connection between risk taking in the form of intimate self-disclosures and cohesiveness in groups (Dies and Hess, 1971; Bednar & Lawlis, 1972; Yalom, 1975; Stokes, 1983). Therefore, the Subject Verbal Participation Rating Scale (APPENDIX E) was developed for coding subject self-disclosures. It consisted of a progressive scale from 1-8 (with 1 being the least and 8 being the most self-disclosing) describing comments representative of different degrees of self-disclosure. This scale was adapted from a coding system developed by Froehlich (1984). Examples of comments typically made by chemically dependent clients (taken from audiotapes of previous music therapy group discussions) were provided at each degree of self-disclosure on the scale to assist the observers in coding comments. A quantitative count for the number of comments made was taken from the number of comments rated.

Because leadership style may have an impact on cohesiveness (Liberman, 1970; Friedlander et al., 1985), the experimenter constructed a

device for recording and coding therapist remarks. This was necessary to determine if leader participation varied from group to group and thus influenced the results of the study. The Therapist Verbal Participation Rating Scale was a similarly devised 7-point scale (with 1 being an open-ended question and 7 being a therapist self-disclosure) accompanied by illustrative examples (from audiotapes of previous music therapy sessions) (APPENDIX F).

Observer Preparation

The experimenter selected two available and interested undergraduate music therapy students to train as observers of verbal participation for the study. The two observers were the same throughout the study. Training consisted of the experimenter explaining how the verbal remarks would be (a) recorded during the group therapy sessions, and (b) coded from audiotapes of the sessions. Trainee observers were told what remarks constituted a verbal comment and, therefore, should be rated from the audiotape following the session. They were also informed of the difference between a solicited and unsolicited comment. A pilot study was initiated to test the effectiveness of the verbal recording and coding system. The observers sat on either side of the therapist, just outside of the therapy group circle, and were each provided with a verbal recording sheet (APPENDIX G). The recording sheet consisted of a circle with seven lines extending from it, one line representing the therapist and six lines representing each

member of the group as they were seated in the circle for group therapy. The observers were instructed to consecutively number the comments as they occurred on the line identified with the subject speaking in the group. The subjects wore tags with numbers which corresponded to the line that represented them on the verbal recording sheet. Therapist comments were also to be consecutively numbered. Following the 45-minute group, the data collectors listened to the tape together, stopping it after each comment (to ensure that both were rating the same comment and crediting the same group member or the therapist). If it was a subject remark, the observers coded the comment "S" or "U" (solicited or unsolicited) and then gave it a number from the Subject Verbal Participation Rating Scale (APPENDIX E) on the comment number and rating sheet (APPENDIX H). If it was a therapist remark, the observers gave it a number from the Therapist Verbal Participation Rating Scale (APPENDIX F) on the rating sheet. Following coding, the observers transferred the data to a data sheet (APPENDIX I) which required them to record the comment ratings by subject or therapist, and both ratings from the observers. This was done so that the number of comments for each subject could be counted and the ratings of the two raters could be easily compared and analyzed.

Several problems were identified from the pilot study. One minor problem was that the observers' positioning in the circle needed to be even with the rest of the circle for clear vision of all the subjects and the therapist. Because of this problem and the fact that the clients

responded spontaneously, the comments were difficult to number and the numbers on the observers' circle recording sheets did not correspond. Secondly, it was questionable what client remarks were, indeed, comments (for example, brief responses such as "yeah"), and how lengthy remarks should be coded (for example, responses that mentioned several degrees of self-disclosure). Thirdly, the two observers' ratings of the comments were not yet in agreement at an acceptable reliability level. In addition, rating the full 45-minute tape from one session proved to be an unrealistic time commitment considering the resources available for this study.

In order to solve some of the observational and recording problems, another pilot test was implemented. The observers moved more closely within the circle for clearer vision. This helped the observers number the comments on the recording sheet more accurately. In the beginning of the sessions subjects were requested to respect each other and speak one at a time. This method of recording and being present during the sessions helped the observers identify who was speaking while listening to the tape. In a few instances, one or the other of the observers could not understand the comment and therefore, could not rate it according to the Subject Verbal Participation Rating Scale. Only those comments which received a rating from the rating scale by both observers were included in the raw count. The overall inter-rater reliability for rating comments as solicited or unsolicited was .91.

To reduce the time demands of coding, only the first 30 minutes of the nine treatment groups (three poem, three song, and three discussion) were coded in future sessions. This method still provided a sufficient sample of client interactions and has been used by several researchers (Yalom, Houts, Newell, & Rand, 1967; Dies and Hess, 1971; Prueter & Mezzano, 1973; Ribner, 1974; Shipley, 1977; Hoffman, 1981; Froehlich, 1984). After pilot testing five therapy groups and making several revisions of the rating scales, the inter-rater reliability reached an acceptable level (.89), and a formalized coding strategy (APPENDIX J), series of rules for coding (APPENDIX K), Therapist Verbal Participation Rating Scale (APPENDIX F), and Subject Verbal Participation Rating Scale (APPENDIX E) were adopted. The inter-rater reliabilities for subject and therapist comments in all the treatment groups are listed in Table 2 (page 50).

The validity of the verbal coding system was established by having a panel of three experts in group therapy (two Certified Substance Abuse Counselors with Master's degrees, and a Ph.D. candidate in rehabilitation psychology with a Master's degree in counseling) determine the relevance of the verbal coding system for chemically dependent clients.

Table 2. Inter-rater Reliabilities for Subject and Therapist Comments in Treatment Groups

Group	Subject Comments	Solicitude/ Unsolicited	Therapist Comments
1	.90	.99	.86
2	.85	.91	.91
3	.89	.89	.90
4	.91	.93	.97
5*	---	---	---
6	.88	.77	.93
7	.95	.95	.99
8	.89	.87	.93
9*	---	---	---
10	.87	.85	.96
11	.88	.93	.95
12*	---	---	---

*Control Groups--No Comment Ratings

Measurement Questionnaires

The number of mutual positive attitudes was measured by a second experimenter-constructed device, a sociometric questionnaire (APPENDIX L). This questionnaire was constructed with reference to Bales (1950) and Moreno (1953) who state that group members should rank all other group members in areas that are relevant to them. In this case, a panel of three substance abuse counselors (two Certified Substance Abuse Counselors with Masters degrees, and a Ph.D. candidate in rehabilitation psychology with a Masters degree in counseling) and

the experimenter agreed that the degree to which the group members liked, trusted, and wanted to spend time with the other members of the group would measure mutual positive attitudes that represent relationship issues, issues particular to the social rehabilitation of recovering chemically dependents as a group. In order to establish the validity of this questionnaire, three experts in chemical dependency examined the questionnaire for its appropriateness and relevance to the research questions.

'Attraction to the group' was measured by the Gross Cohesiveness Scale (Schutz, 1966) (APPENDIX M). This standardized cohesiveness questionnaire has been reported to have a reliability of .75 (Peteroy, 1983), and has been used successfully in several other studies (Gruen, 1965; Yalom & Rand, 1966; Yalom, Houts, Newell, & Rand, 1967; Yalom, Houts, Zimerberg, & Rand, 1967; Shipley, 1977; Kirshner et al., 1978; Hoffman, 1981). The Gross Cohesiveness Scale is a seven-item multiple choice questionnaire with items pertaining to the group members' attraction to the group. Subjects circled an answer (listed from "a" to "e") which indicated the degree to which they agreed or disagreed with each item. Each answer to the questions was given a numerical value from one to five (APPENDIX N), and questionnaires were scored by adding the values of the answers circled.

According to Abeles (1980), responses to music may be affected by one's prior life experiences and musical preferences. Therefore, in order to account for possible subject differences on these variables, all subjects

were asked to complete an experimenter-constructed subject profile questionnaire (See APPENDIX O, P, and Q) following participation in the study. This questionnaire was modeled after Gfeller and Coffman (1992) and requested the following information: age, sex, drug of choice, amount of time spent in treatment, previous treatment history, previous music therapy experience, and poetry and music interests. Each response in the questionnaire was given a weighted value for coding and statistical analysis (APPENDIX R). In addition, the subject profiles of subjects in the song or poem treatment conditions included a seven-point Likert rating scale. Each subject was instructed to indicate the degree to which they liked or disliked the song or poem to determine if their attitude toward the differing focal points for group therapy affected their verbal behavior, attraction to the group, or attitude toward group members.

Procedure

This study consisted of three treatment conditions and a control condition. The three treatment conditions consisted of using three differing focal points for discussion (a poem, a song, and traditional discussion based on predetermined topics) in a 45-minute group therapy session. Because of the lack of research pertaining to the effect of lyric analysis on group cohesion and social interaction in the music therapy literature, the experimenter chose to investigate the use of a song as a focal point for group discussion. A spoken presentation of poetry (also

used as the song lyrics) was chosen as the second type of foci for group discussion to examine differential effects of the lyrics alone (poetry) as opposed to a musical setting of them. The traditional discussion treatment condition was developed as the third treatment condition. This allowed the experimenter to investigate whether using music or poetry as focal points for group discussion resulted in different responses from those that would result from a more traditional group therapy format of discussion. An unstructured informal group acted as a control group in the study to investigate whether any of the treatment groups are more effective in developing group cohesion or encouraging social interaction than no formal therapeutic intervention.

The three treatment conditions and the control group were randomly numbered as: "1"-poem, "2"-song, "3"-discussion, and "4"-control. Twelve experimental groups were randomly assigned to these four conditions; three groups of each of the treatment conditions and three control groups (See Table 3 page 54).

The experimenter sought six subjects for each of the experimental groups because six to eight group members is considered conducive for short term group therapy (Gazda, 1989), and allows for each individual to talk. This group size was also a realistic number for the observers to code data. All but one of the experimental groups had six subjects: one control group had only five subjects because one subject suddenly withdrew when the group started. Each subject participated in only one

Table 3. Organization of Experimental Groups

Condition	Condition Number	Number of Subjects	Group Number
Poem	1	6	4
Poem	1	6	6
Poem	1	6	7
Song	2	6	2
Song	2	6	8
Song	2	6	10
Discussion	3	6	1
Discussion	3	6	3
Discussion	3	6	11
Control	4	5	5
Control	4	6	9
Control	4	6	12

experimental group. The study was conducted over a time period of three months with the experimental groups held at the facility during a free evening time.

Prior to participation in the study, groups of six prospective subjects were randomly selected from the 36 inpatient list at the University of Iowa Oakdale Chemical Dependency Center. Each subject was provided an information summary attached to a consent form (APPENDIX A and B) to follow along as the experimenter read the information to them as a group. Those who chose to sign the consent form and to participate in the study were instructed to meet in either the therapy group room or the common room described above at a

designated time. If all six prospective subjects did not choose to participate, the number of patients needed to complete the group of six was randomly chosen from the remaining patient list at the facility and the process described above was repeated until six patients had consented. The study participants were not informed concerning what experimental group (group therapy or free time) they would be assigned until all six subjects for the group had signed the consent form.

The treatment condition groups of the study were conducted in a group room normally used for traditional group therapy at the treatment center. Prior to subjects entering the area, the room was set up specifically for the study with nine chairs in a circle: six for the subjects, one for the group leader (the experimenter), and two for the trained observers. Positioning of the group leader and the two trained observers in the circle was consistent for all treatment condition groups. A microphone on a microphone stand, adjusted to approximately four feet from the ground, was placed in the center of the group with an audio cassette tape recorder on the floor beside it. For the poem and song treatment conditions, another audio cassette tape player was on the floor in front of the group leader which was used to play the poem or song tape. The control groups for the study were held in the common room at the facility (a familiar lounge area for patients). During all experimental groups, patients other than the subjects participating in the study were not present in the areas being used for the study.

The experimenter was the group leader for all of the treatment groups to control for variance in leadership style. In the beginning of each treatment condition session, the therapist gave a brief introduction explaining that music therapy is using the creative arts to help people express themselves and to reinforce treatment concepts. Subjects were told that participation in the group did not require any artistic skill. However, subjects were encouraged to have a positive attitude, open mind and a willingness to learn; this was a basic group introduction given by the music therapist (the experimenter) in every music therapy group at the treatment facility. Because patients would associate this introduction with the music therapist (who was the music therapist employed at the facility), the introduction was kept consistent even for the discussion group.

Following the introduction in the song and poem treatment conditions, the song lyrics or the poem (depending on the treatment condition) were distributed to the subjects in the group. Subjects were directed to listen to the tape and told that a group discussion would follow. The appropriate tape was then played. Upon completion of the tape, another tape recorder was started to tape the 45-minute group discussion about the song or poem and its relationship to the subjects' lives. During this discussion, the two trained observers each recorded verbal participation on a verbal recording sheet (APPENDIX G) placed on a clipboard. Following the introduction in the traditional discussion treatment condition, the tape recorder was also started to tape the 45-

minute discussion which was initiated by the experimenter asking the group for a definition of "regret". A discussion proceeded about past regrets of the subjects. The other discussion topics of desperation, personal responsibility, and hope were introduced by the experimenter in a similar manner when appropriate.

All treatment groups were tape recorded on to audio cassette using a portable Fisher (Model PH-W405) audio cassette tape recorder with a Panasonic stereo microphone (Model WN-118). The trained observers' method of recording verbal participation during the discussion group was consistent with that used during the other treatment groups. At a later date in time after the treatment sessions, the observers listened to the first 30 minutes of each audiotape together, stopping the tape after each comment to code the comment independently (See APPENDIX J for Coding Strategy and APPENDIX H for Coding Sheet). They used their verbal recording sheet (APPENDIX G) from the sessions to help them determine the speaker of each comment on the tape.

For the control groups, subjects were simply asked to spend time together in the common room of the facility with the trained observers. They were told that it was free time and they could use it as they chose, but they were instructed not to talk to the observers. The observers positioned themselves in the room in a way that they could see all of the subjects. This varied among the control groups depending on where the subjects chose to be in the room. A tape recorder was not used in the

control groups because multiple conversations take place in informal discussions and a tape recorder could not effectively record all verbalizations. Therefore, the comments were not coded by the observers. The trained observers simply used the verbal recording sheet to tally the number of comments for each subject. However, the observers adhered to the same rules for recording verbal comments as were used during the treatment groups (APPENDIX K, Rules for Coding). Because informal verbal discussion is substantially different from an organized discussion (i.e., in discussion, only one person speaks at one time), only limited measures could realistically be compared with the data measured in the three treatment conditions. Specifically, number of verbal comments was not appropriate for comparison to organized discussion.

At the end of each treatment condition group and control group, the sociometric questionnaire, the Gross Cohesiveness Scale, and the appropriate subject profile form (with the Likert rating scales for the song and poem groups) were administered, then collected. Subjects were thanked for their participation in the study. All data and consent forms were stored in a locked area except when the audiotapes were needed by the observers for coding. The audiotapes were erased upon completion of the data analysis to protect subject confidentiality.

Collection of Data

All subjects in the 12 groups of the study completed the Gross Cohesiveness Scale (APPENDIX M) by circling one of the multiple choice answers for each of the seven items. All of the subjects also completed the sociometric questionnaire (APPENDIX L) which required them to list the ID numbers of fellow group members according to the following criteria: (a) the one they most trusted to the one they least trusted, (b) the one they most liked to the one they least liked, and (c) the one they would most like to spend time with to the one they would least like to spend time with.

Subject comments from the first 30 minutes of the 45-minute audiotapes of the nine treatment groups (three poem, three song, and three discussion) were coded by the trained observers using the Subject Verbal Participation Rating Scale (APPENDIX E) and accompanying strategy and rules for coding (APPENDIX J and K). Using the Therapist Verbal Participation Rating Scale (APPENDIX F) the trained observers also coded the first 30 minutes of therapist comments from the 45-minute audiotapes of the three treatment conditions.

In addition to collecting data with self-reports and observing behavior, all subjects participating in the study completed a subject profile questionnaire. This information was later coded numerically for statistical analysis.

Data Analysis

A one-way analysis of variance was used to compare the group means of the scores on the group cohesion measures. Correlation coefficients were determined to examine the strength of the relationships between the various measures of group cohesion. Results of the cohesion measures were also correlated with: (1) the analysis of therapist remarks, (2) the subjects' like or dislike of the song or poetry, and (3) descriptive statistics from the subject profile information.

Methodological Assumptions

In order to use an analysis of variance for statistical analysis of this experimental research, the following methodological assumptions were made:

- (1) Subjects in each subgroup are a random sample from their corresponding populations.
- (2) The populations of the subgroups are normally distributed.
- (3) The variance (or within group differences) within the subgroups are homogeneous.

The violations of assumptions 1, 2, and 3 create little disturbance of the validity of this test if equal numbers are used in the subgroups as is the case with this study in all instances except one.

The generalizability does not extend to other patients who are not chemically dependent or who are being treated for chemical dependency in a facility other than the one where this research was implemented. It

is impossible to account for all of the variables in the treatment facility that have effect on the research.

CHAPTER IV

ANALYSIS OF DATA

The purpose of this study was to investigate the effect of three differing foci for group discussion on group cohesion in a group therapy session with chemically dependent clients. Data from the Gross Cohesiveness Scale, sociometric questionnaire, Subject Verbal Participation Rating Scale, Therapist Verbal Participation Rating Scale, and the subject profiles were subjected to a series of analyses of variance, and post hoc analyses as appropriate. This chapter presents the analysis of the data for each research question.

In order to determine that the group differences were due to differing foci for group discussion, the following variables were investigated: (a) the role of the therapist, and (b) subject characteristics. The trained observers numbered therapist comments as they occurred during the groups and then rated them from the audiotapes using the experimenter-constructed Therapist Verbal Participation Rating Scale (APPENDIX F). The overall inter-rater reliability for this scale was .93 which gives confidence in the interpretation of the results. No significant differences were found in the quality of therapist remarks across treatment conditions.

A subquestion concerning the therapist's role sought to determine if there would be differences in the number of therapist

remarks for the combined treatment conditions. The number of remarks were counted from the verbal rating sheet. No significant differences were found in the number of therapist remarks across treatment conditions.

The group makeup for the combined experimental conditions was determined from data gathered on the Subject Profile Questionnaires (APPENDIX O, P, and Q). Responses on the questionnaire were given a numerical value (APPENDIX R) so that the data could be analyzed statistically. No significant differences were found in the subject profile information across experimental conditions. The data indicated that the groups were equal in all areas covered on the Subject Profile Questionnaire. Data from the Therapist Verbal Participation Rating Scale and the Subject Profile Questionnaires indicate that group differences can not be attributed to the role of the therapist or group makeup.

Research Question One: Will there be differences between the experimental groups concerning attraction to the group as measured by the Gross Cohesiveness Scale?

Analysis of Variance: Differences in Attraction to the Group as Measured by the Gross Cohesiveness Questionnaire for the Combined Treatment Groups

The first research question sought to determine whether there were differences in the subjects' attraction to the group when differing foci for group discussion were used in group therapy sessions with chemically dependent clients. An overall score for the Gross Cohesiveness Scale (APPENDIX M) was determined for each subject by adding the values (from one to five) assigned to the chosen responses for each of the seven questions (See APPENDIX N for scoring of Gross Cohesiveness Scale). Mean values were determined for each treatment condition (See Table 4 for measures of central tendency from the Gross Cohesiveness Scale). The mean values were used to conduct an analysis of variance. Table 5 (page 65) presents the analysis of variance for the differences in group cohesion according to the data collected from the Gross Cohesiveness Scales.

Significant differences ($p=.0064$) were found between the four conditions in regard to data obtained from the average scores of the

Table 4. Measures of Central Tendency for Gross Cohesiveness Scale

Group	Mean	Standard Deviation	Standard Error	Minimum	Maximum
Poetry	30.3889	2.5469	.6003	26.0000	35.0000
Song	29.8889	1.8436	.4345	27.0000	34.0000
Discussion	28.1667	3.3299	.7849	22.0000	33.0000
Control	26.9412	4.3656	1.0588	18.0000	34.0000

Table 5. Analysis of Variance: Differences in Attraction to the Group as Measured by the Gross Cohesiveness Questionnaire

Source	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	F Probability
Between Groups	1.3236E+02	3	4.4121E+00	4.469E+00	.0064*
Within Groups	661.4967	67	9.8731		

* $p < .05$

Gross Cohesiveness Scale. In order to determine the source of the differences identified in the analysis of variance, a multiple range test was conducted. The multiple range test revealed that the poetry and song treatment condition groups were both significantly more cohesive ($p < .05$) than the control groups as measured by the Gross Cohesiveness Scale. In addition, the poetry treatment condition groups were significantly more cohesive ($p < .05$) than the discussion treatment groups.

To further investigate the differences in the experimental groups for specific types of responses within the questionnaire, the mean scores for each question were compared across experimental groups. Table 6 (page 67) presents the measures of central tendency for individual items on the Gross Cohesiveness Scale (See APPENDIX M for specific

questions). An analysis of variance was conducted using the mean scores of the subjects for each of the individual items on the Gross Questionnaire across experimental groups. Table 7 (page 68) presents these data.

Significant differences at the .05 level of confidence were found between the groups on Question #1 (How many of your group members fit what you feel to be the idea of a good member?) and Question #6 (How well do you like the group you are in?). A multiple range test conducted to determine the source of the differences revealed that the poetry and song treatment group members apparently thought their group members were "good members" (Question 1) significantly more than the control group members at the .05 level. The poetry and song treatment group members also "liked their groups" (Question 6) significantly more than the control group members. In addition, the song group members liked their group significantly more than the discussion group members ($p < .05$).

In summary, significant differences were found between the experimental groups concerning attraction to the group as measured by the Gross Cohesiveness Scale. The poetry and song treatment groups found their groups significantly more attractive than the discussion and control groups ($p = .0064$), particularly in thinking their group members were good members and in their liking of the group.

Table 6. Measures of Central Tendency for Individual Items on the Gross Cohesiveness Scale

	Mean	Standard Deviation	Standard Error	Minimum	Maximum
Question 1					
Poetry	4.6111	.6077	.1432	3.0000	5.0000
Song	4.4444	.5113	.1205	4.0000	5.0000
Discussion	4.3333	.8402	.1980	3.0000	5.0000
Control	3.9412	.8269	.2006	2.0000	5.0000
Question 2					
Poetry	4.6111	.6077	.1432	3.0000	5.0000
Song	4.6667	.5941	.1400	3.0000	5.0000
Discussion	4.3889	1.0369	.2444	1.0000	5.0000
Control	4.3529	.9315	.2259	3.0000	5.0000
Question 3					
Poetry	4.3889	.6978	.1645	3.0000	5.0000
Song	4.2222	.4278	.1008	4.0000	5.0000
Discussion	4.0000	.6860	.1617	3.0000	5.0000
Control	3.8235	.7276	.1765	3.0000	5.0000
Question 4					
Poetry	4.2778	.8264	.1948	3.0000	5.0000
Song	4.2778	.7519	.1772	3.0000	5.0000
Discussion	4.1111	.8324	.1962	2.0000	5.0000
Control	3.8824	.9926	.2407	2.0000	5.0000
Question 5					
Poetry	4.1667	1.2485	.2943	1.0000	5.0000
Song	3.8889	.8324	.1962	3.0000	5.0000
Discussion	3.8889	.8324	.1962	3.0000	5.0000
Control	3.5882	1.0037	.2434	2.0000	5.0000
Question 6					
Poetry	4.4444	.6157	.1451	3.0000	5.0000
Song	4.5000	.5145	.1213	4.0000	5.0000
Discussion	4.0000	.9075	.2139	3.0000	5.0000
Control	3.8235	.8090	.1962	3.0000	5.0000
Question 7					
Poetry	3.8889	.9003	.2122	2.0000	5.0000
Song	3.8889	.5830	.1374	3.0000	5.0000
Discussion	3.4444	1.1991	.2826	1.0000	5.0000
Control	3.529	1.0676	.2589	1.0000	5.0000

Table 7. Analysis of Variance: Differences in Mean Scores on Individual Items on the Gross Cohesiveness Scale

Source	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	F Prob.
<u>Question 1</u>					
Between Groups	4.2239E+00	3	1.4080E+00	2.802E+00	.0465*
Within Groups	33.6634	67	.5024		
<u>Question 2</u>					
Between Groups	1.3086E	3	4.3619E-01	6.577E-01	.5810
Within Groups	44.4379	67	.6633		
<u>Question 3</u>					
Between Groups	3.2391E+00	3	1.0797E+00	2.597E+00	.0596
Within Groups	27.8595	67	.4158		
<u>Question 4</u>					
Between Groups	1.8268E+00	3	.0895E-01	8.367E-01	.4785
Within Groups	48.7647	67	.7278		
<u>Question 5</u>					
Between Groups	2.9254E+00	3	9.7513E-01	9.873E-01	.4042
Within Groups	66.1732	67	.9877		
<u>Question 6</u>					
Between Groups	5.8244E+00	3	1.9415E+00	3.673E	.0164*
Within Groups	35.4150	67	.5286		
<u>Question 7</u>					
Between Groups	2.9478E+00	3	9.8260E-01	1.058E+00	.3730
Within Groups	62.2353	67	.9289		

*p < .05

Research Question Two: Will there be differences in the treatment groups concerning the level of self-disclosure according to the ratings of the trained observers?

Analysis of Variance: Differences in the Level of Self-disclosure in the Treatment Condition Groups According to the Ratings of the Trained Observers

The second research question sought to determine the effect of differing focal points for group discussion on the degree of self-disclosure, a desirable aspect of group cohesion. Two trained observers who rated the first 30 minutes of audiotapes from the three treatment conditions, used the Subject Verbal Participation Rating Scale (APPENDIX E) to determine the level of self-disclosure. An average comment rating per subject was calculated for the three treatment groups. Table 8 presents the measures of central tendency for the average comment rating for the combined treatment conditions.

Table 8. Measures of Central Tendency for the Average Comment Rating for the Combined Treatment Groups

Group	Mean	Standard Deviation	Standard Error	Minimum	Maximum
Poetry	5.7088	.8360	.1971	3.8000	7.0000
Song	5.1947	.5568	.1313	3.8571	6.0000
Discussion	5.6675	.5025	.1184	4.5000	6.8750

An analysis of variance was conducted to determine any differences between the average comment ratings (level of self-disclosure) for the three treatment groups. These data are presented in Table 9.

Table 9. Analysis of Variance: Differences in the Level of Self-disclosure in the Treatment Groups

Source	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	F Probability
Between Groups	2.9377E+00	2	1.4689E+00	3.493\$+00	.0379*
Within Groups	21.4448	51	.4205		

*p < .05

Because the average inter-rater reliability coefficient for rating the verbal comments of the combined treatment groups was .89, data concerning the differences in the level of self-disclosure can be interpreted with confidence. The three treatment groups were found to be significantly different in their level of self-disclosure at the .0379 level of confidence. In order to determine the source of the variance, a multiple range test was conducted. This test indicated that the average comment rating of subjects in the poetry and discussion treatment groups was significantly more self-disclosing than the subject comments in the song groups ($p < .05$).

Further analysis was conducted to determine if solicited and unsolicited comments differed in their level of self-disclosure. While differences in the average solicited comment rating for the combined treatment groups was nonsignificant, an analysis of variance indicated that the average unsolicited comment rating for the combined treatment groups was significantly different at the .0085 level of confidence. Table 10 presents these data. A multiple range test revealed that subjects in the poetry and discussion groups made significantly deeper unsolicited comments than those in the song treatment condition ($p < .05$).

Table 10. Analysis of Variance: Differences in the Average Unsolicited Comment Rating of the Combined Treatment Groups

Source	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	F Probability
Between Groups	6.2468E+00	2	3.1234E+00	5.250E+00	.0085*
Within Groups	29.7474	50	.5959		

* $p < .05$

In summary, significant differences were found in the treatment groups concerning the level of self-disclosure according to the ratings of the trained observers. The poetry and discussion groups were significantly more cohesive in reference to the average comment rating.

In addition, the unsolicited comments made in the poetry and discussion groups were also significantly more self-disclosing.

Research Question Three: Will there be differences in the amount of verbal participation for the three treatment groups?

Analysis of Variance: Differences in the Three Treatment Groups Concerning the Amount of Verbal Participation

The third research question investigated the effect of three differing focal points for group discussion on the amount of verbal participation, a desirable aspect of group cohesion. Two trained observers numbered comments as they occurred for the first 30 minutes of verbal participation during all of the 45-minute groups. The comments were recorded on the line of a recording sheet (APPENDIX G) that represented the group member speaking. Later the observers coded the comments as solicited or unsolicited. Only those comments which both observers rated from the Subject Verbal Participation Rating Scale were included in the raw count. The overall inter-rater reliability for rating comments as solicited and unsolicited was .91. Few of the total comments were dropped from the raw count. The total number of comments recorded for each subject by each observer was averaged. The mean number of comments per subject within each treatment condition

was found (See Table 11 for measures of central tendency for the amount of verbal participation in the three treatment groups). Because the nature of organized, formal discussions are different from informal discourse, comparison between treatment groups and the control groups were deemed inappropriate. Therefore, comparisons were made only along the three treatment conditions.

Table 11. Measures of Central Tendency for the Amount of Verbal Participation in the Three Treatment Groups

Group	Mean	Standard Deviation	Standard Error	Minimum	Maximum
Poetry	12.8333	7.6022	1.7919	9.0528	16.6138
Song	19.7778	7.8931	1.8604	15.8526	23.7029
Discussion	16.9444	10.3382	2.4367	11.8034	22.0855

Table 12 (page 74) presents the analysis of variance for the differences in the amount of verbal participation among the treatment conditions.

The differences in these results were not significant at the .05 level. The differences in the average number of solicited versus unsolicited comments per subject in the three treatment groups was also examined. Once again, no significant differences were found.

Table 12. Analysis of Variance: Differences in the Amount of Verbal Participation of the Treatment Conditions

Source	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	F Probability
Between Groups	4.3893E+02	2	2.19464+02	2.901E+00	.0641
Within Groups	3858.5556	51	75.6580		

In summary, no significant differences were found in the overall amount of verbal participation, or in the number of solicited versus unsolicited comments across the three treatment conditions.

Research Question Four: Will there be differences between the experimental groups concerning the group members' mutual positive attitudes as measured by the sociometric questionnaire?

Analysis of Variance: Differences in Members' Mutual Positive Attitudes as Measured by the Sociometric Questionnaire for the Combined Treatment Groups

The fourth research question investigated the effect of three differing foci for group discussion on the number of mutual positive attitudes expressed by the subjects on the sociometric questionnaire

(APPENDIX L). All subjects participating in the study were asked to rank the other members of their group according to the degree they liked, trusted, or wanted to spend time with them. The mean number of concordant pairs for the top two rankings of each of the three sociometric questions was calculated. The measures of central tendency for the average number of mutual positive attitudes expressed on the sociometric questionnaire are presented in Table 13.

Table 13. Measures of Central Tendency for the Average Number of Mutual Positive Attitudes Expressed on the Sociometric Questionnaire

Group	Mean	Standard Deviation	Standard Error	Minimum	Maximum
Poetry	1.2222	1.6997	.4006	.0000	5.0000
Song	1.4444	1.2472	.2940	.0000	4.0000
Discussion	2.1111	1.7786	.4192	.0000	5.0000
Control	2.7059	2.0544	.4983	.0000	6.0000

An analysis of variance was used to test the differences between the groups. Table 14 (page 76) presents the analysis of variance for the differences in mutual positive attitudes expressed on the sociometric questionnaire.

Table 14. Analysis of Variance: Differences in Mutual Positive Attitudes Expressed on the Sociometric Questionnaire

Source	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	F Probability
Between Groups	2.3729E+01	3	7.9096E+00	2.692E+00	.0531
Within Groups	195.8627	67	2.9382		

Differences at the .05 level of confidence were not found between the three treatment groups and the control group. Therefore, no significant differences can be attributed to condition on this measure. However, mean values suggest a trend toward a greater number of concordant pairs in the discussion and control groups.

To further investigate the differences in the experimental groups concerning specific responses for the three sociometric questions, a Chi square test was conducted. No significant differences were found in regard to subjects chosen for a pair based on how well members in each of the treatment conditions liked each other, or would like to spend time with each other. However, the discussion and control groups had more members listed in a mutual pair as the second most trusted member significantly more often than the poetry or song groups. This difference was significant at the .0336 level of confidence.

In summary, while the differences in the number of subjects named in a pair for the second most trusted group member were significant across experimental groups (.0336), this finding was not enough to effect significant differences in the overall mutual positive attitudes. Therefore, no significant differences were found between the experimental groups concerning the group members' mutual positive attitudes as measured by the sociometric questionnaire.

Research Question Five: Will there be significant differences in the degree that subjects liked the differing foci used for group therapy in the poetry and song treatment conditions?

Analysis of Variance: Differences in the Degree that Subjects in the Song and Poetry Groups Liked the Differing Foci

The fifth research question sought to determine if there would be differences in the degree that subjects liked the differing foci used for group therapy in the poetry and song treatment conditions. Likert rating scales appropriate to the differing foci were used for subjects to rate their enjoyment of the poetry (lyrics), music, and the song itself. Generally, subjects in both treatment conditions tended to like the poem (lyrics), rating them above neutral (point #4). (See Table 15 page 78 for measures of central tendency for ratings of the poem/lyrics.)

Table 15. Measures of Central Tendency for Ratings of the Poem/Lyrics

Group	Mean	Standard Deviation	Standard Error	Minimum	Maximum
Poetry	5.5882	1.8048	.4377	1.0000	7.0000
Song	4.8889	2.1663	.5106	1.0000	7.0000

The poetry groups tended to like the lyrics more than the song groups, however, this tendency was not statistically significant. In contrast, there were significant differences within the song treatment condition concerning the subjects' liking of the music and the song as a whole. Table 16 presents the analysis of variance for the differences in the degree that subjects rated the music.

Table 16. Analysis of Variance: Differences in the Average Rating of the Music in the Song Treatment Group

Source	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio F Ratio	F Probability
Between Groups	4.8111E+01	2	2.4056E+01	1.170E+01	.0009*
Within Groups	30.8333	15	2.0556		

*p < .05

The analysis of variance reveals significant differences between the subjects' liking of the music within the three song treatment groups ($p=.0009$). In order to determine the source of the variance, a multiple range test was conducted. This test indicated that Group #8 liked the music significantly more than group #2 or group #10 ($p<.05$).

An analysis of variance was also conducted to determine the differences in the degree subjects liked the song as a whole. The data are presented in Table 17. According to the analysis of variance, there were significant differences in the degree that subjects in the song treatment condition liked the song ($p=.0167$). A multiple range test was conducted to determine the source of the variance. Group #8 and Group #2 liked the song as a whole significantly more than group #10 ($p<.05$).

Table 17. Analysis of Variance: Differences in the Average Rating of the Song in the Song Treatment Group

Source	Sum of Squares	Degrees of Freedom	Mean Squares	F Ratio	F Probability
Between Groups	2.8778E+01	2	1.4389E+01	5.441E+00	.0167*
Within Groups	39.6667	15	2.64444		

* $p < .05$

Research Question Six: Will there be significant correlations between data gathered on the dependent variables?

Pearson Correlation Coefficients: Correlations Between Dependent Variables

The sixth research question examined correlations between data gathered on the dependent variables. The following averages from the dependent variables were examined: (a) comment ratings, (b) Gross Cohesiveness scores, (c) concordant pair scores, (d) number of comments, (e) rating of the music, (f) rating of the poetry (lyrics), and (g) rating of the song. To determine the relationships between the dependent variables (including the subjects' attitudes toward the music or poetry) and overall group cohesion, Pearson correlation coefficients were calculated. Four statistically significant correlations were found: (a) rating of the music with rating of the song ($r=.72$, $p=.001$), (b) rating of the lyrics/poem with rating of the song ($r=.88$, $p=.001$), (c) rating of the lyrics/poem with rating of the music ($r=.47$, $p=.026$), and (d) the number of comments and the number of concordant pairs ($r=.34$, $p=.002$). The correlations found between the lyrics/poem, music, and song did not significantly correlate with any of the cohesion measures. Therefore, these correlations are not relevant to the study of three differing foci used for discussion in group therapy. The significant correlation found between the number of comments and the number of concordant pairs chosen on the sociometric questionnaire ($p=.002$) suggests that when

there was a high level of verbalizations (number of comments), the groups were more cohesive in terms of mutual positive attitudes formed among group members.

In summary, this study compared the effects of three differing foci for discussion in group therapy on the level of group cohesion among chemically dependent clients. The collection of data and the data analyses have been presented. Interpretation of the findings as they relate to the experimenter's conceptualization of group cohesion will appear in the next chapter.

CHAPTER V

SUMMARY AND CONCLUSIONS

This research project was designed to study the effect of a song versus poetry as a focal point in a group therapy session on group cohesion among adult chemically dependent clients. Comparisons of three types of foci for group discussion were made. The foci for group discussion consisted of (a) a poem, (b) a poem set to music in the form of a song, and (c) traditional discussion based on a predetermined topic. In addition, there was a no-treatment comparison group.

A measurable conceptualization of group cohesion was established. Group cohesion was defined as (a) attraction to the group (an individual's desire to identify with and to be an accepted member of the group), (b) the number of mutual positive attitudes expressed among group members, and (c) a high level of verbal participation (number of comments and depth of self-disclosures). The dependent variables were measured by (a) the Gross Cohesiveness Scale, (b) an experimenter-constructed sociometric questionnaire, and (c) an experimenter-constructed verbal rating scale. Data on the Gross Cohesiveness Scale and the sociometric questionnaire were gathered by self-report from the subjects. Two trained observers recorded subject and therapist verbal behavior during the experimental groups and, in addition, later rated the comments from audiotapes of the three treatment groups.

A one-way analysis of variance was used to compare (a) the group means on the group cohesion measures, (b) the quality and quantity of therapist remarks, (c) subject profile information, and (d) subjects' enjoyment of the poem (lyrics), music, and song. Correlation coefficients were calculated to determine the relationships between the dependent variables as well as for the subjects' attitudes toward the poetry (lyrics), music, and song and the overall group cohesion.

According to the data analysis for this study, use of contrasting focal points for discussion had differing effects on group cohesion among adult chemically dependent clients in a group therapy session, depending on which aspect of the conceptualization was being measured. Significant differences in the degree of group cohesion among the four experimental conditions were found in the areas of attraction to the group, degree of self-disclosure, and the degree of self-disclosure of unsolicited comments in particular. The poetry and song treatment condition groups were both significantly more cohesive than the control groups as measured by the Gross Cohesiveness Scale which measured attraction to the group ($p=.0064$). Comments in the poetry and discussion groups were more self-disclosing than those in the song treatment condition ($p=.0379$). No significant differences were found in the areas of mutual positive attitudes expressed, and amount of verbal participation, including number of solicited versus unsolicited comments. There was, however, a significant correlation between the

number of mutual positive attitudes and the number of comments made by subjects ($p=.002$).

Interpretation of Outcomes

Before determining whether differing focal points resulted in various levels of group cohesion, it is important to determine that differences were not due to differences in leadership or group membership. First, the leadership role of the therapist can be considered consistent across groups. No significant differences were found in the number, or the quality of the therapist remarks. This suggests that the therapist's leadership behavior did not bias the results. Moreover, the inter-rater reliability of .93 for the Therapist Verbal Participation Rating Scale suggests that these data were highly reliable. Secondly, analysis of data obtained from the Subject Profile Questionnaires indicated that there were no significant differences in the subject makeup of the groups within or across conditions. Therefore differences between groups can be believed to result from the treatment conditions as opposed to intergroup differences.

Research Question One: Will there be differences between the experimental groups concerning attraction to the group as measured by the Gross Cohesiveness Scale?

Interpreting the results of this study requires the consideration of the experimenter's conceptualization of group cohesion. Because a review of literature regarding group cohesion points up the difficulty of succinctly defining and measuring group cohesion, three aspects of group cohesion were identified and studied, the first aspect being attraction to the group. Because the poetry and song treatment condition groups were both significantly more cohesive as measured by the Gross Cohesiveness Scale ($p=.0064$), it appears that using a song or poem as the focal point for discussion in group therapy with chemically dependent adult clients is a viable method of attracting members to the group.

Data analyses conducted on each individual question of the Gross Cohesiveness Scale indicated that the poetry and song treatment group members thought their group members were "good members" significantly more than the control group members at the .05 level. The poetry and song treatment group members also "liked their groups" significantly more than the control group members ($p<.05$). In addition, the song group members liked their group significantly more than the discussion group members ($p<.05$). It is also interesting to note that according to mean scores, the poetry and song groups found the activities of their groups more attractive than the discussion or control groups. However, this difference was not significant.

In summary, findings from the Gross Cohesiveness Scale support the use of music therapy with chemically dependent clients, a

population which is often resistant to treatment. If music therapy activities contribute to liking of the group, it is possible that such an approach may reduce treatment attrition. This outcome supports prior studies such as Gaston's (1968) who stated that music provides a satisfying experience which draws people together. Perhaps the music does indeed bring people together around a center point for the purpose of engaging in a group activity (Altshuler, 1948; Radocy and Boyle, 1979).

Research Question Two: Will there be differences in the treatment groups concerning the level of self-disclosure according to the ratings of the trained observers?

A second conceptualization of group cohesion studied in the present research was a high level of verbal participation, specifically depth of self-disclosures. While the poetry and song treatment groups were more attracted to their groups as measured by the Gross Cohesiveness Scale ($p=.0064$), comments were significantly more self-disclosing in the poetry and discussion groups ($p=.0379$) than in the song group.

The outcomes are similar to those of other researchers who have studied cohesion in a manner similar to the present study (correlation of Gross Cohesiveness Scores with verbal behaviors). Shipley (1977) found that group cohesion, measured by the Gross Cohesiveness Scale, increased when a creative arts activity was introduced as the

independent variable ($p < .01$). However, like the present study, Shipley (1977) found that content analysis of audiotapes did not highly correlate with the Gross questionnaire. Kellerman (1981) offers an explanation for these contradicting findings. He cautions that a group may become too cohesive. In reference to the present study, the song groups could have been too attracted to their groups (too cohesive) which resulted in subject resistance. The song group had a higher average number of comments per subject than the poetry or discussion groups. While this difference was statistically insignificant, the fact that subjects in the song treatment condition were more verbal may be interpreted as a false sense of togetherness. Kellerman (1981) suggests that the group leader should be aware of this type of resistance and intervene appropriately.

In contrast to the Shipley (1977) study and the present study, Kirshner et al. (1978) found that cohesion measured by the Gross Cohesiveness scale correlated positively ($p < .01$) with a high level of self-disclosure determined from analysis of audiotapes. Similarly, Stokes (1983) found scores on the Gross Scale correlated positively with the Three Factor Group Questionnaire which measured risk taking, value of the group, and attraction of the members to the group.

Results from studies correlating Gross Cohesiveness scores with levels of self-disclosure are inconclusive. It appears that group members may be attracted to their group yet without feeling comfortable enough to take risks and self-disclose. While the above studies all used the Gross Cohesiveness Scale to measure cohesiveness, each study used a

different method to measure self-disclosure. This may explain the varied outcome among these studies.

Other studies examined verbal behavior alone. The Coven (1984) study examined the effectiveness of songs versus lyrics alone in eliciting self-disclosures. Contrary to the present study, she found no significant differences between songs and lyrics in eliciting self-disclosures. As stated above, the present study found comments made in the poetry and discussion groups to be significantly more self-disclosing ($p=.0379$) than comments in the song group. One explanation for this is that lyrics without music (poetry) may facilitate self-disclosure more effectively than a song because there are fewer elements to which subjects can respond (Coven 1984). A song provides an opportunity for clients to defocus or to intellectualize with comments about the song or the music. Apparently, defocusing did not happen as much by simply using the poem as a focal point in the present study.

Research Question Three: Will there be differences in the amount of verbal participation for the three treatment groups?

In regard to defining group cohesion as a high level of verbal participation, the present study also examined the number of comments made in each group. No significant differences were found between the number of verbalizations across treatment conditions. However, raw data indicate that subjects in the song group made more comments than

in the other treatment groups. Coven (1984) found that elements in the lyrics were talked about less than elements in the song. It is possible that more verbalizations were made in the song groups because subjects had more elements to stimulate discussion (the lyrics, music, song, and other sharing).

In contrast, Wylie (1990) examined the number and quality of statements elicited by old songs, antique objects, historical summaries, and general questions. She found that familiar songs elicited significantly fewer statements than presentation of historical summaries or general questions. It is important to note that when comparing these studies to the present research differences may be attributed to the fact that Coven (1984) and Wylie (1990) were studying a different population (elderly people) who have different interactive behaviors than chemically dependent clients ages 20-45. In addition, they were examining one on one interactions as opposed to group therapy behavior.

In the present study, further analysis was conducted to determine if solicited and unsolicited comments differed in their level of self-disclosure. While no significant differences were found in the amount of solicited versus unsolicited comments in the combined treatment groups, the average number of solicited comments per group member in the discussion groups was higher than the poetry and song groups. This suggests that discussion in traditional discussion therapy groups may

require more solicitation than discussions with a poem or a song serving as the focal point for discussion.

It is interesting to note that there was a statistically significant difference in the quality of the unsolicited comments made in the poetry and discussion groups than the unsolicited comments in the song group. The poetry and discussion groups had deeper unsolicited self-disclosures than the song group ($p < .05$). One possible interpretation for this finding is that if a group is cohesive in terms of having a high level of self-disclosures, less solicitation is needed for discussion to occur.

Research Question Four: Will there be differences between the experimental groups concerning the group members' mutual positive attitudes as measured by the sociometric questionnaire?

The last aspect of the experimenter's conceptualization of group cohesion was defined as mutual positive attitudes among group members in terms of trusting, liking, and wanting to spend time with other group members. No significant differences were found across experimental groups. Comparison of this finding with the results from the Gross Cohesiveness Scale implies that mutually positive attitudes toward each other are not a prerequisite for chemically dependent clients to feel attracted to the group, or comfortable self-disclosing.

Other researchers have used sociometric questionnaires to measure group cohesion in music therapy activities. Henderson (1983) found that music therapy activities influenced the number of mutual choices in a positive direction, however this influence was not significant. In contrast, Cassity (1976) found group guitar lessons significantly increased the number of mutual choices among group members ($p < .05$). One explanation for these contradicting results is that the Cassity (1976) study required active music involvement versus the passive music listening and discussion required of subjects in the present study. Perhaps active music involvement contributes more to the development of group cohesion in terms of mutual positive attitudes than passive music listening and discussion, similar to increased cooperation in active participation as measured by Anshel and Kipper (1988).

Research Question Five: Will there be significant differences in the degree that subjects liked the differing foci used for group therapy in the poetry and song treatment conditions?

While the data indicate that the poetry groups tended to like the lyrics more than the song groups, this tendency was not statistically significant. Significant differences were found between song groups in the degree that subjects liked the song ($p = .0167$) and the music ($p = .0009$). However, when individual groups were examined in the 12 group

analyses of all the cohesion measures, no significant correlations could be made. In short, the subjects liking of the song (including lyrics, music, and song as a whole) and the poetry was not highly related to outcomes in cohesion measures.

Research Question Six: Will there be significant correlations between data gathered on the dependent variables?

A significant correlation was found between the number of comments and the number of concordant pairs chosen on the sociometric questionnaire ($r=.34$, $p=.002$). The data suggest that when there was a high level of verbalization (number of comments), the groups were more cohesive in terms of mutual positive attitudes formed among group members. The control group made the most mutual positive attitudes and they also made the most comments. Because the number of verbalizations correlated significantly with the number of concordant pairs chosen on the sociometric questionnaire, perhaps a larger sample might demonstrate significant differences among experimental conditions in the number of verbalizations and mutual positive attitudes. Nonetheless, this correlation implies that the more subjects talked, the more opportunity they had to form mutual positive attitudes.

In summary, outcomes from the study comparing the effects of three differing foci for discussion on group cohesion with chemically

dependent adult clients have been interpreted in terms of the experimenter's conceptualization, cohesion measures, and past research. It is difficult to make generalizations from the studies reported about the effects of music on group cohesion or social interaction. Outcomes are mixed. This study confirms the difficulty of defining and operationalizing group cohesion and social interaction. While a combination of measurements including self-reports and observed behaviors were used, the measures did not correlate significantly.

Application to Clinical Practice

In relation to clinical practice for music therapists, this study supports the use of a song or a poem as the focal point for group discussion in a group therapy session with chemically dependent clients to increase group cohesion in terms of attraction to the group. Findings from the Gross Cohesiveness questionnaire provide useful information for music therapists who are striving to meet the therapeutic goals of (a) increasing attraction to the group, and (b) increasing members' liking of the group. Presenting a song or poetry as focal points for discussion in group therapy could be effective initially to attract members. However, poetry or traditional discussion may be more effective for encouraging self-disclosures because this study implies that those foci elicit more self-disclosures than the use of a song. The unsolicited comments, in particular, made by subjects in the poetry and traditional discussion

groups were deeper self-disclosures than the unsolicited comments in the song group.

Music therapists should consider the level of therapy desired for a particular group (Wheeler, 1983). Perhaps lyric analysis is more or less effective during various stages of therapy. For example, sometimes it is not appropriate for therapists to probe during discussion to elicit self-disclosure due to the level of functioning of the clients or different therapeutic goals for a specific group. Some clients benefit from task oriented supportive therapy while others require more insight oriented, re-educative methods. This study suggests (a) the song intervention was more appropriate for eliciting verbalizations and may be more suitable for supportive levels of therapy, (b) the song or poetry were more effective interventions to attract members to the group, and (c) poetry or discussion were more effective interventions to elicit self-disclosures. Therefore, the type of music therapy intervention chosen should be dependent on the desired therapeutic goal.

The music therapy intervention called lyric analysis is a common intervention in music therapy practice and was used in the present study. Lyric analysis is often used to facilitate self-expression and to increase self-disclosures. Perhaps lyric analysis is not an appropriate activity for meeting the therapeutic goal of increasing self-disclosures. This study suggests that subjects in the song treatment condition had a tendency to make more verbalizations, but their level of self-disclosure was significantly lower than that of the poetry or discussion groups. It is

possible that subjects in the song group did indeed analyze the lyrics rather than use them as a stimulus to make self-disclosures. Apparently subjects in the poetry treatment condition did not analyze the poetry. The presence of music in the song condition may have distracted subjects from therapeutic goals.

Future Research

This study investigated several aspects of group cohesion. While significant differences were found in the areas of attraction to the group and depth of self-disclosure, these measures were not highly correlated. In fact, the only measures that were highly correlated were mutual positive attitudes and number of verbalizations. It may have been possible to determine significant differences or positive correlations more readily with a larger sample size.

This study could be modified in several ways. Questions on the sociometric questionnaire could be changed to correspond with other aspects of the conceptualization. For example, a question which would correspond with investigating self-disclosures might say: List the members in the group with whom you feel comfortable self-disclosing from the most comfortable to the least comfortable. Clients could also be asked to list the members of the group to whom they feel attracted from the most attracted to the least attracted.

A different comparison group might be necessary. The control group in this study was not an appropriate comparison when examining

verbal behavior. Subjects spending unstructured time together have simultaneous discussions and do not function as a formal discussion group. An interesting comparison would be to conduct a similar study and omit providing the poem (lyric sheet) to subjects in the song and poem treatment conditions. Perhaps if the lyrics had not been provided, clients would have responded more personally and comments in the song group would have been deeper self-disclosures. Another modification would be to use a different type of music as a stimulus, or to have clients actively involved in creating, preparing, and performing the music stimulus. In general, replication is needed.

In conclusion, this study suggests the type of foci chosen for group discussion does indeed have an effect on group cohesion. Music therapists should be cautious when evaluating group process, and consider quality as well as quantity of verbal remarks in their observations of social interaction and group cohesion.