

THE EFFECT OF A SONG VERSUS POETRY AS A FOCAL POINT
IN A GROUP THERAPY SESSION ON GROUP COHESION
AMONG ADULT CHEMICALLY DEPENDENT CLIENTS

by

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A thesis submitted in partial fulfillment
of the requirements for the Master of Arts degree
in Music in the Graduate College of
The University of Iowa

August 1992

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CERTIFICATE OF APPROVAL

MASTER'S THESIS

This is to certify that the Master's thesis of

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ACKNOWLEDGMENTS

Completion of this thesis was made possible by the support of many people from beginning to end. Thank you to Dixie Collins for donating time to examine three years of poetry, song lyrics, and chants in order to determine the topics for the poem. Thank you Roger Humes for the suggestions and encouragement toward writing "Listening to my Heart." I also recognize Mark Anderson for sharing his knowledge in library science which helped me review the literature.

Thank you to the University of Iowa Human Subjects Committee for granting me permission to conduct the study at the University of Iowa Chemical Dependency Center. Thank you to the University of Iowa Oakdale Chemical Dependency Center staff for cooperating with me on scheduling the group therapy sessions for the study. In particular, I recognize Patrick Haggerson, Yolanda Cavazos, Barbara O'Rourke, and Alan Zaback who consulted with me as a panel of experts when needed. I also thank the staff in the Activities Therapy Department at the University of Iowa Hospitals and Clinics for their support throughout the study.

I am very grateful to Paul Whitten, the statistician who conducted the statistical analyses for the study. He generously gave his time, knowledge, and encouragement during all phases of the project. I

appreciate his patience and guidance, especially during the testing phase of the verbal rating scales and when interpreting the data analyses.

Thank you Vicki Olivas and Celeste Sinestro, the two trained observers, who put in hours of training while the verbal rating scales were being developed. They were also very helpful and supportive to me throughout the study. I am grateful to the University of Iowa Collegiate Associations Council for awarding me a research grant which allocated funds to pay the trained observers for some of their time.

Thank you, Dr. Gfeller, for believing in my abilities and helping me appreciate and develop them. Thank you for your patience, encouragement, editorial suggestions, and dedication as a professor.

Most of all, thank you to my husband, Bob Clark, who through his unconditional love, has provided me with the time and the emotional support I needed to complete the project.

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CHAPTER I

OVERVIEW OF THE PROBLEM

Purpose of the Study

The purpose of this study was to evaluate the effect of music versus poetry as a focal point for discussion on group cohesion in a group therapy session with chemically dependent adult clients. This included evaluation of (a) attraction to the group, (b) mutual positive attitudes expressed among group members, (c) the number of verbalizations, (d) the depth of self-disclosure, (e) the type of therapist verbal participation, and (f) subject profile information in relation to subject participation. Verbal rating scales were developed for gathering data on subject and therapist verbal participation. The Gross Cohesiveness Scale was used to measure attraction to the group and an experimenter constructed sociometric questionnaire was used to measure mutual positive attitudes.

The Problem

Music has often been described as a catalyst to help man relate to his community and to bring communication to those isolated in mind or body (Alvin, 1966; Alvin, 1978). It has also been advocated extensively as a therapeutic medium to increase social interaction. In fact, as many as thirty-seven percent of the articles in Volumes 1-21 (1964-1984) of the *Journal of Music Therapy* refer to the socialization

function of music (Gfeller, 1987). According to Gaston (1968), music enhances social situations by promoting verbal as well as nonverbal interaction and provides a satisfying experience which draws individuals together:

Most social occasions are accompanied by music, which generally increases sociability. With music in the background, many individuals find it easier to talk with others. In psychotherapy, patients often talk more freely in the presence of music. They may express in music or through musical preferences feelings not otherwise expressible. (Gaston, 1968, p. 43)

By stimulating thoughts and feelings, the use of music in therapy aims at developing communication and building therapeutic relationships based on trust (Gaston, 1968; Cooke, 1969; Mason, 1978; Summer, 1981; Bailey, 1984). Froehlich (1984) states that trust is easily formed when the patient associates the music therapist with the medium of music.

Several authors have described the socialization function of music as a vehicle which brings people together around a center point for the purpose of engaging in activities which require group cooperation, interaction, and coordination (Altshuler, 1948; Radocy and Boyle, 1979). In music therapy, emotionally isolated patients experience contact and sharing with others. Through music, patients are provided the opportunity to develop a feeling of relatedness (Cody, 1965; Stephens, 1983).

Several writers have offered explanations concerning how music promotes social interaction. Perhaps the most common of these

explanations are the beliefs that music breaks down defense barriers and relieves tension. According to these hypotheses, this breakdown creates a nonthreatening atmosphere in which patients may feel free to express themselves (Bonny, Cistrunk, Makuch, Stevens, & Tally, 1965; Alvin, 1966; Gaston, 1968; Cooke, 1969; Hadsell, 1974; Mazza, 1979; Plach, 1980; Froehlich, 1984; Mazza & Price, 1985). Music has been described as an emotional expression and as a harmless language which can evade defenses and reach the unconscious (Noy, 1967; Radocy & Boyle, 1979). Through music, a socially acceptable means of self-expression is provided (Gaston, 1968). It appears, then, that the application of music to group therapy creates a permissive atmosphere which increases group interaction and brings to the surface feelings and issues patients may have avoided in traditional therapy groups (Bonny et al., 1965; Gilbert, 1977). A particular advantage of music therapy, according to Plach (1980), is that the group leader's ability to effect positive changes is facilitated by a means other than his dialogue and body language (Bright, 1981). The music helps to focus the patient's attention (Pickerell, Metzger, Wilde, Broadkent, & Edwards, 1954; Stratton & Zalanowski, 1984).

Despite the fact that the socialization function of music seems to be a basic tenet of music therapy, literature which measures or evaluates music's effect on interaction is remarkably scarce. For some music therapists, the above explanations adequately describe music's value as a tool for facilitating verbalization and expression of emotions (Ficken,

1976; Gilbert, 1977; Berger, 1978; Froehlich, 1984; Freed, 1987). However, Feder & Feder (1981) criticize such assumptions stating that music's function as a stimulus for socialization is an idea based on intuitive assumption rather than a concept supported by research data. In fact, a content analysis of the *Journal of Music Therapy* reveals that most of the literature pertaining to the socialization function of music has been reported through case studies or program descriptions rather than data-based studies (Gfeller, 1987).

In order to more effectively support or demonstrate music's impact on social interaction, research with findings derived from empirical studies is needed (Feder & Feder, 1981). Empirical investigation of the socialization function of music presents a challenging task for the researcher in music therapy, in part, because social interaction is so difficult to define. Further, because social interaction is a broad area of study, it is generally necessary to identify particular aspects for investigation.

Group cohesiveness is one particular aspect of social interaction that is often considered desirable in group therapy interventions (Corey & Corey, 1987). Results from two studies (Lieberman, Yalom, & Miles, 1973; Yalom, Houts, Zimerberg, & Rand, 1967) indicate that group cohesion is a powerful determinant of positive therapeutic outcomes. Is it possible to assume that music not only facilitates social interaction in general, but more specifically, contributes to the cohesiveness within a group? In order to test that assumption, this research project was designed to study empirically the effect of music on social interaction

and group cohesion. 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) mutual positive attitudes expressed among group members, and (c) high level of verbal group participation (number of comments and depth of self-disclosures).

Research Questions

1. Will there be differences between the experimental groups concerning attraction to the group as measured by the Gross Cohesiveness Scale?
2. Will there be differences in the treatment groups concerning the level of self-disclosure according to the ratings of the trained observers?
3. Will there be differences in the amount of verbal participation for the three treatment groups?
4. Will there be differences between the experimental groups concerning the group members' mutual positive attitudes as measured by the sociometric questionnaire?
5. 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?
6. Will there be significant correlations between data gathered on the dependent variables?

Importance of the Study

The importance of this study is justified by (a) the paucity of substantiated evidence that music therapy increases social interaction, (b) the limited data concerning the effects of music on group cohesion, (c) the desirability of group cohesion in group therapy, and (d) the nationally recognized problem of chemical dependency and the need to identify effective treatment methods and alternatives.

Assumptions

1. The subjects in this study have been correctly diagnosed as chemically dependent.
2. The therapeutic interventions used in the study are typical of those used in traditional group discussion and music therapy sessions with chemically dependent clients.
3. The variables of attraction to group, mutual positive regard among group members, and high levels of verbal participation and self-disclosure are appropriate indications of group cohesion.

Limitations of the Study

Results of this study cannot be generalized to chemically dependent people beyond the following characteristics: (a) age 20 to 45, (b) participants in an inpatient facility for chemical dependency, and (c) users of alcohol, cocaine, marijuana, amphetamines, barbituates, heroin, and hallucinogens. Generalization is also limited because it is difficult to determine how one treatment intervention would effect extended

treatment. It is impossible to account for all the variables in the treatment facility, and their possible effect on research outcome.

Definitions

Chemical dependency: the use of any intoxicating substance (alcohol or drugs) on a daily basis with an inability to cut down or stop using it completely for at least a period of one month (American Psychiatric Association (APA), 1980).

Group cohesion: (1) mutual positive attitudes expressed among group members, (2) attraction to the group (an individual's desire to identify with and to be an accepted group member), and (3) a high level of verbal participation (number of comments and depth of self-disclosures) (Lott & Lott, 1961; Evans & Jarvis, 1980; Corey & Corey, 1987).

Mutual positive attitudes: (1) Subjects who listed each other (concordant pairs) for the first choice, second choice, or both in the areas of liking, trusting, or wanting to spend time with each other on the sociometric questionnaire (Moreno, 1953).

CHAPTER II

REVIEW OF LITERATURE

Little direct study of the use of music specifically toward improving interactions among the chemically dependent currently exists. However, extant research concerning a variety of foci are relevant to this study. Therefore, the review of related literature will cover the following topics: (a) characteristics of chemically dependent clients, (b) definitions of group cohesion, (c) measures of group cohesion, (d) evaluation of cohesion measures, and (e) empirical outcomes of group cohesion studies.

Characteristics of the Chemically Dependent

Chemical dependency is the use of any intoxicating substance (alcohol or drugs) on a daily basis with an inability to cut down or to stop using the substance completely for at least a period of one month (American Psychiatric Association (APA), 1980). Chemically dependent clients are filled with regret and guilt due to this loss of control (Kinney & Leaton, 1978). According to Kinney and Leaton (1978), this loss of control is accompanied by the inability to predict with accuracy what will happen when the drug is used. A breakdown of their value systems causes patterns of deceit to develop. Some clients resort to crime in order to support their habit. Unfortunately, through denial and

rationalization, the substance abuser is unaware of what is happening (Johnson, 1973). Chemically dependent people truly believe the reality of their own projections and rationalizations. This causes family, occupational, and social relationships to deteriorate as disagreements arise over whose version of reality is accurate (Kinney & Leaton, 1978). Despite the resulting impairment in social, physical, or occupational functioning, substance abusers will continue to use their drug of choice (APA, 1980). A sense of powerlessness results as denial of the symptoms of chemical dependency escalate (Johnson, 1973).

In order to avoid the pain of reality, immediate gratification is sought through a drug-induced euphoria. Consistent and prolonged drug abuse builds tolerance, thus diminishing the degree of euphoria experienced. Feelings of depression, frustration, confusion, and/or anger result (Johnson, 1973; APA, 1980). This self-defeating behavior and denial or suppression of feelings stunts personal growth and promotes a negative as well as a rigid thinking pattern. The results are a negative self-image, deterioration in ability to communicate, and a lack of trust in interpersonal relationships. Due to alienation from significant others and isolation from social contacts, feelings of loneliness are inevitable. These characteristics may be accompanied by a sense of hopelessness regarding the future (Kinney & Leaton, 1978).

It is often necessary for chemically dependent people to seek treatment in order to break the vicious cycle of behaviors which is sabotaging the quality of their lives. Treatment often involves group

therapy. It is generally believed that chemically dependent clients in treatment benefit from therapy groups which offer support, acceptance, honest sharing, risk taking, cooperation, and the opportunity for group participation, all of these are aspects associated with group cohesion and considered desirable for group therapy in general (Yalom, 1975; Kellerman, 1981; Stokes, 1983; Corey, 1985; Beeber & Schmitt, 1986; Corey & Corey, 1987).

Music therapy is one form of group therapy which several authors have advocated as an adjunctive therapy in the treatment of chemical dependency (Gaston & Eagle, 1970; Miller, 1970; Brooks, 1973; Peterson, 1973; Van Stone, 1973; Dougherty, 1984; James, 1986; Freed, 1987; James, 1988). Unfortunately, most of the advocations were reported as case studies or program descriptions. Gaston and Eagle (1970) and James (1986) were the only writers who reported empirical research concerning music therapy with the chemically dependent. However, these studies did not concern the effect of music therapy on group cohesion or social interaction, but rather the function of music in LSD therapy (Gaston & Eagle, 1970) and the use of a self-monitoring scale as an assessment tool in music therapy sessions (James, 1986). While methodological papers have advocated the use of music therapy for this treatment population, the fact remains that a review of literature reveals very few studies pertaining to the socialization effects of music. Therefore, this area of study is ripe for further research: especially in the area of chemical dependency.

Empirical investigation of the socialization function of music presents a challenging task for the researcher, in part, because social interaction is so difficult to define. Further, because social interaction is a broad area of study, it is generally necessary to identify particular aspects for investigation. Group cohesiveness is one particular aspect of social interaction that is often considered desirable in group therapy interventions (Corey & Corey, 1987). Results from two studies (Yalom, Houts, Zimerberg & Rand, 1967; Lieberman et al., 1973) indicate that group cohesion is a powerful determinant of positive therapeutic outcomes. While cohesion is commonly referred to in group therapy literature as a critical variable in determining positive therapeutic outcomes, it does not have a universal definition. The following section will discuss some of the definitions of group cohesion found in the review of literature.

Definitions of Group Cohesion

Group cohesion has been defined by researchers in several ways but with some measure of agreement. Festinger, Schachter, and Back (1950), pioneers in the study of cohesion, defined it as the sum of the forces which causes a member to stay in a group. Frank (1957) defined cohesiveness as the degree that members sense they belong to a group, or the attractiveness of a group for its members. The above definitions were supplemented by Evans and Jarvis (1980) when they defined 'attraction-to-group' as an individual's desire to identify with and to be

an accepted member of the group. Yet another dimension was added by Lott and Lott (1961) when they defined cohesion as that group property which is inferred from the number and strength of mutual positive attitudes among group members. They did not, however, define 'positive attitudes'.

Different definitions have been used by other investigators. Corey and Corey (1987) chose to define cohesiveness as a feeling of togetherness or community that group members may experience. They viewed cohesion as providing incentives for members to remain in the group resulting from relatedness among its members. Regular attendance was included in the definition of Spiegel and Yalom (1978). Kellerman (1981) described cohesion in terms of a psychological state which enables a group of people to experience a unity of feelings and purpose in order to work in harmony toward a common goal. Today, perhaps one of the most widely quoted definitions stems from the research of Yalom (1975) who combined two of the previous definitions: the attraction group members have for their group and for each other, and the resultant forces which act on members to stay in a group.

Despite the fact that definitions of cohesion vary among researchers, common characteristics are attributed to groups identified as 'cohesive'. For example, because a cohesive group works at developing unifying relationships, members choose to communicate and to make themselves known to others by reciprocating self-disclosures. The result is an accepting, supportive, and caring atmosphere in which members

are allowed to share painful experiences while working together toward a common goal of meaningful group work (Yalom, 1975; Kellerman, 1981; Beeber & Schmitt, 1986; Corey & Corey, 1987). Honest sharing, risk taking, and giving and receiving feedback are viewed as products of group cohesion (Stokes, 1983; Corey, 1985). Members must perceive a group as a means to help them achieve their personal goals if the group is to be cohesive (Stokes, 1983; Corey & Corey, 1987).

In a cohesive group, patients can work out conflicts as long as the standard exists that the antagonists must continue to communicate regardless of how angry they become with each other (Frank, 1957). In fact, expression of hostility may be a sign of cohesiveness. Because members of a cohesive group care about the growth of each other, they are willing to allow hostility to surface, and to bear the discomfort of working it through (Bennis & Shepard, 1956; Yalom, 1975). On the other hand, Kellerman (1981) cautions that a group may become too cohesive. The enjoyable sense of togetherness the members may be experiencing could be resistance. In this situation the group will avoid confrontation when it is needed and therefore, the growth of the group becomes paralyzed (Kellerman, 1981; Corey, 1985; Beeber & Schmitt, 1986). According to Kellerman (1981), it is the responsibility of the group leader to risk a possible attack from the members and to change the situation from one of group paralysis to confrontation, enabling valuable group work to continue.

In summary, a high level of group participation, communication, cooperation, and strong influenciability of the members are products of group cohesion which may be considered intervening therapy outcomes (Yalom, 1975; Beeber & Schmitt, 1986). Unfortunately, research supporting these factors attributed to group cohesion in a therapeutic context suffers from several problems: (a) Research of cohesiveness in a therapeutic context is relatively sparse, (b) aspects associated with cohesiveness have been investigated but researchers have not always provided clear definitions for what they were measuring, and (c) researchers have found it difficult to select valid, reliable measurement devices which clearly represent their assigned definition of group cohesion. The following section will review common methods for measuring cohesion.

Measures of Cohesion

Because cohesion lacks a universally acceptable definition, assessment is often determined in relation to the researcher's interpretation. The measurement instrument employed ideally depends on the precise definition of cohesion used by the experimenter (Yalom, 1975). In addition, the attitude of the researcher concerning valid measurement influences the selection process.

Instruments used to measure cohesion fall into two general categories: self-reports and observed behaviors. Self-report measures require the subjects themselves to provide the data, but measurements

of observed behaviors are recorded by independent observers. Self-reports commonly take the form of (a) questionnaires, (b) Likert rating scales, (c) sociograms, and (d) semantic differential scales. Less common measurements take the form of structured games which are presented to group members.

Self-Report Measures

Cohesiveness questionnaires used for self-report measures include four to twelve questions usually answered on a five to seven point defined scale. They measure to what degree group members feel (a) included in the group, (b) attracted to the group or individual members, and (c) productive and satisfied with group work. Different investigators have used various questionnaires. Unspecified questionnaires were used by Dies and Hess (1971) and Ribner (1974) in their studies of group cohesion. Lieberman et al. (1973) developed a questionnaire which was also used by Bugen (1977). A popular questionnaire is the Gruen Cohesiveness Questionnaire applied by Gruen (1965), Kirshner, Dies & Brown (1978) and Hoffman (1981). Perhaps the most frequently used questionnaire in the study of group cohesion is the Gross Cohesiveness Scale (Schutz, 1966), later modified by Yalom and Rand (1966), which has a reported reliability of .75 (Peteroy, 1983). It has been administered by a number of researchers (Gruen, 1965; Yalom & Rand, 1966; Yalom, Houts, Newell & Rand, 1967; Yalom, Houts, Zimerberg & Rand, 1967; Shipley, 1977; Kirshner et al., 1978; Hoffman, 1981; Peteroy,

1983; Stokes, 1983; Friedlander, Thibodeau, Nichols, Tucker & Snyder, 1985). The Gross Questionnaire was the only questionnaire of those previously noted that reported reliability.

Another type of cohesiveness questionnaire is the Comfortable Interpersonal Distance Scale (Duke & Nowicki, 1972), reported to have a .86 reliability coefficient. This measure consists of a diagram with several calibrated lines extending from a central point. Group members are asked to imagine themselves as the center of the diagram and each other group member as a line protruding from it. Subjects are to indicate on the lines how close they would allow each member to advance toward them. This measure was used by Kirshner et al. (1978) and Hoffman (1981).

Questionnaires which measure the level of trust within the group and the willingness of group members to self-disclose have also been used to determine group cohesiveness. Flowers, Booraem & Hartman (1981) simply instructed group members to list the names of the members they trusted and those they distrusted. Kirshner et al. (1978) constructed a 38-item Willingness-to-Disclose questionnaire from Taylor and Altman's (1966) compilation of statements rated for levels of intimacy across categories ($r=.82 - .86$). The Willingness-to-Disclose score was the sum of the intimacy values for the 38 items. A similar 40-item self-report survey, the Resnick self-disclosure questionnaire, was administered by Ribner (1974). No reliability coefficient was reported for this instrument.

Likert rating scales usually range from seven to nine points between strongly dislike and strongly like, or strongly agree and strongly disagree. Experimenters have used these scales to measure (a) how each group member feels about every other member in the group or the group as a whole (attraction), (b) the extent to which a group member feels other members understand him (understanding), (c) the degree to which a group member feels he is an important part of the group (belongingness), (d) mutual attitudes or opinions, (e) satisfaction with the group, (f) degree of risk taking, and (g) value of the group (Lott & Lott, 1961; Gruen, 1965; Dies & Hess, 1971; Ribner, 1974; Falloon, 1981; Flowers et al., 1981; Hoffman, 1981; Stokes, 1983). The reliabilities of these rating scales in this context were not reported. However, Lott and Lott (1961) reported a concurrent validity correlation of .74 between their Group Cohesiveness Index and another investigator-designed measure.

Sociometric questionnaires have been used to determine the feelings members of a group have toward one another in respect to the same criterion (Moreno, 1953). For example, members may be asked to rank the other members of the group according to their personal preferences. From this ranking, researchers construct sociograms which indicate the number of mutual choices, one-way choices and rejections (Lieberman, 1970; Lieberman et al., 1973; Cassity, 1976; Henderson, 1983). Cassity (1976) reported an internal reliability coefficient of .83 for his self-constructed sociometric questionnaire.

A few researchers have used semantic differential scales to measure affective responses as an indication of group cohesiveness. Dies and Hess (1971) requested group members to rate the group as a whole and each member on a seven point scale between eighteen bipolar adjectives. No reliability coefficient was given for this instrument. A similar measure called the Giffin-Trust-Differential questionnaire (reliability coefficients ranging from .75 to .93) was used by Anshel and Kipper (1988) to measure trust.

The Prisoner's Dilemma game is a standardized game designed to measure particular aspects of group cohesion. It has been used to measure the level of cooperation and competition among group members (Anshel & Kipper, 1988) and interpersonal trust (Dies & Hess, 1971). No reliability, however, was reported for this measure in either study.

There are certain advantages for using self-report methods of measuring group cohesion. One particular advantage common to the first four of the self-report measures previously noted is that they can be quickly and easily administered. All of the self-report instruments discussed work well as a pretest-posttest instrument to record the development of group cohesion because change can be noted over time. A comparison of sociograms constructed in a pretest-posttest fashion can offer a graphic picture of changes in the attractiveness group members have for one another, as well as for the group as a whole (Moreno, 1953). Sociograms may also graphically reveal changes in how group members

perceive each other and the group, depending on the information inquired from the sociometric questionnaire. A benefit specific to using the semantic differential form of measurement is that it measures the affective responses of the subjects. Responses to questionnaires, Likert rating scales and semantic differential scales are given a numerical value which allows them to be scored readily and objectively.

While scoring self-report instruments may be done objectively, a major limitation is that there is no guarantee that the test, itself, measures objective responses. Self-report measures must rely on the honest responses of the subjects which are most likely obtained if the test is administered during the situation for which it applies: group therapy (Moreno, 1953). Unfortunately, a break in group work to administer the measurement device is very disruptive so the tests are usually given immediately following the therapy session. This alone decreases spontaneity. Further, it increases the chance that subjects will not respond honestly, perhaps in an attempt to please the experimenter.

According to Bednar and Lawlis (1972), self-reports are limited because most of them reflect limited content domains and have demonstrated questionable reliability and validity correlations. Another factor decreasing the validity of self-report measurements is that the same instrument has been administered in numerous studies with differing conceptualizations of group cohesion (Bednar & Lawlis, 1972). For example, the Peteroy (1983) study applied the Gross Cohesiveness questionnaire to measure the attractiveness of members to the therapy

group as a whole and to each other, but Hoffman (1981) used the same questionnaire to measure other factors in addition: such as group stability and quasi-behavior. Testing and retesting are needed to validate self-report measures, particularly the semantic differential, because it was applied in only two of the studies reviewed.

Another limitation of self-reports is the reliance on a particular level of functional behavior. The applicability of self-report measures is restricted to clients with the developmental and intellectual level of functioning required to complete the tests. In an attempt to lower the required level of functioning, Cassity (1978) suggested using pictures for trainable mentally retarded clients to identify with whom they would most like to attend an outing. Even so, one can not be certain to what degree the clients would fully understand the question. Basically, self-reports need modification in order to accommodate lower functioning populations. In this particular study, the trained observers read the self-report questionnaires to the subjects who had reading problems, and helped them indicate their desired responses.

Even though reliability and validity have been established for some methods, selection of one single measure is inadvisable. The use of multiple measures provides greater reliability and validity in measuring group cohesion (Lott & Lott, 1961; Gruen, 1965; Dies & Hess, 1971; Ribner, 1974; Kirshner et al., 1978; Hoffman, 1981). While one measure may be insensitive to particular outcomes, another measure might address these outcomes effectively, especially when complex

human behavior such as social interaction is being evaluated. Therefore, two self-report measures were administered to subjects in this study: (a) the Gross Cohesiveness Scale with a reported reliability of .75 was used to measure attraction to the group, and (b) an experimenter-constructed sociometric questionnaire with questions relevant to chemically dependent clients was used to measure mutual positive attitudes expressed among group members. The Gross questionnaire was chosen because of its relatively high reported reliability and the questions reflected one of the experimenter's conceptualizations of group cohesion: attraction to the group (an individual's desire to identify with and to be an accepted group member). The sociometric questionnaire with questions agreed upon by a panel of experts, reflected another one of the experimenter's conceptualization of group cohesion: mutual positive attitudes expressed among group members.

Observed Behaviors

Because several limitations with self-report measures of group cohesion exist, some studies have included or relied exclusively upon the measurement of observed behaviors associated with cohesion to increase reliability and validity of measures. Observed behaviors which have been measured include the following: (a) attendance-to-the-speaker, (b) measuring physical distance amongst members, (c) tallying and/or coding verbal remarks, and (d) recording attendance and dropout rate. A number of investigators have reported reliability coefficients on

these measures. On-sight trained observers have: recorded attendance-to-the-speaker (Flowers et al., 1981 with a mean reliability of .86), measured physical distance amongst members (Shipley, 1977 with a reliability of .98) and tallied and/or coded verbal remarks (Lott & Lott, 1961; Traub, 1969; Goolsby, Frary, & Rogers, 1974; Shipley, 1977). Shipley (1977) found mean reliability coefficients of .97 for discussion remarks, .87 for feedback and .94 for other verbalizations. Inter-rater reliability was recorded at .85 for recording length, quality and number of verbal responses in the Goolsby et al. (1974) study. The method of recording was omitted from the Traub (1969) study.

Several researchers have reviewed audiotapes to analyze verbal responses. Verbalizations have been coded in a variety of ways, depending on what the researcher thought were characteristic responses of cohesive groups. Friedlander et al. (1985) examined verbal ties (semantic cohesion) between all comments made in groups. A reliability of .75 was reported for the Categories of Semantic Cohesion Analysis. Standardized coding systems used to identify content include the Hill Interaction Matrix (Hill, 1965) with a reliability of .80 (Yalom, Houts, Newell, & Rand, 1967), and the *Bales Interaction Process Analysis* code (Bales, 1950) with a mean reliability of .81 (Bonny et al., 1965; Liberman, 1970). The Mills' Sign Process Analysis Code (Mills, 1964) with a mean reliability of .94 was applied by Liberman (1970) for measuring positive, negative and neutral affective statements. Liberman (1970) also coded the type of therapeutic intervention made

($r = .82$) as well as general content ($r = .83$) of subject responses. Stratton and Zalanowski (1984) simply recorded from audiotapes the number of statements made.

In addition to the study of verbal participation in group situations, some investigators have analyzed audiotapes of verbal behavior in one-to-one situations. Prueter and Mezzano (1973) designed Categories for the Analysis of Interaction in Counseling (no reliability given) to tally verbal remarks and code affective interactions. Froehlich (1984) also developed her own system of coding content from audiotapes of individual sessions, and it was demonstrated reliable at the .95 level. Coven (1984) tape recorded individual sessions with elderly widows and simply recorded raw data on the amount of time subjects spent talking about topics being investigated. No inter-rater reliability was provided for this study. A similar study was conducted by Wylie (1990) who counted various types of reminiscence statements. Interjudge reliability ranged from .83 to .94.

Likert rating scales, which observers score from audiotapes, have been used to measure the intensity of verbal responses. Three aspects of disclosure were identified and rated in the Ribner (1974) study including intimacy ($r = .91$), frequency ($r = .89$) and depth ($r = .99$). The Dies Tape Rating Scale with reported reliabilities of .80 and .91 has been used by several researchers to measure the degree of self-disclosures (Dies & Hess, 1971; Kirshner et al., 1978; Hoffman, 1981).

Because cohesion has been defined as the resultant forces that encourage members to stay in a group (Yalom, 1975), a number of researchers have examined attendance and dropout rate as a measure of cohesion (Yalom & Rand, 1966; Yalom, Houts, Newell, & Rand, 1967; Lothstein, 1978; Falloon, 1981). Records of attendance and dropout rate have been studied in relation to leadership styles, various types of therapy groups, and other measures of cohesion to determine correlations. Examination of a series of similar studies reveals variable reliability with this method of measurement for cohesiveness.

There are specific advantages to observing behaviors as a measurement of group cohesion. Perhaps the most obvious is that all four of the previously noted behaviors can be recorded by more than one observer which allows for establishment of reliability through coefficients of inter-rater agreement. In conjunction with this fact, the use of audiotapes gives the experimenter the opportunity to review the data, increasing accuracy of results. In addition, accuracy of measurement is enhanced because recording observed behaviors can be done unobtrusively while the group is in progress.

Another advantage for recording observed behaviors is that an objective measurement is obtained which does not rely on the honest response of subjects. Measurements of observed behaviors also do not rely on the prerequisite skills of the subjects. Therefore, when examining cohesiveness in groups with lower functioning clients, observing behaviors may be a more appropriate form of measurement.

Like self-reports, observed behaviors can be recorded over time so that change can be noted. Graphing data from observed behaviors may serve a similar function as the sociogram.

While the advantages stated above appear to provide support for observation of behaviors as a legitimate form of cohesion measurement, limitations exist. The major limitation is that the behaviors being observed are rarely specifically included in the conceptual definition used by the researcher (e.g. attendance-to-the speaker or intimate and self-disclosing verbal responses). Therefore, when discussing operational techniques and the results of them, the experimenter may be unable to directly reflect back to the conceptualization. In some studies, since the researcher did not include a specific definition in the first place, it is difficult to assess the validity of the observational criteria. Measurements of observed behavior rely on well-trained observers recording well-defined behaviors, truly relevant to the research questions and operational definitions at stake.

A second limitation of the aforementioned observation measures is the lack of standardization through repeated usage. Each of the following measurements were used in only one study: attendance-to-the-speaker (Flowers et al., 1981), measuring physical distance among members (Shipley, 1977) and the two different types of coding affective responses (Liberman, 1970; Anshel & Kipper, 1988). Dropout rate has been examined by several researchers (Yalom & Rand, 1966; Yalom, Houts, Newell, & Rand, 1967; Lothstein, 1978; Falloon, 1981). However,

its reliability in terms of measuring cohesion is questionable because clients drop out of therapy groups for a variety of reasons, some of them legitimate. For example, some clients improve rapidly and therefore outgrow the therapy group (Falloon, 1981). The verbal tallying and rating scales have been applied to measure many different aspects of verbal behavior and their relation to group cohesion. None of them have been consistently applied to measure the same conceptualization of group cohesion. More testing is needed to develop reliable instruments which measure behaviors associated with group cohesiveness.

In this study a verbal rating scale was used to measure the level of verbal participation of group members in terms of number of comments and depth of self-disclosures. These measurements are directly related to one of the experimenter's conceptualizations of group cohesion: a high level of verbal participation. The rating scale was experimenter-constructed because the previously tested rating scales lacked reliability and seemed vague, making them difficult to use.

In summary, it is clear from the review of literature that there is no universally accepted method of measurement that covers the various factors associated with cohesion. However, these studies provide important information concerning the present state of the art for measuring cohesion and verbal interaction, and those methods considered most valid and reliable. While few of these studies address verbal interaction and cohesion in the music therapy process specifically,

the findings have distinct implications for music therapists in the study of the socialization function of music. The following section will provide an evaluation of cohesion measurements, as well as their relevance to music therapy.

Evaluation of Cohesion Measures

The literature demonstrates that the study of group cohesion lacks not only a universal definition, but also a universally accepted system of measurement. Researchers must consider their own definition, and try to choose realistic measures that best reflect their view of 'group cohesion'. As a result, several forms of measurement were applied in this study to accommodate the various conceptualizations of group cohesiveness. Because no single method is ideal, multiple measures were used in order to sample more thoroughly possible outcomes in the broad construct of group cohesiveness.

All of the researchers of the studies reviewed from counseling literature used at least one self-report and one observed behavior to measure group cohesion. However, all of the music therapy studies except one (Anshel & Kipper, 1988) utilized only one type of measurement device to record either verbal interaction or group cohesion. Sociograms (self-reports) were used to measure the effect of music therapy on group cohesion in the Cassity (1976) and Henderson (1983) studies. Analysis of audiotapes or on-sight observations (observed behaviors) provided the data to assess the effect of music on verbal

responses in several studies (Bonny et al., 1965; Traub, 1969; Preuter & Mezzano, 1973; Goolsby et al., 1974; Coven, 1984; Froehlich, 1984; Stratton & Zalanowski, 1984; Wylie, 1990). Anshel & Kipper (1988) were the only researchers in the music therapy literature who applied more than one instrument for the measurement of two aspects of group cohesion (trust and cooperation), and these were both self-reports. As in the counseling studies, music therapy research could benefit from multiple measures to evaluate verbal interaction and group cohesion. Furthermore, careful definition of social interaction (or aspects of it) and subsequent selection or design of appropriate measurement devices is needed.

Another shortcoming in past social interaction and group cohesion studies concerns test reliability. Six of the eleven music therapy studies reviewed did not report reliability coefficients. By providing reliability outcomes, there can be greater confidence in research outcomes. The strength of research concerning music therapy intervention to promote group cohesion can be improved by considering the application of measures effective within the counseling literature.

In conclusion, measurements of group cohesion, including verbal interaction, have been reviewed in hopes of identifying methods applicable to music therapy researchers. While no measure is without limitation, the researcher can enhance the strength of the investigation by selecting devices that (a) reflect the researcher's definition of what is

being measured, (b) have been demonstrated as reliable and valid in previous studies, (c) are convenient to administer, eliminating disruption of the therapy process, and (d) are appropriate for the subjects' levels of functioning. In addition to identifying appropriate measures, the researcher should also consider independent variables and outcomes of previous studies in order to determine appropriate treatment variables.

While few studies directly investigate the effect of music on group cohesion, there are a host of other variables in group therapy that can have an impact on group cohesion, and can therefore influence research outcomes. The following section will provide an overview of the outcomes found in the studies reviewed.

Outcomes of Studies

Researchers have investigated the influences of many independent variables on group cohesion and verbal interaction. Those relevant to this study include: (a) therapeutic techniques, (b) leadership style, (c) structure, and (d) background music. Various therapeutic techniques have been applied to therapy situations in an attempt to increase verbalization or group cohesion. Shipley (1977) found that a collective group art project, versus an individual art project, increased group cohesion (undefined) according to self-reports and the measurement of physical distance among members. Content analysis of audiotapes (classifying verbal statements) did not, however, correlate

significantly with those two measures. According to the analysis of audiotapes from the Froehlich (1984) investigation, music therapy activities which encouraged social interaction, movement, instrument playing, and songwriting were significantly more successful at facilitating verbal responses in pediatric patients than play therapy. Cassity (1976), found that the number of mutual choices (cohesiveness) selected on a sociometric questionnaire significantly increased more for adult psychiatric patients receiving group guitar lessons than those who did not receive lessons. Employing the same form of measurement, however without defining cohesion, Henderson (1983) found that music therapy activities (drawing to music, composing stories to music, and discussing emotions to music) with hospitalized adolescent patients did influence group cohesion in a positive direction; however the increase was not significant.

Anshel and Kipper (1988) measured two aspects of group cohesion, level of trust and cooperation, by two self-reports administered during four treatment conditions: (a) group singing (music and activity), (b) listening only (music and passivity), (c) poetry reading (no music and activity), and (d) film viewing (no music and passivity). Music activities, whether passive or active, significantly increased trust. Conversely, in regard to cooperation, activities that required active participation whether or not music was present (group singing and poetry reading), were found to be significantly more cooperative. Anshel and Kipper's (1988) conceptualizations of trust and cooperation

were not stated. The inconsistent results of the studies applying various therapeutic techniques to increase group cohesion imply that further investigation of these techniques is needed. While these studies suggest that a creative arts activity can have a positive effect on group participation and the development of group cohesion, they do not address chemically dependent clients per se. Furthermore, several of the studies have methodological limitations regarding operational definitions or nonsubstantial measures.

Other research involved investigating the impact the therapist as a leader has on group interaction. Liberman (1970) examined the effects of leadership style on group cohesion (defined as interest, concern, or affection). The Mills Sign Process Analysis Code (Mills, 1964) and a sociogram indicated that groups which were led by therapists who were specifically trained to use prompts and reinforcements were found to be significantly more cohesive than groups led by conventional therapists. The Interaction Process Analysis (Bales, 1950) cohesion measure did not, however, indicate a significant difference between leadership styles. The Liberman (1970) study implies that a leadership style using prompts and reinforcements may positively influence some aspects of cohesiveness.

Another leadership style examined compared the effect of disclosing versus nondisclosing leaders on cohesiveness questionnaire scores and cohesive talk (semantic cohesion) of psychotherapeutic groups (Friedlander et al., 1985). Results from this study indicated that groups with nondisclosing therapists produced significantly more

semantic cohesion than the disclosing therapist style. Interestingly, the self-report cohesiveness measure showed no significant differences between the two leadership styles. In addition, clients' perceptions of the therapists as measured by the Therapist Rating Scale (rating 10 bipolar adjectives describing the therapists) had no significant relationship to leadership style or the cohesiveness questionnaire. This study, however, lends support to the concept that cohesiveness may be positively affected by certain leadership techniques. Therefore, leadership style should be controlled or accounted for in any analysis of group cohesiveness, regardless of the independent variable being measured.

Providing structure to group work has been examined to determine its correlation to group cohesion. An orientation message was used to provide structure in the study of how self-disclosure affects group cohesion (intimacy) conducted by Kirshner et al.(1978). Their groups received either a high level of self-disclosure orientation message or a low level of self-disclosure message. Specific examples of high level and low level self-disclosures were presented in the appropriate messages. The groups were given anonymous problems to discuss which corresponded to the level of self-disclosure indicated in their particular orientation message. Three self-reports and an analysis of audiotapes were the methods of measurement chosen to determine the level of group cohesion and the intimacy of verbalizations. All measurement devices indicated that groups in the high level of self-

disclosure or intimacy condition developed greater group cohesiveness ($p < .01$).

Yet another study concerning self-disclosure and its relationship to cohesion (Stokes, 1983) involved measuring the degree of risk taking, value of the group, and attraction of the members to the group in a variety of personal change groups. According to the Three Factor Group Questionnaire, all of the above dependent variables positively correlated with the Gross Cohesion Questionnaire ($p < .001$). This finding implies that members of cohesive groups will take more risks, find value in the group, and be attracted to the members of the group. The Kirshner et al. (1978) and Stokes (1983) studies suggest that self-disclosure is a valid indicator of group cohesion. Therefore, the present researcher chose to observe and to measure self-disclosure as a determinant of group cohesion in this study.

Of particular interest to the present researcher are those studies which investigate the influence of music on social interaction, a desirable element for the development of group cohesion (Yalom, 1975; Corey & Corey, 1987). Traub (1969) found no differences in the verbal behavior of low-verbalizing mental patients during specified periods after stimulative or sedative music was played. She also found that these results did not change over time. Coding verbal remarks from classroom situations under conditions of no music, sedative background music, and stimulative background music, Bonny et al. (1965) found that none of the conditions significantly influenced verbal interaction.

Similar findings resulted from a study by Goolsby et al., (1974) who examined the effect of no music, loud music, soft music, and variable music on the verbal behavior of disadvantaged kindergarten children during art and free-play time. Trained observers recorded number, length, and the quality of verbalizations at two-minute intervals. The number and length of verbalizations were significantly lower in the loud music treatment condition. Apparently the loud intensity interfered with or suppressed verbalizations. The no music, soft music, and variable music treatment conditions did not produce significantly different verbal responses. This suggests that providing background music during art or free time with this particular population may have no substantial effect on verbalization behaviors.

In contrast, significant effects were found by Stratton and Zalanowski (1984) who conducted two experiments using the same three conditions as the Bonny et al. (1965) study: (a) no music, (b) sedative background music, and (c) stimulative background music. The groups in each experimental condition were instructed to discuss a given topic, and then to achieve a consensus concerning it. Verbal remarks and the amount of time it took each group to reach a consensus were recorded. The experiment was conducted twice. In the first study no significant effects were found for the amount of discussion time or the number of statements made. This was attributed to an inappropriate discussion topic. The second experiment was identical to the first except a more relevant topic was chosen for discussion. In this second study, Stratton

and Zalanowski (1984) found that the number of tallied verbal responses was significantly greater in the soothing music condition than in the other two conditions. For each condition, measurements of the amount of time and the types of statements made were not significant.

Prueter and Mezzano (1973) coded remarks from initial client-counseling interactions in the three background treatment conditions of soothing music, stimulating music and no music. The study lacked a statistical analysis, however the raw data implied that more client-counselor interaction (and affective interaction) took place during the soothing music condition than the stimulative music or no music condition. In another one-to-one situation, Coven (1984) studied the effectiveness of songs versus lyrics alone in eliciting self-disclosure in elderly widows. She recorded the length of time each subject spent talking about specific topics of interest after listening to the song or the lyrics. The data from the two treatment conditions indicated that responses to the song versus the lyrics were significantly different in only two areas: (1) the lyric only condition spent significantly more time talking about the lyrics than the song condition, and (2) elements in the lyrics were talked about less than the elements of the song. Coven (1984) concluded that lyrics without music may facilitate self-disclosure more effectively than a song because there are fewer elements to which subjects can respond. In another study with elderly subjects, Wylie (1990) found that familiar songs elicited significantly fewer reminiscence statements than presentation of historical summaries or general

questions. Based on these few studies and varied conditions, definite conclusions concerning the effect of music on social interaction appear to be premature. Even though these researchers were not investigating group cohesion specifically, their observation methods for data collection are relevant to this study. The above studies suggest that tallying and categorizing verbal responses can provide useful indications of music's effect on social interaction.

Summary

In summary, a number of factors have been examined in relation to social interaction and more specifically, group cohesion. These include therapeutic techniques, leadership style, structure, and background music. Consistently significant outcomes appear for few of these factors. However, therapeutic techniques (Cassity, 1976; Shipley, 1977; Henderson, 1983; Anshel & Kipper, 1988) and leadership style (Lieberman, 1970; Friedlander et al., 1985) appear to favorably affect group cohesion and social interaction (Froehlich, 1984). Therefore, these are important factors which should be central to the research design.

Less consistent are the outcomes of studies measuring social interaction and group cohesion as results of music activities or music listening. These differences may be attributed to the variability in subjects, in the music used, or perhaps in the operational definitions of group cohesion. Numerous possible variables associated with the socialization function of music exist which have been literally

untouched or overlooked in the research. One variable which has not been addressed in prior studies of music therapy involves the effect of using a song for discussion in group therapy on group cohesion. While several authors advocate the use of poetry and songs in therapy to facilitate self-expression in group discussion (Boenheim, 1966; Butler, 1966; Santiago, 1969; Brooks, 1973; Peterson, 1973; Lessner, 1974; Schiff & Frances, 1974; Berger, 1978; Mazza, 1981; Dougherty, 1984; Freed, 1987), their reports are case studies or program descriptions. Therefore, quantitative data are lacking to support the use of songs in group therapy. At the present time, only two empirical studies (Coven, 1984; Wylie, 1990) exist investigating the use of songs to enhance verbalization, and these studies do not address the population in question for the present study, the chemically dependent. Of additional concern is the lack of (a) consistent findings on cohesion measures within studies, and (b) replication in conceptualization, experimental design, and dependent measures across studies.

In short, while a number of sources on music therapy have advocated using music to create greater levels of group cohesiveness and increase social interaction, a review of literature reveals only sketchy and often contradictory support for music as a positive variable. Empirical data regarding the development of group cohesion with chemically dependent clients are absent from the literature. Therefore, further investigation is needed in view of the following issues:

1. Research supporting music's impact on social interaction and group cohesion is incomplete.
2. Some of the extant studies fail to provide multiple, valid, and reliable measures based on a clearly defined concept of group cohesion.
3. Research on group cohesion specific to the chemically dependent is needed.
4. Additional research examining the differential effects of lyrics alone versus lyrics with music is needed.

The present experimenter attempts to address each of these concerns.