A STUDY OF THE RELIABILITY AND VALIDITY OF A SOCIAL SKILLS RATING SCALE FOR USE WITH CHRONICALLY MENTALLY ILL

by

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The purpose of this study was to investigate the reliability and concurrent validity of the Social Skills section of the Day Treatment Client Assessment, a series of rating scales used to assess behaviors of chronically mentally ill adults. Forty-one clients enrolled in a day treatment program formed the four subject groups. Each group met for three 1-hour music therapy sessions specifically designed to foster social behaviors. Three observers participated in each group and rated the clients' behaviors using the Social Skills scale. The observers' ratings were correlated with each other to determine the scale reliability and were correlated with staff ratings of the same clients to determine the validity. Results showed that the scale was both reliable (.732 average) and valid (.628).

Recommendations for further investigation include giving more attention to the development and standardization of assessments sensitive to the chronically mentally ill population.
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time after each group to fill out the assessments on each client carefully and thoughtfully.

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Finally, I would like to thank the clients of Transitions Day Treatment. Without their support and willingness to participate in the project, it would never have happened. The chronically mentally ill are some of the most misunderstood and neglected sections of the population today. If this paper serves to educate or stimulate further research on how the mentally ill can maximize their potential to function in society, then this has been a worthwhile project. It is to the chronically mentally ill that this paper is dedicated.

Susan J. Egeler
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CHAPTER I

INTRODUCTION

Among the major presenting problems of the deinstitutionalized chronic schizophrenic population are the problems of limited or inappropriate social skills and behaviors. Although several theories have been postulated (Liberman, 1982; Liberman, Nuechterlein, & Wallace, 1982; Strauss & Carpenter, 1974), it largely remains unknown why this population has such great social skill deficits. Unlike some of the other schizophrenic symptoms such as delusions and hallucinations, this particular problem has not been successfully treated through the use of psychotropic medications; therefore, alternative methods of treatment have been devised.

Some researchers have indicated (Carrol, 1980; Monti, Corriveau & Curran, 1982; Williams, 1980) that one of the most successful methods of treatment for the development of social skills is through the use of a day treatment program. The variety of treatment modalities used in day programming is structured to offer the client consistency in treatments and interventions on a daily basis. These programs do not remove the client from real-life situations and do not relieve clients from decision-making responsibilities, but

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rather, offers them a chance to develop skills that are necessary to function adequately in society.

Music therapy is one of the treatments that has been used with success in the modification of social behaviors with the deinstitutionalized schizophrenic population. Upon assessing the "needs areas" of the clients, music therapy activities can be structured to fit the specific treatment goals of the individuals within the group. Music therapy is non-threatening and often facilitates social interactions. In addition, Wolfgram (1979) stated that the problems that are revealed within the music therapy session are often the same problems that the client displays in the community, thus it is the appropriate place in which to focus and modify the behaviors. Unfortunately, because deinstitutionalization of the chronic schizophrenic in great numbers is a relatively new concept in mental health, little research has been done on the effects of music therapy with this primarily low-functioning population.

In recent years, day treatment programs have been required to provide an increasing amount of documentation to justify their cost effectiveness to governmental funding sources such as the U.S. Department of Mental Health and the Medicaid program. Anthony and Farkas (1982) have indicated that few standardized assessments that apply to the
chronically mentally ill population are in existence. Because of the nature of the schizophrenic illness, most of the existing assessments, particularly those focusing on social behaviors, could not be readily adapted to fit the population. These existing assessments often cover too broad of an area, do not make the steps between behavioral changes small enough to be reflected on a scale (although very small changes are often of great significance with schizophrenics), and often begin above the clients' current level of functioning. As a result, Cohen and Anthony (1984) indicated that in order to provide the required information, programs have had to devise population-specific methods by which to assess clients' functioning levels on an ongoing basis.

The Purpose of the Research

The purpose of this research is to conduct a concurrent validity and reliability study on the Day Treatment Client Assessment (DTCA), a series of 5 behavioral assessment scales developed by the staff of Transitions Day Treatment Program in Grand Rapids, MI, for purposes of justifying cost effectiveness to primary funding sources. This will be done by determining the inter-rater reliability and concurrent validity for the Social Skills section of the assessment by
utilizing data collected in music therapy sessions designed specifically to elicit social behaviors. Gay (1976) describes concurrent validity as "the degree to which the scores on a test are related to scores on another, already established test administered at the same time or to some other valid criterion available at the same time" (p. 89). Gay describes reliability as "the degree to which a test consistently measures whatever it measures" (p. 92). It should be noted that the intent of this study is not to test the DTCA Social Skills Section for content validity. It is assumed that the scale has content validity. It also should be stated that this study is not attempting to test the value of music therapy as an effective assessment tool, but rather, music therapy sessions are being used as an assessment environment.

It is hypothesized that the Day Treatment Client Assessment Social Skills section will prove to be a valid and reliable assessment of client functioning level.
CHAPTER II

REVIEW OF RELATED LITERATURE

The deinstitutionalized chronic schizophrenic population is beset with many problems that affect all aspects of their lives. Many of these problems can be controlled or minimized through the use of psychotropic (antipsychotic) drugs, which is the single most important and effective treatment for schizophrenic symptoms. E. Fuller Torrey in his book Surviving Schizophrenia (1983) states, however, that: "Antipsychotic drugs are not equally effective for all schizophrenic symptoms. Drugs are most effective at reducing delusions, hallucinations, aggressive or bizarre behavior, thinking disorders, and the symptoms having to do with overacuteness of the senses" (p. 112). He also states that "drugs are often less effective (or completely ineffective) against symptoms such as apathy, ambivalence, poverty of thought, and flattening of emotions" (p. 112). Mayer-Gross, Slater and Roth (1969, p. 275) indicate that these symptoms that do not respond to psychotropic medications become much more prevalent as schizophrenia reaches a level of chronicity as opposed to the delusions, hallucinations and thought disorders that are more prevalent during the acute psychotic states and during
early onset of schizophrenia. In other words, a chronic schizophrenic comes to an "arrangement with his illness" (Torrey, 1983, p. 68). Although the delusions or hallucinations still have a controlling presence, they have become repetitive and formalized.

The aforementioned problems are often identified as, or manifested through, social isolation and social skill deficits, lack of motivation, fear of taking risks and low self-esteem; all of these factors are closely related and all could be further divided into many smaller, more specific problem areas. Behaviors that are not significantly affected by medications need to be addressed by alternative methods of treatment within the clients' milieu. The combined symptoms of the disease hinder the chronic schizophrenic from being able to function successfully and independently in society.

Social skill deficits and inappropriate social behaviors are often the focus of a large part of the treatment in rehabilitation programs for deinstitutionalized schizophrenics. Deficiencies in social skills are viewed by many researchers (Goldsmith & McFall, 1975; Hersen & Bellack, 1977; Liberman et al., 1982) as being critical elements in the development and continuation of the schizophrenic disorder. They are as equally important as
the delusional systems, thought disturbances and gross mood anomalies. In addition, Liberman et al. (1982), Strauss and Carpenter (1974), and Zigler and Phillips (1961) have indicated that premorbid levels of behaviors and skills are important in predicting subsequent social adjustment, clinical outcome, and quality of interpersonal life for the schizophrenic patient.

Before further discussing social skills as they relate to schizophrenia, it is necessary to outline a conceptual definition of what is meant by the term "social skills." In reviewing the literature on social skills, it is clear that few authors have explicitly defined the term. Definitions of a few of the leading researchers in the area of social skills follow.

Liberman (1982) states that:

Social skills refer to everyday conversations, encounters, and relationships that people have with each other. Social skills include the ability to give and obtain information, and to express and exchange attitudes, opinions, and feelings... Social skills refer to the nature and function of communication between people (p. 63).

Wallace et al. (1980) determined that there are 4 elements in most social skill definitions: (a) The person's internal state—his feelings, attitudes, and perceptions; (b) the typography or rate of his behaviors
(such as eye contact, hand gestures, voice volume, and latency of verbal response); (c) the outcome of the interaction as evidenced by the achievement of the person's goal; and (d) the outcome of the interaction as reflected in the attitudes, feelings, behaviors, and goals of the other participants.

In addition, Hersen & Bellack (1977) and Trower, Bryant, and Argyle (1978) have provided comprehensive definitions. Hersen & Bellack (1977) define social skills as the ability to:

express both positive and negative feelings in the interpersonal context without suffering consequent loss of social reinforcement. Such skill . . . involves the coordinated delivery of appropriate verbal and nonverbal responses. In addition, the socially skilled individual is attuned to the realities of the situation and is aware when he is likely to be reinforced for his efforts (p. 512).

Trower et al. (1978) define social skills as the ability to "understand other people's use of elements of expression, . . . convert impressions through appropriate verbal and nonverbal behaviors, . . . affect [and interpret] behaviors and feelings of others [accurately and appropriately and], . . . influence the environment sufficiently to attain basic personal goals" (pp. 2-5).

To summarize, social behaviors, basically, include any interaction (verbal and nonverbal) which occurs
between two or more people. Socially skilled behavior is the manner in which the interaction is handled. Wilkinson and Canter (1982) state that "a behavior is judged to be socially skilled when there is some purpose or goal in the interaction and the behavior is rewarded by feedback or reinforcement by others" (p. 6). Eisler (1976) determined that, in general, researchers have found that less social competence was associated with more severe symptomology. Furthermore, mentally ill people who have demonstrated greater social competence were given better prognosis than less socially skilled individuals.

Liberman et al. (1982) state that:

There are several factors which can be attributed to the great deficit in social skills and behaviors seen in deinstitutionalized chronic schizophrenics. Many schizophrenics have spent numerous years in institutions. The socially isolated, understimulating, deprived and custodial living environments tend regularly to produce the social breakdown syndrome or institutionalism—apathy, social withdrawal, loss of self-care skills, and other negative symptoms of schizophrenia (p. 15).

Liberman (1982) determined that:

Deficiencies arise from inadequate or inappropriate social learning experiences, prior to the onset of the illness; loss of previously learned skills, often due to disuse or lack of practice as a result of lengthy institutionalization, or deficiencies in the
external environment's provision of role-models which provide cueing, prompting, reinforcement, and punishment; excessive anxiety in social situations; and deficits in cognitive, information-processing skills (pp. 75-76).

Social skills can encompass a wide variety of behaviors. Much of the emphasis in research (Bellack, Hersen & Lamparski, 1979; Bellack, Hersen & Turner, 1978; Goldsmith and McFall, 1975; and Marzillier, Lambert, & Kellett, 1976) has been given to verbal communication and to positive and negative assertion exclusively as being the primary behavior deficits, and thus the main focus of training. Lowe & Cautela (1978), however, stated that there are numerous social behaviors which do not fit neatly in the assertive category and that greater attention should be given to a broader range of variables. Among these variables are attending skills, eye contact, facial expression, body position and gesturing, vocal intonation and volume, subject content, initiating, maintaining, and terminating conversations, and other verbal and nonverbal behaviors. It is important to recognize these as pertinent factors to be considered in the social skills training of deinstitutionalized chronic schizophrenics, primarily because many of these behaviors need to be addressed specifically with this population before they can benefit from assertion.
and verbal communication training. Moore, Zimmer and Reid (1982), specifically addressing the social skill problem of abnormal affect often seen in schizophrenics, state that "this outwardly obvious symptom often affects the patient's social interactions by influencing others' perceptions of him, thereby potentially interfering with those parts of daily living which require interpersonal contact" (p. 237). Seemingly, this would hold true for other social skill deficits characteristic of schizophrenia. Bradshaw (1982) indicated that many research studies and training programs assume that clients have primary social skill levels (such as attending skills) and begin training far above the actual skill level of many clients, especially those chronic schizophrenics discharged to sheltered care facilities from state hospitals.

Since any interaction with another individual is considered to be a social behavior, it is of utmost importance that a person develops an adequate social skill level if the interaction is to have a positive outcome. The focus of social skills training is to provide the client with the skills necessary for successful interactions in any situation including work sites, the community and relationships with others. If a
client can not adequately communicate his needs and desires, or if he lacks a social awareness of how his behaviors affect others, then he has left himself open to misinterpretation or rejection. Wilkinson and Canter (1982) suggest that there is no absolute "criteria" of social skill. Clients may respond differently in separate or similar situations, but both responses might be considered to be equally socially skilled. "At its best, social skill training can be used to increase the clients' behavioral repertoire and awareness of social situations and offer him a wider variety of behavioral alternatives from which to choose" (p. 7). Trower (1980) identifies two requirements of effective social skills training as being "a knowledge of relevant social norms and an understanding of types of social failure" (p. 327).

Many existing social skills training programs have been based on a social learning theory that primarily addresses clients' behaviors. Wilkinson and Canter (1982) have compiled a list of basic training elements used to teach social skills to any population. They determined that the procedures used in teaching social skills resemble those used in the teaching of any other skill. The overall task is broken down into small steps
which are taught systematically starting with the simple and working toward the more complex. The training elements include instruction (coaching) in which most of the cognitive aspects of social skills are covered, modelling in which appropriate behavior is demonstrated, behavioral rehearsal (role-play) where the behavior is practiced, and reinforcement. Reinforcement takes the form of feedback, which provides the client with information about his behavior, and reward which is usually praise or some appropriate incentive. They also suggest homework assignments as a training element which provides the opportunity for a client to try out the newly learned behaviors in real-life situations.

Leading researchers have developed and tested several basic training programs which have been designed to teach social skills specifically to chronically mentally ill populations. These programs often incorporate the training elements compiled by Wilkinson and Canter (1982) but have been developed with special attention given to the specific problems and needs of the chronically mentally ill population.

Bradshaw (1982) devised and tested a program, Primary Attending and Socialization Skills Training (PASST), based on operant conditioning combined with
self-instruction. In this program schizophrenics were given tasks to learn relating to social behaviors which were broken down into small sequential steps. Specific instructions and modelling were provided by the trainer. The schizophrenic was then asked to monitor his own performance by means of self-questioning, also taught in detail by the trainer. Once a behavior/task had been mastered, new tasks were added by operant chaining and shaping. Adequate performance was rewarded by social and token reinforcement. The results showed that the PASST program was effective in the following areas: (a) reducing the amount of "sick talk", i.e., delusional verbalizations; (b) improving communication skills; and (c) increasing attending skills. The research supports the hypothesis that schizophrenics can learn self-instructing behavior, that self-instructing behavior can improve task performance, and that therapy with schizophrenics can shift from environmental manipulation to internal cognitive restructuring. Unfortunately, no results for generalization or maintenance of skills were provided in this study. This is a large problem area for schizophrenics which has been handled with little success in research.

Lewis, Roessler, Greenwood and Evans (1985)
developed a method of conversational skills training (CST) consistent with the social skills training methodology. It incorporated modelling, role playing, shaping, and homework strategies in a multiple baseline design to teach functional conversational behaviors. This study also included a cumulative practice strategy wherein the client demonstrated all previously learned skills before role playing a new skill. Video tapes were used to assist in learning new skills. The results of this study indicated that clients who participated in CST increased and maintained their use of target behaviors in a consistent manner. However, the results also indicated that skill generalization to novel situations and people was minimal and that additional training needed to be done in this area. No long range post-test was done to assess maintenance of skills over a long period of time.

Davis and Mathews (1981) attributed the limited success of many social skills programs to the fact that most investigators were concerned, in theory and practice, almost exclusively with the participants' behavior. They stated that "[researchers] did not take into account key aspects of their subjects' internal lives--how they went about processing and storing the information they were supposedly being taught, and how
the subjects felt about interacting with other people" (p. 142). They hypothesized that a training program needs to affect a person's intrapsychic life as well as his behavior in order to be successful in producing lasting and generalizable behavior. The authors developed an "Integrated Curriculum" which was designed to present information to clients regarding the fundamental aspects of communication with other people in a manner which maximized the chances that the information would be internalized as generalizable learning. They addressed the following six ego psychological factors that are commonly associated with schizophrenia and are thought to interfere with the learning process: (a) faulty defensive functioning and the attendant problem of controlling anxiety, (b) difficulties in focusing attention and shifting attention from one subject to another, (c) problems with encoding information, (d) problems in maintaining solid ego boundaries, (e) difficulties in retrieving learned information, and (f) egocentric thought processes. Each of the cognitive intrapsychic features were addressed throughout the training in specially designed activities and discussions, while being incorporated with behavioral training of a more traditional nature utilizing
instructions, modelling, feedback, etc. The authors tested their "Integrated Group Curriculum" against two other social skills training groups, one labeled as a "Discussion Group" and one called "A Structured Learning Therapy (SLT) Group." The Discussion Group was designed similarly to structured group therapy focussing on social skills. The SLT group followed a more traditional model of social skills training, utilizing modelling, role playing, feedback, and generalization training. The results did not indicate that the "Integrated Curriculum" was any more effective in training social skills than either the discussion group or the SLT. There was significant change demonstrated in social skill level only across groups over time, and not as a result of any independent variable. Although the researchers did not provide ideas as to why the "Integrated Curriculum" was not more effective in training social skills than any other method, this author feels the results could be attributed to a number of reasons. First, the training took place over a period of only eight weeks with two sessions per week. Any type of skill training with schizophrenics has been proven to be most effective when done in short, more frequent sessions over an extended period of time, with much repetition if necessary.
Second, specific assessment results of the clients' current levels of functioning were not provided, and training may have begun at level too high for the clients' information processing capabilities. Third, the program may not have been adequately designed to meet the needs of individuals within the group and the training provided was very general as opposed to client-specific," thus emphasizing another value of doing level assessments prior to the start of training.

Munchel and Corbett (1983) designed a social skills training program combining active behavioral techniques with verbal insight techniques, similar to Davis and Mathews (1981). These researchers, however, took into account the fact that the clients function at different levels of social competence, severity of pathology, and familiarity with the group. They determined that flexibility on the part of the trainers was a key issue in determining the success of the training group. As is often found in a day treatment setting, the clients in this program displayed a wide variety of functioning levels and carried a variety of diagnoses, so the researchers attempted to structure their training accordingly. Prior to the start of each group, the trainers met informally with group members (during a
coffee break) to assess the group for relevant issues of discussion and concerns, then guided the group topics and issues in the direction determined by the preliminary observations. Video taping and role playing were used extensively in training to provide practice and feedback with the goal of aiding clients in gaining insight into their behaviors. No results were reported as to the effectiveness of this program.

It is speculated that an individualized program of this nature could be successful over a long period of implementation time. However, it may be necessary to assess clients' functioning levels and divide them into insight-oriented groups and groups which lack insight. It is questionable as to whether lower functioning schizophrenics can effectively be taught to have insight into their behaviors. Insight-oriented training is effective primarily with higher functioning schizophrenics who already have a level of insight, which can be further developed and enhanced through training. Behavioral-oriented programs appear to be more effective with clients who lack insight, because their levels of cognitive processing and ego structure do not allow them to comprehend and benefit from insight-oriented treatment. Davis and Mathews (1981), in discussing the
need for individualized social skill programs, state that: "We would encourage future social skill trainers to use some developmental assessments of the cognitive capabilities of their participants. Relying simply on one's own intuitive assessment is difficult unless the clinician knows the client very well" (p. 151). Often times clients are able to present themselves as being on a higher functioning level than they actually are.

Other researchers have further narrowed their target populations to include just those people labeled as schizophrenic. They have designed programs specifically for teaching social skills to this population. Liberman et al. (1982) concluded that in order for social skills training to be maximally effective with schizophrenics some consideration of the following factors must occur: "family factors, social situations, psychopathology, motivational deficits, and cognitive attentional factors" (p. 6). The authors provided a model depicting possible interrelationships among environmental, cognitive, psychophysiological, and behavioral variables in the course of the schizophrenic disorder. The authors heavily emphasized that if social skills training is to have a significant clinical impact on the treatment of schizophrenia, it must be delivered in a much more
intensive fashion than is currently found in literature. The authors also expressed a need for designing treatment and assessment methods to fit the special and unique needs of schizophrenics. They believed that much more care must be given to eliciting and rating the characteristic symptoms and other criteria for the schizophrenic diagnosis when selecting this as a target population. They stated that, "The vast majority of reports in the social skills training literature are based on heterogeneous groups of psychiatric patients, much less carefully diagnosed schizophrenics. This clumping of apples with oranges places a liability on social skills training outcomes, such that possibly important findings may be diluted or missed altogether" (pp. 23, 25).

In separate studies, Brown (1982); Falloon, Boyd, and McGill (1982); and Wallace (1982) each developed intensive social skills training programs utilizing the usual response acquisition training procedures found in other social skills training research, i.e., instructions, prompts, modelling, behavioral rehearsal, feedback and homework assignments.

Wallace (1982), using a set of stringent diagnostic criteria, designed an intensive program for inpatient
schizophrenics in which treatment occurred five days a week, 2 to 6 hours daily, for a 9-week period. His program not only emphasized motor responses, but also gave equal emphasis to the cognitive skills of receiving processing, and sending functions through the teaching of problem-solving techniques. His hypothesis was that "an increase in problem-solving skills would be more relevant to forestalling relapse and/or rehospitalization than an increase only in such discrete, narrowly defined behavior as eye contact" (p. 57). The subjects in this study were all living with relatives who were judged to be overly critical and hostile. The social skills training group was matched with a control group who was given "holistic training". The preliminary results indicated that fewer subjects in the social skills training group had relapses and rehospitalizations than in the holistic group. The authors indicated a need for more longitudinal studies of this nature to test for the relationship between skill level and long-term outcome, such as quality of life, that is unrelated to relapse. It is unclear in the study as to whether clients' social skill levels were assessed before treatment began, a factor which could have some bearing on the significance of the results of treatment.

Brown (1982) developed a training program to assist
schizophrenics in functioning in the community and to provide post-hospitalization aftercare. His program placed a stronger emphasis on instrumental skills than did other social skills training programs. The training program, like that of Wallace, was structured intensively beginning with a 7-week inpatient program running 5 days a week for 4 hours per day. The program was divided into 7 components focusing on the "life skills" of interpersonal skills, nutrition and meal planning, health and hygiene, money management, advanced nutrition, prevocational training, and community resources/social networks. After the initial 7-week training program, subjects were discharged to a halfway house which was considered to be an expansion of the program, thus giving the subjects a chance to utilize their newly learned skills. The goal was to further develop and generalize competence in daily living skills and social skills. The primary emphasis of this study was to teach schizophrenics skills that could be maintained and that would generalize to new situations. The author stated that:

Treatments that effect change in limited situations or for short periods of time may be of little usefulness to therapists pursuing the goal of reintegrating a patient into his family, job, and community. Similarly,
treatments that affect only those behaviors directly treated are less beneficial than treatments that promote a spreading of therapeutic responses (Brown, p. 111).

Subjects' anxiety levels, depression levels, and life skills were addressed prior to the start of the study. Unfortunately, follow-up data on this study were informally collected with little indication as to the effectiveness of the program, so no statistically meaningful statement could be made about the results.

It is highly questionable, however, that a 7-week training period is a realistic time span in which to teach all of the instrumental skills listed in this program.

Falloon et al. (1982) created a program in an attempt to reduce family patterns that contribute to schizophrenic relapse; namely, negative criticism and hostility directed at the patients by members of their families. Another goal of the program was to reduce overdependent bonding between relatives and schizophrenics. The program was implemented primarily in the homes of the patients and consisted of weekly family therapy sessions for three months, which were gradually decreased to less intensive monthly follow-up visits after a 9-month period (for a total of 40 sessions over 2
years). The authors suggested that training done "in-vivo," that is in a naturalistic setting for the subject, would be more likely to generalize to new situations. The two major treatment strategies employed were communication training and structured problem solving; along with psychoeducational sessions for the family, educating them on the nature, course, and treatment of schizophrenia. Families were also educated on behavioral techniques to enhance their coping skills for dealing with the behavioral disturbances often associated with schizophrenics. The family therapy group was matched with an individual therapy control group. Social skill assessments and various family communication assessments were to be done before, during, and after the treatment phase. Preliminary results indicated that there may be specific benefits associated with the "in-vivo" family approach as opposed to the individualized approach as evidenced by a smaller number of relapses and rehospitalizations for schizophrenics in the family group.

There are several research deficits in the design and implementation of many of the social skills training programs for schizophrenics, many of which have been mentioned above. Generally, training programs with
schizophrenics have been implemented over too short of a time period and without the intensity that is needed to be effective. Curran and Monti (1982) in a brief review of the social skills training programs discussed in their book, concluded that, considering all the factors involved in schizophrenic disorders, it is unrealistic to expect that a brief regimen of social skills training will have any major impact on the subjects' skill levels. One must carefully evaluate the style and intensity in which the social skills program is delivered, particularly with schizophrenics, because this population often experiences sensory input "overload", leading to confusion, attention span deficits, and problems encoding and processing information. In addition, researchers often overlooked the need for consistency in diagnosis and functioning levels of subjects when selecting a target population for social skills training. Programs need to be designed to fit the individual needs of each subject, something which can be determined through assessments. By having consistency in diagnosis and functioning levels, programs can not only be structured to meet the needs of all the subjects to a greater degree, but the programs themselves will have more validity.
Another problem often discussed in social skills literature is that of generalization and maintenance of the acquired skills. This problem has been handled with little success thus far. Although skills are learned successfully within the structure of the therapeutic training environment, follow-up research data to determine if the skills are maintained for a long period of time and are generalized to novel situations in the schizophrenics' natural environment are lacking. Many of the follow-up studies that have been done have been unsuccessful in determining that skills are both maintained and generalized.

Bellack, Hersen, and Turner (1976), in a study to determine whether chronic schizophrenics are able to generalize learned social skills to novel situations, determined that, for the most part, target behaviors generalized to novel scenes, and were maintained for at least 8 to 10 weeks during the post-treatment period. However, follow-up assessments were done subjectively in role-played settings, and it was not determined if the behaviors generalized to in-vivo settings. The authors strongly indicated a need for more research to be done in this area in the subjects' natural environment. Edelstein and Eisler (1976) did a similar study and
achieved similar results. They also used role plays to assess for generalization, and indicated a need for follow-up assessments to be done in real life. Similarly, Shepherd (1978) determined that social skills could be generalized to novel situations within a day treatment environment, but once again indicated a need for assessing in-vivo generalizations. Unlike the previously mentioned studies, Shepherd did not use role plays to assess for generalization. Rather, he assessed clients without their knowing in a separate setting, but still within a protective environment.

A possible explanation for the difficulty in achieving successful generalization and maintenance of skills in the schizophrenics' natural environment was stated by Curran and Monti (1982) in their review of model programs. They stated that: "It should be noted that there exists scant empirical data that indicate that the behaviors being taught in these programs are those that are reinforced in the patients' natural environment" (p. 4). Further assessment research needs to be done in the clients' natural environment away from the therapeutic setting in which most social skills programs are implemented.

One of the weakest areas in the research on social
skills, as indicated in several of the aforementioned studies, is in the area of skill assessments. Accurate assessments are important for a number of reasons. They provide a baseline on which to design and implement training programs. If programs are to be successful, it is imperative that they begin at the current level of functioning of the subjects; a factor which can be determined only through assessments. Bradshaw (1982) and other researchers have identified that certain training programs have failed because the training started above the level of the client.

Assessments also can be used to determine specific need areas of the subjects, thus allowing for more individualized treatment or training. Many programs dealt with teaching socially skilled behaviors very broadly. They neglected to identify specific problem areas upon which to focus, thus hindering the success of the training program. Marzillier and Winter (1978) indicated a strong need to look more closely at individual patients, both in planning individual treatment and carrying out evaluative research. Upper, Livingston, Connors, and Olans (1982), in an evaluative study on social and coping skills training concluded that it would have been more valuable to further assess
specific problem areas to: (a) aid in planning sessions, (b) screen out participants, (c) pick out specific target behaviors, and (d) lend to a more homogenous group. Trower (1980), in describing a need for more accurate assessments, stated that clinicians often rely on experience and intuition in deciding what skills should be taught, with the danger that the wrong or irrelevant skills may be selected.

Assessments can aid in determining the success of the social skills training programs by measuring the changes that have occurred from the baseline (initial assessment) at any given point during the course of the training; and they can also be used to assess generalization and maintenance of skills after completion of the program.

In a more general sense, social skills and other functional assessments can be used in day treatment programs to generate clinical data relevant to programmatic and administrative decision making. Increased emphasis on utilization review and quality assurance procedures make it necessary to develop evaluation methods of measuring the therapeutic effectiveness of partial hospitalization programs in observable, behavioral terms with clear, concise measures.
of the course of treatment and outcome clearly identified. Abrams, Jacobs, and Leventhal (1984), in designing a functional assessment scale, stated that: "Functional assessment is one step in the direction of interfacing clinical and administrative accountability. It provides quantitative documentation of the course and outcome of treatment through measurable, incremental, functioning scores" (p. 19).

Several methods of assessing social skills have been devised by researchers. Liberman (1982) and Wilkinson and Canter (1982) have listed the primary methods as the assessment interview, observation in a natural setting, self-report measures, and role plays. Added to this list are self-monitoring, observation in group settings, and physiological measurements. A discussion of many of these assessment methods follows.

Although several self-report measures have been designed and validated, self-report measures (usually in the form of scales or inventories) can only be used successfully with those clients who are able to report on their behavior in social situations and should not be used as a major source of information. They can be used in conjunction with other assessment methods with some degree of accuracy. Self-report assessments are most
often invalid when used with the deinstitutionalized chronic schizophrenics. This particular population lacks insight into their behaviors and feelings, has attention span deficits, misperceives sensory input, and has faulty cognitive processing, all of which are necessary to accurately self-assess social skill levels.

The assessment interview, or focused clinical interview, offers a good way of eliciting social and interactional data from individuals who are able to report on their behaviors with reasonable accuracy. This method, as with the self-report, is not particularly useful in assessing social skills of chronic schizophrenics for the same reasons stated above. An additional self-report method of assessing interpersonal behavior is that of self-monitoring. Eisler (1976) states that: "In contrast to the other self-report measures discussed, self-monitoring requires the individual to record his behavior at specified intervals in a highly systematic manner" (p. 383). A major advantage to self-monitoring is that it permits access to data that otherwise would not be readily available. It is very difficult to obtain data on an individual's day to day social interactions except through highly systematic self-report procedures. This method also is
primarily ineffective with schizophrenics who lack the motivation required to follow through with such a project.

One of the most commonly used methods for both assessing and teaching social skills is that of the role-play. Hersen and Bellack (1977) indicated that the use of contrived situations has become a standard strategy for assessment of social skills. Several role-play tests have been designed by researchers to assess social skill levels, few of which have been successfully validated. Role-plays are useful in assessing both the subjective and objective elements of social behavior. Behaviors are usually observed, recorded, and rated on behaviorally anchored point scales, although frequency counts, duration recording and time sampling are also used, particularly with the more objective behaviors. Many of the existing role-play tests, such as the commonly used "Behavioral Assertiveness Test--Revised" (BAT-R) which was designed by Eisler, Hersen, Miller, and Blanchard (1975) to measure social skill levels, deal primarily with components of assertive behaviors. These tests often are not particularly sensitive to the aspects of social skills that do not necessarily involve assertiveness,
such as eye contact, conversation skills, and body posture.

In the case of the chronic schizophrenic population, assertiveness is a concept that is very difficult for them to understand and implement successfully; i.e., it is often above their level of functioning. Thus, many of the standardized social skills tests would be useless in assessing skill levels of this population. Bellack et al. (1979) determined that chronic psychiatric patients have much difficulty with the role-play format (such as the BAT-R), and that other methods of assessment need to be investigated. Many of the existing role play assessment tests also cover very broad, general areas of social behaviors. With schizophrenics it is at times more beneficial to identify and single out small components of social behaviors and focus on those specific behaviors as opposed to working on too general of an area.

Researchers (Bellack et al., 1978; Bellack et al., 1979; & Curran, 1978) have determined that one of the biggest questions they face in social skills research is whether the role-played social skill assessments adequately represent real-life behaviors. These researchers did studies investigating the external
validity of role-play assessments. All advised extreme caution in drawing generalized conclusions until a direct comparison can be made between role play assessments and in vivo observations. To summarize the findings, Liberman (1982) stated:

Role-play tests are handicapped by a number of methodological flaws. The most serious problem with role-play tests lies in their lack of external validity. Since the role-playing situations differ in many ways from the real-life situations encountered by the patients, there is no assurance that what is evaluated during the analogue situation . . . reflects "real-life" behaviors (p. 71).

Bellack et al. (1979) concluded that the most accurate and successful way to evaluate social skills is in the subjects' natural environment. In vivo observation is the mode of data collection most strongly advocated for by behavior therapists. However, in most cases it is not economical or pragmatically feasible to observe behavior in the natural environment. This is especially the case with adult outpatient clients, who cannot be followed and observed in vivo. In addition, if these clients knew that they were being observed, they might display behavioral changes not characteristic to their standard pattern of behavior. However, in the case of many deinstitutionalized chronic schizophrenics, a day treatment program may actually serve as a naturalistic
environment. Many clients attend such programs on a regular basis for many years. Attending programming is a part of their daily routine to which they've become adjusted. Clients are accustomed to the structure of the program and the types of therapeutic activities offered.

It has been determined by some researchers (Carrol, 1980; Monti et al., 1982; Williams, 1980) that partial hospitalization or day treatment programs are the ideal therapeutic setting in which to assess and address an individual's functioning level. This is attributed to the fact that staff observe and interact with clients on a daily basis for longer than one hour at a time (as in the case of out-patient therapy), both formally and informally in a variety of situations. In addition, staff observe and often structure clients' interactions with each other. Partial hospitalization does not remove clients from real-life situations, or relieve them of decision-making responsibility. Carrol (1980) stated that: "Above all, partial hospitalization is the best setting in which client level of functioning can be improved because the kinds of treatment modalities used address the issue of role dysfunction and emphasize the importance of daily living skills" (p. 180).

In an extensive review of 31 functional assessment
instruments, described in terms of who conducts the assessment, the presence of reliability and validity data, and a description of the client population on whom the instrument was developed, Anthony and Parkas (1982), determined that few measures of client skill exist which have been standardized on a severely psychiatrically disabled population. The authors also noted that the literature lacks much specificity in the description of the instruments (often due to limited journal space).

Cohen and Anthony (1984), in a paper on functional assessment in psychiatric rehabilitation, stated that:

Many functional assessment instruments have been developed out of specific institutional needs and reflect the unique interests and capacities of a particular setting. This development has also occurred in psychiatric rehabilitation. There is no dominant or preeminent functional assessment instrument, a situation which stimulates each setting to create its own (p. 19).

The majority of the instruments developed have not been tested for reliability or validity because they were not intended for use beyond the program for which they were developed.

Cohen and Anthony (1984, pp. 22-28) listed several important principals which should be considered when creating a functional assessment instrument. First, "functional assessments need to relate to an overall
rehabilitation goal that is environmentally specific."
In other words, clients need to be assessed in relation to the environs in which they desire to be successful. The authors state that "effective functional assessments are always individualized assessments" (p. 23). Individual needs should be kept in mind when developing assessments as each client requires a "somewhat" unique set of skills to succeed in his environment. "Practitioners need to know how to conduct functional assessments in a way that captures uniqueness regardless of the use of any standardized instruments" (p. 24). The authors also stated that "functional assessments need to provide information on strengths as well as deficits" (p. 24). An effective assessment helps the client and practitioner understand both what skills the client has and what skill deficits he has. In addition, functional assessments need to be comprehensive. They should address as many of the areas that relate to the focal topic of the assessment as possible. This is particularly true with the chronically mentally ill population who has a wide variety of problems within select areas (such as social skills).

Functional assessments require that skills be behaviorally defined. They are also more useful when the
skill definition has a unit of measurement as well as a behavioral definition. By providing a unit of measurement, the practitioner is able to accurately measure whether the skill is a strength or a deficit. It is also important that the behavioral unit of measurement is sensitive enough to enable the clinician to detect small changes in behavior. Small changes are often seen as being very significant with a chronically mentally ill population (with whom no behavioral change is seen as being positive at times). Many of the existing assessments are too broad to be utilized effectively with this population, and changes are not reflected adequately.

Cohen and Anthony (1984) also state that "functional assessments, whenever practical, should include an assessment in the environment chosen for the rehabilitation goal" (p. 27). An assessment done in one environment might not consistently correlate with behavior displayed in another environment. In vivo assessments are usually most accurate. Also, functional assessments need to be ongoing as they are often the basis for treatment plans and are the reason for treatment interventions. Assessments are also used to determine success of the treatment intervention and can
be used as a post-treatment follow up. Finally, the authors state that "functional assessments can provide important information for program development within the agency" (p. 28), as well as provide a system for program evaluation. Rehabilitative programs need to continuously monitor and evaluate their effectiveness. As the client populations change, the programs need to change to meet the current needs of the population, factors which can be determined through on-going, accurate assessments.

In the past few years, state and federally-funded programs such as Medicaid, which provide much of the funding for partial hospitalization and day treatment programs, have begun to place increasing emphasis on requiring programs to be able to demonstrate the impact and cost effectiveness of their services. Carrol and Williams (1981) stated that:

Mental health services have enjoyed the security of being held less accountable due to the relatively less tangible nature of mental illness and its treatment. However, mental health service providers are being asked to justify themselves on the basis of determining the cost (input) necessary to provide services that produce a measurable amount of change in clients (output) sufficient to enable them to live satisfactorily in the community (p. 204).

As a result it has become increasingly more important for programs to develop their own functional assessment
Staff members of one such program in Grand Rapids, MI, Transitions Day Treatment, a program serving approximately 120 chronically mentally ill adults in a therapeutic, rehabilitative setting, designed a series of rating scales (Asper, 1983) entitled the **Day Treatment Client Assessment (DTCA)**. The DTCA (See Appendix A) was designed to meet the requirements of the Medicaid program to provide documentation and justification of services in order to receive funding. In reviewing existing standardized assessments for mentally ill, it was determined that most of those available did not fit the population needs of the Transitions clientele. The scales were often not specific enough to reflect small changes in the target areas, and they often had a base rating anchored with a behavior that was above the clients' current level of functioning. The DTCA is divided into five categories labeled as Behavior, Social Skills, Thought Content, Affective Functioning, and Task Performance. Under each separate category is a list of subjective and objective behaviors relating specifically to the category title, chosen with the chronically mentally ill client in mind. Each behavior is anchored on a 7-point scale according to the severity of the
problem with 1 being the most severe and 7 being listed as no problem. The scales were designed with many of the factors summarized by Cohen and Anthony (1984) in mind. In addition, it was determined by the staff at Transitions in accordance with researchers (Abrams et al., 1984; Carrol, 1980; Carrol and Williams, 1981; and Shepherd, 1978) that rating scales and the method by which they were implemented were not only less stressful for clients, but also were easier and less time-consuming for staff to use than other types of assessments.

Each client is evaluated using the DTCA within one month of being admitted to the day treatment program, at the time of the initial master treatment plan. The client is then re-evaluated using the DTCA every six months at the interdisciplinary team meeting in which the master treatment plan is revised. The assessment scales are usually completed by the client's primary therapist and are reviewed by members of the treatment team. Because the team members use up to 25 hours per week to interact with and to observe the client in a variety of situations, assessments can be completed based on familiarity with the client, and a structured interview is not needed.

Of the five scale areas on the DTCA, Social Skills
is considered to be one of the most important (See Appendix C). The Social Skills scales are the most explicitly defined of the five areas, with each scale number having a specific corresponding definition. Social skill deficits interrelate with all of the other problem areas in that limited social skills are both the result of other problem areas and they also affect other areas (such as task performance) adversely. Day treatment programs are designed to address problems relating to inadequate social skills better than any other type of treatment, by using a variety of approaches and techniques, and through the use of many therapeutic modalities such as music, occupational, recreational, and other expressive arts therapies.

Music therapy in particular has proven to be a very valuable therapeutic medium with the chronic schizophrenic population. As Wolfgram (1979) stated:

The problems that are revealed within the music therapy session are, for the most part, identical to the problems the client is experiencing in the community. Music therapy provides a non-threatening means of identifying and working through these problems within a group context; in addition, the opportunity to practice more effective social behaviors is practiced in these sessions. The music therapy activities introduced by the therapist facilitate this process (p. 142).

Wolfgram stated that music therapy is an effective
treatment modality with the chronically mentally ill for the following reasons:

1. Music is non-threatening and generally associated with positive life experiences.


3. Musical materials evoke common thoughts, feelings and experiences to which group members can relate.

4. Music stimulates appropriate behavior and maximal functioning when a desired musical product is contingent upon full group cooperation.

5. Music provides an appropriate outlet for emotion an individual may be reluctant or unable to express.

6. Music therapy activities simulate the vocational, social, and recreational situations the client will experience in the community (pp. 140-141).

Additionally, in an article relating specifically to daily living skills and the use of music therapy in a day treatment setting, McKay (1979) emphasized that music improves self-image through success and accomplishment, and improves physical coordination, body-image, mental flexibility, concentration, and attention span.

In reviewing the limited amount of research on the uses of music therapy with a chronically mentally ill population, it appears that music therapy has primarily been used as a treatment tool for modifying behaviors,
including the modification of some socially inappropriate or inadequate behaviors (such as increasing attention span and on-task performance, etc.). For example, Cassity (1976) determined that psychiatric patients enrolled in a music therapy group (experimental) made more significant gains in peer acceptance and group cohesiveness than those patients enrolled in the non-music (control) group. Music therapy has also been used as a reinforcer for appropriate behaviors, and as a method by which to evoke or change certain physiological responses which can be measured (such as blood pressure, heart rate, etc.).

Music therapy has rarely been used as an assessment aid for measuring non-musical behaviors such as the psychosocial symptoms of schizophrenia. Hadsell (1974), in an article on the sociological approach of music therapy, emphasized the need for ongoing evaluations to determine the current needs of the client as a basis for structuring music therapy activities. The author does not offer specific suggestions, however, as to how music therapy can be used as an evaluative tool, or what types of social behaviors can be evaluated through the use of music therapy.

Braswell, Brooks, Decuir, Humphrey, Jacobs, and
Sutton (1983) in a response to a requirement of the Joint Commission on Accredidation of Hospitals that activity programs provide detailed assessments of clients, developed the "Music/Activity Therapy Intake Assessment." The assessment was divided into four sections, one of which, the "Attitude Survey" dealt largely with social skills. The purpose of the Braswell et al. study was to "investigate the psychometric properties of the Attitude Survey" (p. 92). The data were collected from university students and at the time of publication the survey had not been used with the mentally ill population. A potential problem with an assessment of this nature (self-evaluation) is that it, once again, has the potential to be above many chronically mentally ill clients' level of functioning, rendering it invalid as an assessment devise with this population.

Keeping in mind the statements of McKay (1979) and Wolfgram (1979) on the value and uses of music therapy in a day treatment setting, it would appear that music therapy activities may be an ideal setting in which to assess social behaviors of the chronically mentally ill, as sessions can be structured to elicit social behaviors. Research also indicates a strong need for more standardized assessments of social skills with this
population.

The Null Hypotheses

The hypotheses in null form are:

1. There will be no significant correlation between pairs of judges' ratings; thus, the scale will not have reliability.

2. There will be no significant correlation between the judges' assessment of the clients' social skills and the staff's assessment of the same skills; thus, the scale will not have concurrent validity.
CHAPTER III

DESIGN AND METHODOLOGY

Subjects

Forty-one clients enrolled in Transitions Day Treatment program for a minimum of one year formed the subject group for the study. Subjects were chosen for the study primarily on the basis of how many days per week they were scheduled to attend groups at Transitions Day Treatment, and whether they attended consistently on their scheduled days. Clients who attended less than three days per week or who attended inconsistently (less than 25% of scheduled groups) were not selected for the study. Of approximately 90 clients who were considered for the study, about 50 met the attendance criteria. Each client had been diagnosed by a psychiatrist as being chronically mentally ill with a primary diagnosis of schizophrenia. All clients were settled into routine, mainly predictable behavioral patterns. All clients had been institutionalized at least once during the history of their mental illness. All clients were stabilized on psychotropic medication at the time of the study. Clients ranged in age from about 25 to 70, were of
various ethnic backgrounds, and included 39% males and 61% females. The difference between the amount of males and females in the study can be attributed to the fact that more females were attending consistently during the hours that the study was being run. All clients selected had been involved in some previous music therapy settings. They were asked to participate in the project, and all signed a consent-for-participation form prior to the study (see Appendix B). Clients were not told that they would be rated specifically on social skills and behaviors.

Setting

The study took place at Transitions Day Treatment Program in Grand Rapids, MI. Transitions Day Treatment is one of four programs administered by South Kent Mental Health Services, a non-profit agency under contract with Kent County Community Mental Health. As a partial day program, its purposes are to maintain clients in the community setting and assist them in achieving the highest possible level of independent functioning through structured activity programming in a milieu setting. Programming is available for 120 clients, four days per week from 9:00 a.m. to 3:00 p.m.
Transitions serves the adult chronically mentally ill population. The majority of the clients carry a diagnosis of schizophrenia or major affective disorder, although recent admissions include several personality disordered individuals. Most Transitions Day Treatment clients are referred by Transitions Case Management Program, another of the four South Kent Mental Health Services programs, although referrals have also been accepted from other mental health-related agencies in Kent County.

Individual treatment plans are developed for each client during an interdisciplinary team meeting which includes the client's case manager, the day treatment staff, and the day treatment program supervisor. Intervention strategies are drawn largely from the behavioral therapies, in addition to reality therapy, rational emotive therapy, and client centered therapy. The consistency of the implementation of the interventions is due largely to the day treatment staff working as a team. Weekly progress notes on each client completed as a team insure staff consistency.

The Transitions Day Treatment Program staff is comprised of three occupational, two music, and four recreational therapists, along with three other mental
health professionals.

Together with Grand Rapids Public Schools Community Education staff, the Transitions Day Treatment Staff facilitate nearly 50 groups per week. Group content is structured toward meeting the psycho-social, educational, emotional, physical and pre-vocational needs of the clients, with increasing emphasis being placed on work therapy and in-vivo training of basic skills for independent living and community awareness. Examples of such groups are assertion training, stress management, basic hygiene, community action, active leisure, career development, independent living skills assessment and practicum, and sexuality. Groups range in size from 8 to 25 clients and are lead by 2 staff members. Each milieu therapist is also assigned a caseload of up to twelve clients. Staff are responsible for weekly individual contact with each of their clients as well as record keeping and treatment planning.

Instrument

The instrument used in this study was the Social Skills section of the Day Treatment Client Assessment (DTCA), and the accompanying number definitions for items in the 7-point assessment scales (see Appendix C). The
scales were designed in 1983 by members of the Transitions Day Treatment staff in order to meet requirements of state and federal funding sources to provide documentation and justification of cost effectiveness of services. No reliability or validity data were available on the DTCA prior to this study.

Assessment areas of the DTCA included 5 categories chosen for their relevance to the problems most often seen with the chronically mentally ill population as determined by the day treatment staff. These categories were titled Behavior, Social Skills, Thought Content, Affective Functioning, and Task Performance. Under each separate category is a list of subjective and objective behaviors relating specifically to the category title. Each behavior is anchored on a 7-point scale according to the severity of the problem with 1 being the most severe and 7 being listed as no problem. The purpose of the scales is to provide the staff with an assessment of how the client is currently functioning, what the current need areas are, and what changes have occurred in the client's functioning level. Treatment plan goals can be designed by utilizing information obtained from the assessment scales, and the scales can also provide useful information when determining whether a particular
treatment intervention was successful in modifying a specific behavior.

To meet funding program requirements, staff members of Transitions Day Treatment complete the DTCA on all clients enrolled in the program at the individual client's interdisciplinary team (I-team) evaluation (treatment plan). The initial assessment is done approximately four weeks after the client has been enrolled in the program, at the time of the formulation of the initial master treatment plan. The clients are re-evaluated at 6-month intervals, using the DTCA, at the time of the treatment plan revision meeting. At this meeting, previous goals and interventions are reviewed and assessed for relevancy, and revisions are made if necessary. The assessment scales are usually completed by the client's primary therapist and are reviewed by members of the treatment team. Ratings are chosen based on observation of the client in structured and unstructured settings, and on familiarity with the client. Because the staff interact with clients up to 25 hours per week in a variety of settings, assessments can be completed based on this familiarity and an assessment interview is often unnecessary. The assessments on the subjects in this study were completed by staff members.
who have worked with the clients regularly for over one year, thus assuring accuracy on the assessments due to familiarity with the clients.

Procedure

The baseline assessments for the study were formed by utilizing the Social Skills section of the most recently completed DTCA (completed within the past two months). If a DTCA had not been completed on a client within the past two months, a new one was completed just prior to the study to accommodate any changes in the subjects' behaviors that may have occurred. None of these assessments was completed by staff in specific therapeutic groups, but was based on observations within the total program.

Three evaluators, employed by Transitions Case Management program who were not part of the day treatment staff, were asked to observe each subject in three music therapy groups, and complete one DTCA Social Skills assessment form on each subject in each group just after completion of the group. The evaluators each had a minimum of a bachelor degree in a mental health related field; e.g., psychology and social work; and each had worked with the chronically mentally ill population for
at least one year prior to the study. The evaluators did not know the subjects prior to the beginning of the study.

One week prior to the study, the evaluators were presented with a 30-minute description of the study and an explanation of the procedure by the author. The evaluators were each given a packet of information to review which consisted of the instructions for completing the Social Skills section of the DTCA, a copy of the Social Skills scale and the accompanying number of definitions, and copies of the music therapy activities which were to be used for the study (appendices C and D). The researcher then met with the observers 2 days before the collection of data began to review the procedures for completing the DTCA and to answer any questions. At this time, the participation role of the observers within the groups was discussed. No formal training or practice sessions using the DTCA took place.

For data collection, raters were asked to physically join the group and participate in the activities, but were asked to limit the number of prompts and staff-initiations directed towards the clients. For example, in activities which required that group participants work in pairs, the evaluators were asked to
not seek partners, but to wait until they were asked by the subjects to be their partners. Evaluators were also asked to refrain from volunteering information or answers in activities that required such responses until after the clients had participated. This passive role ensured that clients would not be responding entirely to staff-initiated interactions but would have to accept responsibility for their level of activity participation and socialization.

Due to the large number of subjects (41), the subjects were divided randomly into 3 smaller groups of 10 and one group of 11, to enable raters to observe the clients more closely and accurately. Each group was observed 3 times. Three sets of music therapy activities were designed, each with social skills goals as a main objective (see Appendix D). Each of the 4 groups received the same activities in the same order. Sessions lasted approximately 45 minutes, and each began with a warm-up activity followed by a main activity. All music therapy sessions were devised and conducted by the author of this study, a Registered Music Therapist.

Sessions took place during regular group hours at Transitions Day Treatment, in the morning just prior to the clients' lunch break. The sessions were held in a
familiar group room in the agency.

Raters completed the DTCA Social Skills forms immediately following the end of the sessions, using the scale definitions as a guide. An average social skill score for each client was determined after each observation. Each client was assigned a number (1-41) for purposes of confidentiality during the study and to aid in compiling the data.
CHAPTER IV

RESULTS

The means of the social skills scores for each of the 41 subjects were determined for each judge. To determine the reliability of the DTCA Social Skills scale, each of the judge's mean scores was correlated with each of the other judge's mean scores.

The results of these calculations are as follows:

Table 1

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<th>Correlation Coefficient Between Judges</th>
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<tr>
<td>Judge 1+2</td>
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</tr>
<tr>
<td>Correlation</td>
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<td>Coefficient</td>
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To determine the concurrent validity of the Social Skills section of the DTCA, the mean of the three judge's average scores on each client was calculated, and this score was correlated with the day treatment staff social skills rating of each client (taken from the most recently completed DTCA). The result of the correlation between observers' ratings and staff ratings was a coefficient of .628.
The results of the analysis of the data indicated that the DTCA Social Skills scale is a reliable measure of social behaviors when used in an observational setting, as indicated by the average correlation coefficient of .732 for the three judges.

The results also indicated that the DTCA Social Skills scale is a valid measure of social behaviors, as indicated by the correlation coefficient of .628. The correlation coefficient between the session (observer's) ratings and the day treatment staff retrospective ratings is sufficiently high to show that the two tests are valid in spite of the different settings in which the test was administered.

Summary

The results show the following effects on the study's original null hypotheses:

1. There will be no significant correlation between pairs of judges' ratings, thus the scale will not have reliability (rejected).

2. There will be no significant correlation between the judges' assessment of the client's social skills and the staff's assessment of the same skills, thus the scale will not have concurrent validity (rejected).
CHAPTER V

DISCUSSION AND RECOMMENDATIONS

It can be concluded from this study that the DTCA Social Skills scale is a reliable instrument for rating the social behaviors of a chronically mentally ill population within a music therapy group in a day treatment setting. The scores of the three judges showed a high level of consistency for the 41 subjects' social skill levels based on the results of the data collected in an observational setting. One of the three judges consistently rated the clients lower than the other two, thus lowering the average reliability correlation coefficient slightly.

It also can be concluded that the DTCA Social Skills section is a valid instrument for rating social behaviors of a chronically mentally ill population. Although a coefficient of .628 indicates the presence of concurrent validity, it indicates that the day treatment staff assessments of the clients' social behaviors may be less accurate than the judges' ratings, thus resulting in a lowered correlation coefficient for validity. This may be true considering that the inter-rater reliability for
the judges was sufficiently high.

Both the judges and the day treatment staff ratings were collected by using the same instruments, only data were collected in different settings. The lower day treatment staff validity could be attributed to several factors. Many of the day treatment staff have worked for several years with the clients used in this study. Day treatment staff see clients in a different frame of reference than the social workers who acted as judges for this study. Day treatment staff have much more direct client contact and address different goals than social workers. Social workers work with a wider variety of functioning levels than day treatment staff (who primarily work with the lower functioning clients). Social workers may see clients who are work ready and have families. Thus, the lower functioning clients may appear to have more skill deficits to the social workers than to the day treatment staff who most often do not see the upper end of the range.

It is possible that the social behaviors that the clients exhibit are such a part of their routine behaviors that day treatment staff either are more tolerant of them or do not view them as significant problems; whereas "outside" observers may be acutely
aware of these behaviors, and consequently would rate the behaviors lower on a scale indicating severity of a problem than the staff.

Another contributing factor to the lower validity could be the fact that the day treatment staff have been using the DTCA for over three years, and may have reached a point where completion of the scales has become routine and hence, less accurate. Due to the increased number of clients enrolled in the program and the stringent Medicaid and The Joint Commission on Accreditation of Hospitals guidelines, much more team meeting time is required to do the actual treatment planning, and often minimal time goes in to the assessment completion. Due to the excessive documentation requirements, the scales often appear to be looked at by staff as a necessity to fulfill requirements rather than as a valid tool on which to base treatment goals and interventions. Staff have often used the social skills scale to assess clients without using the accompanying scale definitions, perhaps relying on memory. This could also account for the higher staff ratings. The staff members were not asked by the researcher to change their method of utilizing the tool for assessing clients prior to the study.

Some staff members reported that it is occasionally
difficult to be totally objective about the clients because they (the staff) think that rating a client low in a certain area is a reflection on their competency as a day treatment therapist. This is particularly true with rating the more popular clients. Although it is not a conscious effort on the part of the staff, a client may receive a higher social skill rating than they actually should get because the staff enjoys working with them and "wants" them to do well; thus, this desire may be reflected in the rating score.

A few minor problems occurred within the methodology. Many of the clients unexpectedly displayed resistance to participating in the study. It took much effort on the part of the staff to get the clients to give their consent to participate. This could be attributed to the rigidity and routine behavioral patterns that are characteristic to the schizophrenic illness. Clients do not like to deviate from the safe, predictable routines that they have established. Clients who did attend the groups received coffee and a snack at the end of each group to act as an incentive to attend the next group. It was less difficult to get the clients to attend the second and third groups than it was to get them to attend the first group.
A few of the clients also displayed a "halo effect" in the groups, whereas some of their social behaviors under normal circumstances may actually have been more problematic. The presence of "guests" in the group had the effect of eliciting more appropriate behaviors in some of the clients, although it appeared through informal observation that this did not affect too many of them. Video taping the groups would have been an option, but it would not have allowed the judges to focus on individual's social skills within the groups.

Also, due to the large number of subjects needed for the study, it would have been very difficult to select clients with similar psychosocial levels of functioning for the groups. Because of the diverse range of functioning of the clients within each group, some of the activities selected to display and develop social skills were of limited therapeutic value to some of the clients. This is especially true for activities such as "Build a Bridge of Friendship" in which clients are asked to utilize abstract thought. A client who thinks concretely has great difficulty grasping the directions and purpose of such an activity. Although the groups did succeed in eliciting social behaviors in all of the subjects, it is questionable as to whether some of the clients benefitted
therapeutically from being in some of the groups.

It was also difficult for the researcher to decide exactly when to intervene when the clients were displaying inappropriate behaviors within the group. Confrontation and intervention of inappropriate social behaviors most likely occurred at a slightly slower rate of time than under "normal" group circumstances. This would have allowed the judges more time to observe the behavior.

A problem that the judges had in using the scale itself and the accompanying definitions was in distinguishing between the areas of assertiveness and risk-taking. It was difficult to look at one area independent of the other. Further research with this scale might involve defining the elements even more specifically, enabling a definite distinction between the terms assertive and risk-taking to be formed.

Other areas of the scale seemed very broad. Future research could aim at further dividing many of the categories into smaller steps, enabling staff to identify and target specific behaviors for change.

Another problem with a social skills scale of this type for chronically mentally ill is that it is very difficult at times to distinguish between what is a
socially inappropriate behavior and what is a psychotic behavior. For example, during one activity requiring clients to work in pairs, two actively delusional clients formed a team. They utilized appropriate conversational skills, assertion, and eye contact throughout the interaction; however, the content of the conversation was totally delusional, as evidenced by not only overhearing the conversation, but by when the clients took turns introducing each other to the group members. What is difficult to decide is whether these clients, in their interaction with each other, were displaying poor social skills. This situation could potentially cause a judge to give a client a lower rating, unless definitions of social appropriateness were very comprehensive and were carefully explained prior to the time of the observation.

It appears that music therapy sessions may be a valid setting for assessing and/or modifying social behaviors of chronically mentally ill adults. Sessions can easily be structured to elicit nearly any social skills or inadequacies. Music therapy is non-threatening, deals with real-life situations involving social interactions, and can be an appropriate outlet for frustration or feelings which might otherwise be manifested through social inappropriateness. It is
difficult to determine if the clients' mean social skills scores were influenced by the music therapy sessions independent of the presence of observers. Little research has been done on the effectiveness of using music therapy as an assessment tool at the present time, and much more research could be done in this area. In addition, the effort of music therapy on modifying socially inappropriate behaviors of chronically mentally ill population could be studied more closely.

Further research is also needed in the areas of assessment development and standardization for the chronically mentally ill population. Current assessments often begin above the clients' current level of functioning and neglect to include some areas that often are prominent problem areas for low-functioning schizophrenics. Assessments often cover too broad of an area and do not adequately reflect the minute changes that are crucial in recognizing the schizophrenic client's progress or regression.

It is recommended that a large program such as Transitions Day Treatment hire a person whose primary job would be to do assessments, evaluations, and diagnoses for a period of two to four weeks on every incoming client, before the client is assigned to a primary care
worker. This would allow for reliable and valid assessments of each client's needs, problems, and strengths upon which to develop the treatment plans. Unfortunately, financial and political reality would not allow for this position as it is not a service that Medicaid and other funding sources recognize as being billable.

In general, much progress has been made in understanding the treatment needs of the deinstitutionalized chronic schizophrenic. However, because deinstitutionalization of large numbers of clients is still a relatively new occurrence, more research needs to be done exploring all of the possibilities for making integration into the community easier for the schizophrenic population as well as for the community.
APPENDIX A

DAY TREATMENT CLIENT ASSESSMENT
### Appendix A

#### DAY TREATMENT CLIENT ASSESSMENT

**Date:**

**Client:**

**Assessor:**

Directions: Circle the number which describes the client's functional level for each item. If an item is not assessable, do not circle a number, do not use in determining average.

<table>
<thead>
<tr>
<th>Item Assessed</th>
<th>Severe Problem</th>
<th>Moderate Problem</th>
<th>Mild Problem</th>
<th>No Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independence</td>
<td>1 2 3 4 5 6 7</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Self-abusive/suicidal</td>
<td>1 2 3 4 5 6 7</td>
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<td></td>
<td></td>
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<tr>
<td>Aggressive/assaultive</td>
<td>1 2 3 4 5 6 7</td>
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<td></td>
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<tr>
<td>Manipulative</td>
<td>1 2 3 4 5 6 7</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Substance abusive</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attention seeking</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual acting-out</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bizarre</td>
<td>1 2 3 4 5 6 7</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Self-stimulatory</td>
<td>1 2 3 4 5 6 7</td>
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</tr>
<tr>
<td>Anti-social/resistive</td>
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Reproduced with permission of the copyright owner. Further reproduction prohibited without permission.
Behavior total score  __________
Behavior average score  __________
(Divide total score by number of items circled)

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<th>Mild Problem</th>
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<td>Eye contact</td>
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<tr>
<td>Appropriate conversation (topics, voice quality)</td>
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<td>Non-verbal communications</td>
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<td>Assertion</td>
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<td>Risk-taking</td>
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Social Skills total score  __________
Social Skills average score  __________
(Divide total score by number of items circled)

Comments:
### AFFECTIVE FUNCTIONING

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<td>Verbalizes feelings</td>
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<td>Self-concept/body image</td>
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<td>5 6</td>
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<tr>
<td>Intensity/extremes of expression (manic, blunted, depressed, etc.)</td>
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<td>3 4</td>
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**Affective total score** __________  
**Affective average score** __________  
*(Divide total score by number of items circled)*

**Comments:**

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<td>Mild Problem</td>
</tr>
<tr>
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<td>No Problem</td>
</tr>
<tr>
<td>Follows directions</td>
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<tr>
<td>Attention span</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>Frustration tolerance</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>Follow through/ motivation</td>
<td>1 2 3 4 5 6 7</td>
</tr>
<tr>
<td>Degree of autonomy</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>Quality of work</td>
<td>1 2 3 4 5 6 7</td>
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Task performance total score ________
Task performance average score ________
(Divide total score by number of items circled)

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<th>Moderate Problem</th>
<th>Mild Problem</th>
<th>No Problem</th>
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</thead>
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</tr>
<tr>
<td>Ability to abstract</td>
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<tr>
<td>Memory (long/short)</td>
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<td>3 4</td>
<td>5 6 7</td>
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<tr>
<td>Hallucinations</td>
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<td>3 4</td>
<td>5 6 7</td>
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<tr>
<td>Delusions</td>
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<td>3 4</td>
<td>5 6 7</td>
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</tr>
<tr>
<td>Judgement/decision-making</td>
<td>1 2</td>
<td>3 4</td>
<td>5 6 7</td>
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<tr>
<td>Thought content (paranoid, rigid, obsessive, irrational, suicidal, etc.)</td>
<td>1 2</td>
<td>3 4</td>
<td>5 6 7</td>
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Thought Content total score
Thought Content average score
( Divide total score by number of items circled )

Comments:
CONSENT FOR PARTICIPATION
Appendix B

CONSENT FOR PARTICIPATION

The undersigned has agreed to willingly participate in a project designed solely for the purposes of furthering the education of Susan Egeler, Transitions Day Treatment Team Coordinator.

The Project involves participating in 3, one-hour Music Therapy groups held during regular program hours, in which there will be three Transitions employees from outside of the Day Treatment program acting as observers. The observers' role is to participate in groups and evaluate social behaviors. Data collected will be used solely for the purpose of validating an assessment scale.

The undersigned may cancel this consent by notifying Transitions Day Treatment staff in writing prior to the time of the music therapy sessions.

The undersigned will remain completely anonymous to people outside of the agency.

__________________________________________  ____________
Signature of Consenting Party                  Date

__________________________________________  ____________
Witness                                       Date

__________________________________________  ____________
Client’s name in full (Please Print)           Case #
APPENDIX C

DTCA SOCIAL SKILLS SECTION:
INSTRUCTIONS AND ACCOMPANYING NUMBER DEFINITIONS
Appendix C

DTCA Social Skills Section:
Instructions and Accompanying Number Definitions

Observer Name __________________________ Date: _____________
Client Name __________________________ Time: _____________
Assigned Number ___________

Instructions for completing the DTCA: Social Skills Section.

1. Read through each section of the assessment.

2. For each item in each section, circle the number which you believe most accurately describes the client’s current functioning level according to your observations in the Music Therapy Group.

3. If an item within a section cannot be assessed, do not circle a number.

4. Add the total of the numbers circled in each section of the assessment.

5. Determine the average for each section by dividing the total of that section by the number of items circled (If you were unable to assess an item, do not include it when determining the average).
<table>
<thead>
<tr>
<th>Item Assessed</th>
<th>Severe Problem</th>
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<th>Mild Problem</th>
<th>No Problem</th>
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<tbody>
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<td>Eye contact</td>
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<td>Assertion</td>
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<td>3 4</td>
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<td>7</td>
</tr>
<tr>
<td>Risk-taking</td>
<td>1 2</td>
<td>3 4</td>
<td>5 6</td>
<td>7</td>
</tr>
</tbody>
</table>

Social Skills total score
Social Skills average score
(Divide total score by number of items circled)

Comments:
Corresponding Number Definitions for Social Skills Section of the DTCA

**Eye Contact**

1. Client uses no eye contact, even upon staff request.

2. Client uses eye contact for short periods of time (less than 2-second duration) with prompting from staff.

3. Client needs more than 1 prompt to use eye contact (continuously throughout interactions); maintains eye contact for 3-5 seconds.

4. Client needs prompting to use eye contact. Client does not require repeated prompts; is able to maintain eye contact for longer intervals of time.

5. Client initiates eye contact but has difficulty maintaining. Client frequently glances away for extended periods.

6. Client initiates eye contact. Client occasionally glances away for extended periods.

7. Client maintains appropriate eye contact consistently.

**Appropriate Conversation**

1. Client is nonverbal; will not respond to staff attempts at conversation. Or, client is hyper-verbal; will not respond to conversational limits. Volume is extremely loud or soft. Topic area is continuously inappropriate; e.g., sexual content, delusional, religious, overly descriptive.

2. Client is primarily nonverbal; will rarely respond to staff attempts at conversing. Or, client is primarily hyperverbal, will rarely respond to staff conversational limit-setting. Volume is either too loud or too soft. Topic area is most often inappropriate.

3. Client still shows marked impairment in quantity and quality (volume) of speech, topic area, and interactive responses; but will respond to staff attempts at initiating or limit
setting for brief periods of time.

4. Client continues to need verbal prompting from staff, but is able to display appropriate conversation for a longer period of time.

5. Client is able to initiate and maintain appropriate conversational topics. Client occasionally exhibits deficits in one of the above stated areas which may require some staff verbal intervention.

6. Client is able to initiate and maintain appropriate conversational topics. Client rarely exhibits deficits and is able to return to appropriate conversation without staff intervention.

7. Client displays appropriate conversational skills at all times.

Nonverbal Communications

1. a) Client isolates self from group/other clients; or, bombards others with presence. b) Client exhibits hypokinetic or hyperkinetic behaviors (hyper-active or under-active). c) Client exhibits extremely inappropriate personal spacing when interacting with others. d) Client exhibits extremely closed or open body posture. e) Client uses either no gestures or extreme gestures when communicating. Client will not respond to staff attempts at changing the behavior.

2. Client exhibits deficits in each of the above stated areas. Client rarely responds to staff attempts at modifying the behaviors.

3. Client exhibits deficits in each of the above stated areas, but will respond to staff intervention for short periods of time.

4. Client exhibits deficits in 3 or more of the above stated areas, but will respond to staff intervention for short periods of time.

5. Client exhibits mild deficits in 3 or more of the above
stated areas, and will respond to staff intervention for longer periods of time.

6. Client exhibits mild deficits in less than 3 of the above stated areas and is able to correct behavior with minimal staff prompting.

7. Client exhibits no problem in any non-verbal communication areas.

**Group Participation/Socialization**

1. Client is totally withdrawn, does not interact with others. Client never initiates interactions. Client will not physically join groups and will not participate in group activities even with heavy prompting.

2. Client spends all of time alone, does not interact with others except for occasionally responding with 1 or 2 word answers. Client never initiates. Client will not participate in group activities unless continuously assisted with 1:1 help from staff.

3. Client will sit with group, but will not initiate participation in group activities. Client will respond to staff prompts to participate, but needs prompting to continue participation and socialization. Client has difficulty following staff directions and making appropriate verbal contributions.

4. Client needs staff prompting to participate and socialize but is able to continue for short periods of time without staff prompting. Client is able to follow simplistic directions. Client makes appropriate verbal contributions approximately 50% of the time. Client will interact with other clients but rarely initiates the interaction. Attention span is short (not able to attend to tasks for more than 5 minutes).

5. Client does not require staff prompting to initiate participation, but does not always make appropriate verbal contributions (75% or more are appropriate). Client will interact with other clients. Client occasionally refuses to join in an activity. Attention span is limited to
approximately 10 minutes.

6. Client participates in activities without prompting, and initiates interactions with others. Attention span is 15 minutes or longer on an activity, but less than an entire activity. Client has more difficulty in verbal discussion groups and with abstract concepts than on concrete activities. Client makes appropriate verbal contributions and socializes appropriately consistently.

7. Client shows no deficits in attention span, socialization, contributions to group, following directions, etc.

**Assertion**

**Threatening:** Situations in which clients perceive possibility of some type of loss or injury to self.

**Nonthreatening:** Situations in which clients perceive minimal or no possibility of loss or injury to self.

1. Client is either consistently aggressive or passive in both threatening and nonthreatening situations. Client is unable to express thoughts or feelings, or get needs met appropriately.

2. Client is not able to be assertive in threatening situations.

Client is able to be assertive approximately 20% of the time in nonthreatening situations.

3. Client is able to be assertive in threatening situations approximately 20% of the time.

Client is able to be assertive in nonthreatening situations approximately 35% of the time.

4. Client is able to be assertive in threatening situations approximately 35% of the time.

Client is able to be assertive in nonthreatening situations approximately 50% of the time.

5. Client is able to be assertive in threatening situations approximately 50% of the time.

Client is able to be assertive in nonthreatening situations
approximately 65% of the time.

6. Client is able to be assertive in threatening situations approximately 65% of the time. Client is able to be assertive in nonthreatening situations approximately 80% of the time.

7. Client is able to be assertive in threatening situations approximately 80% of the time. Client is able to be assertive in nonthreatening situations approximately 100% of the time.

**Risk-taking**

A risk is an activity or situation which is perceived as something new, different, changed, possibly threatening, challenging, or requiring more skill.

1. Client will never initiate risk-taking or will never participate in risk-taking activities when prompted by staff. Or, client takes risks continuously that may result in injury to self or others, or does not display good judgement.

2. Client participates in risk-taking activities when prompted by staff approximately 20% of the time. Client does not initiate risk-taking. Client takes unsafe risks or uses poor judgement approximately 80% of the time.

3. Client participates in risk-taking activities when prompted by staff approximately 35% of the time. Client initiates risk-taking activities 20% of the time. Client takes unsafe risks or uses poor judgement approximately 65% of the time.

4. Client participates in risk-taking activities when prompted by staff approximately 50% of the time. Client initiates risk-taking activities 35% of the time. Client takes unsafe risks or uses poor judgement approximately 50% of the time.

5. Client participates in risk-taking activities when prompted by staff approximately 65% of the time.
Client initiates risk-taking activities 50% of the time.
Client takes unsafe risks or uses poor judgement approximately 35% of the time.

6. Client participates in risk-taking activities when prompted by staff approximately 80% of the time.
Client initiates risk-taking activities approximately 65% of the time.
Client takes unsafe risks or uses poor judgement approximately 20% of the time.

7. Client participates in risk-taking activities when prompted by staff approximately 100% of the time.
Client initiates risk-taking activities approximately 80% of the time.
Client does not take unsafe risks or use poor judgement.
APPENDIX D

ACTIVITIES FOR MUSIC THERAPY SESSIONS
Appendix D
Activities for Music Therapy Sessions

Music Therapy Session 1

Introduction:

"Hey Folks, Who's In Town? Tell us your name and then sit down"

Goals: Increase eye contact
Increase group participation and on-task behavior
Increase risk-taking behaviors
Develop non-verbal communication skills

Clients are seated in a circle, and are taught the verse. The staff leader begins by having the group recite the verse. At the end of the verse, the staff leader stares at one group member. When eye contact is made with the chosen member, the client stands up, recites his name, and then sits down. The verse is repeated again and this person then becomes the group leader and stares at another person in the group until eye contact is established. The process is continued until all group members have had a chance to introduce themselves and be the leader.

Main Activity: "Drawing Musical Charades"

Goals: Increase group participation with team members
Increase on-task behaviors
Increase risk-taking behaviors
Increase assertive responses

Clients are divided into two teams. Each team decides on ten song titles which are written down and placed in a hat. The teams select a person to keep time. The team members each take turns picking a song title out of the opposite team's hat and drawing it on a large piece of paper taped to the wall. The team members attempt to determine the song title by what's drawn on the paper. Each drawing turn is limited to 2 minutes. One point is awarded to the team for successfully determining the song title portrayed in the drawing. The winning team is determined by the number of points accumulated after each has 10 turns.
Music Therapy Session 2

Introduction: "No-Lose Musical Chairs"

Goals: Increase group participation
       Increase assertion
       Increase risk taking

Chairs are set up back to back in 2 rows - one chair for every participant. When staff starts the music, clients walk in circles around the chairs. When the music stops, clients sit down. Staff then removes one chair, and resumes playing music. When music stops, clients sit in available chairs. The person who does not get a chair sits on someone's lap. After each round one more chair is taken away and participants end up sitting on laps, until all but one chair is gone and all participants are lined up on each other's laps.

Main Activity: "This Song's For You"

Goals: Increase social interactions
       Increase risk-taking skills
       Increase assertion
       Increase appropriate conversational topics

Group members are asked to pair up. Each is given a paper and pencil and is asked to interview each other for 5 minutes, writing down 5 things that they learned about the partner. Clients then choose one song off a variety of albums that they determine describes something about their partner. The pairs rejoin into one group, and members take turns introducing their partner to the group, telling the group what they learned about the individual, playing the song, and explaining why it was picked for the person. This activity continues until everyone has a turn.
**Music Therapy Session 3**

**Introduction:** "I Like My Neighbors Who"

**Goals:**
- Increase group participation
- Increase on-task behavior
- Increase independent decision-making abilities
- Increase risk taking

Clients sit in a circle. A leader is chosen who stands in the middle of the circle. The leader states a phrase such as "I Like My Neighbors Who: wear glasses," upon which all participants who wear glasses need to get up and switch seats with each other. The leader also attempts to get a seat. This leaves one person standing in the middle who then becomes the leader. The process continues until everyone has a chance to be in the middle.

**Main Activity:** "Build a Bridge of Friendship"

**Goals:**
- Increase socialization
- Increase group participation
- Increase appropriate conversation
- Increase assertion

Clients participate in a discussion about friendship. A list is made of what a good friend is and is not. The song "Bridge Over Troubled Water" by Simon and Garfunkle is played and discussed (clients are given copies of the words). Clients are then asked to select a partner. Materials are spread out in the middle of a large table from which clients are asked to select some to build a "bridge of friendship" with their partners. Materials may include wood pieces and scraps, paper, glue, paints, fabric scraps, cans, trash, etc. Clients are then given an opportunity to share their creations with the rest of the group.
BIBLIOGRAPHY


Shepherd, G. (1978). Social skills training: The


American Association for Partial Hospitalization.
