

GROUP SINGING AND DISCUSSION AS ANXIETY REDUCING
AGENTS FOR NEW PATIENTS IN PSYCHOTHERAPY GROUPS

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CHAPTER I

INTRODUCTION

Concern with the phenomenon known as anxiety is as old as the history of mankind. Anxiety is an emotional state characterized by an unpleasant apprehensiveness which results from the individual's anticipation of unknown, non-specific dangers. Psychiatric-mental health nurses deal with the problem of patient anxiety in both individual and group settings; however, nurses are increasingly using the group modality for the treatment of emotional problems.

Psychiatric-mental health nurses have participated for some time in informal group interactions that have lent support, remotivation, reeducation, and assistance in problem-solving to patients. Nurses are presently acting as leaders and coleaders of such groups.

The main goals of group therapy are the facilitation of successful interpersonal relationships, and the reduction of isolation, anxiety, and dysfunctional communication. Another therapeutic goal is to enable patients to gain insight into their behavior. The group environment serves as a testing ground for the emotional reeducation of its members. In addition, the group encourages its

members to support each other and therefore meet each other's socialization needs.

The first session of a psychotherapeutic group presents characteristic difficulties since a new experience of mutual exposure invariably causes anxiety in both the therapist and the patient. The literature supports the contention that the patient's anxiety level is the highest during the initial group therapy session (Kadis, Krasner, Weiner, Winick, and Foulkes, 1974)

Anxiety associated with beginning group therapy may develop because the patient may fear censorship and rejection by the group members and therapist. The patients may feel that exposure to others may be threatening to their self-image. Regardless of the cause, if the patient's anxiety during the initial group therapy session is too high the patient may withdraw from therapy, lack the concentration needed for problem-solving, and be unable to reap the benefits of therapy. The therapist has the responsibility of reducing the patient's anxiety level during the first few sessions as thoroughly as possible before it has been allowed to heighten to threatening proportions.

Psychiatric-mental health nurses have sought to reduce the prevalent anxiety in beginning groups through the use of verbal interviewing techniques. The nurse has

not used non-verbal anxiety reduction techniques for this patient population extensively.

Music is a non-verbal means of communication that has been used as an anxiety-reducing agent. According to Gaston (1954), music is a means of subtle communication that may succeed in reaching the patient when other means fail. He hypothesized that music readily lent itself to therapeutic purposes because it was the most adaptable of the arts. The therapeutic use of music has been pioneered in the field of music therapy since World War II. Research within this field has lent support to music's therapeutic and calming effects upon groups of mental ill patients.

Nursing has infrequently utilized music as a therapeutic modality in the group therapy setting. This research was therefore aimed at ascertaining whether the nurse's use of music alone or the use of music in conjunction with verbal interaction reduced the patient's anxiety level when beginning group therapy.

Statement of the Problem

Does a significant difference in self-reported state anxiety exist between psychiatric inpatients participating in a group sing-a-long or in those psychiatric inpatients participating in a group sing-a-long followed by a

verbal discussion prior to attending their initial, second, or third group psychotherapy session?

Statement of Purposes

The purposes of this study were:

1. To determine anxiety levels of subjects prior to their participation in a group sing-a-long
2. To determine anxiety levels of subjects prior to their participation in a group sing-a-long followed by a verbal discussion
3. To determine anxiety levels of subjects after their participation in a group sing-a-long
4. To determine the anxiety levels of subjects after their participation in a group sing-a-long followed by a verbal discussion
5. To compare pre and post anxiety scores of subjects involved in the group sing-a-long condition
6. To compare pre and post anxiety scores of subjects involved in the group sing-a-long followed by a verbal discussion condition
7. To compare post anxiety scores between subjects involved in the group sing-a-long and subjects involved in the group sing-a-long followed by a verbal discussion

The pre-anxiety scores will be accounted for by an analysis of covariance.

Background and Significance

Few studies have been performed relating the effect of group singing upon anxiety levels. In group therapy the patient is met with new social interactions, which often produce tension. The therapist often tries to help the patient feel at ease in the setting, however, verbal reassurance is sometimes not enough. In such situations, the use of music may be a non-verbal way to reassure the patient.

Empirical research in the field of nursing is needed for testing nursing theories and equally significant for improving nursing practice. To date, there has been a paucity of research concerned with man's coping behavior on the health-illness continuum. The mechanisms used by man to cope with threats to health, life crises, infirmities, and dysfunctions need to be identified and interventions to support these behaviors have to be planned and tested. Nurse theorists need to be aware of those nursing interventions designed to assist patients cope successfully.

This study was aimed at testing the effectiveness of two anxiety reducing interventions instituted by the nurse in a specific patient population. These interventions can be readily utilized by the psychiatric-mental

health nurse in any group setting and particularly when leading or coleading a group psychotherapy group.

Anxiety has been described as a phenomenon characterized by psychological and physiological symptomatology. The emotional tone of anxiety is characterized by uneasiness, distress, tenseness, nervousness, anguish, apprehension, panic, or fright (Schalling, Cronholm, & Asberg, 1975). According to numerous anxiety theorists, particularly Lazarus and Averill (1972), anxiety is triggered by a vague perception of a threat evolved by an internal or external stimuli. The anxious person will therefore feel frightened but will not know why.

Anxiety associated with initial group psychotherapy sessions has been documented by several group theorists. DeSchill (1974) asserted that practically everyone, including the therapist, experienced some anxiety during the initial group sessions. The anxiety generated within the membership, during the initial sessions, can be transmitted from member to member and collectively serve to heighten the entire group's anxiety level.

Excessive anxiety in patients beginning group psychotherapy undermines the patient's progress (Yalom, 1975). High anxiety levels precipitate the patient's premature withdrawal and termination from the therapy.

High anxiety levels interfere with the patient's ability to effectively problem-solve, form successful interpersonal relationships, and reduce their sense of isolation. Thus, high anxiety levels deter the patient from meeting the functions that the group seeks to promote.

The mental health professions, including nursing, have relied heavily upon the use of verbal interaction to reduce beginning anxiety in group members. In fact, psychiatric-mental health nursing's greatest area of expertise lies within the area of formal and informal verbal skills. Peplau (1964) recognized this when she stated, "one inescapable fact is that nurses always have had and always will have verbal relationships with their patients" (p. 7).

The verbal interactions for reducing anxiety chiefly consist of identifying the patient's anxiety, encouraging the patient to acknowledge it, and then encouraging verbalization of the patient's feelings. The verbal interactions for reducing anxiety in patients beginning group psychotherapy have been utilized with apparent success; however, the exploration of alternate forms of anxiety reduction by nurses for this population has been very limited. It was therefore proposed that research be performed within an alternate area of anxiety reduction.

Music has been cited as a non-verbal means of anxiety reduction in the music therapy literature. The therapeutic value of music is attributed to many different phenomena, depending on which theoretical framework is employed. Music's success in reducing anxiety has frequently been attributed to its tendency to promote feelings of catharsis, to provide a form of distraction, and to serve as a vehicle where unconscious libidinal strivings may be satisfied. Music additionally enhances the group process and encourages group interaction.

Music has often accompanied man's social relationships because it has been a source of enjoyment and serves as a common ground of interest for group members. Music facilitates the release of pent-up emotions within the members of a group psychotherapy session as it tends to serve as a non-verbal, emotion arousing stimulus (Sommer, 1957).

Group performance of a musical activity has been found to enhance interpersonal relationships within the group setting (Cassity, 1976). Cassity found that group participation in guitar lessons increased the level of peer acceptance and cohesiveness within the group. In addition, the literature lent support to group singing as a modality for both anxiety-reduction and resocialization (Butler, 1966; Eby, 1943; Davis, 1943). The majority of

literature that has been written about the nurse's involvement in musical activities has focused upon the nurse's role in the facilitation of group singing. This role has been proposed by several music therapists for the nurse.

Numerous studies in the field of music therapy were undertaken to determine the types of music that were most effective in reducing anxiety and in certain patient populations. Mitchell and Zanker (1948) found that traditional and folk music were favored by all patients. Biller, Olson, and Breen (1974) found that sad music reduced subject anxiety (according to scores on the state and trait anxiety scales) to a greater extent than did happy music. Music's effects upon the galvanic skin response has been investigated by Peretti and Swensen (1974) and Weidenfeller (1962). Peretti and Swensen found that among male and female music and non-music majors, sedative music precipitated the greatest anxiety reduction in female music majors. Weidenfeller (1962) studied the effects of calming and exciting music upon the galvanic skin responses of normal, depressive, and schizophrenic patients. The researcher concluded that the "calming" music's effect on anxiety lasted for six hours and were general for all subjects, irrespective of their diagnosis.

Hypotheses

The hypotheses for this study, as stated in the null were:

1. There will be no significant difference between the pre and post anxiety scores of subjects participating in the group sing-a-long

2. There will be no significant difference between the pre and post anxiety scores of subjects participating in the group sing-a-long followed by a verbal discussion

3. When the pre-anxiety level is controlled, there will be no significant difference between the post-anxiety scores of subjects participating in the group sing-a-long and subjects participating in the group sing-a-long followed by a verbal discussion

Definition of Terms

For the purposes of this investigation the variables were operationally defined as follows:

Nurse-therapist--a licensed, registered nurse with a minimum of a bachelor of science in nursing, who professes interest in the field of psychiatric-mental health nursing and is currently involved in a mental health setting. The researcher will act as the nurse-therapist in the study

Group sing-a-long--a musical activity where the nurse-therapist and subjects jointly sing five or ten taped musical selections with lyrics (See Appendix B for a listing of musical selections)

Follow-up verbal discussion--designed group discussion using five questions to stimulate conversation about the subject's response to the music (See Appendix B for discussion questions)

Formal group psychotherapy session--a group session, primarily concerned with problem-solving that is led by a psychiatric-mental health nurse (other than the researcher) and a psychiatric social worker

State of anxiety--a temporary emotional state, characterized by feelings such as distress, tenseness, nervousness, anguish, and apprehension. The level of the state of anxiety is the subject's performance on the State Anxiety Scale (Spielberger, 1970)

Psychiatric inpatients--currently hospitalized male and female inpatients between the ages of 18 and 75 presenting symptoms of mental illness as diagnosed by a staff physician. The diagnosis of mental illness may be primary or secondary and will be noted on the patient's chart

Initial group psychotherapy experiences--the
patient's first, second, or third exposure to the modality
of group therapy in his or her current hospital setting

Limitations

There was no control over the following variables:

1. The differential effects of the nurse-therapist's personality upon the subjects
2. The differential effects of the personalities of the other group members upon the subjects
3. The significance and subsequent effects that a particular song will have upon the subject
4. The differential effects of the use of recorded music with lyrics as opposed to recorded instrumental music
5. The amount and type of medication that was received by the subject during the hospital stay
6. The differential effects of hospitalization prior to the study
7. The severity of the mental illness, for example, the lability of the patient's moods, thoughts, and behaviors
8. The subjects in the two experimental conditions were not all tested on the same day.

Delimitations

The following variables were controlled for:

1. The subjects for this study were diagnosed with a primary or secondary diagnosis of mental illness by a staff physician
2. The subjects were between the ages of eighteen and seventy-five years of age
3. The subjects for this study were male and female
4. The subjects were attending formal group psychotherapy for the first, second, or third time on the day of testing
5. The subjects did not take an electroshock treatment on the day of testing
6. The subjects were not actively hallucinating or violent
7. The subjects were able to read, write, and speak the English language
8. The subjects were able to hear and had no obvious or recorded hearing deficits
9. All groups consisted of two to ten subjects.

Assumptions

The assumptions for the study were:

1. The use of a group setting for the therapeutic use of music and verbal interaction is beneficial and not harmful to the patient
2. Music is a pleasurable activity that serves as a reward in its therapeutic use
3. Communication is in itself a rewarding activity
4. Decreased patient anxiety levels within the patients will facilitate the benefits of the group
5. Catharsis of emotions is beneficial to the psychiatric patient
6. The use of verbal interviewing techniques is one of the psychiatric-mental health nurse's greatest skills
7. Intrapersonal personality changes can be precipitated through interpersonal relationships
8. Anxiety can be rapidly transmitted non-verbally from one member to another in the group setting
9. Anxiety can be reduced from high levels to tolerable levels for the patient through intervention

Summary

Two types of interventions, derived from the fields of nursing and/or music therapy were implemented to ascertain their effectiveness as anxiety-reducing agents. The first intervention consisted of the facilitation of a group sing-a-long prior to the patient's initial, second, or third group psychotherapy session.

The second intervention consisted of the facilitation of a group sing-a-long followed by a verbal discussion, prior to the patient's initial, second, or third group psychotherapy session. The research was implemented to add to the empirical knowledge in the area of anxiety reduction by the psychiatric-mental health nurse working with the group process.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

Anxiety is considered one of the fundamental explanatory concepts in most theories of personality and psychopathology (Spielberger, 1975). Anxiety is regarded as a central problem in the neuroses. The feeling tone of anxiety has been described as an unpleasant apprehensiveness in anticipation of unknown and non-specific impending danger.

Mental health professionals have been faced daily with patients who are overwhelmed by crippling anxiety. One of the chief functions of the therapist has been the reduction of patient anxiety to a manageable level. Paradoxically, the therapeutic modalities designed to reduce anxiety, that is, individual, group, and family therapy, also tend to generate anxiety within the patient when they are initiated.

This chapter examines: the concept of anxiety; anxiety in beginning group therapy; interventions for the reduction of anxiety; the nurse's role in anxiety reduction; anxiety reducing interventions used in the group

setting; pretherapy training; desensitization; relaxation therapy; the use of music in anxiety reduction and group performance of music; types of music found to decrease anxiety; and the nurse's participation in musical activities. The review has incorporated material from the fields of nursing, music therapy, psychiatry, and psychology.

The Concept of Anxiety

The concept known as anxiety has been defined by many in various ways. Many causes for anxiety have been hypothesized; however, phenomenologically, anxiety has been characterized by uneasiness, distress, tenseness, nervousness, anguish, apprehension, panic, or fright (Schalling, Cronholm, & Asberg, 1975).

The first person who attempted to describe anxiety within a theoretical framework was Freud (1924, 1933, 1936). He initially depicted anxiety as something that was felt by the individual and was characterized by an unpleasant affective state. He thought that anxiety resulted from the discharge of libidinal feelings; however, Freud modified his views to regard anxiety as a signal indicative of the presence of danger. He then identified three types of anxiety, that is objective, neurotic, and moral anxiety. Objective anxiety or fear was evoked by facing real dangers in the external world. Neurotic anxiety was evoked by the

individual's unacceptable sexual and aggressive impulses which had been severely and consistently punished during the childhood phase. Moral anxiety or guilt resulted when one's behavior violated the code of the individual's conscience.

Alternative explanations for the causation of anxiety have been proposed by Lazarus and Averill (1972) and Peplau (1962). Lazarus and Averill proposed that anxiety was triggered by the vague perception of a threat which was evoked by an internal or external stimuli. In this case, there was a diffuse arousal state without the clear cognitive cues to the source of the anxiety. This vagueness resulted in the anxious person feeling frightened but not knowing why he or she felt that way. Anxiety has also been regarded as a form of energy by Peplau (1962) which cannot be directly observed but has to be inferred because of its effect upon one's behavior. She regarded anxiety as an affective state characterized by an unpleasant feeling of apprehension.

Anxiety has been described as the automatic response of an individual who perceives a threat to his or her physiological or psychological nature. This response precipitates physiological responses in the autonomic nervous system in addition to the psychological functions or

readiness for self-preservation. This phenomenon has been called the fight or flight response and is characterized by an increased activity of the sympathetic nervous system.

Anxiety has been found to produce tangible effects upon the individual's emotions, thought processes, physiological makeup, and behavior patterns. Anxiety has been depicted on a four point scale to indicate the varying degrees of anxiety. The scale has been used to categorize anxiety into mild, moderate, severe anxiety or panic (Simmons, 1976). In this framework, the mildly anxious person appears more acutely sensitive to external stimuli and more receptive to learning. The moderately anxious person's perceptual field narrows. He or she then experiences the phenomenon known as selective inattention which occurs when the person fails to notice what has been going on in the situation peripheral to his or her immediate focus. The severely anxious person's perceptual field is greatly narrowed so that the focus is on a specific detail rather than the entire picture. Panic occurs only when the individual's anxiety level is allowed to soar to threatening proportions. In this case, the person remains impervious to his or her environment and unable to focus on his or her environment even when directed by another (Simmons, 1976).

Peplau has hypothesized that the anxious person adapts his or her behavior in order to avoid or reduce his or her anxiety level and will use one of the four following behavior patterns. These behavior patterns or "acting out" behaviors are characterized by the overt or covert use of anger to prevent the individual's recognition of the anxiety. The anxious person may convert the anxiety into physical complaints through the process of somatization. Finally, the individual's anxiety may be transformed into flight behavior in the form of withdrawal or depression (Peplau, 1964).

Anxiety has often been used to signify a temporary emotional state as well as a habitual emotional state. Spielberger (1975) conceptualized state anxiety as the transitory emotional state which is characterized by subjective, consciously perceived feelings of tension. He has viewed trait anxiety as a state which is relatively stable and represents the individual's characteristic behavioral disposition towards the perception of a threatening situation.

Anxiety in Beginning Group Therapy Situations

There is an imposing body of evidence which demonstrates that there are limits to the amount of anxiety

that can be considered therapeutic within the group therapy setting. It seems paradoxical that the group therapy modality designed to reduce anxiety initially creates anxiety. The first session of a psychotherapeutic group characteristically presents difficulty since it is a new experience which involves exposure for the therapist and group members.

During the first group therapy session, the patient may attempt to protect himself or herself by taking flight from the group when the anxiety level becomes intolerable. In addition, the therapist may also experience anxiety in a beginning group and may exhibit self-protective, anti-therapeutic behavior patterns to the group. A minimum amount of anxiety within the group therapy environment is beneficial as it enhances motivation and increases client vigilance; however, excessive amounts of anxiety obstruct the group member's ability to handle the stress. Crippling amounts of anxiety associated with beginning group therapy prevent client introspection and interpersonal exploration.

The first group session brings forth familial and familiar "déjà vu" reactions of considerable intensity (Kadis, Krasner, Weiner, Myron, Winick, Foulkes, 1974). Yalom (1975) hypothesized that anxiety associated with

beginning group therapy existed for the initial twelve sessions. He contended that during the first twelve meetings that many members became unnecessarily discouraged with themselves and prematurely terminated their treatment. He viewed the new group members as being extremely susceptible to the therapist's influence during the initial sessions due to their high anxiety levels during this time.

Various explanations for anxiety in the initial phase of group therapy have been offered. One explanation proposes that anxiety results when the patient's preconceived notions of what therapy should be are not met. In addition, the patient's insecurity and lack of identity within the group as a beginning member tend to increase his or her anxiety level. Yalom (1975) designated intrinsic and extrinsic anxiety as being the causes for beginning anxiety in groups. He cited intrinsic anxiety as arising from the patient's conflict with group norms. For example, when encouraged to disclose information concerning his or her interpersonal relationships with others, the patients who had isolated themselves or had maintained poor interpersonal relationships with others tended to experience anxiety. In addition, if the patient entered into the group process with goals that were at cross purposes with the group goals, intrinsic anxiety resulted. The patient's

personal goals or hidden agenda that he or she brought to the first meeting often went unmet. This caused the member to feel a certain amount of anxiety.

The ambiguity of the group setting has been associated with a certain amount of patient anxiety. The new member's lack of identity within the group may promote an increased dependency upon the therapist as he or she sees the therapist as someone who can provide him or her with the security that is needed. Some members have been found to increase their dependency upon other group members so as to decrease their anxiety levels. Members often use various behaviors to decrease their beginning anxiety.

Some members distance themselves from the other group members by maintaining superficial personal exchanges and through polite advice-giving. Other members employ attention-getting behavior or behave ineptly to gain sympathy from the other group members whereas some handle their anxiety by acting as assistant leaders or as teachers (Clark, 1977).

Anxiety associated with extrinsic factors occurs when the therapist fails to adequately explain the group goals to the patient. In his research with laboratory groups, Yalom (1975) gave support to the notion that the more ambiguous the group goals were, the more anxiety

within the group. Ultimately, there was less cohesion and productivity within the groups where the goals remained undefined. The members of these groups tended to terminate therapy prematurely.

Irrespective of the cause(s) of anxiety during the initial phase of therapy, the therapist must reduce the anxiety if the group's integrity is to be maintained. It has been noted that in groups fraught with high levels of anxiety, the atmosphere is largely non-therapeutic. However, low levels of anxiety within the group setting are associated with an increased aptitude for learning. This kind of group atmosphere can be considered therapeutic (Yalom, 1975).

Premature termination of membership will result if the new group member's anxiety is not dealt with effectively. It is therefore imperative that the therapist do his or her utmost to reduce this anxiety within the initial few therapy sessions if the patient is to reap the benefits of group therapy.

Interventions for the Reduction of Anxiety

Throughout the literature, certain methodologies for the reduction of anxiety in all patients have been advocated. The therapist has been given primary

responsibility for reducing the patient's anxiety and is to do so in a direct, advice-giving manner.

The treatment of all anxious people, regardless of the pathology, should be much the same according to Ruesch (1973). He hypothesized that the voice of the therapist should be firm and non-threatening and that the sentences used be short and to the point. He emphasized the therapist's role in decision-making, stating that the therapist should make the decisions for the highly anxious patient. The therapist should additionally remain unperturbed as the therapist could convey a feeling tone of calmness and strength to the patient and thereby reduce the patient's anxiety level. Finally, the author advocated that when possible the patient be removed from the anxiety-producing situation.

Numerous authors (Cartwright & Zander, 1968; Peplau, 1962; Kadis, Krasner, Weiner, Myron, Winick, & Foulkes, 1974; Yalom, 1975) suggested that the most effective way to decrease anxiety was for the therapist to verbally acknowledge the patient's anxiety and then attempt to have the patient talk about it. Following the initial self-disclosure, the therapist would have the patient attempt to identify the source of anxiety, previous measures that have

effectively reduced anxiety in the past, and encourage the patient to utilize his or her past coping behaviors.

The Nurse's Role in Anxiety Reduction

The literature supports the contention that the nurse has an important function in alleviating patient anxiety (Bird, 1955; Gregg, 1955; Janis, 1958). Janis (1958) was the first to investigate the manifestations of psychological stress in hospitalized surgical patients anticipating surgery. He found that one group of patients manifested a low anticipatory fear preoperatively and tended, therefore, to deny potential danger and deprivation. Another group of patients were classified as part-time worriers. These patients showed moderate fear which could be alleviated by mild sedatives and routine activity. A third group of patients were classified as the high anticipatory fear group and reacted to the upcoming surgery in an exaggerated way by weeping, flushing, and making efforts to postpone the surgery. The author proposed that the highly anxious patients would benefit the most from a brief, concise communication form so as to enable the patient to regain his or her emotional control.

One of nursing's foremost spokesman on psychiatric nursing, Peplau (1962) proposed a four step series of interventions to deal with the anxious patient. She drew

heavily in her works from Sullivanian interpersonal theory. Therefore, the Sullivanian theory regarding anxiety will be explored before Peplau's nursing interventions are outlined. Sullivan (1947) maintained that anxiety was created within the interpersonal relationship. He maintained that behaviors, emotions, and needs originated from the interaction of one individual with another. He viewed anxiety as the chief disruptive force within the interpersonal relationship and theorized that the patient's need for the relief of the anxiety reflected the patient's need for interpersonal security. He maintained that individuals tended to become anxious about present-day relationships because they projected expectations from past relationships. Sullivan hypothesized that the therapist's role in dealing with the anxious patient was to sustain a therapeutic interpersonal relationship with the patient. A strong, healthy interpersonal relationship with the therapist supposedly enabled the individual to profitably handle his or her anxiety.

Peplau (1962) proposed a four step intervention plan for the reduction of patient anxiety. The four steps were originally designed to be performed over several nurse-patient interactions. The later steps could feasibly be enacted only after a trust relationship between

the nurse and patient had been established. According to Peplau, the nurse would initially recognize the patient's anxiety verbally to the patient. The nurse would then ask the patient to think of those behaviors which had served to decrease his or her anxiety in the past and then urge the patient to utilize the relief behaviors during his or her highly anxious periods. Following this step, the nurse would encourage the patient to describe his or her feelings, thoughts, and behaviors which immediately preceded the anxiety attack. The nurse would then help the patient identify the precipitating event that led to the anxiety attack. Through this four step intervention the nurse could eventually enable the patient to gain insight into what caused the anxiety and how he or she had reacted to it.

Peplau's (1962) interventions with the anxious patient were expanded and modified by Gregg (1955). She proposed that the nurse encourage the anxious patient to investigate how his or her new anxiety-producing experiences resembled his or her old anxiety-producing ones. The nurse was then encouraged to give the patient an opportunity to express his or her feelings of anxiety and to maintain his or her own pace in working their problems out. Gregg proposed that the nurse offer the patient unconditional acceptance.

as she felt that the anxious patient needed the support of an accepting, non-critical party.

Little empirical nursing research has been done in the area of nursing interventions designed to reduce anxiety. The studies that have been performed have been largely limited to those studies designed to determine the effect of nursing interventions with medical-surgical patients. Meyers (1974) conducted an experiment designed to determine which type of communication, structured, irrelevant, or no communication, most effectively reduced anxiety in an anxiety-producing experiment. The "structured communication" consisted of an accurate description of what the experiment consisted of. The "irrelevant communication" consisted of conversation which was not related to the experimental condition. The "no communication" consisted of the researcher performing the experiment without any prior explanation of the procedure. The anxiety-producing experiment consisted of the investigator (a nurse) walking into the patient's room with a covered tray containing test tubes, a stick applicator, gauze, and a metal container. The investigator applied water to the patient's arm and covered it with a piece of gauze until it dried. The results of the study were that those patients receiving structured communication did not fear the experiment,

whereas those patients receiving no communication or irrelevant communication expressed a fear of being hurt during the experiment. The investigator contended that the nurse could reduce the patient's anxiety level by providing the patient with specific information; however, that in some cases patients overreacted to specific information, while others denied the significance of the information. The author concluded that the nurse additionally has to acknowledge that the patient's past pattern of handling stress will influence how the individual handles stress (anxiety) presently.

Another experiment conducted by Brockway, Plummer and Lowe (1976) studied the effects of two types of nursing reassurances upon patient anxiety levels. The anxiety was measured vocally by a psychological stress evaluator. The patient population consisted of pregnant women who were being interviewed by nurses regarding their concerns about hospitalization. One group received knowledgeable reassurance (academically promulgated) and one group received superficial reassurance. The results were that the subjects receiving knowledgeable reassurance had decreased anxiety whereas the subjects receiving superficial reassurance did not. Neither form of reassurance was statistically significant. The findings suggested that

knowledgable reassurance was useful only for those patients who did not use denial or avoidance as coping mechanisms.

The nursing research has been conflictual in nature. It appears that the nurse's provision of accurate information to the anxious patient was only effective in some cases. The need for a nursing intervention designed to reduce anxiety in those patients tending to use denial and avoidance as coping mechanisms still remains to be found. Therefore, nursing, as witness to the empirical evidence, has not found an anxiety-reducing intervention that is universally effective. Research in the area of finding effective methodologies for reducing anxiety needs to be performed.

Anxiety-reducing Interventions
Specifically Used within
the Group Setting

Numerous group theorists have advocated many different ways of reducing anxiety within the group setting. Interventions that have been put into effect prior to or during the first group session include: anticipatory interviews, orientation groups, and role-induction interviews. These interventions can be classified as pre-therapy training. Desensitization, relaxation therapy, and warm-up exercises have also been utilized in the group.

setting to reduce anxiety in the initial phase of group therapy.

A number of group theorists (Yalom, 1975; Kadis, Krasner, Weiner, Winick, & Foulkes, 1974; Curran, 1976) have emphasized the therapist's need to conduct an anticipatory interview about the group and to provide the patient with information concerning the group goals, expected behavior, and to provide a description of the other group members.

Kadis (1974) noted that the therapist's perception of and response to the patient's initial doubts, reactions, and curiosity about the first session had a tremendous influence upon the patient's performance within the group. In addition, he proposed that the therapist either during the pre-therapy interview or during the actual first session, recognize potential sources of anxiety for the patient and communicate them to him or her. In addition, the therapist was to inform the patient that his or her anxiety during the first few sessions might be so great that he or she might want to leave the group; however, this often meant that something very important was going on within the patient and that it was important to stay and work on these feelings.

According to Yalom (1975), the therapist also needs to deliberately repeat and emphasize the essential points of the preparation. He felt that the patients had "an unbelievable tendency to inattend selectively, or to misunderstand key aspects of the therapist's initial comments, due to their high anxiety levels" (Yalom, 1975, p. 298).

Some group therapists chose to initially prepare the patient for therapy through the provision of written or audiovisual material regarding the group process. Some therapists invited the patients to listen to a tape or a model group session or attend a trial meeting in order to decrease their beginning anxiety.

Another alternative method of orienting new members to the group process is the formation of institutional or outpatient, intake groups. These have also been called vestibule, diagnostic, holding, or orientation groups. These groups are designed to provide the patient with a preliminary group experience until the patient can be specifically assigned to a permanent group experience. In this setting, the patients are encouraged to initiate some work within this framework which they can then carry over into their more permanent group therapy experience (Gauron, Steinmark, & Gersh, 1977, p. 34).

The role-induction interview was originally developed by Orne (1968). This interview suggests the appropriate patient role in a group therapy session. Curran (1976) modified Orne's role-induction interview and conducted an experiment whereby he exposed one group of patients to a thirty minute videotape of a role-playing interview and then had the patients role play their responses to a particular situation. His second group served as a control group. His research findings supported the contention that those patients exposed to the videotape and role induction interview exhibited a significant amount of anxiety reduction as measured by the Taylor Manifest Anxiety Scales (Curran, 1976, p. 354).

In addition, Yalom (1975) also conducted research into the effect of Heitler's anticipatory socialization interview upon lower class patients preparing to go into group therapy. The results of the study suggested that those patients given an idea of the expected norms and behaviors in group therapy participated to a greater extent and exhibited more self-exploratory behavior than did those who were not given the interview. It appears then that providing the patient with a set of expectations about the group therapy process reduces their anticipatory anxiety level.

Group desensitization has also been utilized by the mental health field as an efficient means of reducing specific anxieties and phobias (Katahn, Strenger & Cherry, 1966; Lazarus, 1961; Paul & Shannon, 1966; & Deffenbacher, 1976). Group desensitization has gained its noticeable efficiency from the fact that several individuals with the same type of anxiety can be desensitized at the same time.

In the group desensitization process, the first two sessions are usually devoted to the establishment of rapport between group members and to the explanation of the desensitization procedures. Initially relaxation procedures are utilized and the client is then urged to mentally picture an anxiety-producing scene. The therapist then instructs the patient to "relax away the anxiety while continuing to visualize the scene" (Goldfried, 1971; Meichenbaum, 1972). In the event that the patient begins to become panicky, he or she is instructed to terminate the scene. This technique takes approximately twenty-four hours of therapy before it can be considered an effective anxiety-reducing agent. Therefore, without modification and the subsequent reduction of time necessary for it to be effective, it does not appear to be a feasible method of anxiety reduction in clients beginning group psychotherapy.

Relaxation exercises have been solely utilized to decrease patient anxiety. In the relaxation process, the initial part of the session concentrates on the systematic relaxation and contraction of all of the body's muscle groups. The therapist then instructs the patient to imagine a pleasant scene. The therapist then asks the patient to recall this feeling every time he or she experiences heightened anxiety in a situation. With practice the client should eventually be able to progress through an entire "tension-provoking scene mentally without experiencing overwhelming anxiety" (Clark, 1977, p. 23).

In addition, warm-up exercises have also been utilized to reduce anxiety in patients entering group therapy. One such exercise consists of having each member write down what he or she hopes to get from the group experience, and/or asking the members to draw pictures of themselves and then pair off to talk amongst themselves about the pictures. This exercise is designed to allow the members to express some of their feelings about participating in the group and has been found effective in the reduction of anxiety levels (Clark, 1977).

The Use of Music in Anxiety Reduction

The aforementioned anxiety reduction techniques have been restricted to the use of verbal techniques.

Since its inception, the field of music therapy has attempted to reduce patient anxiety through the medium of music. Music has been called the universal language because it enables communication to take place between cultures who are separated by language, time, and space (Herth, 1978).

The therapeutic effects of music have been reported since early history and have been actually documented within the music therapy field. In ancient Greece, Apollo was considered to be the father of medicine and music. At that time music was considered to be an important medium for education and healing (Meinecki, 1948). In addition, the shaman healer's use of music during sacred rituals was thought to enhance the healer's power and was part of the community effort to restore the sick back into health and into the social network (Radin, 1948).

The period after World War II saw an increase in the use of music as a form of therapy, especially in the psychiatric and rehabilitative settings. Music therapy can be defined as an adjunctive activity therapy that utilizes the medium of music to provide a gratifying experience. The therapist's role in music therapy is primarily to draw the patient into a musical activity, that is, to

encourage the patient to make music by singing, humming, playing, dancing, or conducting (Tyson, 1965).

The music therapy literature explores the history of music in therapy and the theoretical explanations for its functions and its power. Even Ruud (1977) traced the theoretical explanations for the use and success of music in terms of the psychoanalytic, behaviorist, humanist/existential, and interpersonal schools of psychology. His overview of the various theoretical frameworks and music's use within them concluded with the stance that the field of music therapy "could never establish theories and procedures separated from those within the field of psychology and philosophy" (Ruud, 1977, p. 101). He differentiated the field of music therapy from the field of psychology, in that, both fields dealt with man, but that only music therapy dealt specifically with man's relationship with music.

There have been numerous theoretical explanations for music's therapeutic success rate and among these the themes that surface most frequently are that music could change mood levels, provide an escape from problems, and serve as a vehicle for self-expression. Taylor and Paperte (1958) and Miller (1967) hypothesized that music could precipitate a mood change for the listener. Taylor and

Paperte (1958) felt that when the structural dynamics of the music were similar to the structural dynamics of the listener's emotions, a sympathetic union of the two resulted. A change in the music would then simultaneously produce a corresponding change within the listener's emotions.

The psychoanalytic viewpoint regarding music's ability to change emotions was presented by Miller (1967). He proposed that in any music, wordless, prelogical mechanisms of the unconscious could be triggered. He related that music's ability to portray multiple and even opposite emotions simultaneously made it possible for the music to become deeply meaningful to the listener's unconscious feelings. He felt that because of the aforementioned dynamics music was able to create an emotional experience for the listener the depth of which was seldom equaled in any other form of communication. In addition, Miller felt that within a given culture similar types of sound produced similar types of feelings, such as love, excitation, joy or sadness within for the entire membership, even though individual differences did exist.

Music has also been viewed as a vehicle which enables the individual to escape from his or her morbid self-preoccupation into the dynamics of the music itself.

This view was proposed by Girard (1954) who visualized music as being a natural substitute for one's imagination and fantasy states.

A number of authors, notably Van deWall, 1946; Gaston, 1954; Wright and Priestley, 1972; and Golman and Paperte, 1949, proposed that music served as a vehicle for self-expression. This proposition was based on the belief that music had cathartic-like effects, that is, it had the ability to serve as a "physical container into which the tensions of the emotions can be poured, so that the cathartic effects can lead to deep peace and harmony" (Wright & Priestley, 1972, p. 22). Utilizing a psycho-analytic framework, Golman and Paperte (1949) proposed that music's therapeutic effects facilitated the patient's expression of unconscious and repressed material because it served to stimulate the listener's imagination.

Several authors attributed music's therapeutic effectiveness to the contention that music promoted and sustained the formation of good interpersonal relationships. Gaston (1954) viewed music as the most adaptable of the arts and viewed it as being a catalyst for the establishment of good interpersonal relationships. Sears (1968) and Michel (1976) viewed music within the interpersonal relationship framework. Sears (1968) hypothesized that

music was an extension of human behavior and could serve as a potentiator of self-growth and good interpersonal relationships. Michel (1976) proposed that music could be conceptualized as a two-edged therapeutic sword. One edge of the sword consisted of music's effects upon the individual's body and mind; whereas, the other edge consisted of the uses that mankind could put music to. He visualized the music-therapist's function as using music as a tool to enhance the therapist-patient relationship.

In summation, music's therapeutic success rate is thought to be due to many factors. Anxiety reduction has been cited within the music therapy literature as one of the types of therapeutic successes. Michel (1976) proposed that music was anxiety-reducing because it seemed to offer reassurance and distraction for the mental patient.

Numerous studies in the field of music therapy were performed to determine the effects of music upon self-reported anxiety and the galvanic skin response, the physiological correlate of anxiety. Biller, Olson, and Breen (1974) conducted an experiment to determine the effects of "happy" and "sad" music with lyrics upon subject anxiety levels. The state and trait anxiety scales (Spielberger, 1975) were utilized to assess the anxiety levels of the subjects. It was concluded that sad music without audience

accompaniment with musical instruments reduced subject anxiety to a greater extent than did happy music. Happy music with or without accompaniment was found to increase the anxiety levels.

In a recent study conducted by Smith and Morris (1976) subjects were subjected to stimulative music, sedative music, and no music. The subjects were given a questionnaire before and after each of the three musical conditions to determine the levels of emotionality and worry. In the study, worry was considered the cognitive component of anxiety, whereas emotionality was considered to reflect the physiological and affective components of anxiety. The results supported the contention that sedative music did not enhance emotionality or worry nor did it significantly reduce either of these variables. Stimulative music was found to increase both emotionality and worry as well as enhance cognitive activity.

Other empirical studies focused on the effect of background music upon the galvanic skin response. Perretti and Swenson (1974) investigated the effects of music upon the galvanic skin responses of four groups of subjects: males, females, music, and non-music majors. The results demonstrated that sedative music precipitated the greatest decrease in physiological manifestations of anxiety in

female music majors, followed by the second largest reduction in female non-music majors.

Weidenfeller (1962) studied the effects of calming and exciting music upon normal, depressive, and schizophrenic subjects. The exciting music heightened anxiety to a greater extent in the depressive group than it did in the schizophrenic group. The calming music consistently reduced anxiety (manifested by the galvanic skin response) for all three groups. The investigator concluded that calming music maintained its sedative effect for at least six hours after its administration. The investigator proposed that music could therefore be utilized to at least temporarily modify the general mood levels of the depressive and schizophrenic patients.

Ries (1969) proposed that the patient's respiratory status was a valid indice for the individual's music preference. He noted that the "deeper the subject's breathing, the greater his musical preference" (Ries, 1969, p. 64). He also proposed that the more the subject preferred a musical selection, the less anxious he or she would feel.

Diserens (1969) investigated the metabolic changes associated with listening to music and found that the rhythm of respiration tended to adapt itself to the rhythm of the music, particularly when the music slowed. In

additional studies he found that music was capable of lowering the threshold of sensory perception and that muscular energy increased with the intensity and pitch of the sound stimuli.

Group Performance of Music

Music has often accompanied man's social relationships because it has served as a source of enjoyment and a common ground of interest for the group members. Several authors recommended the use of music within the group therapy setting and offered some theoretical explanations for its success rate. Two therapists, Frances and Schiff (1976) recommended the use of music within adolescent group therapy. The authors felt that it was more socially acceptable to be moved by music and to respond to the music within the group than it was to share the same feelings openly in a group if there had been no external catalyst to the discussion. They proposed that "popular" songs achieved a certain success rate in adolescent groups because the songs appealed to the members' basic emotions in a compelling way. The therapist could change his or her relationship with the adolescent group through the use of music because the music lessened the therapist-membership distance and could make the therapy appear less threatening to the adolescents. The authors cautioned against the

indiscriminate use of the music in therapy; however, because the increased group cohesion fostered by the music could become temporary and artificial unless the music was utilized to assist the members to examine their conflicts introspectively. The music could unintentionally become a form of resistance within the group as it could become so entertaining that the "real" issues in group could be avoided.

Cassity (1976) performed an experiment to determine whether the group performance of a musical activity would heighten the benefits of group therapy. He hypothesized that the benefits of the group therapy experience were increased group cohesiveness and peer acceptance, and improved interpersonal relationships. The study results were that the experimental group who were learning to play the guitar together, increased their levels of peer acceptance and group cohesiveness to a greater extent than did the non-experimental group.

This investigation hypothesized that a group's participation in a musical activity should indirectly decrease individual anxiety levels. This hypothesis was based upon the assumption that the social relationships between the patient, therapist, and other group members could be improved through their cooperative participation

in a group musical activity. Hypothetically, if the social relationships were improved through the participation in a group musical activity, then the patient's anxiety level should be decreased, providing that the anxiety resulted from the patient's fear of rejection from other group members. This study utilized group singing as the musical activity to be performed based upon its therapeutic success rate as found in the literature.

Several writers emphasized the value of group singing in the resocialization and reduction of anxiety in psychiatric patients. Eby (1943) proposed that group sing-alongs or "song meets" had a normalizing effect upon the patient's socialization habits. He also proposed that the patient's increased cooperative efforts in group singing decreased the patient's level of social isolation. In addition, Davis (1943) proposed that the group singing served to increase group unity and increase positive patient attitudes. Another music therapist, Harrington (1939) observed that group singing tended to have a positive, healthful influence upon the patient's entire hospital stay.

Group singing was introduced in an actual group therapy setting by Butler (1966). She introduced group singing in her private group practice during the initial

thirty minutes of the session. This period was followed by a discussion of the lyrics and the membership's reactions to them. Butler related that the "anxiety and uneasiness of the initial group meeting was eliminated by pre-ventilation through singing" (1966, p. 54). She also proposed that the group singing increased the patient's verbal interaction during the rest of the session. Frances and Schiff (1976) in their work with adolescent groups found that listening to records was helpful in smoothing the induction of a new group.

Types of Music Found to Decrease Anxiety

The music that the majority of patients favored were those that were traditional and folk in nature (Mitchell & Zanker, 1947). According to Frances and Schiff (1976), individuals' song selections provided clues about their dynamics and transferences. They proposed that the individual's reaction to the music varied with his or her personality patterns. The majority of research performed in the music therapy field to determine which types of music most effectively reduced anxiety supported the contention that calming, sedative music usually lowered subject anxiety levels. The music that was selected for use

in this study was thought to be traditional or folk and/or in sedative nature.

Nursing's Participation in Musical Activities

The majority of the literature written about nursing's facilitation of musical activities with patients has focused on the nurse's role in facilitating group singing and with the use of music with medical/surgical patients. It has been interesting to note that the nurse's role in facilitating group singing has most frequently been proposed for the nurse by the music therapist, rather than by the nurse.

Descriptive studies regarding nursing's use of musical activities with patients were proposed by Forrest (1972) and Graham (1977). Forrest (1972), a music therapist and a psychiatric nurse, proposed a nursing protocol for the use of music with psychiatric patients. He proposed that the psychiatric nurse use the nurse-patient relationship to encourage the patient to express his or her emotional turmoil into the release of music. He stipulated that the more musically inclined the nurse was, the more aggressive a role he or she should take in the staging of musical activities with patients. The author urged the collaboration of the nurse with a registered music

therapist whenever possible in order to receive expert advice regarding song selection.

Another music therapist, Graham (1977) suggested that Licensed Vocational Nurses with a musical interest should combine their musical interest with their nursing skills. He proposed that the nurse's participation in a group sing-a-long with geriatric patients could serve as a mutually gratifying experience for both the nurse and the patient.

One descriptive nursing study was performed by Kelly (1974) who was a student nurse. She discussed her unsuccessful attempt to initiate a musical program on an orthopedic floor. The article was a humorous description of the difficulties of initiating a music program without the proper equipment. Another instance where nursing employed music was cited by Fell (1972) who wrote of a charge nurse who utilized taped recordings of music to promote personality changes in the mentally subnormal.

There have been few empirical studies carried out to determine the nurse's effectiveness with the medium of music. The research that has been performed used both psychiatric and medical-surgical patients as the patient populations.

Lancaster (1976) carried out activity group therapy with a group of regressed, chronic schizophrenics. She encouraged the group members to perform tasks such as drawing, reading poetry, and listening to music. She encouraged the members to involve themselves within the tasks and found that their increased involvement in activity stimulated verbal interaction, improved their self-concepts, and reduced their anxiety levels. Another group of nurses also conducted research with chronic schizophrenic patients in the area of activity therapy. In their 1978 study, Beard, Enelow, and Owens encouraged the patients to participate in various activity therapies, including music. Their findings suggested that the patient's performance of the activities stimulated verbal interaction and reduced anxiety. In both of the aforementioned studies, the effects of music were not singled out and, therefore, the results were only suggestive of what music could do for the patients.

The most recent nursing research in the nurse's use of music was performed utilizing medical-surgical patients (Herth, 1978). Herth (1978) found that music helped the patients to relax during the performance of activity and passive range of motion exercises. Music

helped the patients to exercise more frequently and easily than they had prior to the use of the music.

In a second experiment, background music was played for five minutes before recent post-operative patients were gotten out of bed for the first time. The patients in the experimental condition exhibited a reduced amount of lightheadedness and fainting. In a third experiment, the author piped music into the patient's room at bedtime. The patients listening to the music required thirty percent less pain medication than they had previously been getting after the music program was initiated. The author related that in all three experiments, the intensity of music's effect was dependent upon the individual musical preferences of the patient. Music had a greater effect upon the patient when the patient enjoyed music and when the patient's favorite types of music were played for him or her.

Conclusion

The field of nursing has not used music therapeutically to a large extent. The nursing research in this area has been largely descriptive rather than empirical. It was the intent of this research project to clarify to what extent music can be therapeutically used by the nurse in a group psychotherapy setting. The target population,

consisting of psychiatric inpatients initially entering group therapy is considered representative of a high anxiety population. Exploration of means to reduce anxiety within this group can be considered the goal of this study.

CHAPTER III

PROCEDURE FOR THE COLLECTION AND TREATMENT OF DATA

Introduction

This study was of a dual field and pre-experimental nature. It was considered field research as it limited its focus to the interactions of a given social unit in a single hospital setting. It was considered a pre-experimental study as it "followed a one-group pretest--post-test design format" (Leedy, 1974, p. 150). Each of the two groups had a pre-experimental evaluation, and were then exposed to the influence of the variable, and finally had a postexperimental evaluation. Randomization did not occur. This chapter presents how the procedure was conducted.

Setting

The setting for this study was a private, church affiliated, general hospital in the southwestern part of the United States. The institution has a patient population of approximately 500, with an open psychiatric-medical/surgical ward with a thirty-seven patient capacity. The psychiatric dayroom, located on the ward, served as the setting in which the testing and the experimental

conditions were performed. Patients with a secondary psychiatric diagnosis who were enrolled in the psychiatric day program, but located outside of the ward, were also included in the study. The turnover rate of the patients involved in the psychiatric day program (a program including group and occupational therapy) was approximately thirty patients per month. The average length of stay was one to two weeks.

Population and Sample

The target population consisted of all of the patients who met the delimitations, who were willing to participate in the study, and who were attending group psychotherapy either for the first, second, or third session. The sample candidates were identified by checking the psychiatrist's daily orders, the patient's charts, and the patient census. The patients with a secondary psychiatric diagnosis were located by attending psychiatric grand rounds with the entire mental health team each morning.

The sample, composed of a total of thirty patients, was divided into two groups of fifteen. Fifteen patients were exposed to a group sing-a-long lasting for twenty minutes (Group A). Fifteen patients were exposed to a group sing-a-long lasting for ten minutes, followed by a ten-minute discussion of five questions (Group B).

Each experimental condition was staged for a one week period in an alternating fashion until fifteen subjects had been respectively exposed to each condition. A coin was tossed to see whether condition A or B would be initiated first. Condition B was selected as the first experimental condition. The rotation of the experimental conditions was continued until the thirty subjects had been tested.

Protection of Human Rights

In order to protect the rights of the subjects of this study permission to do the study was initially obtained from: a committee of the Human Research Review Committee at the Texas Woman's University (see Appendix C); the agency in which the study was performed (see Appendix D); and the subjects themselves (see Appendix F). The subjects were informed of the risks and benefits of the study. Anonymity was protected by assigning each subject a number for identification and a letter (A or B) for categorization into experimental conditions.

Tool

The State-Trait Anxiety Inventory* was developed to provide a relatively brief and reliable self-report of state and trait anxiety (Spielberger, 1975). Spielberger differentiated between the two facets of anxiety, the state of anxiety and the trait of anxiety. He proposed that the state of anxiety represented a transitory emotional state, whereas the trait of anxiety represented a stable personality state. For the purposes of this study the state anxiety variable was utilized as it has been found to measure changes in transitory anxiety over time with greater accuracy than the trait scale has. The state scale consisted of twenty items based on a four-point scale. The items consisted of statements that asked people to describe how they felt at a particular moment in time, that is "(1) not at all, (2) somewhat, (3) moderately so, (4) very much so" (Spielberger, 1975, p. 720). The scale was given with instructions that focused on a particular time period. Low scores indicated states of calmness and serenity, intermediate scores indicated moderate

*The State-Trait Anxiety Inventory STAI form X-1, is copyrighted, and cannot be replicated in this study. The test can be obtained from Consulting Psychologists Press, Palo Alto, California.

levels of tension, and high scores indicated intense apprehension.

The State-Trait Anxiety Inventory was not available until 1969, however, it has since been used to measure "state and trait anxiety in more than 200 studies (Spielberger, 1975, p. 721). Parrino (1969) investigated the effects of different kinds of pre-therapy information upon the anxiety levels of snake-phobic patients after therapy. The state anxiety scales were given to each patient immediately before the patients entered the fear-producing situation and immediately after they had left it. Post-anxiety scores were found to be significantly lower than the pre-therapy scores.

Evidence of the construct validity of the state anxiety scale was determined from a sample of 977 undergraduate students at Florida State University (Spielberger & Gorsuch, 1966). The students were initially given the state anxiety scale with the standard instructions. They were then asked to respond by indicating on the scale how they would feel if they were going to take a final exam in an important course during the second testing. The mean score for the A-State scale was considerably higher in the exam condition than in the norm condition for both males and females.

The reliability of the state anxiety scale was determined by Spielberger (1967) in a normative sample of undergraduate college students. The alpha coefficient seemed to provide a more meaningful index of reliability of the state anxiety scale than did the test-retest method, as the state anxiety scale measured a transitory state. The reliability coefficients ranged from ".83 to .92 for the state anxiety scale" (Spielberger, Gorsuch, & Lushene, 1970, p. 10).

Collection of Data

An orientation meeting with the mental health team and the nursing staff on the ward was held prior to the collection of data. At this time the criteria for subject selection, the times and locations of the experimental conditions, and the types of music and questions asked in each condition were explained by the researcher to the staff.

Violent and hallucinating subjects were not utilized in the study sample. The determination of violent and/or hallucinating behavior was made by either the researcher or by the staff nurses. There were no violent or hallucinating subjects who were selected or tested during the study.

Subjects displaying moderate amounts of anxiety, crying, and anger were included in this study as these behaviors were considered normative for psychiatric inpatients. When any of these behaviors were displayed, the researcher verbally acknowledged the condition and asked the patient to share the reasons for his or her behavior. Three female patients cried during the experiment, however, they were quickly able to regain their composure when they talked about their feelings. The crying behavior did not reach an excessive level so that invalidation of group scores was unnecessary.

The subjects for the study were approached by the researcher after morning rounds with the mental health team. The researcher verbally described the experiment to them (see Appendix F) and ascertained whether the patient was willing to participate. After obtaining a consent form, the researcher told the patient the location and time of the experiment. The researcher explained the directions for the pre-test anxiety questionnaire to all of the participating patients after they had assembled in the dayroom. The researcher answered any questions that were asked prior to the administration of the pre-test. The researcher then administered the pre-test and allowed the patients at least fifteen minutes to complete the pre-test. The

researcher then initiated either condition A or B and then administered the post-test.

Pilot Study

The pilot study consisted of two phases, the first phase consisting of the song selections for conditions A and B, and the second phase, the actual administration of the mood level questionnaires followed by either of the experimental conditions.

Ten patients involved in the daycare program were asked to rate twenty-two songs according to how calming they found them. The twenty-two selections, selected initially by the researcher herself, were thought to reflect one of four qualities. These qualities were, reassurance, fantasy, serenity, or sadness. The twenty-two selections were taped. The tape was played for the patients (playing approximately one minute of each selection) and the patients indicated their preferences on the scale they were given (see Appendix G). Only those songs that fifty percent of the patients found moderately to very calming were used in the actual study. Demographic data was also obtained from these ten subjects so that further support could be given to the generalizability of the ten subjects' song preferences.

In group A, ten taped musical selections were used. Each was followed by a thirty second period of silence. The tape lasted approximately twenty minutes. Five of group A's song selections were pulled out of a hat (without replacement) and were used as the musical selections for group B (see Appendix H). Each of these songs was followed by a thirty second intermission so that the tape lasted for approximately ten minutes. The researcher (in the group B condition) then initiated the group discussion. Five questions were asked of the participants with a time allotment of two minutes of response time for each question. The conversation was stopped at the end of each two-minute segment by the researcher. Group B condition did not exceed twenty minutes in length.

The researcher gave directions for the post-test at the end of the twenty-minute experimental condition. The post-test directions were modified to include the fact that the post-test measured how the person was feeling right then, immediately following the experimental condition.

Four subjects meeting the criteria for this study were involved in the actual pilot study itself. Two subjects were placed in group A and two in group B. There was no apparent difficulty encountered when utilizing the

medium of recorded music with group singing. All four pilot study subjects sang along with the tape. The pre and/or post-tests questionnaires took an average of seven minutes to complete. One of the patients initially filled out the trait anxiety scale (located on the other side of the state scale). The trait scales on all of the following pre and post-test questionnaires were marked through by the researcher in order to prevent confusion. One of the pilot study patients asked for a clarification of the term "high strung" during the testing. The researcher stated that high strung was likened to being nervous. The researcher clarified any misunderstanding of terminology in the actual study by offering the patient a one word synonym for the term in question. There were no difficulties encountered in scoring the information obtained during the pilot study.

Actual Study

The researcher encountered much difficulty in getting consent from patients entering group therapy for the first time that day. In general, the patients entering group therapy had been hospitalized only one day when they were enlisted in the group therapy/daycare program. As a result, many of the patients were highly anxious and did not want to get involved in the study. After three weeks

of attempting to get first-session patients in the study, only two of the patients had met all of the criteria. The researcher made the decision to expand the criteria for qualification to include those patients attending group therapy for the first, second, or third time.

This decision was based on Yalom's (1975) hypothesis that the first dozen meetings of the therapy group were precarious and, at the same time, very important to the patient's progress in subsequent meetings. He hypothesized that during the first twelve meetings many members became unnecessarily discouraged and prematurely terminated therapy. The researcher hypothesized that the first three sessions would still constitute the initial phase of group therapy and that the concept of anxiety associated with beginning group therapy would still be applicable to this population.

Treatment of the Data

To test the first two hypotheses, a paired t-test was used on each group to compare post-test anxiety to the pre-test anxiety scores. This served to determine whether a significant change in anxiety levels had occurred in either or in both groups. An analysis of covariance was used to compare the post-test anxiety scores between the group sing-a-long condition and the group sing-a-long

followed by verbal discussion condition. The pre-test scores were used as the covariate to allow for possible group differences in the pre-test anxiety levels. The .05 alpha level was selected. Each test was hand scored.

Summary

Data were collected from thirty hospitalized psychiatric inpatients who were divided into two experimental conditions. Group A condition consisted of a group sing-a-long and group B condition consisted of a sing-a-long followed by a verbal discussion of the music's lyrics. The Spielberger State Anxiety Inventory (1968) was administered immediately before and after the experimental conditions. This study was designed to provide empirical data concerning the effectiveness of the nurse-therapist's use of music and verbal skills in the reduction of anxiety in psychiatric inpatients beginning group psychotherapy.

CHAPTER IV
ANALYSIS OF DATA

Introduction

This dual field and pre-experimental study was carried out to determine whether a significant difference in self-reported state anxiety existed between psychiatric inpatients participating in a group sing-a-long and those psychiatric inpatients participating in a group sing-a-long followed by a verbal discussion prior to attending their first, second, or third group psychotherapy session.

The data were collected from thirty subjects divided into two groups of fifteen. Group A condition consisted of a group sing-a-long to a twenty minute tape of ten musical selections with lyrics. Group B condition consisted of a group sing-a-long to a ten minute tape of five musical selections with lyrics. Group B condition was followed by a discussion of five questions for a ten minute period. Each experimental condition was staged for a one week period in an alternating fashion until fifteen subjects had been respectively assigned to group A and B.

All subjects were tested on the Spielberger State Anxiety Inventory prior to, and after the experimental condition.

A paired t-test was used to compare post-test anxiety scores with pre-test anxiety scores to determine whether a significant difference in anxiety existed between pre and post anxiety scores in either or both experimental conditions. An analysis of covariance was used to compare the post-test anxiety scores between the group sing-a-long condition and the group sing-a-long followed by verbal discussion condition. Analysis of the data is presented in this chapter.

Data Interpretation

Raw scores showed that eight of the group A (group sing-a-long) condition subjects reported lower anxiety on the post-test compared to the pre-test. Six of the group A condition subjects reported increased anxiety on the post-test than on the pre-test. One group A subject reported no change in anxiety from pre-test to post-test.

Nine of the group B (group sing-a-long with discussion) condition subjects reported decreased anxiety on the post-test compared to the pre-test. Four of the group B condition subjects reported greater anxiety on the post-test than on the pre-test. One group B subject reported no change in anxiety from pre-test to post-test. These scores are reported in table 1.

TABLE 1

RAW SCORED ON SPIELBERGER STATE ANXIETY
INVENTORY PRE-TEST AND POST-TEST
FOR GROUP A AND GROUP B

Pre-test	Group A Post-test	Gain	Pre-test	Group B Post-test	Gain
46	54	+ 8	20	20	0
68	47	-21	62	64	+ 2
47	44	- 3	59	55	- 4
76	46	-30	68	31	-37
39	31	- 8	35	36	+ 1
67	78	+11	34	30	- 4
65	67	+ 2	49	43	- 6
64	54	-10	26	26	0
55	63	+ 8	56	30	-26
39	38	- 1	38	36	- 2
44	30	-14	66	39	-27
73	79	+ 6	52	56	+ 4
69	69	0	46	51	+ 5
22	21	- 1	43	25	-18
56	66	+10	33	31	- 2

Group means and standard deviations were determined for group A and B on pre-test and post-test scores from the Spielberger State Anxiety Inventory. Table 2 presents the descriptive statistics.

The average difference between the pre-test and post-test scores was computed for each group. The significance of the difference between the average means between pre-tests and post-tests of the two groups was determined by t-test.

TABLE 2

MEAN, STANDARD DEVIATIONS, AND DIFFERENCES
BETWEEN PRE-TEST AND POST-TEST MEANS OF
GROUP A AND GROUP B, t-TEST, P VALUE

Group	Pre-test	Post-test	Difference	t-value	p value
A	mean 55.33 S.D. 15.40	mean 52.47 S.D. 17.82	mean -2.866 S.D. 11.885	-0.93	0.3661
B	Mean 45.800 S.D. 14.727	mean 38.200 S.D. 12.968	mean -7.600 S.D. 12.965	-2.27	0.0395

Hypothesis 1

In group A, the condition which used just the group sing-a-long, the t-value was -0.93. The p value was 0.3661. The p value was not statistically significant at the .05 level of probability. Therefore, the null hypothesis, "there will be no significant difference between the pre and post anxiety scores of subjects participating in the group sing-a-long," was not rejected.

Hypothesis 2

In group B, the condition which used the group sing-a-long followed by a verbal discussion, the t-value was -2.27. The p value was 0.0395. The p value was statistically significant at the .05 alpha level. Therefore, the null hypothesis, "there will be no significant difference between the pre and post anxiety scores of

subjects participating in the group sing-a-long followed by a verbal discussion," was rejected.

Hypothesis 3

Analysis of covariance was used to compare the post-test anxiety scores between the group sing-a-long condition and the group sing-a-long followed by verbal discussion condition. The pre-test scores were used as the covariate to allow for possible group differences in pre-test anxiety levels. The results are presented in table 3.

TABLE 3
SIMPLE COVARIANCE ANALYSIS

Degrees of freedom	F value	P value (PR F)
1, 26	2.93	0.0990

The F value was 2.93. The PR F value was .0990. This value was not statistically significant at the .05 alpha level. Therefore, the null hypothesis, "there will be no significant difference between the post anxiety scores of subjects participating in the group sing-a-long and subjects participating in the group sing-a-long followed by a verbal discussion," was not rejected.

Musical Preferences

Demographic data of the subject was obtained from the pilot study subjects and the study subjects so that the musical preferences of the pilot study group might be generalized to the actual study group. Information relating to sex, age, ethnic origin, geographic location of home, and religious affiliation was obtained from each participant.

Age

Demographic characteristics of the pilot study population, and sample population by age is shown in table 4.

TABLE 4

DISTRIBUTION OF SAMPLE POPULATION BY AGE

Age Range	20-30 freq. %	31-40 freq. %	41-50 freq. %	51-65 freq. %	
Pilot Study	3 (30%)	1 (10%)	4 (40%)	2 (20%)	N=10
Group A	2 (13.3%)	6 (40%)	4 (26.7%)	3 (20%)	N=15
Group B	4 (26.7%)	6 (40%)	2 (13.3%)	3 (20%)	N=15
$\chi^2=4.740$	P=.578				

A chi-square was performed to determine whether there was a significant age difference between the three groups. The chi-square value was 4.740. The p value was

.578. There was no statistically significant age difference found among the groups.

Sex

The sex of the participants is shown in table 5.

TABLE 5
DISTRIBUTION OF SAMPLE POPULATION BY SEX

Sex	Pilot Study		Group A		Group B	
	freq.	%	freq.	%	freq.	%
Male	3	(30.00)	4	(26.67)	7	(46.67)
Female	7	(70.00)	11	(73.33)	8	(53.33)
$\chi^2=1.465$	N=10		N=15		N=15	
						p=0.4807

The chi-square was performed to determine whether there was a significant sex difference among the three groups. The chi-square value was 1.465. The p value was 0.4807. There was no statistically significant sex difference found among the groups.

Ethnic Origin

The ethnic origin is shown in table 6.

A chi-square was performed to determine whether there was a significant difference between ethnic origins among the three groups. The chi-square value was 0.833. The p value was 0.6592. There was no statistically significant ethnic difference found among the groups.

TABLE 6

DISTRIBUTION OF SAMPLE POPULATION BY ETHNIC ORIGIN

Ethnic Origin	Pilot Study		Group A		Group B	
	freq.	%	freq.	%	freq.	%
White	8	(80.00)	13	(86.67)	11	(73.33)
Black	2	(20.00)	2	(13.33)	4	(26.67)
$\chi^2=0.833$	N=10		N=15		N=15	p=0.6592

Geographical Location

Geographical location of the participants is shown in table 7.

TABLE 7

DISTRIBUTION OF SAMPLE POPULATION
BY GEOGRAPHIC LOCATION

Geographic Location	Pilot Study		Group A		Group B	
	freq.	%	freq.	%	freq.	%
City of Dallas	7	(70.00)	10	(66.67)	12	(80.00)
Dallas County	3	(30.00)	5	(33.33)	0	
Other	0		0		3	(20.00)
$\chi^2=10.029$	N=10		N=15		N=15	p=0.0399

A chi-square was performed to determine whether there was a significant difference between the geographic location among the three groups. The chi-square value was 10.029. The p value was 0.0399. There was a

statistically significant difference found in the area of geographic location among the groups. Group B had no subjects living in Dallas County and had three subjects that lived outside of Dallas County. The pilot study and group A subjects had subjects living within the Dallas County area but no subject living outside of the Dallas County area.

Religious Affiliation

Religious Affiliation of the participants is shown on table 8

TABLE 8

DISTRIBUTION OF SAMPLE POPULATION BY RELIGIOUS AFFILIATION

Religious Affiliation	Pilot Study		Group A		Group B	
	freq.	%	freq.	%	freq.	%
Protestant	9	(90.00)	11	(73.33)	10	(66.67)
Catholic	1	(10.00)	4	(26.67)	4	(26.67)
Jewish	0		0		1	(6.67)
$\chi^2=3.037$	N=10		N=15		N=15	p=0.5516

A chi-square was performed to determine whether there was a significant difference in religious affiliation among the three groups. The chi-square value was 3.037. The p value was 0.5516. There was not a statistically

significant difference in religious affiliation found among the groups.

No statistically significant differences among the three groups in age, sex, ethnic origin, and religion were found. However, there was a statistically significant difference among the three groups in geographic location. Since all the variables with the exception of geographic location were found to be similar among the groups, it appears that the musical preferences of the subjects in the pilot study may be applicable to the subjects of group A and group B. However, since the three groups differ on the geographic location, the musical preferences of the pilot study population cannot be fully generalized to the subjects of group A and group B.

Summary

This study was performed to test three hypotheses regarding the nurse's use of music in anxiety reduction. The analysis of the data revealed that the first and third null hypotheses were not rejected, whereas the second null hypothesis was rejected.

CHAPTER V

SUMMARY, DISCUSSION, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

Introduction

This chapter presents a review of the study. In addition, this chapter presents the conclusions that can be derived from the study, the identification and discussion of the findings in the study, and suggestions for further study.

Summary of the Study

The problem of this study was to determine whether a significant difference in self-reported state anxiety existed between psychiatric inpatients participating in a group sing-a-long or in those psychiatric inpatients participating in a group sing-a-long followed by a verbal discussion, prior to attending their initial, second, or third group therapy session. The hypotheses for this study, as stated in the null were: (1) there will be no significant difference between the pre and post anxiety scores of subjects participating in the group sing-a-long, (2) there will be no significant difference between the pre and post anxiety scores of subjects participating in the group

sing-a-long followed by a verbal discussion, and (3) when pre anxiety levels are controlled, there will be no significant difference between the post anxiety scores of subjects participating in the group sing-a-long and the subjects participating in a group sing-a-long followed by a verbal discussion.

The review of the literature focused on: the concept of anxiety; the etiology and manifestations of anxiety; anxiety associated with beginning group therapy; the nurse's role in the reduction of anxiety; anxiety reducing methodologies used in the group process; the use of music as an anxiety-reducing agent in group therapy; and the nurse's use of music as a therapeutic medium.

The method of research was considered a pre-experimental and field study. The State Anxiety Inventory was administered as a pre-test to an A group and a B group and was again administered as a post-test after both groups had been exposed to the respective experimental conditions. The sample population was a group of thirty psychiatric inpatients attending a formal group psychotherapy session for the first, second, or third time that day. The subjects were assigned to two groups of fifteen depending on the week that they were being tested. The experimental conditions, A or B, were alternated on a weekly basis.

The purpose for collecting the demographic data on all subjects was so that the musical preferences of the pilot study group might be generalized to both group A and group B subjects. The demographic data were statistically analyzed using a chi-square. The results of the data indicated that among the three groups there were no significant differences in age, sex, ethnic origin, and religious affiliation; however, there was a significant difference in the geographic location of the three groups. Group B differed in this variable from the pilot and A groups.

The pre and post-test data were statistically analyzed by t-test and an analysis of covariance. The results were presented in narrative form and in appropriate tables in Chapter IV. The results of the t-test indicated that there was no significant difference in the pre to post anxiety levels in group A, the sing-a-long condition. There was a statistically significant difference in pre to post anxiety levels in group B, the sing-a-long followed by a verbal discussion condition. The first null hypothesis was not rejected, whereas the second null hypothesis was rejected. The results of the analysis of covariance indicated that there was no significant difference in the post-test scores of conditions A and B. The third null hypothesis was therefore not rejected.

Discussion

The first hypothesis was tested to determine whether there was a significant difference between the pre and post anxiety scores of subjects participating in a group sing-a-long. The data supported the conclusion that the group sing-a-long condition did not significantly reduce subject anxiety before the subjects entered their first, second, or third formal psychotherapy session. These results are somewhat inconsistent with the review of literature, which revealed that group singing fostered group cohesion (Davis, 1943, Mitchell & Zanker, 1948), increased socialization (Eby, 1943), broke down feelings of isolation (Soibelman, 1948), and reduced anxiety levels (Butler, 1966). An analysis of the study examines possible reasons for the inconsistent results.

There are several variables within the sample population which may have affected the results of the study. The subjects in group A, the sing-a-long condition, exhibited a much higher pre-test anxiety score on the average than did the subjects in group B. The mean pre-test score of group A was 55.33, whereas the mean pre-test score of group B was 45.80. Therefore, initially and also after the experimental condition, the mean post-test scores for

groups A and B being 52.47 and 38.20 respectively, group A showed a higher anxiety level than did group B.

The two groups were not matched with respect to pre-anxiety levels before assignment into the experimental conditions, nor were the subjects randomly assigned. Therefore the fact that the subjects of A group appeared more anxious before, during, and after the experiment may have significantly interfered with the anxiety-reducing qualities of the experimental condition. Further testing would have to be performed to ascertain whether initially higher anxiety scoring subjects experienced a greater anxiety reduction in either the A condition or the B condition.

The subjects in group A were tested in groups of two to six people respectively, whereas the subjects in group B were tested in groups of two to four people respectively. Group A had larger numbers of people being tested than group B. This variable may have accounted for an increased initial anxiety score and/or post anxiety score in group A. Further testing would have to be performed to ascertain whether the size of the group being tested significantly affected the pre and/or post-anxiety scores in either or both the group A condition or the group B condition.

The subjects of the A condition also differed significantly in their geographic location from the subjects in the B condition. This variable was not controlled and might have had a significant effect on the subject's anxiety reduction. Further testing would have to be performed in order to determine whether geographic location significantly affected the subject's pre and post-anxiety scores.

The severity of the subject's mental illness may have significantly affected the subject's pre and post-anxiety scores. The subject's diagnosis and mood lability were not taken into consideration as variables. Further testing would have to be performed to ascertain whether the severity of the subject's mental illness, the diagnosis, and/or subject lability significantly affected the pre or post-anxiety scores in either or both the group A or group B condition.

Another factor which may have affected the scores of the group A subjects were the five different songs utilized in group A from group B. These different songs were: Daisy, Country Roads, Swing Low Sweet Chariot, The Band Played On, and Shenandoah. These particular songs may have increased subject anxiety levels more than the other five songs used in both the A and B condition. Biller,

Olson, and Breen (1974) found that while sad music decreased anxiety, that happy music tended to increase anxiety. Some of the song selections used in group A may have represented a happiness mood and have therefore increased the subject anxiety levels. The researcher selected the songs for administration in the study, and although a pilot study group screened the songs that pilot subjects felt calmed them to the greatest extent, the researcher biased the study by selecting the music initially. The subjects in group A may not have enjoyed the song selections and therefore may not have experienced a concurrent anxiety reduction when they listened to the selections. Herth (1978) found that the more a subject liked a selection the greater anxiety reduction there would be. Perhaps if a more thorough initial assessment of the subjects' musical preferences had been performed and their choice of songs used in the experimental condition, there may have been a greater degree of anxiety reduction.

Gutheil (1954), in his writings, wrote that before music could be successfully used as a supportive technique in psychotherapy that four groups of variables had to be taken into consideration and controlled. These groups consisted of the musical materials used, for example, vocal music or instrumental music, whether the room was

soundproofed, whether there was exposure to ambient noise, or whether the music was used alone or in conjunction with other treatment. The second group of influences Gutheil considered were the effects of the music on the listener's mood level. He considered whether the music was stimulative or sedative, how listening to it alone or in a group would affect the listener's perception, or whether the music affected the listener's output of activity, imagination, or ability to learn. The third group of influences that needed to be considered was the listener's background, that is, what state of health the listener was in, his or her previous training in music, his or her familiarity with the music, and his or her active or passive participation in the music. The fourth group of variables taken into consideration were what the objectives of the study were: was it educational, sociologic, experimental or therapeutic?

In view of all the possible confounding variables that Gutheil hypothesized, it is evident that many of these aforementioned variables were not controlled in this research study. These uncontrolled variables may have significantly affected the group A subjects' performance on the anxiety scale. Further study, taking more of Gutheil's proposed variables into account, would shed light on how these variables might affect subject performance.

The second hypothesis was tested to determine whether there was a significant difference between the pre and post-anxiety scores of subjects participating in the group sing-a-long followed by a verbal discussion condition. The data supported the conclusion that the group sing-a-long followed by a verbal discussion did significantly reduce anxiety before the subjects entered their first, second, or third formal psychotherapy session. As was previously mentioned this particular group initially had a lower average anxiety level than did group A and subsequently experienced a much greater anxiety reduction on the post-test. Lower initial anxiety levels may have allowed the group B subjects to be more receptive to the anxiety-reducing facets of the music. This factor would need to be controlled in a follow-up study to determine whether an initially lower average anxiety score did indeed forecast reduced average anxiety scores more significantly at the post-treatment point.

The group B study results support Butler's (1966) hypotheses. Butler utilized group singing followed by a discussion of the music's lyrics in her private group psychotherapy practice. She observed that group interaction was increased through this process and that membership anxiety was decreased. Butler failed to empirically

document this however. The results of this study tend to give support to Butler's report, based on empirical evidence.

The use of verbal interaction to reduce subject anxiety has been proposed by many in the mental health field as it enables the subject to discuss his or her conflicts openly. The verbal discussion used in group B was not the type of verbal interaction specifically proposed to reduce patient anxiety as proposed by Cartwright and Zander, 1968, Peplau, 1962, Kadis, Krasner, Weiner, Myron, Winick, and Foulkes, 1974, and Yalom, 1975. The verbal discussion utilized in this study could be considered to be focused on the music and the significance of the music's lyrics on the listener. The success of the group sing-along followed by a verbal discussion may have been due to the combined effects of the anxiety-reducing qualities of the music and/or the subject's ability to become distracted from morbid preoccupation with his or her own problems through his or her involvement in the musical discussion. This is conjecture however since the differential effects of the singing and the follow-up discussion were not adequately controlled. A third group of subjects utilizing a verbal discussion only need to be tested to establish a clearer relationship among the variables discussed, that is,

was the music, the music and discussion, or the discussion alone significant in reducing subject anxiety levels?

The third hypothesis was tested to determine whether there was a significant difference between the post-anxiety scores of the subjects participating in the group sing-a-long and the subjects participating in a group sing-a-long followed by a verbal discussion. The data supported the conclusion that when the initial anxiety levels were controlled there was no significant difference between the post-anxiety scores of subjects participating in the group sing-a-long and subjects participating in the group sing-a-long followed by a verbal discussion. This finding diminishes the significance and credibility of the findings previously mentioned about group B, that is, that the singing followed by a verbal discussion significantly reduced subject anxiety. This finding points out the need to incorporate more stringent controls for initial anxiety levels into the design.

It should be noted however, that the P value in the analysis of covariance was .0990, and although it was not statistically significant at the .05 level, it is close to the .05 level of significance. It is hypothesized that a larger sample size might produce clearer results.

Conclusions

The conclusions for this study were:

1. The group sing-a-long condition did not significantly reduce subject anxiety before the subjects entered their first, second, or third formal psychotherapy session.

2. The group sing-a-long condition followed by a verbal discussion did significantly reduce subject anxiety before the subjects entered their first, second, or third formal psychotherapy session.

3. There were no significant differences between the post-anxiety scores of subjects participating in the group sing-a-long and the subjects participating in the group sing-a-long followed by a verbal discussion before the subjects entered their first, second, or third formal psychotherapy session.

Implications

This study did not substantiate group singing alone as an effective anxiety-reducing technique to be utilized by the nurse in a group setting. The study, did, however, substantiate, to some degree, the contention that the combination of group singing followed by a verbal discussion did effectively reduce subject anxiety. It can therefore be suggested that this intervention (the group B condition)

can be successfully used by the nurse in the group setting.

One implication of this study is that the nurse can expand her role with psychiatric patients through the use of music. It was not the intent of the study to have the nurse duplicate the role of the music therapist. Rather, the intent was that the nurse familiarize him or herself with the benefits of utilizing the medium of music and subsequently expand his or her role in this area.

A multidisciplinary approach within the mental health field is necessary if mental illness is to be alleviated. Iversen (1967) supported the multidisciplinary approach with the field of music therapy when he stated, "because music is an integral part of culture, music therapists must study their art as it relates to culture. To achieve this goal, a multidisciplinary approach is essential" (p. 106). This study paves the way for further study in the area of expanding the nurse's use of music as a therapeutic medium and proposes increased nursing interaction with the music therapist.

The specific effects of group singing and/or verbal discussion on anxiety were not specifically determined in group B. Therefore, one of the major implications of this study is that there is still a need to determine which of

the two variables most significantly produced the anxiety-reducing effect found in group B.

Recommendations

Based on the findings of this study, the following recommendations are suggested for further investigations:

1. The present study be replicated with a larger sample.
2. Further controls regarding initial anxiety scores, group size during testing, geographic location, and individual musical preferences in song selections be built into the research design.
3. A study be conducted in which three experimental groups are utilized, that is, a group sing-a-long, a group sing-a-long followed by a verbal discussion, and a verbal discussion group.
4. The subjects be randomly selected and assigned to groups.
5. A follow-up study to determine the effects of reduced anxiety upon the formal group psychotherapy process be performed.

A review of the literature supported the contention that music could be utilized to reduce patient anxiety. Studies showed that group singing and group singing followed by a verbal discussion about the lyrics reduced

patient anxiety. The approach of this study was to test the effectiveness of the two methods of anxiety-reduction in a population of patients attending group psychotherapy for the first, second, or third time.

Results indicated that the group singing alone did not reduce anxiety but that the combination of group singing followed by a verbal discussion did. The statistical analysis demonstrated that the A condition was not statistically significant but that the B condition produced significant effects. However, when initial anxiety levels were controlled, an analysis of covariance demonstrated that there was not a significant difference between the post scores of the A and B conditions. This points to the need to impose more stringent controls on the subject's initial anxiety scores within a design so that the effects of a group sing-a-long or a group sing-a-long followed by a verbal discussion could be determined with more accuracy.

Some of the factors which may have produced the results of this study were identified. Recommendations have been made to continue investigation into the area of the nurse's use of music with the proposed population.

The findings that condition B produced a significant anxiety-reduction suggests that there is a place for this type of intervention in the nursing field. This result

supports the contention that music has a place in nursing's interaction with psychiatric patients. This expanded nursing role needs to be further explored and modified; however, nursing and music therapy can supplement each other's knowledge and skills so that music can be therapeutically utilized to its fullest with the psychiatric patient.

APPENDICES

Appendix A

The nurse-therapist will initiate a group singing period in Group A and Group B after the following dialogue has been concluded with the group members assembled.

"I have called this meeting so that we could get together as a group and do some singing before the group therapy session at 10 a.m. Let's start off by going around the circle and introducing ourselves to each other

"I have passed out song books to everyone that have songs that we can sing. We are going to sing every song in the book in the order that they appear. In between each song there will be a small resting place. Everyone is encouraged to sing, but if you feel you cannot sing the song, you do not have to. If you cannot sing, please try to follow along with the words and listen to the music. Let's begin!"

At this time the twenty minute session will begin. In Group A the twenty minute tape of songs will be played, and the ten minute tape will be played in Group B. (The exact songs cannot be determined until the preferences of the patients involved in the pilot study have been determined.)

Appendix B

VERBAL FOLLOW-UP DISCUSSION POST GROUP SINGING (Group B)

The nurse-therapist will initiate a group discussion after the five musical selections (lasting a total of ten minutes) have been played. The therapist's dialogue will be:

Music has been called the universal language. It seems that everyone has some sort of reaction to the music. Music can produce many different emotions in us. We have just sung five different songs together. I would like us to discuss our feelings about the songs in the next ten minutes. I am going to ask a few questions to get the discussion started. Although you do not have to answer any of the questions, I think that everyone's opinion is valuable and I would encourage everyone to participate.

Question 1. Of the five songs, which song was your favorite and why was it your favorite?

Question 2. What kind of mood did listening to your favorite song put you into?

Question 3. Do you listen to music for entertainment at home?

Question 4. What type of music do you listen to most frequently?

Question 5. Who is your favorite composer and/or artist?

The nurse-therapist will close the discussion at the end of ten minutes. She will state, "our time is up now. At this time we will take the mood-level questionnaire again."

Appendix C

TEXAS WOMAN'S UNIVERSITY

Human Research Committee

Name of Investigator: Ellen C. Flaherty Center: Dallas

Address: 6225-201 Bordeaux Avenue

Dallas, Texas 75209

Dear Ms. Flaherty:

Your study entitled Group Singing and Discussion as Anxiety Reducing Agents for New Patients in Psychotherapy Groups

has been reviewed by a committee of the Human Research Review Committee and it appears to meet our requirements in regard to protection of the individual's rights.

Please be reminded that both the University and the Department of Health, Education and Welfare regulations require that written consents must be obtained from all human subjects in your studies. These forms must be kept on file by you.

Furthermore, should your project change, another review by the Committee is required, according to DHEW regulations.

Sincerely,

Gouldine M. Goss

Chairman, Human Research
Review Committee

at Dallas

Appendix D

TEXAS WOMAN'S UNIVERSITY
COLLEGE OF NURSING
DENTON, TEXAS

DALLAS CENTER
1810 Inwood Road
Dallas, Texas 75235

HOUSTON CENTER
1130 M.D. Anderson Blvd.
Houston, Texas 77025

AGENCY PERMISSION FOR CONDUCTING STUDY*

THE St. Paul Hospital

GRANTS TO Ellen Flaherty, R.N.

a student enrolled in a program of nursing leading to a Master's Degree at Texas Woman's University, the privilege of its facilities in order to study the following problem:

Group Singing and Discussion as Anxiety Reducing Agents for New Patients

The conditions mutually agreed upon are as follows:

1. The agency (may) (~~may not~~) be identified in the final report.
2. The names of consultative or administrative personnel in the agency (may) (~~may not~~) be identified in the final report.
3. The agency (~~wants~~) (does not want) a conference with the student when the report is completed.
4. The agency is (willing) (~~unwilling~~) to allow the completed report to be circulated through interlibrary loan.

5. Other: St. Paul Hospital requests a copy of the completed study be submitted to the Education Coordinator. The hospital also requests that it has the privilege of deciding if the name of the agency may be used in a published copy of the report.

Date 12-29-78

E. F. Johnson M.D.
Signature of Agency Personnel

Ellen C. Flaherty R.N.
Signature of student

Shirley Zigler
Signature of Faculty Advisor

*Fill out and sign three copies to be distributed as follows: Original - Student; first copy - agency; second copy - T.W.U. College of Nursing.

Appendix E

6226-201 Bordeaux Avenue
Dallas, Texas 75209
September 19, 1978

Education Coordinator for Nursing
Department of Education and Training
St. Paul's Hospital
5909 Harry Hines Blvd.
Dallas, Texas 75235

Dear Ms. Grice:

I am presently involved in writing my thesis in order to obtain a Master's of Science Degree in Psychiatric-Mental Health Nursing from the Texas Woman's University. The research problem involves the determination of the effect that patient participation in a group sing-a-long or group sing-a-long followed by a verbal discussion has upon anxiety. The population involved in the study would include those psychiatric inpatients involved in the daycare program that would attend the group psychotherapy session for the first time. I would like to use 1North as the setting.

The research design is both field and preexperimental in nature, and involves the formation of two psychiatric inpatient groups. The subjects would receive an anxiety questionnaire before and immediately after the experimental condition. The testing, facilitation of the singing, and subsequent discussion group would be performed by this researcher.

I would like to set up an interview with you in order to further explain the experiment, present you with the proposal, and answer any questions you may have. The proposal addresses itself to the rationale behind the study and the methodology with which it is to be carried out. I am looking forward to meeting with you. Thank you for all of your cooperation.

Sincerely yours,

Ellen C. Flaherty

Ellen C. Flaherty R.N., B.S.N.

(214) 352-3403

Appendix F

TEXAS WOMAN'S UNIVERSITY

Consent to Act as a Subject for Research and Investigation

(The following information is to be read to or by the subject.)

1. I hereby authorize Ellen Flaherty to perform the following procedures:
 - A. Administer a questionnaire which is designed to determine the mood level I am experiencing at the time of its administration.
 - B. I will agree to participate in a group sing-a-long for twenty minutes. I realize that I do not have to sing if I do not want to, I will agree to listen to the singing if I do not actively participate.
 - C. I will agree to retake the mood level questionnaire after the singing is over.
 - D. In an attempt to establish reliable data, I shall try to attempt to answer the pre-test and post-test mood level questionnaires as honestly as possible.
2. The procedures described in Part 1 have been explained to me by Ellen Flaherty.
3. I understand that the procedure in Part 1 involves the following possible risks or discomforts:

Possible embarrassment about singing in front of others.

I understand that my rights to privacy will be protected by all test data remaining anonymous. I will be assigned a number and letter A or B to signify the group that I will be placed into and to identify me as a participant.

4. I understand that the procedures and investigations described under Part 1 have the following potential benefits to myself and/or others.

Group singing has a wide range of effects. Some of these effects are:

- A. Is generally considered to be pleasurable and rewarding.
- B. Enables one to share uncomfortable feelings with others.

5. An offer to answer all of my questions regarding the study has been made. If alternative procedures are more advantageous to me they have been explained. I understand that I may terminate my participation in the study at any time.

_____ Date: _____
(Signature of Subject)

TEXAS WOMAN'S UNIVERSITY

Consent to Act as a Subject for Research and Investigation

(The following information is to be read to or by the subject.)

1. I hereby authorize Ellen Flaherty to perform the following procedures:
 - A. Administer a questionnaire which is designed to determine the mood level I am experiencing at the time of its administration.
 - B. I will agree to participate in a group sing-a-long for ten minutes. I will then participate in a ten-minute discussion about my reactions to the songs. I realize that I do not have to sing or talk during the twenty minutes, however I will agree to listen to the singing and the discussion.
 - C. I will agree to retake the mood level questionnaire after the singing and discussion are over.
 - D. In an attempt to establish reliable data, I shall try to attempt to answer the pre-test and post-test mood level questionnaire as honestly as possible.
2. The procedures described in Part 1 have been explained to me by Ellen Flaherty.

3. I understand that the procedure in Part 1 involves the following possible risks or discomforts:

Possible embarrassment about singing in front of others.

I understand that my rights to privacy will be protected by all test data remaining anonymous. I will be assigned a number and letter A or B to signify the group that I will be placed into and to identify me as a participant.

4. I understand that the procedures and investigations described under Part 1 have the following potential benefits to myself and/or others.

Group singing and verbal discussion have a wide range of effects. Some of these effects are:

- A. Is generally considered to be pleasurable and rewarding.
- B. Enables one to share uncomfortable feelings with others.

5. An offer to answer all of my questions regarding the study has been made. If alternative procedures are more advantageous to me, they have been explained. I understand that I may terminate my participation in the study at any time.

_____ Date _____
(Signature of Subject)

Appendix G

MUSIC PREFERENCE QUESTIONNAIRE

Identification Number _____

The following is a list of musical selections which may or may not have a calming effect upon you when they are played. After the selection is played, please indicate the song's effect upon you by placing a check under one of the four columns. The first column will signify that the song has no calming effect on you. The second column will signify that the song has a moderately calming effect (it relaxes you to some extent). The third column will signify that the song has a very calming effect (that the song relaxes you to a great extent). The fourth column will signify that the song makes you nervous.

Selection	Degrees of Calming			
	None	Moderate	Very	Nervous
1. Leaving on a Jet Plane				
2. Take Me Home Country Roads				
3. Shenandoah				
4. Mariah				
5. Five-Hundred Miles				
6. In the Early Morning Rain				
7. Puff the Magic Dragon				
8. Today While the Blossoms				
9. Kum-ba-yah				

Selection	Degrees of Calming			
	None	Moderate	Very	Nervous
10. I'm Forever Blowing Bubbles				
11. Let Me Call You Sweetheart				
12. Daisy				
13. By the Light of the Silvery Moon				
14. In the Good Ol' Summertime				
15. Don't Fence Me In				
16. What the World Needs Now				
17. Sometimes I Feel Like a Motherless Child				
18. Raindrops Keep Falling on My Head				
19. Swing Low Sweet Chariot				
20. Ash Grove				
21. Bridge Over Troubled Waters				
22. Sunrise, Sunset				

Please note any songs that have a calming effect upon you that have not been listed above.

Appendix H

Group A songs

Daisy, Daisy
Take Me Home Country Roads
Swing Low, Sweet Chariot
The Band Played On
Shenandoah
Let Me Call You Sweetheart
Bridge Over Troubled Waters
Kum-ba-yah
What the World Needs Now is Love
Raindrops Keep Falling on My Head

Group B songs

Let Me Call You Sweetheart
Bridge Over Troubled Waters
Kum-ba-yah
What the World Needs Now is Love
Raindrops Keep Falling on My Head

Appendix I

DEMOGRAPHIC DATA

Identification Number _____

SEX: _____ AGE: _____

ETHNIC ORIGIN: _____

GEOGRAPHIC LOCATION OF HOME: _____

RELIGIOUS AFFILIATION: _____

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