MUSIC THERAPY
in the Rehabilitation
of the Adult Blind

By ROBERT K. UNKEFER

A Research
Project Report

E. Shafer Gaston

SERVICES FOR THE BLIND
State Department of Social Welfare of Kansas
TOPEKA, KANSAS
Music Therapy in the Rehabilitation of the Adult Blind

By ROBERT K. UNKEFER

A Research Project Report

To Dr. Barton: Please accept this as a gift. Acceptance does not mean that you are obligated to read the pamphlet.

SERVICES FOR THE BLIND
State Department of Social Welfare of Kansas
TOPEKA, KANSAS

PRINTED IN THE STATE PRINTING PLANT
27-2053
Dedication

This report is dedicated to the memory of Louis S. Cholden, M. D., who first conceived of the possibility of using music therapy in the program of the Kansas Rehabilitation Center for the Blind. Doctor Cholden was the psychiatric consultant to the Center from 1950 to 1952 and pioneered much of the original thinking which has become the current trend in psychological concepts of the rehabilitation of the blind. Although Doctor Cholden did not live to see the fulfillment of many of his dreams about the adoption of scientific procedures in rehabilitation, before his death in 1956, this and several other pioneer projects had begun and were demonstrating his unique capacity to apply psychological and psychiatric principles in other fields in which he was personally interested and with which he felt professionally identified.

William L. Dauterman.
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dedication</td>
<td>2</td>
</tr>
<tr>
<td>Foreword</td>
<td>5</td>
</tr>
<tr>
<td>I. General Orientation</td>
<td>11</td>
</tr>
<tr>
<td>II. Music Therapy: History and Development</td>
<td>18</td>
</tr>
<tr>
<td>III. The Music Therapy Project</td>
<td>26</td>
</tr>
<tr>
<td>Statement of Purpose. The Project Staff.</td>
<td></td>
</tr>
<tr>
<td>A. The Selection of Clients for Music Therapy.</td>
<td>29</td>
</tr>
<tr>
<td>B. Music Activities and Equipment.</td>
<td>35</td>
</tr>
<tr>
<td>C. Work in Music with Groups of Clients.</td>
<td>41</td>
</tr>
<tr>
<td>D. Work in Music with Individual Clients.</td>
<td>44</td>
</tr>
<tr>
<td>E. Results</td>
<td>45</td>
</tr>
<tr>
<td>F. Case Stories</td>
<td>47</td>
</tr>
<tr>
<td>IV. Implications for Continued Effort</td>
<td>53</td>
</tr>
<tr>
<td>Appendix</td>
<td>55</td>
</tr>
</tbody>
</table>
Foreword

The significance of the material contained in this report cannot be adequately assessed without a clear understanding of the program, methodology, resources, and philosophy prevailing in the Kansas Rehabilitation Center for the Blind during the period covered by this study. Music Therapy as described herein is the creature of its inherited professional discipline and the environment which conditioned and nurtured it. The administration of the State Department of Social Welfare of Kansas has since 1948 supported the Division of Services for the Blind in its effort to develop and offer an expanding facility in the Rehabilitation Center.

Adjustment training was the original and remains the ultimate goal of rehabilitation centers for the blind. The development of the maximum degree of independent mobility through “travel training”—sensory perception and recognition, cue interpretation, and the use of the white cane or other travel aid—is probably the most common similarity among rehabilitation centers. The alleviation of the loss of communicative skills through the teaching of Braille, typewriting, script-writing, and the use of Talking Books is another common denominator. Some form of counseling seems to have been accepted practice since the establishment of the first “retraining” centers by the armed forces during the Second World War. The development of manual dexterity has also been a common objective, although the modalities used and the orientation of the staff and trainees to the activity has varied from “busy work” through finger training and occupational therapy to vocational training.

While the dual concept of the rehabilitation center as a facility for the improved “diagnosis” and “adjustment” of candidates for rehabilitation did not originate in the Kansas Center, the refinements and expansion of the dual concept have been fostered by it. The two functions are frequently inseparable in the processing of an individual case. Physical, sensory, neurological, psychological and similar examinations are identifiable diagnostic procedures. Whereas staff observations made during the course of travel training, or other adjustment activity, are less frequently identified as diagnosis since the application of the acquired information is usually closely related to the learning situation and the total rehabilitation
process, it has been the belief of this administration and the operating staff that all observations should be shared currently and reported permanently as significant information which will have a bearing on future case planning with the individual client. Therefore the staff is oriented to the dual functions of careful, objective observers and understanding trainers.

Work Performance Testing was the first area emphasized for development and revision. The belief that a valid method for the evaluation of work ability is essential in vocational planning has continued to persist and to facilitate the ultimate placement of adult blind people on suitable jobs. Occupational Therapy, another new profession, was adopted as a means of circumventing the traditional "craft work" which had become stigmatized through abuse and lack of thoughtful direction. Experience has demonstrated that personally qualified and professionally trained therapists can better teach hand skills and afford what has become essential attitudinal therapy in an organized rehabilitation program.

The diagnostic value of manipulative activities has been increased by the use of a professionally trained therapist and by emphasizing the development of meaningful skills which can be immediately applied to meeting the problems of daily living. While a few craft activities are still in use because of their particularly applicable nature, most of the traditional "blind crafts" have been eliminated, and food preparation, sewing, laundering, general housekeeping, and self-care skills introduced.

One of the earliest observations which brought about the establishment of an entirely new activity in this phase of work with the adult blind was the recognition of a need of some form of education or therapy which could be used to improve the general level of physical health of the clients. Poor eating habits and inactivity frequently characterize the pre-Center conditioning of the client. Since idleness is usually a factor in the client's decision to come to the Center, loss of appetite or overeating and lack of exercise are often present. The first attempts to meet the need for normal physical exercise took the form of gross group calisthenics and competitive games. Later, medical supervision made it possible to refine the activity to a form of corrective therapy in which there is provision made for individual prescriptions and individualized activities to meet specific needs. The development of the "play concept" has also been emphasized through refinements of games and other group activities.

Psychological service was an accepted method of personal and vocational evaluation at the time of the Center's founding. The
addition of psychiatric service was adopted shortly after and has become a major influence in the program development. Each client upon admittance to the Center is given a battery of psychological tests. Intelligence, personality, interests, and motor abilities are assessed by a qualified psychologist. A psychological report is written and the psychologist confers with the staff on specific problems. He is also available to the psychiatrist, who interviews each client, writes a psychiatric report and prescribes a generalized form of attitudinal therapy. The psychiatrist may also indicate the need for further special diagnostic examinations, recommend some kind of psychotherapy, or advise against further efforts in rehabilitation because of the presence of organic or emotional pathology which is not subject to treatment in a rehabilitation center or requires another specialized type of facility. The psychiatrist functions as a member of the staff team who makes available his special knowledge of human behavior to the staff conferences. Psychiatry has made a major contribution to the rehabilitation processes currently practiced in the Kansas Center. Through the work of Lewis S. Cholden, M. D., the first psychiatrist to be employed as a part-time member of the staff, some specific “psychiatric aspects” of rehabilitation have been identified and put into common usage. The most widely read and understood concepts formulated by Doctor Cholden were those which explain the psychological process experienced by the individual who loses his sight in adulthood and progresses from trauma through acceptance, and from depression to the development of a new self-concept. Another contribution of Doctor Cholden’s was the workable application of the group therapy technique. Although many therapists still find it difficult to work with a group of blind clients, Doctor Cholden’s reported experiences have assisted those who have followed him to proceed with greater understanding and increased effectiveness. Group therapy, where professional competency is available, is becoming a commonly accepted therapeutic activity in facilities which offer a closely controlled and greatly accelerated rehabilitation program.

With each new addition to its program, the Rehabilitation Center has attempted to evaluate the offerings of the additional service. It has been believed that a variety of professional skills could better meet the needs of the heterogeneous case load and the complex problems presented. Further, it has been a basic assumption that there is an unique body of information to be obtained through the application of the various professional disciplines to the specific area of problem-solving found in a rehabilitation center for the blind. Although this information is difficult to obtain and the
abstraction of basic principles even more difficult, a consistent effort has been made to keep accurate and complete records from which to draw out whatever generalizations might therefrom be made.

While it is true that rehabilitation workers are slowly accumulating a significant body of information which can be communicated to and applied by others, it is still acknowledged that we have only the most rudimentary information and tools with which to work in our attempts to deal with the complex problems in the rehabilitation of the physically and sensorially handicapped.

Although an occasional significant article has appeared in the professional literature, the first major contribution toward the formulation and documentation of an acceptable body of information describing the functional aspects of rehabilitation as practiced in a center was the report of the Findings of the Spring Mill Conference held in February, 1951, under the title of “Adjustment Centers for the Blind.” The conference and the publication were co-sponsored by the American Foundation for the Blind and the Office of Vocational Rehabilitation, Department of Health, Education and Welfare, which was then known as the Federal Security Agency. That document concerns itself mainly with the methods and techniques thus far developed for the evaluation and adjustment training of the adult blind. In 1956 the same agencies sponsored another conference in New Orleans for the express purpose of arriving at and documenting principles and standards for the operation of centers. This report which marks the second major milestone on the road to professional maturity was published under the title, “Rehabilitation Centers for Blind Persons.” These two documents remain the most important sources for the student of this modern and unique social phenomenon—the rehabilitation center for the blind.

In order to function effectively, rehabilitation workers, like other professional groups, must have and believe in a set of principles and immediately available skills. However, principles are derived from a prevailing philosophy. If the philosophy is not sound and enduring, the principles will fail to implement the ends which they purport to serve.

The philosophy which has prevailed throughout the Kansas agency is concerned with both the human values of the clients it serves and the professional values of those who serve. It is fundamental that the intrinsic worth of each human being is the only real equality men share and that individual differences are as important as are similarities.

The approximately forty persons who receive service each year at the Kansas Center cannot be described as a “group” in that their
only characteristic in common is the loss of sight or a significant por-
tion of their sight. As do all visually handicapped persons, they re-
main individuals with all of the usual differences found in any arbi-
trary selection from the total population. It cannot even be assumed
that there is universally present a motivation for rehabilitation, and
when such motivation is present, it varies in degree and in direction.
Therefore, a “program” which purports to serve the rehabilitation
needs of “the blind” must be flexible and expansive. The offerings
described above as diagnostic and adjustment services cannot be
construed as the program of this Center. It is more truly representa-
tive of the operation to discuss these factors in the philosophy of the
staff, their professional competency, and their specific rehabilitation
techniques, in order to communicate the essence of our objective
in the rehabilitation of the whole person.

When in 1952 we were dealing with the problem of finding new
approaches to the complex variety of case situations facing the
staff, the possibility of using Music Therapy as an additional
“adjunctive therapy” arose. Music and “the blind” have tradi-
tionally been associated in a variety of ways. The occasional blind
musician who has gained fame and sometimes fortune is one of the
stereotypes with which we are all familiar. At the other extreme
is the portrait of the “blind beggar” who makes “music” on the
street corner and who reaps a considerable financial reward from
his appeal to the guilt feelings of the passers-by, who salve their
consciences with magnanimous acts of giving to the less fortunate.
Another belief is that many of the blind who have very little else
to live for while away their days making beautiful music to ac-
company their grandiose fantasies and thereby find happiness in
their lives of “darkness and despair.” Perhaps these cultural factors
were sufficiently disturbing to inhibit most rehabilitation workers
from conceiving of music as a positive therapeutic modality. How-
ever, it seemed obvious to the Center staff that music was an im-
portant part of the lives of a large majority of “well-adjusted” and
productively occupied persons who happened to be blind. It seemed
possible to imagine that the infinite variety of musical experiences
available to the blind and apparently enjoyed by them might be
put to practical use in treating problems of rehabilitation. Further,
acknowledging that the existing modalities through which we were
attempting to reach clients frequently failed, there seemed to be no
theoretical reason why this important activity should not be ex-
plored as another new means of communication. Mr. Robert
Unkefer was consulted on the problem, became vitally interested in
the potentials which seemed apparent, and began to function as
part-time Music Therapist for the Center. This association made possible some extremely intriguing explorations into the various means of applying a “functional music” program in a rehabilitation center for the blind. Eventually a federal-state grant was applied for and received to finance the two year research project reported in the following pages.

The enthusiasm engendered in the staff by the positive results of the music therapy activity again stimulated the search for additional areas of activity which might tap even new interests and motivations and which could be similarly applied to the primary goal of solving the rehabilitation problems of other individuals who remain unchallenged. A project entitled “Objects of Beauty for the Sighted and Blind” was brought to the staff’s attention by its originator, Allen Eaton, affiliated with the American Foundation for the Blind and a Fellow of the Federal Office of Vocational Rehabilitation.

While at this writing only preliminary suppositions are available, it is again apparent that the approach to rehabilitation through the use of objects, activities, and relationships which appeal to man’s creativity and need for aesthetic experiences holds an infinite variety of productive opportunities for the development of rehabilitation techniques which are now unknown, untried, and yet to be evaluated. The importance of establishing strong and wholesome relationships between clients and the staff through educational and aesthetic activities cannot be overestimated. The motivations for these experiences are more nearly universally present and available as compared with useable motivation identifiable toward “independence,” self-help, self-improvement, and a variety of other relatively mundane necessities of life. Since we do not have nor is it desirable to have a codified doctrine for rehabilitation, experimentation and exploration is now and will remain the most desirable attitudinal atmosphere in which to develop new insights and new techniques for the rehabilitation of the adult blind.

CHAPTER I  

General Orientation

SOME FALLACIOUS CONCEPTS

"Music for the Blind" is a subject both old and new; this concept is gloriously supported by the believers but severely damned by the dissenters. As yet few healthy results seem to have come from the clashes and skirmishes between the believers and the dissenters. A kind of "all or none" principle pervades the literature. The believers seem to be pressured into seeking only practical or essential values in music in order to justify its worth. The dissenters seem to conclude that since music has practical value for so few blind people, it should be given no place.

The phrase, "music for the blind," implies the kind of generalization which so many writers, such as Platt, have described as causing so many misconceptions.

It is this no-two-alikeness that makes reference to "the blind" so meaningless and generalizations regarding their ability, personality, psychology, character, independence, and adjustment to blindness of no significance whatsoever.

In thinking and writing about music, however, both professional teachers and workers for the blind seem to forget the dangers in generalization. The workers who support a "no music for any blind" concept are particularly vehement in their remarks, and are just as guilty in this generalization as the teacher who wants to be sure that each blind child is given piano lessons.

It is not the purpose here to chart the history of the teaching of music to the blind. It is interesting and it seems worthwhile, however, to trace and describe some of the strong feelings and some of the false beliefs that are still held. Many of these feelings or beliefs may not differ even in degree from those which were held early in the nineteenth century when a student from the school of Huyéy achieved success as a concert pianist although blind.

Undoubtedly, there still exists the societal belief that the blind

---

1. This investigation was supported, in part, by a research and demonstration Special Project grant from the Office of Vocational Rehabilitation, Department of Health, Education, and Welfare.

are fine musicians. Korhonen³ describes this misconception in this way:

... It is said that "a person without sight develops a mysterious sensitivity to music." One blind pianist or singer performing in concert reinforces a societal belief that the blind are fine musicians.

There are hundreds of articles in both professional and lay journals which refute the idea that when one loses his vision he automatically becomes a good musician. Nevertheless, many people still cling to this idea. It is a comfortable idea which seems logical. There is much to support the reasoning that this one misconception is the basic source for all of the strong feelings both for and against "music for the blind."

Music teachers in the schools for the blind intellectually agree that there is no significant difference in musical ability in blind and sighted children. In practice, however, they seem to support an opposing view. In a survey reported by Chard⁴ three-fifths of the student population in twenty-six schools for the blind were being given private music lessons. Of the remaining two-fifths it was estimated that eight or nine hundred students were too young for private lessons, leaving four or five hundred of appropriate age, out of a total of twenty-nine hundred, who were being missed. In addition to private lessons most of the students were receiving classroom instruction in music, and many also belonged to several extracurricular music groups. The author of this survey report concludes that the music teachers could not be proud of their work until the four or five hundred "missed" students were on the lists for private music lessons.

By way of contrast, a generous estimate of the students in public schools who take private music lessons would be one-sixth of the total numbers of students. No music educator in the public schools even considers the arranging of private music lessons as a major part of his job responsibility.

In opposition to the music teacher who wants to teach music to all blind are the people conveniently referred to here as the dissenters. These dissenters are found among the Workers for the Adult Blind. They may be home teachers, overly zealous rehabilitation counselors, or high officials in national or state agencies and organizations for the blind. These dissenters are threatened when their clients become interested in learning to play a musical instrument. To them such a client is only a short distance from the street

corner where he will stand and play his guitar or accordion with a tin cup ready for the coins to be collected from the pitying sighted society. While it is true that the blind mendicant is still extant, and his time-honored racket has not been displaced by organized social service, he is much less of a problem because of legal restrictions than formerly. The dissenters may be honest in their fears that blind beggars might be encouraged, but the fears seem to stem from a nightmare of the past, not of the present.

The dissenters do not often voice their views, but their existence is nonetheless felt. A reading of the articles on music prepared for the hearing of the American Association of Workers for the Blind gives one the impression that every author must be extremely careful to show the work done in music as having acceptable vocational significance.

The overemphasis on the vocational and commercial values of music training for the blind coupled with the fear for stimulating mendicants has caused inconsistency, limitation, and a failure to look for other values in music. Even though the music teachers continue to try to give all blind children long series of private music lessons, their goals seem to be the discovery of talent and the education of the talented few. On graduation from a school for the blind only the most brilliant performer is encouraged to take further training in music. If his talent is not judged as salable, he is discouraged. Even if he adopts music as a hobby, his advisor is hopeful that his ability is at a level which will enable him to pick up a few dollars.

A Broad View of Rehabilitation

Throughout the education and training of the blind there is a valid and constant effort to provide the practical, the essential, the vocational or commercial. In modern times the education, training, and rehabilitation of all handicapped has been established so that the handicapped person could eventuate in some means of providing his own support in order to live as an independent person. This goal has been shown to be extremely important not only for the handicapped person’s self-esteem and happiness, but also as a means of reducing the costs of social welfare.

Aiding the handicapped person to discover some kind of appropriate work in which to earn his living will continue to be the prime concern of all rehabilitation workers. That this is true and in constant practice can be deduced from the names of many rehabilitation agencies. Until recently, almost all of these agencies linked the word vocational with rehabilitation. The Federal office
continues to use the name the Office of Vocational Rehabilitation although the sensitive officials support a concept of rehabilitation far broader than the limiting name would imply.

In a democratic nation a pragmatic and first things first working hypothesis is usually adopted. It is altogether correct that the first emphasis in education, training, and rehabilitation of the handicapped was placed on solving vocational problems and the many facets of such problems. Once initial problems are solved and procedures are established the pragmatic theory which was used for launching a program then becomes uncomfortable. It is then time to re-examine concepts.

The rehabilitation of the whole person is a concept which has been supported in theory for several years. The definition of rehabilitation as adopted by the National Council on Rehabilitation in 1942 is a very broad one: “restoration of the handicapped to the fullest physical, mental, social, vocational, and economic usefulness of which they are capable.”

There is little evidence that the rehabilitation of the whole person is often achieved in actual practice. Much progress has been made in physical and vocational restoration, and in aiding the handicapped to become economically useful. Mental restoration is usually conceived as psychiatric treatment and is also more available. Social restoration and its concomitant, cultural restoration, remains as theory not as yet thoroughly tested. The needs of the handicapped for aesthetic experience, for hobby formation, for leisure time activities for accepting responsibility in social groups have long been cited in the literature; but they have not been fulfilled as yet in the evolving rehabilitation process.

Cultural Restoration

Since the education, training, and rehabilitation of the handicapped has been measured and fitted for vocational gains, it is only natural that artistic values have been strongly de-emphasized, or even denied. The definition of aesthetic, “of or pertaining to the beautiful as distinguished from the moral and especially the useful,” suggests in itself the reason a tax-supported rehabilitation agency could not afford time and money to provide cultural pursuits by its clients.

The need that man has for aesthetic, creative experience has been described and redescribed from the time man first evolved.

5. The word cultural is used hesitatingly. It is meant to connote the enlightenment and refinement of taste acquired by intellectual and aesthetic training. The reader is cautioned, however, to remember that there are an infinite number of levels of taste or of aesthetic judgment intimately related to the experience of the person making the judgment.
philosophic theory. The value in aesthetic experience seems to defy description by words. Art has been described as having moral value, educative value, healing value, and perhaps a score of other values. While such values can be found in art and while man’s practical nature seems to bid him find these practical values, the exact nature of the aesthetic experience continues to elude the philosopher’s pen.

Aesthetic feeling is a subjective experience. Kant has described the pleasure from the appreciation of the beautiful as disinterested pleasure which is not dependent upon the fulfillment of desire, such as relief of hunger by eating. Schopenhauer believed that the only moment of relief that man can achieve in a “world of will” is through the contemplation of a beautiful work of art.

The literature of the work with the blind is not barren in the area of aesthetics. There are very bright spots in the not too recent literature. The valuable work of Cutsforth, "The Aesthetic Life of the Blind," accomplished in 1932 has a freshness after a quarter of a century which only truth can have. Lewars produced a beautiful exposé of aesthetics of music for the blind in 1938 under the somewhat confusing title, "The Economic and Social Value of Our Program of Music." Neither work seems to have achieved its rightful place; neither has stimulated the kind of change which must be manifest in the educational and rehabilitation processes which will allow the kind of free environment conducive to artistic expression and aesthetic growth.

Cutsforth has pointed out the fallacy in developing a theory of aesthetics for the blind through the study of some isolated type of function of perception or of some isolated feeling values.

It is almost a platitude to remark that the stimulus pattern, the objective aspect of the perception, is the smallest part of any aesthetic experience. But in spite of this fact both the seeing and the blind regard the stimulus pattern as the source and kernel of the experience . . .

Aesthetic growth does not take place so much through the senses as it does through the entire intellectual development. Aesthetic appreciation is always relative to the wealth of effective relationships it organizes about the stimulus pattern.

The same author has pointed to the dangers of presenting visual forms of expression to the blind to stimulate aesthetic growth. Artificial visual concepts result.

Educational methods in seeking to stir the artistic life of the blind have,

---

instead, furnished an abundance of visual goals and motivations which have served as an anaesthetic . . . Such pedagogical procedures have nothing but disastrous results. First, the blind receive such an exaggerated opinion of visual beauty and visual pictorial art that they have no confidence in the validity of their own methods of appreciation. Second, aesthetic values are upset in the belief that the art object or stimulus pattern transcends in importance the theme of the artistic expression and the subjective relationships involved in the appreciation of the theme.9

Cutsforth does not find in the vocationally oriented institutional environment any opportunity for aesthetic growth.

An appreciation of the beautiful is neither formally taught nor formally learned. It is a phase of personality growth and will either develop or not depending upon the conditions under which personality growth takes place.

The blind must be taught as the seeing must be taught, by permitting them to live so that their personality growth may incorporate the true relationships between themselves and their environment. This is a social and educational ideal which is never attained, but when it is even roughly approximated, the cultured individual is the result, whether he be a savage tribesman or a college graduate.10

No apology is made here for the inclusion of so much of the Cutsforth theory even though it is now some twenty-five years old. Apologies should go to Doctor Cutsforth because the problems which he pointed out so sharply are still extant. The continued prevalence of separate recreation rooms for girls and boys, and the continued teaching of only mechanical and repetitious skills are but two of the lowly examples which attest to a limited, unimaginative environment in the institutions for the blind.

The richest stimulation to aesthetic growth is always found in the social situation of the normal individual, and the most perfect artistic creation and expression is his behavior in relation to his social group.11

AESTHETIC GROWTH FROM MUSIC

Mere sensory stimulation does not insure aesthetic growth directly, but a varied, wealthy mass of sense stimuli when perceived will enlarge an individual’s experience so that his personality is developed to a level at which aesthetic pleasure is born.

There is danger in generalizing that one particular art form is superior to others for any individual or group. It does seem possible and safe to speculate, however, that in the very nature of music exist certain characteristics which make it more directly perceivable by the blind.

When music in any of its forms opens the door of Beauty to us, the entire world of appearance with its glamour of light and shade vanishes from con-

10. Ibid., p. 181.
11. Ibid., p. 182.
sciousness more or less completely . . . If this is true of the sighted, how true it is of the blind. We find ourselves suddenly freed from all limitations when once music turns her key and opens for us the door of Beauty.12

Musical appreciation, fortunately, is so subjective that it is forever put beyond the reach of visual spoilation. . . . It is interesting to note that the one art in which the blind are proficient is the only art that cannot possibly be subjugated to visual values and visual meanings.13

The theory of Krummeich14 contains implications as to why music may be a most valuable art form for the blind. This author describes the perception of graphic and space arts in terms of visual imagery, and hastens to point out that the perception of music is completely different. Music is perceived in terms of temporal imagery. Music is a pure time-art. In a narrow definition music is a well-ordered pattern of sounds floating along a time axis; there is a charm of movement.

A blind person, in his day to day living, is intimately concerned with both time cues and sound cues. His successful travel is strongly dependent on sound cues and his correct perception of the passage of time. This may imply a kind of “readiness” or “positive valence” for the perception of music by a great percentage of the blind.

SUMMARY

The education, training, and rehabilitation of the blind has long been directed toward aiding the blind to achieve materialistic gain. Age-old misconceptions and fears for stimulating mendicants have caused training in music to be measured only in terms of vocational goals. Advances in rehabilitation processes point toward the need for social and cultural restoration. The most important phase of human existence, creative aesthetic expression, has been neglected. Music, which must be perceived through temporal imagery, may be the most valuable art form for the stimulation of aesthetic growth in the blind.


CHAPTER II

Music Therapy: History and Development

Music is an integral part of human life and aspiration, and as such it is one of our most useful therapeutic tools—at once delicate, versatile, and powerful. Like all instruments, it can be abused or prostituted by the ignorant, the careless, or the untalented; in the hands of the trained, dedicated, and skillful, it can mediate the most fundamental of personal and social experiences.1

DEVELOPMENT IN PSYCHIATRIC HOSPITALS

There is still much confusion in the understanding of the therapeutic uses of music. In the preceding chapter music is purported to be a very important art form, perhaps having the most universal appeal, and of particular importance in the concept of the aesthetic control of behavior. Music has been accepted throughout history as a stimulus which can affect the emotional state of the individual. But, even when such a gross general principle is accepted as true, there is still the question as to how music is used in a clinical setting to help a patient score a therapeutic gain.

What is Music Therapy? Does it differ from School Music? Is music the therapeutic tool in and of itself? Each of these questions is appropriate; these and similar ones are raised continuously by both trained music therapists and their professional co-workers. The voicing of such questions is altogether healthy and necessary in an area of work which is still in the earliest experimental stages.

Historical evidence of the use of music therapeutically is not difficult to find; such evidence usually shows an intuitive rather than a scientific approach to treatment. During World War II music activities became a regular major part of Special Services Activities in Army Hospitals. When the Veterans' Administration hospital services were greatly enlarged at the war's end music activities were included in Special Services. As the music programs in these hospitals grew there gradually evolved certain procedures and practices which seemed to have meaning and usefulness in an individual patient's treatment. The intuition of the hospital musician and his co-workers continued to provide the stimulus for developing the music activities. Many of the hospital musicians were former school music teachers. Programs were similar to school music

programs, except for stronger emphasis on recreational music and a greater use of popular rather than serious music activities. The programs were successful when measured from a participation index, and undoubtedly many gratifying therapeutic gains resulted. Unfortunately when these early positive results were reported the music was credited as the sole therapeutic agent. This false reporting resulted in premature rosy publicity, a clouding of logical thinking, and a slow start in careful scientific investigation.

Aside from some of the negative aspects of this beginning, the VA hospital support of music activities has been a major factor in the rapid development of music therapy in the immediate past decade. Facilities and equipment in a large number of VA hospitals were available and the hospital musician who desired to improve his professional status through research and experimentation received encouragement from open-minded administrators.

Other hospitals in the country, both private and state institutions, have also contributed to the healthy development of music therapy. Some hospital music programs have been in existence for thirty or more years.

Music Therapy “grew up” in the psychiatric hospital. The long-term nature of mental illness, the ambulatory state of the patient, and the already existing practice of providing many activities and media for patient participation and work provided the kind of structure which easily led to the addition of a music activities program.

The transition from music activity to music therapy has been a gradual one, and the degree to which such a transition is successful in a particular institution is directly related to the level of training and professional growth of the hospital staff in general, and of the hospital musician in particular.

Development of Theory and Formal Training

The development of university courses in music therapy was commenced as the demand for trained workers appeared. Several universities developed courses leading to degrees at both graduate and undergraduate levels. A clinical training period was included in these courses from the start. In 1950 the National Association for Music Therapy, Inc., was established.

The university training caused the effort to move the discipline of music therapy from the realm of the arts toward the direction of the sciences. Studies set in a scientific framework were begun

2. Among the earliest degree courses established were those at Michigan State University, East Lansing; University of Kansas, Lawrence; Chicago Musical College; College of the Pacific, Stockton, California.
and have continued. There is still much to be investigated, but a body of knowledge does now exist which when brought into play will eventuate in good work which is constant, predictable, and reproducible.

The completed studies are generally of two types. Those which meet the standards of the classic, single variable, method of scientific study are concerned with showing that physiological changes can be induced in the human organism with musical stimuli. Others which are concerned with the influencing of psychological changes in the human organism utilize observation and case study techniques for determining results, and have served to pin-point the recognition of factors other than music in the therapeutic situation based from a music activity.

**THE PATIENT THERAPIST RELATIONSHIP**

The early mistake in reporting the music, *per se*, as the sole therapeutic agent was soon corrected. Barnard helped to change this fallacy.

It can be observed from clinical examples that although the activity (music) may change only slightly from patient to patient, the way it is used and the purpose it is made to serve vary considerably. This is one of the chief ways in which an activity becomes therapeutic.

How can music accomplish therapeutic tasks? The answer is so simple as to be startling. It cannot. It is not the music that is the real therapeutic agent but the music therapist. It is he who molds the music to the therapeutic goals, who guides the patient in making a therapeutic experience out of the work or recreational activity with music. It is the atmosphere he creates, the relationship he establishes with the patient, the direction in which he turns their attention that makes music therapy out of musical activity.

Gaston has also pointed out the importance of the relationship between the music therapist and the patient.

Music is a means toward the more important value of establishing good interpersonal relationship between patient and therapist. It is important to understand that this is music's most important function and it is for this goal that music is most often used.

The assessment of the importance of the patient-therapist relationship immediately presumes the understanding of the patient, his needs and his potentialities, by the music therapist. The patient's history and development, observations of his current be-

---

3. Most of the reports of these studies can be found in the several Music Therapy Yearbooks (six volumes) available from The Allen Press, Lawrence, Kansas.


Behavior, mood, and thought processes can only be understood in the light of a sound, theoretical background and knowledge of the dynamics of mental illness. This understanding which can only be gained from formal training and clinical experience is what separates the musician from the music therapist, and allows the latter to move music activity into the realm of music therapy.

**Reconciliation of Basic Ideas**

The careful reader will be aware at this point of two ideas which are somewhat confusing and may seem to conflict. Music has been shown as having value in and of itself by reference to philosophic theory and by citing careful studies designed to show that physiological changes can be induced in the human organism with musical stimuli. Following this there may seem to be a discrediting of music when strong emphasis is placed on the importance of the patient-therapist relationship.

These ideas are presented in this order and without attempt to bring them into concordance because they have evolved in this order. When the early music therapist was challenged in his belief that the music was the primary therapeutic agent he changed horses and placed emphasis on the building of a relationship with the patient. He, at times, left the music out of the situation altogether, but then found that a purely social or coffee-drinking relationship was not satisfactory to him or to the patient, and was quite limiting therapeutically.

The pendulum swing from activity to relationship has plagued not only the development of music therapy, but other activity therapies alike.

Fortunately, and only very recently, the perspective which includes recognition of the activity as an essential feature of the patient therapist relationship has been gained. Much more needs to be learned about the psychological significance and appropriateness of certain activities and art forms and the inappropriateness of others for use by certain patients and certain therapists.

Music Therapy does not differ from good Music Teaching in kind, but only in degree. The school music teacher does in general what the music therapist has the opportunity and responsibility to do in the particular. The hackneyed expressions, “We must teach children” as opposed to “We must teach music” are now overworked to the point of becoming trite. When this implied philosophy is actually practiced by the sensitive, warm teacher, social, psychological and cultural gains which will enhance the life of the person can be made.
BEGINNING IN REHABILITATION CENTERS

Shortly following the development of music therapy in adult psychiatric hospitals came the first trials in other kinds of institutions. Able staff in special schools and hospitals for children found it easy to adopt the new understanding and techniques, since many such places already had music activity programs. Notable work was done early in private schools for emotionally disturbed children and in institutions for the mentally retarded. Crocker\(^6\) has developed an important technique which utilizes music (piano improvisation) as a diagnostic tool. Loven\(^7\) and co-workers have begun careful evaluation of music therapy in a school for the mentally retarded.

Schapiro\(^8\) has made the earliest attempt to introduce a music activity into a rehabilitation center program for the blind for therapeutic purpose; she has made the only lengthy formal report of such a study. The study under the title, *A Technique of Using the Piano in the Rehabilitation of the Blind Adult*, is concerned with only one aspect of a complete music therapy program. An important contribution, however, is that the well developed technique of teaching piano to the blind is related to rehabilitation goals. In a digest written by the author, the project is described in this way:

The study is a practical plan for the first steps in teaching piano to the blind adult beginner within the specific frame of reference of a rehabilitation program.

Almost all blind persons need help in making a good adjustment in life in a world arranged for the sighted. Such help is best provided through the organized rehabilitation program. Since the war, a number of rehabilitation centers have been established and in them specialized methods and techniques in this field are being developed and perfected. Making music is one of the activities particularly suitable for use as a therapeutic agent in the process of rehabilitation of the blind. Actually, it has been little used, due to the fact that most music teachers are puzzled and uncertain as to how to go about teaching the blind adult beginner to play. Indeed, many good teachers have failed when confronted with this challenge. This study demonstrates a successful approach to the problem.

Schapiro spent more than a decade collecting information and testing her technique in several rehabilitation centers in Europe, in South America and in this country. Included in the body of the dissertation is a general description of the types of adjustment prob-

---


7. Martha H. Loven working at the Parsons State Training School, Parsons, Kansas.

lems encountered among blind persons needing rehabilitation, and the place of piano instruction in the rehabilitation programs. The author believes that the chief result desired from the study of music is the stimulation of motivation.

The Schapiro study is reported here in some detail for it is the only recorded study of an experimental project which has direct relationship to the project that is described in the remainder of this pamphlet. This writer and several colleagues were privileged to observe some of the exploratory work of Schapiro and became intimately aware of the good results obtained. In the formal report of the project the importance of the therapeutic relationship seems to be somewhat shadowed by the emphasis on the techniques of teaching piano. While observing this experimentor in the actual practice of her work, however, one is immediately impressed with her warmth, sincerity, adaptability and awareness of problem areas which contribute so greatly to aiding the client to make therapeutic gains as well as musical progress.

THE KANSAS REHABILITATION CENTER

Existing rehabilitation centers vary considerably in basic philosophy and program development. Some are of broad scope and attempt to offer diagnostic and adjustment services in all areas of living; others continue limited service emphasizing the purely vocational aspects of rehabilitation. The Kansas Center has a program of broad scope with a clear-cut boundary between it and the program of a vocational training center or trade school. It is concerned with the assessment of a person's personal and vocational potential. Vocational training is considered a post-center phase of the client's rehabilitation.

The services and benefits which should be available in a rehabilitation center for the blind have been described by Dauterman.9

1. A diagnostic facility wherein the total person is tested, observed, and evaluated using the techniques of social work, psychology, psychiatry, physical medicine, occupational therapy, recreation, education, business, and industry, so that the client and counselor will know and understand the existing potential for a satisfactory adjustment to living.

2. A training facility offering instruction in special skills—grooming, travel, communication, the correct use of common hand-tools and special tools and aids for the blind, occupational information, and social skills—in meeting the needs of daily living without the convenience of sight.

3. A place wherein the physical and social environment constitute an optimum climate for the facilitating of adjustment to life with impaired vision or without sight, through a better understanding of one's physical, emotional and intellectual capacities.

The Kansas Center has probably utilized psychological, psychiatric and conjoined techniques to a greater degree and for a longer period than any other similar facility. This is due to the orientation of the staff and their intentional seeking in that direction. Important also is the fact that such services are so easily obtainable in Topeka, Kansas, where the center is located. Three psychiatric hospitals, each participating in the training program of The Menninger School of Psychiatry, are located in Topeka. Many members of the professional staffs of these institutions have participated as both consultants and active workers in the planning and development of the Kansas Rehabilitation Center program.

Understanding the music therapy program at the center is dependent upon the understanding of the center itself. Additional information about it and a list of its purposes is included in Appendix, pages 56 through 59.

**Music Therapy in the Kansas Center**

Late in 1952 Cholden\(^\text{10}\) and Dauterman\(^\text{11}\) decided to explore the therapeutic uses of music with blind clients in the rehabilitation center setting. Observations of clients during recreational music activities led to the hypothesis: music is of major importance in the lives of many blind people, regardless of their technical ability in music or the level of their music appreciation.

The writer, a music therapist, was employed for one half-day or evening period each week as a consultant and to work with individual clients and groups of clients.

Exploration was accomplished in four activity areas of music: creative activities, educational activities, recreational activities, and activities designed to meet manipulative needs.

Frequently there were positive, although often fleeting, glimpses into worthwhile possibilities. Several staff members and a few volunteer workers served to give continuity to the music program. Group music activities were particularly useful because with several different groups it was observed that the clients really worked as a group only during the music activity. With several individual clients it seemed easy to relate directly their work with the music.

---

\(^{10}\) Louis S. Cholden, M.D., Psychiatric Consultant, Kansas Rehabilitation Center for the Adult Blind, 1950 to 1953.

\(^{11}\) William L. Dauterman, Supervisor, Kansas Rehabilitation Center for the Adult Blind, 1951 to 1957.
therapist to the therapeutic gains. A few trials at a functional use of music in travel training had positive possibilities.

There was not enough time to follow through any of the potentials. It was also impossible to tell if a full-scale music therapy program would be worth the investment in a full-time staff member, and expensive music equipment. Were the positive fleeting glimpses all that could be expected or were they signs of an undeveloped program? Thus, the idea of a study project, supported by a grant, was born.

The music program has been a popular one from the beginning, too often, perhaps, just one of the “frills” with the music therapist at times feeling more like the “Good Humor Man” than a contributing member of the rehabilitation team. If it is just a “frill” which provides only diversion and pleasure then it is most appropriately the job of a volunteer. Whether or not it can be more than that is what this study was designed to reveal.
CHAPTER III
The Music Therapy Project

STATEMENT OF PURPOSE

Support for this study was approved in June, 1955, through the Special Project Research and Demonstration Grant Program, Office of Vocational Rehabilitation, Washington 25, D. C., and the Kansas Department of Social Welfare, Division of Services for the Blind. The broad purpose of the study was the evaluation of the effectiveness of music therapy as a part of an over-all program for rehabilitation of the blind. The study was begun with the following outline:

I. Proposal: Upon the assumption that every man needs some form of artistic creative expression and/or experience, that music may be the most useable form for many blind people, and that music therapy may appropriately be added to the adjunctive therapies utilized in the controlled rehabilitation process, the following proposal is set forth: To establish a tentative music therapy program to run for two years from which to base a study of the effectiveness of music therapy in a rehabilitation program for the adult blind, and to report the results of the project for the use of other rehabilitation centers.

II. Method: The establishment of a full-time music therapy program staffed by a trained music therapist and a part-time consultant in music therapy keyed to the total program will include:

A. Music Testing Program: To administer and evaluate a battery of musicality tests, and to establish norms for the adult blind.

B. Music Activities Program: To include creative, educational, recreational, and manipulative activities in music for individual clients and clients in groups.

C. Functional Music Program:
   1. Emotional needs of the client: The music therapist working under the prescription of the psychiatric consultant to meet specific emotional needs of individual clients.
   2. Physical needs of the client: The music therapist teaches for the transfer effect from specifically designed rhythmic music to meet rhythmic physical needs of individual clients, as manifest by some clients, usually those who are congenitally blind, in a rhythmic motor activity—walking, talking, and/or working.
III. **Evaluation Techniques:**

A. Diagnosis of the client's musical aptitude and initial musical abilities.
B. Periodical evaluation of his musical achievement.
C. Periodical evaluation of the relationship of the musical achievement to the level of adjustment.
D. Follow-up study of the residual effect of the musical experience at the Center in the client's post-Center life.

IV. **Recording, Reporting and Publication:** To keep narrative and statistical records of the work done and the client's progress; to study, evaluate, and to report in writing upon the conclusion of the project; to prepare, print, and distribute the final report in a suitable form for the use of interested persons in the field of rehabilitation of the adult blind, music education of the blind, home teaching, and recreation for the blind.

Of prime concern from the beginning of this study was the establishment of a broad scoped music therapy program directly related to the particular needs of the clients participating in it. Thus, there has been no rigid effort to stay within limiting conditions of the above outline nor to follow through all the facets of study projected in it. This principle of operation is not one to be used conveniently by a lazy or short-sighted staff, but one truly in tune with the philosophy of the Kansas Center. The total program has never been conceived as a series of formal courses in which all clients are enrolled. Rather, varieties of media, activities and therapists are available and activities are prescribed for use at varying performance levels depending on the client's needs as determined from diagnostic appraisal, followed by psychiatric or rehabilitation counseling.

**THE PROJECT STAFF**

The central project staff was composed of five persons, two of whom are experienced rehabilitation counselors, and three are experienced music therapists. Only one of the five was employed on a full-time basis on the project. All five have given much more in terms of time and effort than could be required or that could be supported financially.

W. L. Dauterman, supervisor of the Center, served as co-ordinator of the project. He is both an experienced administrator-supervisor and a rehabilitation counselor. Officially, he was responsible for all personnel matters; he supervised case work, and the case and project recording; he guided the project development in line with the Center's philosophy; and he served as a counselor at the functional level with clients.

Mr. Dauterman's personal contribution to the project was far greater than his official connection as Center supervisor would re-
quire. From the outset, when he first conceived of the idea of such a study under grant funds, and throughout the study period he served to stimulate the central and peripheral project staffs to pursue new ideas in line with the general design of the project. He is not a performing musician, but has a strong interest in music. He conducted several of the group music sessions and served as a staff observer at almost all such sessions.

Jerry Dunham, also an experienced supervisor and rehabilitation counselor, contributed greatly to the project. He served as a counselor at the functional level and did much individual and group work in music. He has a strong interest in music, plays several instruments, and worked individually in music with some clients. His counseling experience related to his individual work in music with clients has served to give greater insight into the function of the music therapist in the rehabilitation center.

Mrs. Beatrice Worthington was selected as the full-time music therapist. She was employed after she had given more than four months volunteer service. She demonstrated great adaptive ability in work with blind clients, and had wide experience in using music techniques in music schools, recreation units, and settlement houses; she had worked with both children and adults. She is an imaginative person with the capacity to adapt inexpensive materials and equipment in the making of music. She was responsible for most of the individual work in music with clients and conducted the greater amount of group activities.

As is normally the practice in the Center, this staff member was assigned other duties as a means of expanding her experience in the total rehabilitation process, and in order that the clients would fail to identify her with only one activity. This practice has proved highly desirable because it enables each staff person to observe clients while accomplishing different kinds of tasks. Comparative observations of a single staff member have frequently served to aid the client in recognizing problem areas.

The music therapist, along with duties connected with music therapy, was assigned the responsibility of the teaching of typing and acted as an assistant to the staff member in charge of travel training. The highly flexible organization allowed the assignment of other duties from time to time.

William W. Sears, a trained music therapist who has experience in both hospital work and in teaching music therapy courses at university level, was employed throughout the project as a part-time research assistant. His duties have included the recording and
evaluation of some of the data, the building of special equipment, the preparation of some of the interview forms, and some work with individual clients. He is a highly skilled specialist in building and adapting music equipment for specific place and purpose. He has designed and built record playing equipment for this project and describes some of his work in his article, "Practical Electronics for Music Therapy," which is reprinted in the appendix of this pamphlet.

This writer, a trained music therapist, was designated as project director. Prior to the study and during the first half of the study period he worked as a consultant and at the functional level with a few clients during a one-half-day period per week. During the second half he moved to a distant state and returned as a consultant for three extended periods. He prepared some of the initial interview forms, conducted many initial interviews and some final interviews with clients. He was charged with the writing of progress reports of the study and with the writing of the final report.

While the five members of the central project staff were charged with and accepted the responsibility of the project, the services of many other people were utilized. The clinical psychologists and consulting psychiatrists who are part time members of the Center staff have given much support and guidance. Harry E. Hayes, Director of the Kansas Division of Services for the Blind, has maintained active and continuing interest in the project and has supported it by simplifying administrative procedures, and by supporting the establishment of the all-important free atmosphere for investigative work.

Several highly skilled volunteer workers have contributed to the project. The clients themselves have been most helpful in their willingness to participate in several long interviews which were required in the collection of project data.

In a study which requires the varied services of so many, the task of keeping each contributing person oriented is an important one. Such orientation was accomplished in this project by a series of regularly scheduled staff conferences which were attended by both the central and peripheral project staffs. Careful records of these conferences were kept, and made readily available to any staff member.

A. THE SELECTION OF MUSIC THERAPY FOR PARTICULAR CLIENTS

The problem of the selection of particular therapists and appropriate areas of activity for the patient or client is a common one in all kinds of institutions which recognize and attempt to utilize
activity therapy as a specific part of the treatment. The problem is not easily solved, but the approximation of a satisfactory solution is, perhaps, the most important single factor which allows the use of activities to go beyond the level of keeping idle hands busy and the mere establishment of a pleasant environment.

In the psychiatric hospital neither the free choice of activities by patients nor the rigid assignment of patients with similar symptoms to the same activities has been successful. There is also a growing amount of evidence to support the view that the selection cannot be made entirely on the basis of assessment of therapists' ability to relate to a particular patient without recognition of the activity in which the therapist has developed skill.

Although the patient's needs of the moment, in terms of the nature of the desired interpersonal relationship and in the expressed interest in a particular activity have proved to be helpful indices for selection, there still seems much to be desired.

Understanding the nature of the desired relationship and the means to affect such a relationship is the responsibility of all activity therapists. The psychiatrist and/or counselor serves to describe the patient's needs and to prescribe the direction in which the therapist-patient relationship is to move. A few psychiatric hospitals which have small numbers of patients and large staffs of activity therapists have supported the practice of restricting work with particular patients to one or two therapists who had demonstrated special ability in forming the kind of relationship needed. This manner of assignment frequently works very well, but just as frequently serves to limit the growth of the therapist and denies any value intrinsic to the activity itself. It would seem better to support the growth of all activity therapists by continuing their education and training through work with all kinds of patients. This is more feasible in the large institution and reinforces the worth of the particular activities.

It is probably necessary to note that no one therapist can serve successfully with all patients. No matter how much understanding of treatment the therapist has, there may be a patient or client from time to time with whom he experiences a kind of personality clash which is best resolved by reassignment.

It is even more foolish to hold a belief that one specific activity can be made to serve all patients or clients. Some therapists, motivated through competition have sought to prove that their favored activity can be of great importance in the treatment of all patients; and sometimes they are almost successful for a time. They do not,
however, succeed for long before it is realized that there is a false, artificial system in operation, which contributes little to a team concept of helping the patient to recovery.

The recognition of the problem of selection of activities and therapists was recognized prior to the start of this project. The selection of therapist was easily handled due to the small number of clients and the opportunity for each activity therapist to work with each client if the activity seemed appropriate. Constant re-evaluation of the client-therapist relationships and indicated changes were assured through daily staff discussions of each client's progress.

The selection of an activity in the rehabilitation center, however, seemed much more acute than in the psychiatric hospital. The long-term nature of hospitalization for mental illness may allow the selection of activities by the trial and error method. Error may even be used to advantage in psychotherapy, at times, and will often lead to selection of activities in which the patient will achieve success and the feeling of accomplishment.

There are usually only three months to work with a client in the rehabilitation center. Too many errors in selection of activities leave no time for the finding of areas of success. When the activity is in the area of musical performance, there is even greater need to select correctly and get the work started early if the client is to recognize a feeling of success through accomplishment in the three-month period.

**THE MUSIC INTERVIEW AND MUSIC TESTING**

The Music Testing Program was included in the original proposal for this study under the rationale that there was real need to determine a more systematic means to assess the clients' musical capacity, performance potential, and musical interest. Even though the project was launched with the assumption that music is probably the most important art form for almost all blind people, it was not comfortable to believe that the appropriate time to lead each client into an extensive music experience was necessarily during the time he spent at the rehabilitation center.

The project director, in his experience previous to the project, had become somewhat distrustful of his free interviews with clients. Strong dependency needs held by many blind persons, particularly those in need of rehabilitation, cause them, at times, to try to cover feelings of dislike. In interviews they frequently express interest in what they feel the interviewer would like them to be interested, and elect to do what they feel he wants them to do. It is easy
enough to be agreeable about music, to express interest in it, and to protect one’s self with a remark about not really knowing much about it, anyway.

The testing program was not conceived to replace an interview, but it was hoped that the results from several different kinds of tests might help to establish the sharpness of interest in music, the level at which to begin a music activity and which one, and the problems which might be encountered. Low test scores were not to be used to keep clients from entering a music activity except in cases where the music situation seemed overly frustrating.

At the beginning of the study period a structured interview form was prepared. A copy of this form is shown in the Appendix, page 62. This guide sheet was prepared for use with each new client entering the Center during the study period. The interviewer was the project director, the full-time music therapist, or the research assistant, all of whom are experienced music therapists.

The interview form was designed to help in determining both the background and interest in music of the new client. Twenty questions deal with the interviewee’s training in music; sixty are designed to show how much information he has about music. The sixty items cover all types of music; it is possible for the client to give a Yes answer to all of them without having had formal training in music.

An interview score is obtainable by a simple counting of Yes-No answers. It is known that a high score does consistently indicate both richer background and higher interest in music from checks of the scores made by two groups of college students. Members of one group of junior-senior level university music majors scored significantly higher than the members of a group of junior-senior university nonmusic majors.

The use of this interview form has been continued throughout the project and is judged as being a most important single device in the selection of clients to work in music. Much information can be obtained in a short period from the client, and without the frustrations sometimes stimulated in a more formal testing situation.

Initial plans were made for standardizing this form and determining the coefficients of reliability and validity, but these plans were dropped when it became quite clear that the form would need constant revision, and that a revised form should be in use long before standardization procedures could be completed on the original form. The form elicits information about all kinds of music. Along with questions on serious music, there are also questions in
the area of popular and country music. Tastes in popular music and country music are not static, and certainly “big names” in these areas are constantly changing. Popular music terms as well as names change rapidly. In the interview these names and words are used to stimulate the client to disclose what information and what interest he has in music. To give a complete picture, he must draw on his immediate as well as his past experience.

While it is realized that the test expert will find much to question on the manner in which the structural interview form was developed, its format is recommended for use in similar situations. The particular questions should be designed for clients, with consideration given to the locale and the environment in which it is to be used.

During the first half of the study period, three standard commercial music tests were given to each new client. Much other test data readily available from regular psychological and work performance testing was recorded with the music test scores. A sample test record form is shown in the Appendix, page 64.

The music tests of Drake, Gaston, and Seashore were given to each client during the first half of the study in an effort to find a useful index of musical capacity and performance potential. Each of these tests has certain advantages and disadvantages. Both the Drake and Gaston tests have higher face validity than does that of Seashore. The Drake is long and time consuming and the rhythm section seemed to be too frustrating to several clients. The Gaston test has no adult norms and has one short section dependent on the sense of vision, and thus not useable.

Based on the criteria of two music therapists’ rankings of the first twelve clients, the coefficients of correlation using a rank order for computation are:

- Drake Melodic Memory ........................................... .916
- Gaston Test of Musical Memory .......................... .748
- Seashore Tonal Memory ......................................... .700
- Seashore Pitch ...................................................... .630

For twenty-five clients the Gaston correlated with the Drake Melodic Memory at a high level, .881.

Scores of twenty-five clients from three standard tests of manipulative skills were studied. Tests used were the Purdue Pegboard, the Pennsylvania Bi-Manual, and the Minnesota Rate of Manipula-


3—2053 • 33 •
tion. Each of these for the most part tests only thumb and forefinger co-ordination or gross hand movements. Not enough clients placed for the computation of a rank order correlation. From inspection little relationship seemed to exist between these scores and the rankings of two music therapists.

Scores from two manipulative tests which have been developed at the Kansas Center, a reflex time test, and a kinesthetic memory test appear by inspection to give evidence of problems or lack of problems which were encountered by several individual clients in the manipulative sphere, especially problems at the piano keyboard.

A careful evaluation of the testing program was made halfway through the study. An awareness of several serious problems connected with the testing had been growing and some change was in order.

Much too much time was consumed in the actual testing and in recording data. Even when scheduling conflicts were held at a minimum, the testing sometimes was not accomplished until as much as one-fifth of the total client's period at the Center had passed. If the individual work with the client was held up until testing was complete, his chances of achievement in music at the Center were greatly reduced. If the work was started before completion of testing, the test results might be considerably skewed.

The number of tests was greatly reduced during the second half of the study and then the real problem in the testing program became clear. The music therapist, who was charged with the responsibility of administering most of the music tests, had little background in this area of testing. She had been trained in the conservatory method where the assessment of musical talent is usually made from an audition of the student who displays his developed performance skill.

The music therapist was given guidance in test administration and the theory of testing and she made real effort to carry out the testing program as directed. She could intellectually accept the rationale for the testing program, but her negative feelings in relation to testing would get in the way and undoubtedly the test results were often false. Basically she felt that the test situation was one of coldness, which interfered with the establishment of a positive relationship with the client. She frequently did not trust the test results and seemed, at times, to try to disprove them.

In the last quarter of the study the commercial music tests were dropped and the music therapist was given the opportunity of assessing the new client's musical capacity by using the structured interview and by tryouts in singing and playing.
Although the writer continues to support a view which includes the use of some test data to assess musical capacity, this testing program has provided an important learning experience. Although there was real disagreement among the project staff over testing, there was also recognition that the full-time music therapist was honest in her views and could not accomplish successfully that which she could not believe or trust. The disagreement was on method and not on objective, thus two methods have been tried to reach the same objective and have served to bring the objective of selection of clients more clearly into focus.

Conclusions

The members of the central project staff agree that the selection of music as an activity for a client should be made after careful assessment of his experience and interest in music and his musical capacity.

Lack of any background or experience in music, does not indicate that the client should be kept from participating in music, but it is highly indicative of the level at which work can start and how rich the experience must be made. A client with no experience in music at all should probably not start into a music activity during a period of depression when he has strong needs to fail at whatever he tries, because there is no backlog of information or habitual response for him to use “in spite of himself.”

B. Music Equipment and Music Activities

Many music activities and many different kinds of music equipment were used during this project. In the request for grant funds the amount of money for equipment was a very small part of the total request. This was by intent; no one involved in the planning phase of the project felt that he was able or that he desired to make an arbitrary basic equipment list.

Particular music activities must be directly related to the needs and interests of both clients and staff if they are to be meaningful and useful. The music equipment used in these activities can most often be borrowed or purchased as it is needed. Much successful activity in music can be carried through with very little or no equipment. In the development of a music program in a rehabilitation setting, the clients should have the opportunity to participate in the purchase of some and in helping to gather or build other equipment. The music therapist exercises guidance so that the collection, which may grow rather rapidly, will have consistency.
Equipment

At the beginning of this project there was an inventory of all music equipment already on hand. It was quite surprising how much usable equipment had found its way to the Center even though no great effort had been made to obtain it. It is suspected that in most institutions a similar result would be experienced if storerooms were gleaned by a person who could assess and choose all kinds of materials which have the capability for producing interesting tonal sounds.

Some of the equipment on this early inventory had been purchased, some was obtained through gifts, and much of it had been fabricated in the shops at the Center by both staff members and clients. The equipment on hand was as follows: three pianos, one guitar, twelve assorted song flutes, twenty-four assorted rhythm instruments, a set of drums, two radio-phonographs (not high fidelity), one tape recorder, a small library of recorded, printed, and Braille music.

Many of the rhythm instruments had been made at the Center as have been new ones which have been added to the collection during the run of the project.

Some standard band and orchestra instruments have been purchased, including two clarinets, an alto sax and a cornet. One small accordion and two guitars were added. Most of the purchased instruments have been obtained through secondhand dealers or surplus agencies. Each instrument was carefully selected; playability, tone, and state of repair were found to be good bases for judgment.

In addition to piano and drums, a bass playing instrument is greatly needed in any kind of an instrumental group which desires to play popular music. A bass viol is an expensive instrument, in need of careful handling, and presents a storage problem. A very satisfactory one-string bass-playing instrument was built at the Center from a piece of two-by-four lumber, a floor peg from a white cane, a bass string, and an attachment for holding and tuning the string. A pickup microphone was attached to the instrument and connected to an amplifier. This instrument can be tuned in several different keys, and a simple bass part can be learned and played easily by a novice.

The construction of many rhythm instruments and some scale-playing instruments has been shown to be of value in relating the music activities program to the total Center program. For example, advice on design and decoration from the occupational therapists
and from the specialists in wood and metal work has been valuable
and for some clients has served to give more meaning to both the
crafts projects and to the music projects.

Perhaps the two most basic items of equipment are pianos and
record players. These are expensive items and should be selected
carefully. Contrary to common opinion, pianos do wear out; they
need continuous care and eventual replacement. Even though a
particular instrument is to be used for practice purposes only, it
should not be a castoff instrument which produces sound more by
chance than from its maker's plan for it.

Most piano manufacturers build a sturdy studio-model instru-
ment. It is not the least expensive instrument produced, but will
be the cheapest long term investment.

The pianos should all be equipped with heavy duo-casters so
that frequent easy moving will be possible. These heavy-duty
casters will often raise the keyboard height slightly, and this should
be considered when the piano bench or playing chair is selected.

No pianos were purchased during the run of this study, but one
studio model had been obtained a year or so prior to this period.
It has served its purpose very well.

Record-playing equipment and related sound-reproducing or am-
plifying apparatus must be carefully selected. No expose of the
need for high-fidelity sound-reproducing equipment is to be made
herein, other than to state the standad plea for good equipment
which can reproduce music from recordings which is accurate and
free from great distortion. Music played on the Talking-Book ma-
chine leaves much to be desired, but one often "desires less" when
he hears music from a multithousand-dollar machine if the multi-
knobbed operating panel is under the hand of a sound manipulater
rather than a musician.

During this study two standard commercial radio-phonograph
combination sets of the type produced for use in homes were found
to be highly unsatisfactory. The record turntables were not sturdy
enough, and the speed-selector switches and the switches to select
the proper needle for records of different size grooves proved to be
too difficult for some of the blind clients to manipulate, despite the
fact that many of these clients had owned their own players for
years. This equipment was often out of order and in a short period
satisfactory repair was almost impossible.

Two major record-playing devices were constructed during this
study. The first combines an individually selected turntable, tape
recorder, amplifier and speaker system. Each component part was
purchased, assembled, and fit into a case of special design. The whole apparatus was placed on large casters, and although it is much too heavy to carry, it can be moved easily from room to room. This equipment also serves as a very satisfactory public-address system. It was designed to be used under staff supervision and is not made available in the lounge or recreation room for unlimited use by the clients.

The second record player which was constructed during the project was designed for permanent placement in the recreation room and for use by the clients without constant staff supervision. This player was made from some new, and from many salvaged parts. It has a separate turntable for each playing speed and a playing arm for each turntable. The simple set of switches which are placed on the front of the case, away from the turntables, are designed so that the turning of them at the wrong time or in the wrong sequence will not harm the equipment.

Much of the design and construction of these two sound-reproducing devices was the work of Williams Sears, whose article, “Practical Electronics for the Music Therapist,” is reproduced in the Appendix of this pamphlet. Mr. Sears’ article includes some very practical rules to follow in the selection of recording-playing equipment.

Facilities

Just as the establishment of music activities and the procurement of music equipment grow from the needs and interests of the clients and staff, so does the space allotment in which the music therapist is to develop the music activities program. The success of a music therapy program is not dependent on the amount of space provided. No music therapy program in existence was begun with optimum space. In point of fact most of these programs have flowered in spite of very great space limitations and uncomfortable quarters.

There are, however, a few guide lines to consider when commencing a program of music activities which is to be carried on at the same time other work is being accomplished. The rooms used for music must be soundproofed or they must be far enough from other study and work areas so that the sound from music practice will not be disturbing. It is strange to note that people can work or study in a room adjacent to a woodworking shop without complaining of being disturbed by even the sharp piercing sounds from a power saw. Sounds from music practice will become dis-
turbing to these same people very quickly. The all-pervasive nature of musical sound makes it more difficult to block out.

Frequently and, in a way, very logically it is assumed that recreation rooms, lounge areas, or other similar rooms may be used as music practice rooms during periods when they are not needed for other purposes. These rooms are often large and more often on the well-traveled path of most clients and staff. The right to practice in private is important to all music learners, but it seems that it may be even more important to a blind music learner. There is a much greater feeling of security and a willingness to make musical sound if a small practice room can be provided. This feeling of security must be gained before the blind music learner can allow himself to obscure the sound cues on which he depends with his own produced musical sound.

While this study was conducted under some space limitations, a very good working arrangement was made. Initially, a music room was established in the main Center building where all other Center activities were being carried out, including counseling and psychotherapy, administrative work, and all craft activities. This initial location had to be changed almost immediately. The center of music activity was moved to the adjacent dormitory building and established in a small, but conveniently located bedroom. This room was used as a studio and scheduled for individual practice periods. Small group rehearsals were held in the same room or held in the larger basement recreation room.

During the study preliminary planning for future quarters for music activities was discussed. It was estimated that the music program as being developed would need a minimum of one large studio and two practice rooms, soundproofed and located within the Center building. The large studio should be equipped with two pianos and each practice room should house one piano. Storage space should be carefully planned, allowing for storage of instruments adjacent to the music area and available to the users without entry into the studio or practice rooms. Each room should be equipped for listening to recorded music.

These requirements for optimum space for a music activities program at the Center could not be justified unless each room could serve for duo-purpose. The soundproof requirement would allow the large studio to be particularly appropriate for staff conferences and for group therapy sessions. The practice rooms could serve for private use of Talking Books and reader services. The large studio should not be used as a lounge area or recreation room.
While recreation activities in music must be a part of the total program, the "too close" association between recreation, lounging, and music serves to limit greatly the development of a music therapy program.

Music Activities

There was an attempt in the original proposal for this study to categorize music activities on the basis of assumed client needs. This was done to lift the program development above the level of trying to define particular music activities in terms of specific therapeutic value. The four categories of music activity were assumed to be creative, educational, recreational, and those activities for development of manipulative skill.

Just as one sometimes elects to continue to wear an old suit because the material is good even though the fit is no longer exact, these four categories have been maintained even though they are too diffuse to serve as a sturdy base. The categories are so broad that many music activities fit into all of them as will many other kinds of activity, thus making a meaningful list of specific activities impossible. These four categories of activity, however, do provide indices for a check list to evaluate the progress toward the one basic acceptable goal for all individual clients and the clients in groups, i.e., providing the stimuli for a broadening music experience.

During the study many activities were developed both for individuals and for groups of clients. For example, creative experiences have been used at several levels of skill. One client experienced creativity when he was encouraged to build a rhythm pattern on the rhythmic structure of his name; another was able to write words and music for a song for women's voices with appropriate piano accompaniment. Educational activities in music have ranged from individual lessons in voice and instruments to group discussions of careers in music. Recreation activities have centered around "community singing," social and folk dancing and playing of rhythm instruments. Two clients were referred to the music therapist for aid in developing manipulative skill and finger dexterity, and at times music was used in initial travel training classes and in the gymnasium to help in the development of rhythmic gross motor movements.

These examples of activities should not be considered as indicative of a complete list of the activities which were used or as having particular therapeutic value because they have been chosen as examples. Instruction in piano may often be selected for a client because the piano is a self-contained instrument and does not de-
mand the support of a second player to produce a musical whole. Either the autoharp, the guitar, or the accordion might be chosen for the same reason. Voice instruction is frequently selected for a client in immediate need of narcissistic pleasure or self esteem because rapid initial progress can be made in voice study. Many folk dances are desirable, but the square dances which require releasing physical contact with one's partner have proved extremely frustrating to many blind clients.

Further discussion of specific items of music equipment, facilities, and music activities would tend to confuse the principle of operation followed in the study period, and recommended without reservation for persons who might desire to begin a music therapy program in a similar institution. This principle, "people, then things," demands the employment of a music therapist first and in turn the gradual growth of a music therapy program. This process will insure the development of music activities which are related to the total institution's program and to the locale. When this relationship exists, the activities can have meaning for both staff and clients, and only then can they be used for therapeutic purpose.

C. Work in Music with Groups of Clients

When the music program was begun at the Kansas Center, some two years before the start of this project, a Music Group was formed. These group meetings were held once a week, on the same evening when the staff psychiatrist conducted a group therapy session and individual interviews. Group music activities followed the group therapy session. This scheduling was based from the availability of staff members involved.

All clients were invited to participate in this music group. Recreational activities—group singing, listening, dancing, playing rhythm instruments—were introduced, and initially were greatly successful when judged solely from amount of participation. At the time this music group was the only group in which all clients actively participated. This participation seemed very important to several staff observers, and the "success" of the activities tended to allow great value to be placed on this kind of informal music experience, and caused it to be extended over a very long period without thorough evaluation.

This type of music group was continued into the period of this study, and was maintained as an evening activity. It came to be called "Music Therapy Group" or just "Music Therapy" by both staff and clients. The psychiatrist's group therapy sessions were rescheduled during daytime hours, and the music activity conducted
by the music therapists or other interested staff, became a prime evening activity.

Participation continued to be quite good during most periods and it was felt generally that the group had value as an evening activity although the staff soon began to voice dissatisfaction with the group’s structure and with the inability to define the therapeutic purpose of the group. Much time was spent in staff discussion sessions and centered around the problem of which clients should be in the group, the feeling that the staff leader often worked as an entertainer and the failure of clients to assume any responsibility for the group in growth. This never did become a group that belonged to the clients; their “on the spot” participation was judged to be the result of the ability of the staff leader to manipulate, cajole or entertain.

Several changes were attempted in seeking a solution to the staff’s dissatisfaction. Selected clients were scheduled for the group, others were not in an effort to gain a cohesiveness. The clients not scheduled would stay away for a session or two, but then would start to attend again to have something to do on the particular evening.

The clients were encouraged to help plan succeeding sessions and to take responsibility in carrying them through. This planning was tried over a long period but was not successful.

The staff concluded that the activity could be viewed as very successful if used purely for recreational purposes and for entertainment, but that if used in this manner should become the responsibility of volunteer services. The expensive time-investment of professional staff members seemed to be much too great in relation to specific gains made by clients.

One last effort was made to determine the value of a music group in which music performance skills were not prerequisite to membership in the group. Just prior to the final six months of this study the staff planned a series of twelve topics for programs, and established goals for the series. The central theme material for each program was considered for its practical appeal to blind clients, its value as a broadening music experience. The continuity and relationship of each topic and its succeeding topic were considered, there was an attempt to relate each session to the next session while at the same time maintaining a plan flexible enough for new clients to participate at any time during the series. The application of the plan included client involvement in planning and taking responsibility for parts of each session; careful consideration was to be given to the level at which each topic was to be introduced.
The session topics were planned as follows:

2. Television and Film Music.
4. Group Singing (to include composing a song).
5. Group Singing with Instruments.
8. Combination of 4, 5, and 6.
9. Introduction to Music Acoustics (through investigation of scale systems of other cultures).
10. Musical Form.

The goals were determined to be:

1. To develop social relations.
2. To increase confidence in music preferences.
3. To promote active hobby interest.
4. To promote group responsibility.
5. To expand music listening experiences for increased enjoyment.
6. To afford a modality for creative expression.
7. To provide basic learning experiences to help divorce "mystery" from music.

The series of topics as listed was used over a three-month period. Careful observations were recorded and evaluations based on the predetermined goals were made. The reports show that some sessions were successful and that positive movement toward specific goals was made. Other sessions were highly unsuccessful. Lack of continuity and lack of client responsibility remained clearly apparent.

During the last three months of the study period the series was made available to a selected group of clients during day hours and it met with more consistent success when used primarily as a broad educational activity.

Evening music sessions were continued and allowed to become diversional and recreational periods for clients to elect. The time of only one staff member was used.

The experiences with a nonperforming music group which have been summarized have provided some clear operational fundamentals. Members of the staff wonder now why it took them so long to realize that cancelling the group was in order. The great reluctance to cancel was based from a false belief that some therapeutic gain must come from something in which so much effort is invested. With great effort invested there was an unwillingness to allow the period to be evaluated only as a diversional activity.
It is suspected that many music groups in other institutions are thought of as being specifically therapeutic, and carried on through staff action rather than from assessed client needs. Therapeutic gains cannot be made unless the members of the group are aware of themselves as a group and have the capacity for affective involvement with each other. “Group music therapy should be enacted when a group of individuals are enough aware of their own common needs, and where those needs have to do with music, so that they can express or it can be observed by the therapist that these needs can be satisfied by a group music activity.”

During the study period several small performing music groups were established and discontinued as needs arose. These groups were used to extend gains made in work with individual clients. Some of them were started by the clients spontaneously; others were deliberately suggested by the staff. Both small singing groups and small instrumental groups were used. One girls’ trio developed into a polished singing group, with each member taking responsibility for making music arrangements. At times a small instrumental group gained enough musical skill to play for social dancing. The cancelling of groups was usually accomplished at the time when some of the more musically skilled members were ready to leave the center. Usually a performance was arranged and thus the cancelling could be accomplished when all members had the experience of successful achievement.

The manner in which these small performing groups served in the rehabilitation process will become more apparent in the discussion of individual work in music which follows. In general the goals most often achieved were:

1. The building of self-esteem through successful group experience.
2. The acceptance of responsibility, at first as a player and gradually as a full fledged member who could contribute to the plans for the group.

D. WORK IN MUSIC WITH INDIVIDUAL CLIENTS

Earlier in this report the value of work with individual clients was discussed. The professional music therapist has realized that his best work in a treatment facility is based from and constantly related to the needs of his individual clients, and that he can help the client in fulfilling needs when he has the opportunity to work with him in frequent individual sessions.

In the large hospital a kind of “total push” program is often adopted because of a limited number of staff members and a large

1. Jerry Dunham. “Notes on Group Music Therapy.” See Appendix, page 79 this pamphlet. Further clarification of this phase of the project will be found in these notes which Mr. Dunham prepared three months before the end of the study period.
patient population; work with individuals has to be limited and the activity therapists try to meet individual patient's needs within a group setting.

In the Kansas Rehabilitation Center the staff-client load is held at a ratio level which allows almost unlimited individual work with clients. There is no other report of a music therapy program in which the total client population is considered in determining the worth of the program.

During the period of study sixty-one clients were carefully examined as candidates for work in music, and were scheduled for some type of individual work. This number represents almost four-fifths of the total client load and is admittedly out of proportion. Because of the study there was a deliberate effort to assign clients to music even though expressed or assessed interest-level was only average or even below average. No assignments to music were made when there were very positive indications that the work would be harmful; and when assignments were made and the work became overly frustrating to the client or if he only wasted time in the activity, the assignment was cancelled. The period of assignment varied from three or four weeks to fourteen months; most clients were assigned for eleven weeks. The time spent in individual sessions with the music therapist varied from the maximum of one-hour periods five days per week to the minimum of two one-half-hour sessions per week.

The sessions were oriented around individual instruction in singing or playing an instrument, and in free or structured listening periods. When progress in individual work indicated that experience in a small music group would be desirable, the individual sessions could be reduced.

Daily observations and weekly summaries were recorded by the music therapist for each client who was scheduled for individual or small group work. Both musical progress and the development of the relationships were charted. This is standard procedure at the Center; a mass of information is collected and thus behavior patterns become quite clear in a short period.

E. Results

The difficult problems of evaluating this study were recognized at the time it was begun. Much data was collected and carefully organized with the hope that the sorting of it could lead to specifically stated results. Much has been learned about the process of development of a music therapy program. The structured interview, the testing, the daily observation notes and weekly summaries,
and the final interviews have yielded much information which clearly indicate operational changes and refinements—some of which were made and some can be made in the future.

The success or failure of the study cannot be determined from what has been learned about operational improvements unless the most basic question has been answered: Was the work in music therapy a significant part of the program of enough clients to warrant the investment of funds in personnel and equipment? The answer to this question is based from the judgment of the three most qualified staff members involved in the study, the music therapist, the Center supervisor, and the rehabilitation counselor. These three people worked full-time at the Center throughout the study period, and each had much experience in evaluating particular parts of the total program to determine areas of specific success or failure experienced by each client. This type of evaluation has been standard at the Center and becomes a part of each case record.

The evaluators reported their judgments independently from each other on sixty-one clients. They were asked to answer whether the work with the music therapist was significant in either the diagnostic or adjustment phase. When the decision was difficult, they were requested to consider if the music relationship yielded anything more than could have been gained in any other Center activity, and if not, they were to assume that it was not significant.

The work was judged to be significant for forty-seven clients (77%) by at least one member of the evaluating team. It was judged significant for thirty clients (49%) by at least two members, and for fourteen clients (23%) by all three members.

The above percentages are based from the total client load. Of the fourteen clients who were judged to have made no gain as a result of work in music, ten were assigned because of willingness to co-operate in the study project and probably would not have been scheduled for music in a more normal period of operation.

The weakness in the evaluating system which is introduced by the use of the music therapist as a member of the evaluating team is recognized; the music therapist probably had more personal desire to see positive results. This weakness is countered somewhat by the discovery that for the fourteen clients whose work in music was judged as significant by only one evaluator, eight single judgments were made by the music therapist while nine were made by the Center supervisor.

The dual concept of the rehabilitation center as a facility for diagnosis and adjustment is discussed in the Foreword of this pam-
phlet. Contrary to rather common opinion, the diagnostic phase is not an initial process which is clearly stopped when adjustment training begins. Continuous diagnostic observations are made and for some clients the total time spent at the Center will be in treatment planning. These clients are not ready for the adjustment phase until psychiatric treatment is accomplished. At times this treatment may be carried on at the Center, but most frequently it must be done in another institution.

Thus, any therapist must have the capacity to work as an objective observer and as an understanding instructor or trainer, and any major activity or program-part must allow for both diagnostic observation and adjustment training.

The three evaluators judged the work in music as significant and labeled it as either diagnostic observation or as adjustment training. For the group of forty-seven clients where at least one judgment of significance was made, thirty-three were placed under “adjustment” services and thirteen under “diagnostic” services; one client was placed in one category by one evaluator and the same client in the opposite category by another. Twenty cases were placed under “adjustment” services by at least two members of the evaluating team and nine placed under “diagnostic” services by at least two members; of these nine, six were placed by all three members.

F. Case Stories

Six case stories were selected for inclusion in this report for descriptive purposes. The elusive but standard goals of hobby formation or the development of leisure time activities while valuable are not discussed. The selection of cases was made because the work in music had particular significance in the adjustment phase of the rehabilitation process, because it yielded early and important diagnostic material or because the relationship guided by the music therapist was of therapeutic value. In no case was progress in music used as a prime factor in this section.

Cases 1 and 2: Resolving Childhood Problems Centered Around Music

Several clients with expressed and assessed strong interest in music were reluctant to be drawn into active participation because of extremely frustrating experiences in music lessons or school music activities.

2. Attempts have been made to describe very specific case material under a disguised personal history of the client. This method served to inject a total falseness in each case story, and the trials were discarded in favor of a sketch which reflects both personal history and diagnostic factors in gross general terms.
One middle-aged, congenitally blind professional man had taken piano lessons in a school for the blind for almost a decade. At the time of admission to the Center, more than twenty-five years after high-school graduation, he maintained that he had not played the instrument even once in that time. He is intellectually superior and reports that he was able to achieve at an adequate level in piano even though he hated the lesson requirements. He remembers having a strong dislike for learning from Braille music and became willing to try to play again when he learned that he could have instruction in “playing by ear.”

He made very rapid progress initially and within a week began to serve as pianist in a small instrumental group. His rapid progress levelled off shortly, and although he failed to develop much musical style he did reach a very adequate nonprofessional-playing level.

The music therapist, being aware of long standing problems the client had in social relationships, was able to help him realize the value of his newly developed skill for service in social groups. The service aspect of the skill appealed to the client, and he has been able to use it in this way in his post-center adjustment.

The strong interest in music, which the client only expressed passively by hours and hours of rocking-chair listening was used to help him build new habits of comfortable active expression.

A young girl recently graduated from a school for the blind expressed what appeared to be very sincere interest in music. She had not experienced success under the formal methods of music teaching at the school, and had assumed that she was lacking in any musical ability. Lack of success in other areas of schoolwork and in adult relationships with men or women resulted from reality-based problems in the home environment and with parental relationships. She appeared to be greatly immature and poorly motivated.

She demonstrated a better-than-average ability to work with her hands in repetitive-type tasks. When the interest in music seemed somewhat stronger than in other areas she was encouraged to try. She demonstrated good-average tonal memory and superior kinaesthetic memory.

She was able to learn to play the autoharp, manipulating the twelve chord bars with accuracy. Her progress was consistent and her experience of success in the activity led to the experience of a successful relationship with the music therapist, an adult female.

She welcomed the opportunity to perform for other clients and this successful group experience was used to help her realize the satisfactions which come from assuming responsibility in group relationships.
The achievement of resolving early frustrating experience by honest, direct, successful experience, in an area of strong interest served very well in aiding this client to participate in all phases of the diagnostic process and to accept the recommendation for psychiatric treatment.

Case 1 and case 2 are similar in that successful music experience was substituted for earlier unsuccessful experience. The degrees of success in music differ greatly and the purpose the experiences were made to serve also differ. A long-term goal was reached with the first client, but with the second the gains were of immediate value with no estimate as to the lasting nature of the experience.

Cases 3 and 4: Diagnostic Appraisal

Lack of success in activities can also serve in the rehabilitation process, both for staff planning and in counseling the client. It is not suggested that clients be assigned to an activity therapist on a wholesale basis on the assumption that either failure or success in the activity can be useful. When the assignment is made as a result of careful staff and client consideration, and failure is experienced there will be good reason to evaluate the failure carefully.

Work with several clients suggests indications that there are aspects of music learning which allow earlier observation of some kinds of problems than are yielded from observation of other activity areas, particularly those centered around tasks of daily living.

One man of early middle age with a highly polished exterior presented himself at the center in a period between jobs. He was extremely well motivated and had a successful work record and family life. He came to the center to improve his travel and to prepare himself for a position of more responsibility.

In interview the client expressed what appeared to be very sincere interest in music and supported the expression by describing his record collection and his use of it with his wife and family. His music listening interests were not centered on just one kind of music; he liked opera, and popular dance music also appealed to him. When he was told of the availability of instruction in singing or playing, he thoughtfully decided to try to learn to play the piano since this might be something he could do with his children.

During piano instruction the client began to manifest great anxiety and strong dependency needs. He tried to cover the anxiety by talking to the music therapist in an expansive way about music to use up the lesson period without having to sit at the piano. When
he did try to play he was extremely dependent and asked for the
most simple kind of step by step instruction. His awareness of
dependency was quite threatening.

The psychological report on this client did not forecast the degree
of anxiety which was manifest in the music sessions; he was de-
scribed as a "somewhat anxious, but strongly motivated individual
of excellent endowment." The initial psychiatric consultation note
reflects no anxiety and emphasizes the client's "very rational and
wise approach to many plans in his life."

The degree of anxiety was observed by the travel training in-
structor but, until supported by the observations of the music thera-
pist, was considered to be reality based from obvious problems of
a wide faltering gait and inability to travel freely in his home com-

munity.

Early recognition of the problems arising from dependency needs
allowed the client time to begin to deal with them and caused the
staff to recommend that a long-term counselling service be made
available to this client in his post-Center adjustment in a re-
sponsible job.

Another man with limited ability and motivation came to the
Center at the request of his agency. He expressed no great interest
in any activities at the Center, but a tiny spark of interest in music
seemed to be present, and the history revealed a short period of
paid employment as a member of a dance band which had been a
little more successful than any other vocational trails.

The client was assigned to music activities. Though he had some
developed skill on his instrument he could not perform with the
Center band composed of music beginners. He was more satisfied
with the penalty of failure than he could be with the responsibilities
of success.

This behavior—in an activity area where the client had ability,
developed skill, and previous successful experience—gave indica-
tion toward the decision that the client was not able to gain from
the Rehabilitation Center program appropriately until fears of
inadequacy could be removed. The rehabilitation period was not
falsely extended because of very mild and inconsistent success in
activities or in counselling.

Readiness for rehabilitation is difficult to determine and an overly
optimistic staff frequently may attempt to supply all of the moti-
vation and assume a state of readiness in the client which does not
exist.
Cases 5 and 6: Supportive Relationships

If the activity therapist is to aid the client to achieve gains in the rehabilitation process a meaningful interpersonal relationship must be fostered. With some clients a supportive relationship can be strong enough to be used for direct specific purpose. The activity framework is maintained throughout the relationship to give meaning and security.

One immature young woman of average endowment demonstrated her ability to use the Center program, but her progress was very slow, and the distance for her was long. Her progress was real and consistent so arrangements were made for her to use the facility as long as necessary even though the period might be several times as great as the normal three-month stay.

She had some experience in music, having studied piano both as a child and as an adult. She had not liked her most recent teacher because the teacher demanded too much from her. She was not able to make decisions in any area and could not decide to elect a music activity. The decision was made for her and she was assigned to music for instruction on piano in “playing by ear.” She responded to the relaxed manner of the music therapist and was encouraged by the support of daily supervised practice periods. Her progress in piano playing was quite good and the relationship to the therapist became comfortable and supportive with marked features of a mother-daughter combination. Her work in small music groups and in other group activities flowered when she was introduced under the protective custody of the music therapist.

Even though the client was well motivated she had difficulty in accepting the length of her stay. There were frequent crises often triggered by the discharge of a client who had been at the Center for a shorter period. She elected to remain at the Center because of “her music”—her way of describing the support from the music therapist.

When she progressed to the level where she could benefit, expressive psychotherapy was begun. She was able to form a good relationship with the physician while continuing to hold on to the support from the music therapist through the crises arising from psychotherapy.

One young man with limited abilities, marked dependency needs, and many somatic complaints liked the Center too well. As each extended period came near its end he would either mobilize his
potential and make enough progress to justify staying or he would make arrangements for extended physical checkups or eye examinations sure to reach beyond the discharge date.

When assured of a few more weeks grace period he would settle down in comfort and attach himself to any and all staff. The dependency would spread in all directions and the staff members become quite uncomfortable under the pressure of it both from personal feelings and from recognition of how immobilizing it was to the client.

On recommendation of psychiatric consultant it was decided that there should be a channeling of the dependency to one staff person. The client was to be commended for appropriate behavior, but referred to one person when he began to express his dependent feelings either verbally or by other means.

The music therapist was selected to establish the supportive relationship with this client. He was given daily individual time with her and the sessions were oriented around learning to sing. Some honest progress was made in singing, although the client became so comfortable in the relationship he tended to credit his progress and his vocal potential in an exhalted manner.

The directing of dependency needs to one therapist proved effective. The client was able to progress in all areas when the supportive relationship was guaranteed. Satisfactions gained from praise for acceptable behavior eventually began to replace needs for constant support.

The six case stories just told describe the function of the music therapist as more than providing recreational or diversional activities. The stories are not complete in that only the work of the music therapist and the clients is described; this fallacy of oversimplification is dangerous. Music therapy cannot be used successfully unless it is a part of a total program, where a constant interchange of information among all therapists is assured both by the administrator's decision and by the staff's seeking attitude.
CHAPTER IV
Implications for Continued Effort

The staff of the Kansas Rehabilitation Center for the Blind and the agency administration were impressed by the value of music therapy as a result of this study to the point where it is planned to continue this activity as a permanent part of the Center program. No doubt the emphasis on music therapy will not be maintained at the level required during the project period but to the degree dictated by client need and interest and within the limits of staff skill it will continue to be a part of the Center program. A position has been set up in the staffing plan which calls for a person possessing the professional preparation for music therapy work in addition to other responsibilities.

The study has been exploratory by nature and much more data has been collected than could be treated in the report. Many new ideas for further study were stimulated from problems which arose during the conduct of this project. These ideas have been recorded and some related materials and equipment have been secured.

The use of music in travel training seems to provide several facets for careful study. A thorough investigation of the value of fostering attention through music training on the pitch of sounds and the means to teach for the transfer effect in travel should be made. Perhaps training in selective listening fostered through experience in identifying specific tone qualities of orchestral instruments being played together might enhance the selective listening which is required for successful independent travel by a blind person.

Much more needs to be learned about the use of rhythmic music to aid the many congenitally blind people who manifest difficulty in making smooth rhythmic movement while walking.

There should be a thorough investigation of methods for promoting security during music listening periods or when background music is used. Any interference with ordinary sound cues that the blind person uses for communication causes him to feel insecure and overly cautious.
Minimal exploratory work has been made with a sound association test and with a personality test which utilizes recorded music as the stimulus. Both of these tests need more careful and lengthy investigation.

The implications for further study are in the area of refinement of techniques specifically desirable in work with the blind.

The members of the central project staff will probably never have the opportunity to work together on any of these new ideas which they helped stimulate. Each of the five members has now moved on to another position. The studies, however, may be commenced at the Kansas Center since over a number of years it has been developed not only as a facility for outstanding rehabilitation services, but as a staff unit charged with the responsibility for a continued search for methods and techniques which will expand the success of work with clients.
A Statement of General Information

Since the Center was opened in October, 1948, scores of blind persons many of whom had lost interest in living, have gone through it and come out with a new will and determination to lead an active life. The Center has a twofold function in its work with the blind—DIAGNOSIS and ADJUSTMENT. The diagnosis is accomplished by many kinds of testing, observation and counseling; and the results are used to help the client formulate an individualized plan of training which will be most beneficial to him.

The adjustment services place more emphasis on personal counseling, group therapy, orientation, self-help activities, occupational exploration, manual arts, communicative skills, physical education and social group activities.

THE CENTER IS NOT A VOCATIONAL SCHOOL FOR THE BLIND. While most clients are given PREVOCATIONAL training, the Center's general purpose is to assist the blind in every way possible to make a more complete adjustment to their handicap; to give the clients a new, realistic, less limited concept of blindness, and to have them see their blindness in its correct perspective as only one facet of their personality.

THE CENTER STAFF is composed of a supervisor, a vocational instructor, a communications and travel instructor, an occupational therapist, a music therapist, clerks, a housemother and a cook, all on full-time duty. There are three part-time consultants in the areas of general medicine, psychiatry, and psychology. There are part-time workers in physical education and maintenance. Other workers are employed as needed. Volunteers also are used to assist the staff in carrying out many vital activities.

THE FIRST WEEKS of a client's stay at the Center are devoted mainly to testing and orientation to the building, the dormitory and the city of Topeka. The testing includes psychological, manual dexterity, work performance activities, etc., which aid in determining the kind of work the client is best able and equipped to do; whether it is clerical, business, professional, agricultural, industrial, or service work. Depending upon the client's interest and aptitudes, he is evaluated in terms of his ability to profit from training in one of these fields.

MANUAL ARTS are used to teach clients to be more dexterous with their hands and develop tactual perception. Hand work aids the client in building self-confidence. While it is known that very few people can make a living with handicrafts; many do develop useful skills through crafts and frequently new vistas are opened for gratifying and useful leisure time activities.
Travel training is offered to each client. He is encouraged to achieve the highest degree of independent mobility that is feasible for him in view of his physical ability, sensory equipment, motivation and his practical need to travel alone. The use of the white cane is taught as a supplementary technique to make possible greater and safer mobility.

Where indicated, the acquisition of a guide dog and training in its use is recommended by the Center. However, dogs and training in their use are not available at this Center.

Many clients are taught braille, reading and writing. All clients are encouraged to take instruction in script writing and to practice this skill regularly. Some clients are given instruction in typewriting and a few are taken through an advance typewriting course, which includes transcribing from recorded dictation. Every client is instructed in the correct use of the telephone which includes dialing technique. Occasionally, lessons in spelling, arithmetic, and speech are given to individuals who have special problems in these areas.

There is training in poise, grooming, table etiquette, care of personal effects and tips on everyday living problems such as how to keep paper money separately identified.

There are two periods each day for lectures covering general information particularly useful to the blind. Areas covered are occupational information, personal business affairs, legal aspects of blindness, hygiene, personal appearance, and social skills. These classroom sessions are designed to supplement performance activities occurring during other phases of the Center program.

Occasionally there is a field trip; this may be to a museum, a factory or perhaps it may be a hike. An effort is made to visit places of particular interest to those clients selected for this activity.

The dormitory, which is adjacent to the other Center building, is designed to house twenty clients. In addition to offering excellent facilities for maintenance it is equipped to meet many of the client's recreational needs. In the dormitory both men and women clients are encouraged to learn new and efficient ways of accomplishing their domestic tasks. All clients are expected to make their own beds, take care of their personal belongings and to clean their rooms. There are talking books, radios and a television set available for leisure time.

In addition to the recreational activities spontaneously entered into by the clients, there are planned social activities each week. Parties, dances, and other social gatherings are frequent and popular. Various games—cards, checkers, chess and many others—and activities such as bowling, shuffleboard and outdoor games round out the social experience. These group activities demonstrate the possibilities for a full and happy life for the blind person.

Counseling services are available to all clients attending the Center. While primary counseling responsibility for the client's over-all rehabilitation planning remains with the Rehabilitation Counselor, or Home Teacher; the Center provides each client with a counselor for weekly conferences during his stay. The client may feel free to discuss his Center program, vocational planning, and personal problems during these sessions. Various members of the staff are available as counselors and are assigned on the basis of the kind of skill required to help the client solve his particular problem. This counseling activity is felt to be one of the most helpful services available at the Center and the one through which the clients can readily learn to know himself better and find acceptance of his limitations and appreciation of his abilities.
The client’s needs for ESTHETIC EXPERIENCES are not overlooked. The Center attempts to give each person an opportunity to find the most appropriate channel through which to express his artistic urges. Some clients utilize manual arts, such as woodworking, leather work or ceramics to obtain this essential gratification. Opportunities are available to enjoy and to improve the appreciation of all forms of the space arts which can be perceived adequately without sight. All may participate in the many forms of musical activities which are part of the Center program. Recorded music and community concerts are made available for those who wish to enjoy music more passively. Rhythm band and group singing are activities available for the unskilled, but more actively interested. For those with a real interest in acquiring an ability to perform musically, vocal and instrumental instruction is available.

The usual DURATION OF A CLIENT’S STAY at the Center is three months. He may stay for a longer or shorter period, depending upon his ability to benefit from the experience. It is recognized that each person will reach the maximum level of achievement at his own pace, and that he may or may not achieve that level during the initial three months at the Center. Occasionally, early terminations are advised. Frequently, extensions are arranged for additional time. It is always possible for a client to return later to the Center to take additional work.

Upon conclusion of the client’s stay at the Center a terminal conference is usually held. The Center staff, the field worker and the client have an opportunity during this conference to discuss the client’s ACHIEVEMENTS AND PLANS FOR THE FUTURE.

Before a client enters the Center, CERTAIN INFORMATION IS REQUIRED. A summary of his social history including identifying information, education, work experience, and family background is needed. Reasons for the client’s referral are also needed. Although there are no specific restrictions upon who is admitted, the Center reserves the right to pass on referrals for admission, and where it believes a client will not benefit from the Center program, the referral is not accepted. A complete physical examination, which will indicate the client’s physical limitations, is required as well as an eye report.

There is NO TUITION CHARGE for Kansas persons attending the Rehabilitation Center. However, a MAINTENANCE CHARGE is made to cover room, board and laundry while the client is in residence at the dormitory. This expense may be met in the following ways or by combining any of these resources: payment by client, payment by county department of social welfare, or payment by the State Department of Social Welfare. Each client must have some money for incidental expense while at the Center, the provision for which may be made as described above for maintenance. In addition, some clients will need help with the cost of travel to and from the Center, and this is met in a similar manner.

REFERRALS of legally blind Kansans are made to the Center by either the Vocational Rehabilitation Counselor or the Home Teacher of the Staff of the Division of Services for the Blind. A county social worker desiring to have a blind person receive Rehabilitation Center service, should refer the individual to one of these workers who may subsequently make the official referral to the Center. For further information contact your county welfare department or the Division of Services for the Blind, State Department of Social Welfare, State Office Building, Topeka, Kansas.
KANSAS REHABILITATION CENTER FOR THE ADULT BLIND

General Purposes of the Center

1. To give psychological and standardized manipulative tests.
2. To assess sensory acuity, ability to judge attributes of the physical environment and the dexterity of fingers and hands, work tolerance and co-ordination of the body members.
3. To give a number of job tryouts, to appraise the type of activity in which the individual has a predominant interest.
4. To appraise travel ability, social skills and personal grooming habits.
5. By living with and observing the client to discover his personality structure and areas within this structure where there may be a likelihood of insecurity and adjustment difficulty.
6. To give the individual an opportunity to know himself better.
7. To give the client trainee an opportunity to understand more about his physical handicap and problems related to it and the ways with which these problems may be coped.
8. Occupational information and counseling.
9. Training in travel, crafts, braille, typewriting, handwriting, etiquette, grooming and generally to supply the individual with the help needed for his making a satisfactory adjustment to eventual training or job placement.
10. To have lectures, group discussions, field trips, physical reconditioning and recreational activities planned to aid the client in his adjustment and to provide a pleasant and stimulating supplement to his everyday work activities.
11. To make daily observations of the client trainee, discuss and plan his curriculum while at the Center and at the termination of his stay to provide the client with some description of our findings and his progress and to plan with the client the next steps after leaving the Center.
12. CAUTION: The Rehabilitation Center is in no sense a trade school and does not include training that will lead directly to a job. It is a testing and conditioning facility, designed to diagnose the client's personal and vocational potential, and to develop his assets to the best possible pre-employment level.
**KANSAS REHABILITATION CENTER FOR THE ADULT BLIND**

**Prescription for Therapeutic Regime**

**NAME**

**COUNTY**

**STATE**

**DIAGNOSIS:**

**Ophthalmological**

Name of Disease

Visual Acuity

Limitations

**General Physical**

Diseases

Limitations

**Psychological**

I. Q.— Level of Interest

Areas of Interest

Personality Characteristics

Limitations

**CONCURRENT THERAPIES:**

Individual psychotherapy, Group psychotherapy, Personal counseling, Vocational counseling, Occupational therapy, Work therapy, Educational therapy, Music therapy, Recreational therapy, Medical therapy, Physical therapy

**OBJECTIVES:**

*Emotional:* Alleviation of anxiety, Outlet for hostility and aggression, Building of self-esteem, Relief of guilt feelings, Emotional stimulation, Testing of frustration tolerance, Fostering emotional verbal expression

Elaboration:

*Intellectual:* Exploration of creative ability, Guidance of interest and energy, Special training in

Elaboration:

*Social:* Socialization, Forming relationships with others, Facilitating communications, Group activities, Development of leadership ability

Elaboration:

*Vocational:* Special guidance, Occupational exploration for placement, Development of work tolerance, Improvement of work habits

---

*60*
Avocation: Constructive use of leisure time—literary__, repetitive crafts____, creative crafts____, domestic arts

Elaboration: ____________________________________________

Physical: Development of tactile discrimination____, Development of finger dexterity and manipulative ability____, Muscle co-ordination____, Muscle development____, General physical conditioning

Elaboration: ____________________________________________

Attitude Toward Client:
Aggressively enthusiastic____, Enthusiastic____, Passively enthusiastic____, Reassuring____, Encouraging____, Approving____, Praising____, Solicitous____, Friendly____, Indulgent____, Kindly firm____, Encouraging dependence____, Discouraging dependence____, Encouraging independence____, Sympathetic with errors and defects____, Casually accepting errors____, Critical of errors and defects____, Discouraging____, Cool____, Others____

Amount of Attention: Maximum____ Minimum____ Average____

Special types ____________________________________________

Precautions: Compulsive____ Destructive____ Assaultive____

Aversions (specify) _______________________________________

Phobias (specify) _______________________________________

Abrasions and contusions (e.g. diabetes) ______________________

Signature of Doctor____________________ Title________________

Pertinent Information to Be Used by Staff

Date of Admission____ Sex____ Date of Birth____ Age____

Educational Background: Elementary____, High School____, College____,

Specialized____, Specify ______________________________

Avocational Interests ________________________________ (Hobbies, recreation, other)

Previous Occupations ________________________________ (Types of work and duration)

Nationality or Special Cultural Background ________________________________

Religion or Church Affiliation ________________________________

Remarks:

Completed by ________________________________

Title ________________________________

Date ________________________________
Guide for Structured Interview to Determine Music Background
and Music Interest

Introduction: For a few minutes I want to talk with you about music. I will ask questions which are designed to help you show to me what interest and what experience you have in any kind of music. Please remember that I want to know about any kind of music in your experience. Do not think of me as the kind of trained musician who wants to hear only about one kind of "educated" music.

**PART A**

1. (a) Do you remember music classes in grammar school with pleasure? ............................................. Yes No
   (b) Did you sing? .............................................
   (c) Did you play rhythm instruments? ....................
   (d) Did you have a musical instrument in your home that you enjoyed playing with? .............................................
   (e) Did you take lessons on any musical instrument during grammar school period? .............................................
   (f) For more than two years? .............................................

2. (a) Did you sing in a chorus regularly in junior high and high school? ............................................. Was it by your choice?
   (b) Did you have to pass a tryout examination to get in? .............................................
   (c) Did you play in a band, orchestra, or any instrumental group? .............................................
   (d) For more than one year? .............................................

3. Have you performed a solo, either singing or playing an instrument at any time in your life? .............................................

4. Since school have you belonged to any kind of a music group? .............................................

5. Do you join in the congregation singing when you go to church? .............................................

6. Do you join in singing in a group at a party? .............................................

7. Can you repeat the words to any song? .............................................

8. Do you have favorite radio or television musical programs? .............................................

9. Do you play the juke box in a restaurant? .............................................

10. (a) Do you have a record player and collect records? .............................................
    (b) Do you play them every day? .............................................

11. (a) Do you remember hearing any music yesterday or today? .............................................
    (b) Can you think of the name of the piece? .............................................

12. (a) Can you remember any particular musical program which you attended at some time in your life? .............................................
    (b) Do you remember the music that was played or sung on this program? .............................................

**TOTALS**

**ADJUSTED SCORE**

(Score equals total of yes answers minus total no answers) • 62 •
PART B

1. Here is a list of some famous music names. Can you identify them? What did or do they do in music?

<table>
<thead>
<tr>
<th>Name</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearl Bailey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bach</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dale Evans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stokowski</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stan Kenton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Andre Kostelanetz</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Josh White</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gershwin</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jerome Kern</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beethoven</td>
<td></td>
<td></td>
</tr>
<tr>
<td>James Melton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Count Basie</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alec Templeton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dinah Shore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yma Sumac</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frankie Laine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hank Snow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buddy Rich</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johnny Ray</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Skitch Henderson</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bix Beiderbeck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Art Tatum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cugat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Segovia</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stravinsky</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frankie Carle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>John P. Sousa</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Palestrina</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harry James</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Howard Hansen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verdi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glenn Miller</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Benny Goodman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dave Brubeck</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Toscanini</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Larry Adler</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chet Atkins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Victor Herbert</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Richard Rodgers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>George Shearing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Here are some words frequently associated with music. Can you identify them?

<table>
<thead>
<tr>
<th>Word</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin Pan Alley</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Frets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creep</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Principal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Downbeat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stradivarius</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Key</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chord</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Upper Left</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Platter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Allegro</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contralto</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tango</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bop</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baton</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fiddle</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Squeeze Box</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beat</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Adjusted Score

(Score equals one for each correct answer.)

Test Score: __________________________

PART C

Summary by Interviewer: (Suggestions—(1) Allow the interviewee to enlarge his answers if he desires, or if it is thought that a more accurate picture could be gained. (2) At times it may be necessary to encourage him to talk more by asking additional clarifying questions. (3) Describe the interview, making some estimate of the interviewee's interest in music by noting his willingness to respond to the questions, etc.)

Interviewer: ________________________________
Name of Client

Date

KANSAS REHABILITATION CENTER FOR THE ADULT BLIND
Music Therapy Research Project

PART A

Record of Pertinent Test Data

1. Wechsler-Bellevue Intelligence Scale ........ Verbal I. Q.
2. Lee Thorpe Vocational Interest, Part E, The Arts ....
   (Percentile Rank; Standard Norms)
3. Sound Association Test (Stanford)—Wilmer & Husni .
   (Percent correctly identified)
4. Kuder Preference Record, Part 7 ................
   (Percentile Rank; Standard Norms)
5. Purdue Pegboard, Assembly Test (Standard Norms)...
6. Pennsylvania Bi-Manual Worksaple .................
7. Minnesota Rate of Manipulation ...................
8. Reflex Time ..................................
9. Kinesthetic Memory ................................
10. Sensory Abilities
    (a) Visual: 20/____
        Reading Vision______, Obstacle Perception______,
        Light Perception______, Totally Blind______
    (b) Auditory: Range______,
        Left______, Right______,
        Hearing Loss: R______, L______,
        Sound Localization: good, average, low
11. Seashore Test
    Pitch______, Loudness______, Rhythm______,
    Time______, Timbre______, Tonal Memory______
12. Gaston Test of Musicality ........................
13. Drake Musical Aptitude Test ....................
    Memory______, Rhythm______
14. Structured Interview, Music ....................
    Part A______, Part B______
15. Additional Tests: ____________________________

.64.
PART B

I. Significance of test findings in relation to the probability for success in a musical activity; and the type of an activity indicated:

II. The determining factors in the decision to use music therapy, the kind of activity, the amount, or not to use music therapy in this case:

III. Evaluation of effectiveness of music therapy:

IV. Statement of apparent relationship between test findings and effectiveness of music therapy activity pursued:

V. Significance of music therapy activity in relation to the total rehabilitation process:
Introduction: As you know, the Center offers planned musical experiences and activities to its clients. As with all parts of our program, it is important that we be able to evaluate these musical activities in terms of meeting our clients' needs. We should like to have you tell us just what you think about these activities. Please try to say just what you believe and not what you think we wish to hear. We are just as interested in what you did not like about the music activities as much as we are interested in what you did like. Your opinions will be greatly appreciated by us and they will help us plan better for future clients.

(LET THE CLIENT CONTINUE FROM HERE IN HIS OR HER OWN WORDS.) When the client has completed all he or she wishes to say on his or her own initiative, continue by reading the questions below. If the answer to a question indicates a yes or no even though the client did not use the exact word circle the appropriate word. Any other answer, circle the NC (not certain). Please read slowly, explain if necessary and try to obtain carefully considered answers.

Instructions to Interviewer: Read the introduction to the client. Take appropriate notes on the blank sheet provided. Then follow directions given after the introduction.

If the client answers a question directly, mark as indicated. If the interviewer has to draw out or use pressure to obtain an answer put a straight line under the appropriate words as well as the circle around it. Make any appropriate remarks in the space provided.

Personal Reference

1. Emotional Value
   a. Were your musical experiences at the Center generally pleasant? ................. Yes No NC
   b. Do you remember any which were extremely pleasant and enjoyable to you? .......... Yes No NC
   c. Do you remember any which were extremely unpleasant or that you did not enjoy? .... Yes No NC

   Remarks:

2. Attitude Toward Music
   a. Do you think that you are more interested in music and musical activities now than before coming to the Center? .................................... Yes No NC
   b. Have you become aware that music can offer many different kinds of experiences, especially for a blind person? ........................................ Yes No NC

   Remarks:
3. Factual Knowledge
   a. Have you increased your knowledge of music in any way since entering the Center? .................. Yes No NC
   b. Can you describe several major items? .............. Yes No NC

Remarks:

Interpersonal Reference
1. Did music, in any way, help you in making a better relationship with any of the staff members as individuals? Yes No NC
   —— other clients ————? Yes No NC
   —— persons outside the Center? Yes No NC
2. Did music cause you to have any conflicts with any other person? ........................................ Yes No NC
3. Do you think, in the future, that music may be of value in helping you to establish relationships with any other individuals? ........................................ Yes No NC

Remarks:

Social References
1. Did the musical activities help you in any way to get along with or enjoy the company of the other clients or other blind persons as a group? .................. Yes No NC
2. Did music help you in any way to be more comfortable in or enjoy being with groups of people, most of whom were sighted? ........................................ Yes No NC
3. Were you comfortable and did you enjoy going to community musical events while at the Center? Yes No NC

Remarks:

Relationship to Other Center Activities
1. Did you consider the music activities as a regular part of the total Center program rather than something special? .................. Yes No NC
2. Did your participation in any of the musical activities affect you in any way so that you felt more comfortable or were able to get more out of the other Center activities? .................. Yes No NC
3. Did you learn anything during the musical activities that helped you learn more from any other Center activities? .................. Yes No NC
4. Compared with all other Center activities, were the musical activities the most important to you? The least? Neither? .................. Most Least Neither

Remarks:

Projected Uses of Music
1. Would you like to continue learning to play (sing) an instrument? .................. Yes No NC
2. Do you think that you might listen more to music on the radio or TV now and in the future than you did before coming to the Center? .................. Yes No NC

• 67 •
3. Will you possibly listen more to records than you did?   Yes  No  NC
   Remarks:

4. Would you like to build a record library of your own or to increase the one you have?   Yes  No  NC

5. Do you think you might attend more public concerts in the future than you did before coming to the Center?   Yes  No  NC

6. Will you participate more in group singing than you have before?   Yes  No  NC

7. Will you go dancing more often?   Yes  No  NC

8. Have you gained or increased a desire to do any reading about music or musical activities and people?   Yes  No  NC
   Remarks:

Activity Value of Music

Please rank the following music activities in order of their importance to you. Rank the general categories first and then the sub-categories within each general category. If you did not participate in a given category make a line through that category.

1. Individual musical activity
   a. Playing an instrument
   b. Singing
   c. Listening

2. Group activity (blind persons excluding any Center staff)
   a. Band
   b. Singing
   c. Rhythm instruments
   d. Listening
   e. Dancing
   f. Other special activities

3. Group activity (with sighted persons)
   a. Band
   b. Singing
   c. Rhythm instruments
   d. Listening
   e. Dancing
   f. Special Center concerts and visiting groups

4. Public performances and concerts

Remarks:

If it were for you to decide and thinking of the benefit of all clients, should the Center continue to offer musical activities?   Yes  No  NC
   Remarks:
Practical Electronics for Music Therapy*

WILLIAM W. SEARS

In the process of writing a paper under a prescribed topic to be presented to a prescribed audience within a prescribed time interval, one is faced with the necessity of analyzing these three interrelated factors in order to determine the information of "best fit" to be related. Taking the factors in reverse order, the time permitted will be divided roughly between one-half hour of written material and one-half hour of demonstration and application.

The second factor, prescribed audience, demands that an evaluation be made of the informational level of knowledge of the subject matter which exists within the group at the given time and the need and interest of the group in such material. Realizing that various levels of information exist and that the writer might make the wrong assumption as to that level, an attempt will be made to approach the subject on the following basis: That the majority of the audience has knowledge of the subject only to the extent of their being capable of turning electronic equipment on and off, of playing records on a turntable, of knowing how to adjust the volume controls and such similar actions. Appropriately apologies are extended to those persons whose informational level is above this delineation.

Finally, analysis of the prescribed subject, "Practical Electronics for Music Therapy," led to the following considerations. Practical means useful and essential, capable of being put to use. This would, in turn, break down further into such items as cost, mechanical and technical knowledge of music therapists, the time a music therapist would devote to electronic problems, and many more implications, too numerous to mention. Above all, practical electronics would seem to imply the gaining of a "feeling" for some minimum of operational knowledge of electronics. The word "feeling" was used here for a purpose. Words stand or act as labels for feelings or sensations. It is ventured that when the word, electronics, is used, many of you in the audience are more aware of a certain feeling, possibly a slight fear or, at least, a hesitancy, than you are of the so-called more intellectual implications of the

*This paper was read at the seventh annual conference of the National Association for Music Therapy, Topeka, Kansas, 1956, and first published in *Music Therapy* 1956, The Allen Press, Lawrence, Kansas. Permission to reproduce it here was granted by the editor, E. Thayer Gaston, Ph. D.
word. The various degrees of individual attention you are giving to what is being said is probably determined more by your individual "feelings" than by your individual intellectual interests. It is thus hoped that this paper will serve to promote in some way, at least, more positive feelings for electronics among music therapists. In order to do this, we must first acquire a feeling for certain words which will serve us as a basic vocabulary.

Frequency, intensity, duration and form are four prime aspects of a physical sound stimulus. Sound stimuli come to us in the form of vibrations. A vibration is any one to-and-fro movement of an object. Noise is produced by non-periodic movement and tone by periodic movement. The rate or number of times these vibrations occur during a certain time interval, usually one second, is called frequency. Frequency is normally expressed in cycles per second, c.p.s., a cycle being one complete vibration. Humans interpret as sound, frequencies of approximately 16 or 20 to 15,000 or 20,000 c.p.s. Intensity refers to the extent or amount of physical movement of the vibrating body. It is sometimes called amplitude. Duration concerns the length of time the vibrating body is in motion, and form is related to the manner in which the object is vibrating: simple, pure, fundamental, meaning that the object is vibrating in its entire length only, or complex, meaning that it is vibrating in smaller parts as well as its total length, all at the same time.

We apply different words to the sensations resulting from these four vibrational aspects of sound. What we perceive as and call pitch is correlated most closely with frequency. However, it is greatly dependent upon the other three aspects. We tend to hear low frequencies lower and high frequencies higher when the physical intensity is increased. Intensity of the sound stimulus gives us primarily the sensation we label loudness. As with pitch, loudness is also dependent on the other three physical aspects, especially frequency. The importance of this latter relationship will be pointed out later. Form is largely responsible for our perception of tone quality or timbre, thus allowing us to identify the various sound sources as different and also differences in the sound of similar instruments.

Duration produces mainly our sensation of the length of time we hear a certain sound: this we generally just call time. Again, timbre and time are dependent in lesser ways on the other physical aspects of the sound stimulus. Thus, we see that there are four separate and measurable physical aspects of a sound stim-
ulus but that, although each has a prime psychological attribute, the psychological sensations are not separate and distinct; they are interdependent upon all four physical attributes.

The above considerations are of importance to us, here, in this respect. The electronic means for sound reproduction can be relatively easily designed to control the four physical factors of sound. An amplifier can be made to reproduce all audible frequencies at some given intensity and with certain sound wave forms in proper duration. But, these more simple systems are not able to take into account the more complex interrelationships occurring in the psychological sensations produced. This has resulted in the greater variety in design and construction of electronic equipment, more knobs to turn, more separate parts with which to be concerned, more expensive units, and in some respects, more complexity and confusion for the would-be user.

Let us now analyze the electronic system which is probably most used by music therapists, the phonograph system. We will begin with the phonograph record and proceed to the ear. The most generalized breakdown might be made as follows: the record player, the amplifier, the speaker system, and the room. On further division the record player is sub-divided into the cartridge, the tone arm, the turntable, the motor and the connecting wires to the amplifier. The amplifier sub-divides into the pre-amplifier, main amplifier, controls, and connections to the speaker. The speaker system breaks into the speaker or speakers, the baffle or enclosure, and dividing networks. The room category refers to placement, acoustics, etc. Electronically, the weakest link in the chain is the speaker system.

What, now, are some of the important factors for a music therapist to know about these component parts? Let us assume that a certain therapist has no phonograph equipment and wishes to purchase some. What should he know? Let us make the further assumption that he wants to attain a system which will give him the most true or most faithful reproduction he can obtain. However, this last assumption depends, in final analysis, on his own discriminating listening tests of complete systems.

First, better systems for less money can usually be obtained by buying component parts rather than a commercially built, complete unit. Also, separate components generally offer a more flexible system: one with more possible uses, such as, with AM and FM radio tuners, with television to improve the sound, with contact microphones to electronically amplify musical instruments, and for PA systems.
Second, and equally important, if budget limitations exist, component systems can be improved at much less cost over a period of time by replacing individual parts with better or improved versions.

In analyzing the component part system, we will indicate some of the major characteristics for which the therapist should look. It will be necessary to use some rather technical terms which we will not have time to define. However, they are ones commonly found in catalog descriptions of equipment and what is said about them here is intended as a guide. Manual play turntables are generally better than record changers except where the convenience of the changer is necessitated by the conditions of use. Four-pole, or synchronous motors, are much preferred over cheaper two-pole motors. They are almost a must for LP records, as the hum caused by two-pole motors is often quite noticeable. This hum is picked up by the cartridge, then amplified. It can be tested by moving the tone arm back and forth close to the turntable, or playing a special "silent" groove record. Heavy cast turntables, usually found on manual players, are preferred for their flywheel effect in keeping constant speed. Speed changes are desirable, usually at least three, 33⅓, 45, and 78 r.p.m. The "wow" rating should be as low as possible. Provision should be made for disengagement of the "idler" wheel to keep flat spots from forming during non-use. Flat spots on the idler wheel are evidenced by a wabbling effect on sustained tones. Magnetic cartridges are preferable over the general run of crystal and ceramic cartridges, and should be equipped with diamond, sapphire and metal styli or needles in that order of preference. If the initial cost is not prohibitive the diamond is usually more economical because it will last longer and is easier on record life and wear. Separate needles or styli should be used for 78 and LP records. Longer tone arms produce better performance and record life than shorter ones; shorter ones are usually found on changers since space is usually a restricting factor. The connection between turntable and amplifier should be made with shielded phono cable usually not to exceed two feet in length and equipped with a phono plug.

A good amplifier system consists of two parts. However, they may be mounted on the same unit frame. The first part, the pre-amplifier, is the one that receives the connection from the turntable. A pre-amplifier is not necessary with crystal cartridges but is a must with the preferred magnetic type. The pre-amplifier usually contains all the controls. The other part of the amplifier system is the main or power amplifier and functions to raise the electronic level
of the input signal to a sufficient level to drive or operate the speaker system.

There are any number of controls available on amplifiers. Three are a minimum: the volume, and separate treble and bass controls. The term "volume" is a misnomer. It regulates the intensity of the physical sound and this we psychologically perceive as loudness. Volume, psychologically, refers to a different aspect of sound which we will not pursue here. However, it is probably fortunate that volume has been used in this way. If an amplifier has just a volume control, it is not compensated, as it is called. Compensation, in this instance, refers to the psychological fact that we do not perceive all frequencies of the same physical intensity with equal loudness. Generally, it may be said that it takes greater intensity to hear frequencies at the lower and higher end of the auditory range for them to be heard equally loud with the middle ranges. This is one of the reasons we "lose" some of the sound when we play our records or radio at low sound levels. A good amplifier will thus have a compensated volume control or one listed as a loudness control. These are electronic networks which attempt to correct for this psychological phenomenon. Other controls might be a selector switch which allows connection to be made with the various other input equipment, radio tuners, tape, records, etc., which are connected to the back of the amplifier in separate sockets.

Two other controls are usually found and they sometimes seem confusing. These are the "roll-off" and "turn-over" or what could be called record recording characteristic matching controls. Due to the physical impossibility of a record manufacturer's being able to put the actually true vibration patterns on records, records are produced which have some frequencies accentuated and others reduced. This is also done because of other technical considerations. Suffice it to say that these two controls attempt to compensate for these recording differences and the settings of these controls are usually published by the amplifier manufacturer, as they pertain to playing a certain company's records.

Some of the catalog specifications of amplifiers which are of importance to us are as follows. A description such as high fidelity is not enough. The specification should read: frequency response —20 to 15,000, ±1 db. or better, (The larger the frequency range and the smaller the db. indication, the better the amplifier); distortion—3% or less; hum minus 60 db. or lower.

The frequency response listed indicates that the amplifier will produce all frequencies within the stated limits equally well within
the decibel (db.) limits: one db. roughly being the intensity variation necessary for one to perceive a just noticeable difference in the sensation of loudness.

The power rating, expressed in watts, is an important consideration. Watts in this sense might be compared to the horsepower rating of an automobile. The more horsepower, the more the car will pull. The higher the watt rating of the amplifier, the more sound output it will have. The watt rating becomes important when considering the size of room: the larger the room, the greater the power needed. Also, reserve power is needed because if a small power amplifier tries to produce loud passages adequately, it may distort the sound. For an average-size room, a 10- to 15-watt amplifier will give adequate performance.

Here we need to make a relationship between frequency response and watts of power. Specifications of amplifiers usually list the frequency response at some given output level. This means that the amplifier does not necessarily perform at all output levels equally well. But, when the specifications are given in such a complete manner, the amplifier is usually found to be better than one which lists only the frequency response without a reference level.

When reading specifications, a good amplifier is often indicated by the tubes it uses, especially the output tubes. Some of the better tubes are 6L6's, K66's, 5881's, 6U6's, EL37's.

A final feature of good amplifiers should be the availability of output matching to the various impedance ratings of speakers. It is sufficient to recognize that the term impedance is an electronics designation and when the ratings of the output of the amplifier and the input of the speaker are the same numbers, the system will work at its best. The common impedance designations are 4, 8, 16 and more rarely 600 ohms, ohms being the name applied to the units of impedance.

As was stated previously, the speaker section is usually the weakest link in the complete sound system. It is also the one which is subject to the most argument and individual preference. However, a few general principles may be stated. Most speaker systems today employ a diaphragm, usually conical in shape, which is driven by a magnetic field. Most modern speakers use a permanent magnet, the best considered to be made of a metal called Alnico V. The heavier the magnet, usually, the better the performance. Also, the larger the diameter of the cone or diaphragm the better the over-all frequency response, especially for low tones. Small speakers cannot physically reproduce the fundamental of low tones. They give
the impression of low fundamentals, however, by reproducing essential harmonics or overtones. The speaker should have a power rating, in watts, to handle sufficiently the amplifier output. A resonance frequency as low as possible is another desirable characteristic.

Single unit speakers can be obtained which employ more than one diaphragm or cone, a small one for producing high tones and a larger one for the low tones. Some even employ three units on one frame. Cost, however, increases as the number of such units increases when other considerations are held constant. Names for these multiple unit types are co-axial, co-spiral, tri-axial, etc. Many of the better units are designed to disperse the higher frequencies since from low to high, the intensity propagation of the sound is focused into narrower and narrower channels perpendicular to the face of the speaker. This is a physical phenomenon, not a design characteristic. Such speakers will have some description or name signifying this feature given in the literature. Other speaker systems make use of a number of single-speaker units, both large and small, the better systems employing what are called dividing networks to distribute different frequency regions of the signal to the speakers most efficiently handling each region.

In wiring the speaker or speaker system to the amplifier, as large a diameter of wire as practicable should be used. Ordinary lamp cord may be used up to 25 feet. The wire should also be of the stranded type, rather than solid, to permit greatest flexibility. Large-size wire is necessary as small wire may introduce losses in frequency response.

A well-designed loudspeaker enclosure or baffle is of equal importance to the sound of the complete phono system as the quality of loudspeaker, or, in fact, any other component. Not much can be effectively said in this short paper without getting involved in enclosure designs. It would seem sufficient to note several items. In general, the larger the enclosure, the better, although many excellent designs of construction have been made which are relatively small. It should be made of wood at least $\frac{3}{4}$-inch thick for smaller sizes and $\frac{5}{8}$-inch thick for the larger models. Three common types of speaker enclosures are referred to as bass reflex, labyrinth, and corner enclosures. Specific trade names, however, may use some other term implying the same type of construction. There are many other styles giving excellent performance, but the above three are quite standard.

The room in which the phonograph system is used will have great
effects on the final listening quality of the sounds the system produces. Usually not much can be done in reconstructing the whole room, but a few simple techniques may make a great deal of difference. Try placing the speaker unit in different places in the room; directing the sound across the longest diagonal of smaller rooms will give the best sound. Hanging rather heavy drapes or placing a few slabs of acoustical tile on the walls, especially the one opposite the speaker, will often give improvement, as will placing a heavy carpet on the floor. Breaking up a smooth flat wall with bookcases or other similar furniture units will sometimes help. Above all, give the phonograph a listening test with it placed in various locations.

Concerning the cost of electronic equipment, the buyer usually gets results in a direct relationship with money spent. However, improvement does not double as the buyer doubles his outlay. The amount of improvement for money spent in the quality of the sound of a phonograph system gradually becomes less and less as smaller improvements become more and more expensive to obtain. Prices of acceptable record players range upward from $25 to $30; for amplifiers, upward from $45 to $50; for speaker systems, upward from $40 to $60. As a general guide, it is suggested that for every $5 invested in the record player, $7 should be invested in the amplifier system, and $8 to $9 in the speaker system. If there is any extra money, invest it in the speaker system.

From this writer's point of view, the practicality of using equipment which comes in kit form cannot be too greatly emphasized. Better equipment for much less cost can be obtained. The parts of the component sound system which are available in kit form are amplifiers and speaker enclosures. Record players may be bought in separate parts—turntable, tone arm and cartridge. Kit equipment offers other advantages. At least one company with which the writer is expressly familiar supplies such explicit instructions and detailed drawings with the kit that mistakes in construction are impossible if the builder is able to read. All metal parts are cut with the necessary holes, and construction requires, as tools, only pliers, screw-driver, soldering iron and a knife for stripping wire. The music therapist could benefit greatly by assembling such a kit and, in the end, may find that he has received much therapy, himself, in the form of narcissistic gratification as well as increasing his practical knowledge of electronic equipment.

The use of kit equipment offers still other therapeutic advantages. In co-operation with educational therapy, shop therapy, occupational
therapy, or other therapies, the assembly of the various units can be made patient activities. This would include not only the actual assembly of the kits, but the final decoration and finishing of the wooden parts. In all probability it would be a great benefit to a patient to work on something like this in one shop, and eventually come to the music shop to see and hear his creation in performance. This would lend an element of co-ordination and unification to his hospital life. With proper handling, it could help lead to greater and more positive co-operation among the various adjunctive therapies.

Probably the items of electronic equipment next most used by the music therapist is the tape recorder. Here, it is believed the price of the tape recorder is more directly proportional to quality of reproduced sound than in the case of the phonograph. The buyer gets very nearly what he pays for. Prices range from around $70 upward. Some of the items to note are the following. Tape recorders come in several speeds; that is, there are various speeds at which the tape is pulled past the recording and playback mechanism. The speeds available are 11, 33, 77 and 15 inches per second. In contrast to record playing equipment, where the slower speeds are used to produce the highest fidelity or frequency response range, tape recorders go in the opposite direction—the faster the tape speed, the higher the fidelity. The speeds of 33 and 77 are most common in portable recorders, with the 77 being generally preferred for music reproduction. The speed of 15 inches per second is seldom found on other than professional studio tape recorders.

Portability is another consideration, the weight, shape, size and storage compartments being of interest here. Of importance, also, is the flexibility of use of the particular tape recorder. Does it have provisions for recording through sources other than its own microphone, such as directly from radio tuners, from other amplifiers, or from attachment to the back of a speaker? Does it provide for playback through other amplifying equipment and external speakers as well as having its own internal speaker system? Can it be monitored with earphones while recording, and does it have provision for fast forward and fast rewind of tape? Is there a tape timer to use in indexing recorded tapes? Is the tape drive mechanism steady and dependable, and does it make use of a single or several motors?

These are some of the questions to answer when buying a tape recorder. Generally, the more of the features found on a given tape recorder the better its performance and the higher the price. This,
certainly, does not completely tell the story of tape recorders. It was not intended to do so.

To conclude, it should be stated that the field of electronics is constantly changing and improving, almost, one might say, with the speed of electrons. What has been said, here, may seem to be adequate today, but tomorrow it may be completely obsolete.

GENERAL REFERENCES


KIT MANUFACTURERS

Heath Company, Benton Harbor 20, Michigan.

Allied Radio Corporation (Knight), 100 North Western Avenue, Chicago 80, Illinois.

Arkay Radio Kits, 120 Cedar Street, New York 6, New York.

Notes on Group Music Therapy

JERRY DUNHAM

The group music therapy, usually including the total client group during an evening at the Rehabilitation Center, has been handled in a variety of ways by several different staff members over several years. It has been structured in advance for three months at a time. It has been handled in a free way—so that each evening was an individual performance, according to the music therapist's idea of what should be carried on for that particular group, on that particular evening. There have been goals written for the activity. In fact, the Music Therapy Project staff have tried in every way that could be imagined, to work out the evening group music therapy activity so that it would be achieving the fulfillment of group needs. It has occasionally been successful, so far as the staff could see, and according to the music therapist's impression. However, most of the time, it did not seem to satisfy the staff's notions.

So far as this writer can remember, no group music therapy activity has come from a felt need by the group, itself. Instead, it has partly come from tradition, that is because of circumstances in the beginning—an evening where the group was invited. This was the only kind of musical experience that seemed feasible, and when the music therapy project began officially, this tradition played a part in the continuance of the evening group activity. It was an activity then, which was handed down by the project staff, as a policy decision that these group music therapy evenings should continue. The activity was occasionally questioned, however it was always decided that the activity should continue throughout the months of the project study. The decision to continue did not come from a clear belief in its value, but rather that it should have a fair test and the staff's feeling that, some way or other, the group music activities should satisfy in some vague way, the group needs. It was even decided to have the group of clients themselves, work out what would be included in the evenings and thereby get their cooperation and involvement in the activity. The assumption was that the clients would feel the need, or at least accept the policy, that the evening should continue. However, for probably a number of various, obscure reasons, the plan for self-determination by the group did not continue past two or three evenings.

These notes suggest that the question is not whether this group
activity will have some value to a few clients on occasions, since we assume that any activity that is carefully planned by a sensitive therapist with training in music, is certainly going to have some sort of consequences which will occasionally be favorable; but rather, it questions whether the staff's assumption that a group activity for a variety of clients who may not all be in the individual music therapy program and who may or may not have an interest in the musical activity, or in the group activity, can actually be called group music therapy when it is not an expression of group needs. It can be called a group musical activity since it comes from a structure from the staff policy, but "Music Therapy" by definition presumes to deal with personal needs. Group needs are never easy to evaluate, particularly when a group of individuals are not aware of themselves as a group and who have not had enough experience or emotional involvement with each other. They cannot have a very observable group feeling or need which might be satisfied by a group musical activity. The question then is, can we say that group music therapy should only be enacted when a group of individuals are enough aware of their own needs, and where those needs have to do with music, so that they can express or it can be observed by the therapist that these needs can be satisfied by a group music therapy activity. Such a musical activity that comes from a policy decision by staff, must be considered to be one of planned activity and not therapy.