DEVEREUX SCHOOLS

FORUM

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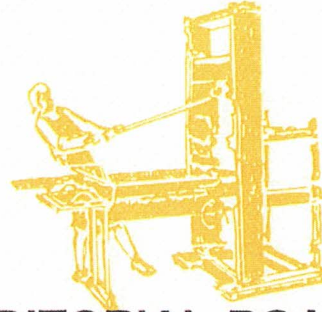

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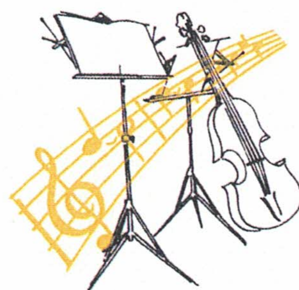
The Therapeutic Value of Music And Its Treatment Implications

Norman E. Hoffman



INTRODUCTION

Both music therapy and psychotherapy treat mental diseases or disorders. Each type of therapy must have a trained person deliberately establishing a relationship with a patient. The objective is removing, modifying, or retarding existing symptoms, of mediating disturbed patterns of behavior, and of promoting positive personality growth and development. The aims of techniques are to help the patient achieve a less fearful outlook on life and a more effective way of handling life's problems. Both treatments work towards giving the patient encouragement, self-esteem, and ego-gratification.

Today, in those cases involving the usual psychological or psychiatric treatment procedures, often a patient will not relate to the psychologist or psychiatrist because of techniques that may put the patient on guard or make him fearful. Consequently, there is a great need to find another method to assist those who are outside the realm of the usual practices in psychotherapy. Because of this necessity for finding an additional avenue by which more people might be reached, music therapy has evolved to fill the gap where no stimulus could be found to induce a response. Where no common meeting ground for contact was evident, music, the universal language, is being spoken and understood. In this way, the music therapist may find the door through which to gain rapport and confidence in experience in treating the non-verbal as well as the verbal patient. The music therapist can build the tolerance and ego support

of the patient by means of musical activities, by appealing to the universal knowledge, if not love of rhythm.

There is much confusion concerning the role of the music therapist; what his aims and purposes are, and the "hows" and "whys" regarding the application of music as a therapeutic agent. The functions of the psychologist and psychiatrist, including many of the methods used to determine stability and ability; i.e., I.Q., and some of the techniques in the treatment of the retarded and emotionally disturbed are, because of mass education and instant communication, more generally familiar. Tests may range from the Binet to the Rorschach to the Telebinocular, depending on the information sought after. Due to the complexity of the human mind, the infancy of psychology and psychiatry, the psychologist or the doctor is too often left with tests that are inconclusive or vague in showing any definite signs. Because there are some individuals who have proved untestable under present testing procedures, music therapy has been developed. Even in cases where diagnosis and treatment are correct and effective, music therapy can be used as an integral part of the child's program, not only as an aid to the psychologist, but also an entity.

Most normal children can distinguish simple and sometimes complex rhythmic patterns, and can relate to them through repetition, either by clapping the hands or by beating on something, such as a drum. But in the case of a severely retarded or emotionally disturbed child, there may be a lack of flexibility and conscious listening ability, resulting in non-rhythmic freedom — an inability to freely feel or repeat a rhythmic pattern because of his particular constricted inner disfunction. This then, becomes one area where a music therapist produces results by developing, formulating, and making felt these retarded rhythmic patterns.

A child may be possessed by a compulsive beat. This is an innate rhythm to which the child may fixate his entire development. Like a clock, his every function must be regulated by this methodical, hypnotic beat. The music therapist must make contact with this rhythm, then proceed to help the patient break away from the pattern, leading him towards an awareness of the infinite number of other patterns that exist in the realm of music.

To determine a compulsive or non-rhythmic beat, the music therapist may use a drum and drumsticks. These are to be played by the child as the therapist improvises rhythmic patterns, harmonies, et cetera, on the piano. He may also use a metronome,* which gives a mechanically controlled beat to be repeated by the child. These two methods are not only useful and conclusive in determining the child's beat, but they are interesting and refreshing if presented properly. Hopefully, the child will work and, by repetition at first, achieve new patterns while experiencing a structured and meaningful musical experience.

Music teachers often use songs and musical plays to stimulate musical interest and activity in children. In many cases, instead of having good and valuable musical experiences, the child may have become bored, frustrated, or even humiliated. This may have been the result of poor quality of music, content of the play, et cetera. The music therapist and teacher must never forget that all children, regardless of their ability, are individuals with their own needs. To presuppose that a certain musical game or play was written to stimulate a hand movement, foot movement, or any particular participation may be insulting, humiliating, or frustrating to the child. The music therapist must be constantly sensitive to the child's level of ability. After considerable research in the field of musical plays and games, I have found that many are trite and hackneyed works which leave a child with a poor musical experience. Consequently, their use may lead to a deterioration of interest in music.

The interest and wonderful responses of the children I have worked with, encouraged me to write an original musical play. In writing the play, I attempted, as much as was possible, to keep the content fresh and unique, while always trying to fit each part to the child who would act it out. Because the musical composition was non-condescending, though the words of the song and the narration were kept simple (but not embarrassingly childish), a sincere interest and enthusiasm for the play activated many children who had never performed in any activity, musical or otherwise. The play was built around humor, varying and interesting harmony, word activity, use of musical instruments and a basic moral.

I do not say that the music teacher must be a composition ex-

**To be used at the discretion of the therapist. Not to be used if frightening to the child.*

pert or composer, but he should be sensitive and aware of the existing difficulties of each child, carefully selecting the material to fit that child and applying it accordingly. In fact, the music teacher is not a music therapist; but if his work is with the mentally ill, he can create a situation that will enhance the musical experiences that give pleasure, enjoyment, and most important, meaning.

BRIEF HISTORY OF MUSIC THERAPY

From the earliest primitive societies, music has been closely linked with magical healing powers. Music which accompanied drugs and other treatments among primitive people symbolized the power which a medicine man possessed. In this sense, songs as well as instrumental music (drums or rattles) were believed to be effective in driving away illness or healing wounds. The great function of music for primitive people was that it served as a symbol of the priest-practitioner's power, particularly with regard to his control of the spirits which caused illness. Music, then, was an emblem of his profession.

Graeco-Roman worship was primarily directed toward Apollo, the sun god. The sun, responsible for the health-giving rays, is the dispenser of life and its blessings. Therefore, Apollo was early divined the great physican.[1]

Pythagoras believed that if one employed music in daily life, according to a prescribed manner, it would make a salutary contribution to one's health. Plato believed that when the soul lost its harmony, melody and rhythm assisted in restoring it to order and concord; thus, he linked the importance of music with the moral welfare of a whole nation. He felt that by changing a musical mode the foundations of the state might be undermined. The belief that music could heighten or lower public mores when cast in the different modes — each an imitation of character; i.e., Lydian, decorous and educative; Phrygian, violent and emotional — is called ethos of the modes.[2]

David calmed and soothed Saul by playing for him on his harp. He supposedly eased Saul by driving away the evil spirits that afflicted him. The great religious reformer, Martin Luther, called the devil a saturnine spirit to whom music was hateful, and believed that it could be used to exorcise him, as well as other evil spirits.[3]

One disease for which music was supposedly the only cure was tarantism. This was very prevalent in Italy during the seventeenth century. Although cases appeared throughout Italy and Spain, it tended to be localized in Apulia, a hot region in the heel of the Italian boot. The disease was attributed to the bite of a spider, the tarantula. This occurred usually at the height of the summer heat. People would suddenly jump up and run out of the house and start dancing in the street with great excitement. A whole mob might participate in this frenzied orgy until all were finally exhausted. The only effective remedies seemed to be music and dancing. People were known to have died of this disorder if music was not accessible.

The music, called a tarantella, was a piece played in a very fast tempo frequently repeating melody.[4]

Clinical experience indicates that the mood and the mental tempo of psychotic patients can be influenced more readily if a special approach is employed. If a patient is depressed, slow sad music will capture his mood more readily than gay music. Gay music could be irritating. With hypomaniacal patients, fast music would be required. Only after the therapist has worked himself musically into the mood of the patient, can a shift to a different mood or tempo be made.[5]

Live or active music is most important because it can get the patients' attention more readily and help stimulate a larger number of responses that passive music could not offer. The means used in passive are radio, phonograph, and motion pictures, and when possible, live concerts. The means used in active depend on the musical abilities of the patient. A good form is singing in groups, large or small. Other considerations include rhythm bands, musical games, auto-harps, and dancing. The active application has more advantages because it stimulates the intellectual field producing satisfaction and self respect, arouses emotional activity, and gives an outlet for the emotions.[6]

MUSIC THERAPY AND THE THERAPIST

The music therapist must be one with an intuitive understanding and a sound knowledge of both music and psychology before attempting to interweave the two in the task of helping the mentally handicapped. He must be able to improvise numerous modes, harmonies, rhythms, tempos and meter with absolute freedom and acumen. A piano is the instrument most suited to this degree of versatility. Since the therapist will be involved with different personalities, attitudes, moods, and the many facets that mental illnesses encompass, these skills and tools are absolute

necessities for communication in a therapeutic situation. The music therapist must be able to set or change moods with each individual characteristic disorder that he recognizes. Occasionally the patient will set the mood for the therapist by his reactions to the harmony, change in tempo, rhythmic accents, dynamics, et cetera.

For example, observing a music therapy session at the Mercy-Douglass Hospital in Philadelphia conducted by a music therapist, the following action took place: a six year old, autistic child entered the room screaming and pounding on the wall with both hands (he was unaware of any visitors present, because of a one-way mirror). The therapist began playing poly-chords on the piano, representing the screams and anger of the child, in an attempt to make him concious of another relating force that was present. The first reaction was a reticence that lasted for only a moment before another tantrum occurred. The therapist then changed the mood with the use of the pentatonic scale and a change in dynamics from loud to soft. Within five minutes the child was reticent, but this time he rocked from side to side. Continuing in the pentatonic mode, the therapist shifted his basic tempo to that of the child's rocking. He then followed with a subtle decrescendo of tempo to explore the child's consciousness of the music. I observed that with the decrescendo the rocking of the child subsided; when the therapist stopped playing, the child momentarily stopped rocking. Thus, we see how the child upon first entering the room sets the mood for the music therapist. With his beginning given, the music therapist had a procedure to follow. This session also illustrates the importance and necessity of improvisation as a prerequisite for the music therapist.

Along with the free experimentation with dynamics, rhythms, tempo, harmony, and form, the therapist employs a technique of transposing singing material so he can explore, then develop vocal ranges that are limited in many handicapped children. A flexible vocal range provides for the child pleasurable new experiences that enhance the ego-gratification that is essential in the life of a well-adjusted person. Singing experiences can make it possible for a child to have inter-personal relations by performing songs that suggest games directed toward his environment, relations with others, and awareness of himself.

Musical instruments can be used to encourage interaction, or add freshness and new meaning in therapy sessions. These instruments may be of the percussive variety for the withdrawn or brain damaged child, or strings, brass, and woodwind for the overactive. However, the decision of which ones and when and how they can be used must be based on the child's emerging needs. The music therapist should discover the stimulus that unlocks and brings to conciousness the disturbances of the fearful or withdrawn child, should encourage cooperation with the hyperactive child, and help the handicapped child develop feelings of satisfaction and self-achievement. Musical instruments used discriminately can be an integral aid in the therapy program. It is the present belief that a hyperactive child should be placated to establish rapport or communication. In my work with a hyperactive child, I have used a variety of instruments to establish a meaningful experience. At times the drum and cymbal suited the purpose, but as his mood changed, the one string violin was successful. On other occasions a simple cow bell caused the response that I was trying to achieve. Thus, the music therapist cannot rely on any one set of rules to determine the desired response that he is trying to achieve.

Music therapy can be an area of treatment that exists when others fail, i.e., group therapy, play therapy, art therapy, as a means of communication and help. Rhythm which is the "soul of music" exists in every human being; for he breathes in rhythm, walks in rhythm, his entire circulatory system functions rhythmically. It is evident that music therapy is evolving and beginning to mature as a means to reach and help the patient.

In this particular case study, I will be dealing with observations, techniques and the observed response of one child to music therapy. The study reveals a young girl's inability to interact with staff members as well as her peers. Her inner fears and lack of normal development were obviously a main factor in fixating her ego development, as well as her pre-kindergarten mental age, in contrast to her chronological age of nineteen. We shall see how music therapy helped a desperately fearful and withdrawn child make significant gains toward personality development, greater ability for self-expression, and a way and means for healthy communication.

CHARACTER SKETCH

Educational Review (quoted from case history):

K. is the third of four female

siblings. She was born six months premature, suffered a clavical fracture at the age of five, german measles at six, polio, encephalitis, and the mumps at the age of seven. K. began formal schooling at five, attending pre-school nursery school and kindergarten; she spent three years in the latter. K. has always had difficulties in school; she has never been able to function on a normal academic level. A speech impediment, much physical illness, and the frequent moves to various parts of the country because of the father's position, have been factors affecting her school adjustment. For a short time, she attended un-graded classes in special education. Prior to enrollment at her present school, K. was not in a formal school setting, but was being tutored at home.

Psychologists Examination (quoted from case history — 1/10/63):

K. did not answer any questions, in fact she spoke no words except to repeat some digits. She could only nod miserably at this time. Twelve days later, (second contact) when asked about her dolls, she responded immediately by nodding her head, but would not answer questions verbally. When asked to write her name, she printed tKAHak.

She was not talking to other students and only rarely to the staff (females only). She talked freely with her dolls, completely disregarding spectators. Often, she seemed to be in a fantasy, sometimes appearing to smile at her own thoughts, and slightly rocking.

The impression received was that of extreme infantilization of personality; retreat from reality of psychotic proportions; and an organic malfunction, which had probably contributed to traumatic failures with inter-personal relationships. The possibility of pseudo-retardation as an emotional defense was suggested. Such a defense was used, especially, when she was shown cartoons of animals in various emotional contexts.

K. was non-commital about oral gratification, smiled indulgently at a destructive animal, was sobered by the anal material, uncomfortable and concerned over masturbatory content. Confusion and guilt were manifest on an infantile level in regard to the last two.

In group testing, her mental age was untestable. In the Wechsler-Bellevue Intelligence test, K.'s performance I.Q. was 39. The Peabody Picture Vocabulary test showed an I.Q. of 77. All other tests were either negligible or deferred at this time.

Her diagnosis was chronic brain syndrome associated with brain trauma and with severe neurotic reaction. The findings of the psychologists and psychiatrists were concurrent; but, in addition, the psychiatrist made a recommendation to continue the program at the residential unit in occupational therapy, music therapy, finger painting, etc.

OBSERVATIONS BY EDUCATIONAL STAFF PRIOR TO MUSIC THERAPY SESSIONS

Teachers' Observations

Mathematics — "K. is a slim, physically immature girl for her chronological age. This writer has never witnessed more than a shaking of the head as a means of communicating with peers or adults. She seems to show limited academic knowledge, although she is quite aware of her surroundings, as can be observed by her comprehension of humor that escapes most of her peers."

English — "K. is a very withdrawn girl who usually does not relate in a group setting. She has a very good sense of humor and understands what is being said. She is a well-behaved girl who seems to be happy and can be found smiling frequently."

Physical Education — "K. is non-verbal to peers and staff. She is extremely passive and must have constant supervision at all times."

Language Arts — "K. is a very shy reserved girl, surrounded by all sorts of fears. She will not enter into discussions, but usually stands beside an individual until he says something to her. She is generally cooperative, but cannot be forced to do things she does not want to do. As yet, K. has little concern for her personal properties (i.e., her towel, et cetera), except for her doll, April, whom she treats as a real person and uses as a crutch."

PERSONAL OBSERVATIONS

The following observations of K. have taken place at Devereux Schools, a residential treatment center, for emotionally disturbed and retarded educable children.

My first observation of K. was in a room set aside for television, where she was sitting alone, rocking back and forth while nervously picking and brushing imaginary particles off her slacks. She remained there one hour without speaking or moving from her chair. One of her peers asked her a question, which made her react in a timid, fearful manner.

The second time I saw K. was outside on the school ground while the children were having free play and activities. K. was again by herself, sad-eyed and non-communicative, as she made her way toward the swings. She stayed there a long period without any attempt at conversing or relating to

anyone. Meanwhile, a group of boys were actively playing near the swings, shouting and horse-playing with one another. They did not intentionally try to bother her, but she became very frightened and left the swings, crying freely.

Later that day I saw K. with a few of her dolls. This was the first time I had heard her talking. Seeing her smiling was a pleasant contrast with the fearful withdrawn child I had observed earlier. If she were left in a room by herself, she would sit there all day without making any sound that would make you aware of her presence.

My first actual contact with K. was in a music class that I was teaching; the class consisted of eight children. I noticed again K.'s same peculiar mannerisms of rocking, picking and brushing her slacks, that I had observed earlier. I asked her if she would like to listen to a record; she would not reply, but I noticed that her face became flushed and her eyes began to tear, with signs of fear.

A few days later, in class, we were listening to the story of *Treasure Island*. K. smiled when a recorded parrot started cajoling. I then asked her if she had enjoyed the record. She acknowledged by nodding her head, yes. This time, fear and her crying were not present. I then began to teach the class a song, *Clap Your Hands,* which is a simple rote song. K. watched as the other children clapped their hands, stamped their feet and nodded their heads to the music. She seemed to enjoy watching the children perform these amusing antics. When I asked if she would like to join in the game, she put her head down, and began rocking and picking. I then ignored her and continued the song with the other children. She then lifted up her head and began to smile, but continued rocking. It was at this time that I recommended that K. receive individual music therapy. It appeared to me that she was a highly sensitive child who received very little attention as a result of her own unwillingness or inability to make contacts.

In developing a music therapy program for K., I first observed her reactions to music in a structured music class. At the same time I observed her peer and staff relationships. This led to the choice of music and techniques that I used in the first sessions. Through her reaction and sensitivity to certain sounds, she gave me the means to prepare a special music therapy program. Each session led to new discoveries and preparation for the session that followed.

FIRST SESSION

K. entered the room for her first music therapy session and sat down on a padded chair; rocking and nervously picking at her slacks. I showed her six records that I had used in previous music classes attended by her, and asked if she would like to listen to any one in particular. She looked up, still rocking, and pointed to an album called *Frere Jacques,* which I immediately put on the record player. She listened intently to the music, the voices, and especially to the sounds of the ringing bells which made her grimace and cover her ears with both hands. After listening to the opening song, "Frere Jacques," I asked if she liked the record. She replied instantly by shaking her head, yes, and a beautiful smile lit up her face. I asked her if she enjoyed the bell sounds that made her cover both ears. A very weak and squeaky "yes," was her reply, and this was her very first verbal communication with me. I then asked her if she had ever heard the particular record before, and a few other questions pertaining to the record. Her reply in each case was, "I don't know."

Though her rocking continued, K. did not show the signs of fear that she had exhibited in previous classroom sessions, nor did she seem displeased with any of the questions that I had asked.

SUMMARY OF FIRST SESSION

The records I showed K. in the first session were used in her previous music classes, which I felt were both pleasant and useful in my first individual contact with her. The record she chose had stimulating emotional content in the dissonant ringing of the bells, to which she responded overtly. Her reactions and verbal answers assured me that she was mentally and physically conscious of the entire session. K.'s reactions to the dissonant bell sounds displayed her sensitivity to vibrations and opened an avenue for exploration in the next session.

SECOND SESSION
(One Week Later)

K. entered the room as I was performing (on the piano) polychords, with primary characteristics of the minor second interval. K. immediately walked over to me with a healthy smile, sat down, and made amusing gestures with her face and hands. As I continued playing the piano, I asked her a few questions about the names of her dolls. She was silent. I began singing boys' and girls' names in a questioning manner, which seemed to amuse her greatly. This continued for ten minutes with no apparent success, other than the

smiling and comical gestures which she made continually in response to the dissonant sounds. Then, much to my surprise and pleasure, she answered in a clear, deliberate voice, naming some of her dolls. It was a truly beautiful experience to see this sad-eyed, seemingly semi-autistic child responding to the sounds of the piano and speaking freely. She talked about her dolls, dog, turtle, and her cat, making a point of telling me that her cat scratched her on the mouth several times.

Throughout the session, whenever an extremely dissonant sound was heard, she would cover her ears with her hands and frown.

SUMMARY OF SECOND SESSION

K. had seemed lively and aware of the dissonant sounds that I had played. Through the use of hand and facial expressions, she had conveyed an enjoyment of the musical experience. During this second session, I observed smiles and other meaningful expressions which had seemed non-existent previous to the music therapy. Since K. had utilized verbal communication without fear and withdrawal, I felt that she was ready for a singing experience which proved to be the turning point in her music therapy program. Through singing, she began to form peer and staff relationships and a desire to participate in activities that, in the past, had only resulted in fear and withdrawal.

THIRD SESSION
(One Week Later)

In our third session, K. seemed happy and excited upon entering the room. I was singing "Alouette," using polychordal harmonies on the piano. Instead of using the popular French lyrics, I injected a humorous English verse I hoped would stimulate a response both physically and verbally. The following are the words I used: "Alouette, pretty little girl. Let me pat your pretty head — pat your head is what I said — pat your head — pat your head — Ooooh!" Every time I sang, "pat your head," I patted her head, which was followed by healthy laughter and expressions of joy on her face. After many repetitions of the song, I asked her to sing "pat your head," along with me. After much coaxing and refusing, she, in a scratchy and high pitched voice, began to sing the words, "pat your head." I continued playing and singing the song for about ten minutes as she added more words with every repetition. This time, she was singing more than half of the words in the song, patting her own head every time we sang those particular

words.

The only praise I gave her during the singing was a smile of approval, which was enough to encourage her efforts. At the conclusion of the singing, I praised her highly in regard to her voice, participation, and the amount of fun that it was singing together. She smiled and laughed out loud, satisfied with what she had done.

SUMMARY OF THIRD SESSION

During this third meeting, there was no trace of K.'s nervous and compulsive picking at her clothing, hanging her head shyly, or avoiding eye contact. She was more outgoing and extremely concious of her actions and of her participation. This display of overt actions led me to believe that K. was gaining new meaningful experiences and abilities which could draw her out of her shell and give confidence in communicating with others, with the aid of music.

The music and lyrics definitely stimulated her reactions with a great deal of success during this session. The humorous words of the song stimulated her to enjoyment and laughter, as she physically responded with her hand patting her head.

K. was completely enjoying this new and awakening experience of singing without fear or frustration, and I felt that she should continue to sing, not only to strengthen her voice, but also to reinforce a positive vocal experience which could possibly speed her recovery.

FOURTH SESSION
(Three Days Later)

In this session, I had prepared a new song for K. to sing, which seemed to please and amuse her in the music class that she attended. Since she had done so well with "Alouette" I wished to introduce the song "Clap your hands" into her program. I decided on the use of a tape recorder with K. so that she could hear her own voice, hear herself loudly laughing, clapping her hands, and speaking to something other than her dolls.

As K. entered the room, I was playing and singing "Alouette," which was being tape recorded. She smiled with eagerness as I greeted her, looking curiously at the tape recorder.

It still took much coaxing in order for me to get a verbal response as I asked her to join me in the song, "Alouette," though she smiled and laughed out loud. I stopped playing and put the machine on "playback" to get her reaction to her own singing and laughter. As she listened to the song, her hand would pat her own head when I sang the words, she

laughed when I substituted her name in the song for "Alouette." I then put the machine on "record," trying to get her to sing into the microphone so she could hear her own voice. After a few refusals, she began to sing with the same vitality and interest as she had done in the third session, but this time, she knew that her voice would be played back on the recorder. She listened intently as I played back her voice, free of anxiety and overjoyed by this new experience.

I felt that K. could now learn and handle a new song which I would use to expand her reactions and experiences. I began singing, "Clap Your Hands." As I clapped, K. immediately sang with me and clapped her hands rhythmically, singing with clarity. As I changed the words to "stamp your feet, nod your head, shake your hands," she responded by singing and acting out the words for the first time.

During this session, K. became very much enthralled with music, both in the passive and active aspects.

EVALUATION OF PREVIOUS SESSIONS

K.'s quick and successful response to music therapy made me feel an evaluation at this time would be beneficial to her progress. This evaluation would help me decide the procedures, materials, and techniques that I would use to continue a progressive and successful program.

I discovered K.'s compulsive rocking was at the tempo of 120 beats per minute, by the use of a stop watch. I also discovered that she was highly sensitive to dissonant sounds by her reactions to the vibrations of the bells and responses to polychords that I had played on the piano. When I played "Alouette" at the tempo of 120 beats per minute, also using humorous lyrics, I was not sure at that time if she were responding to the compulsive beat or to the humor. But, when I played "Clap Your Hands" at the tempo of 88 beats per minute, this change did not bother or confuse her. She immediately broke from her compulsive rocking beat of 120 beats per minute, and sang with complete flexibility in the new tempo. Thus, I felt her responses were due to the humorous lyrics and actions that the songs suggested, and had nothing to do with her compulsive rocking beat.

Dr. Paul Nordoff, who has made some revealing discoveries in the field of music therapy, feels that a compulsive beat that persists makes it impossible for a child to experience any kind of rhythmic freedom. All rhythmic activities

that depend on flexibility are beyond the child's capacity, and he remains closed to the experiences that they could generate. Although K. was rocking in the tempo of 120 beats per minute, she was completely aware of the new tempo in which she sang. Since she was conscious of these changes, and her responses were excellent, K. did not have a compulsive beat that might have retarded her progress.

K. was showing less signs of fear and withdrawal as each session progressed, even when I presented new materials and experiences, such as singing and listening to her voice on the tape recorder. Fear and withdrawal had lessened, which was observed as rapport developed. K.'s positive responses to music therapy led me to believe that she was ready for an exploration of rhythmic patterns, new experiences in tempo, new modal listening, and an augmentation of her vocal range to further reinforce her singing experience.

FIFTH SESSION
(One Week Later)

The fifth session deals with an exploration of the rhythmic abilities of K. and sixty students in the same private school. The students had been arranged in groups of eight, each of whom participated individually as the remaining students watched and waited eagerly for his own turn. I wanted to investigate, with the aid of the children, the relationship, if any, between poor rhythmic ability and mental deficiency.

I used a metronome and chose the settings of 54, 92, 138, and 184 beats per minute, to determine the effects of these children's responses to different tempos. With each metronome speed, I instructed them to use right hand, left hand, both hands, and alternate hands, beating simultaneously on a small drum to the sounds of the clicks.

As with each group, I told K., in a humorous manner, she was going to learn how to play a drum and how much fun it would be to hear it played back on the tape recorder. K. was quite eager to beat the drum and happy at the sound of her hand hitting the instrument. I then put the metronome on at 54 beats per minute and told her to beat the drum with each click. K. could not beat in this tempo, but instead, beat the drum at 120 beats per minute. I then set the metronome mark at 92 beats per minute. She matched the beat perfectly and showed sensitivity to the new tempo in each of the different hand actions. As K. was still beating the drum, I switched the setting to 138 beats per minute and told her to match these faster clicks. She did well with her hands

separately, and excellently when both hands beat the drum together. But, when she used alternate hands, her beat was slightly behind and then ahead of the clicks, a marked desynchronization of her hands as they beat the drum. When I set the metronome at 184 beats per minute, K. immediately returned to the tempo of 120 beats per minute.

After much research in the children's clinical records, it was found that the students who had great difficulties in the various tempo settings were either seriously retarded or suspected of having a fixated personality disorder. Although there were a few exceptions who performed the experiment perfectly, the subjects were extremely musical and could not be placed in the same category.

I felt that in K.'s case, since she was now sensitive to the main rhythmic beats, she could be brought to a much higher level of musical experience, which would bring her to broader functioning capacities.

SIXTH SESSION
(One Month Later)

To explore K.'s rhythmic range in greater detail, I introduced a pair of drum sticks and a larger drum for her to use, as I improvised on the piano. I began playing polychords, mixed with traditional harmonies, at the rate of 120 beats per minute, and asked her to beat the drum. At first she was very uncomfortable and rested the sticks on the drum. But after much coaxing, she followed the beat perfectly, using both hands at the same time. To determine how much conscious listening K. was responding to, I periodically stopped playing. At first she continued beating, but after I repeated the stopping patterns, K. also would stop. I then went through a series of tempo marks from 88 to 160 beats per minute, which she followed correctly. She responded excellently to dynamics, accelerando and ritardando, which surprised and excited her. When I played slower than 88 beats per minute and faster than 160 beats per minute, she rebounded approximately to 120 beats per minute.

To expand K.'s rhythmic range, I began playing simple patterns using triplets and eighth-quarter notes with the whole tone scale and rhythmic patterns to give K. a new experience in tonality; also to make her aware of the slower and faster tempos. After much work, I got K. to beat as slow as 60 beats per minute, and as fast as 180 beats per minute without any rebound in tempo.

K. now seemed to be experiencing satisfaction with her efforts in the musical activity. K. had now

formed a real interest in the external stimuli (piano and drum). She was not only responding to the stimuli, but she was relating freely without the encumbrance of dissatisfaction and fear that was so apparent in her past.

SEVENTH SESSION
(One Week Later)

K.'s fixated personality was stimulated and was now forming into an entity that would be amenable to the continuance of ego development. But, if it were to reach any further heights, she would have to have inter-personal relationships which individual music therapy could not offer. I felt it necessary for her to have group musical experiences with her peers. If she could function and relate in this setting it would be possible for psychological and psychiatric testing to be administered, which tests had proved inconclusive at the time of her enrollment.

I brought in two other students who were in her class and who enjoyed and performed well in musical activities. I began playing the piano and asked them to sing "Alouette," but K. only listened with her original timidity. Even as I coaxed her to sing, she would not respond verbally; only nodding refusal. I told the new students to stop singing and I began to sing K.'s name to the song. She smiled and nodded her head, as if she were now ready to sing. At first, she sang sporadically, but after a few repetitions, she sang the song in its entirety. I nodded my head for the other children to join in as K. was singing. She was at last performing a musical activity in the presence of others who were also taking part. She lost all fear and became an active singing member of a group while enjoyment and pleasure were prevailing. We continued to sing for ten minutes, as each member sang separately. When it was K.'s turn to sing, a happy bright-eyed, smiling girl had emerged in anticipation.

K. was quite willing to sing "Clap Your Hands" in the presence of her two peers as they joined in the singing. We went through many verses for ten minutes, without any fear, frustration, or refusals to sing. She became excited by the sound of her voice, and enjoyed the children's performance. A measured development had evolved since her first session, which is seen quite vividly in this session.

EIGHTH SESSION
(One Week Later)

At this time I put K. in her regular class of eight students. I put the tape recorder on and began to sing a good morning song[7] to

the class, using the name of a student with each verse. Each child responded when his or her name was mentioned by singing "good morning." When I sang K.'s name, she smiled and sang happily, "good morning." After concluding that song, I played three other songs that were also brand new to the class and to K. The songs were: "Toodala" (a lullaby), "Frog Went A Courting" (a folk song), and a song which I had written to be sung in a play called "A Simple Thing." K. not only sang the songs with the class, but also sang solos with complete confidence and vocal clarity. Her peers were so astonished at K.'s participation that they complimented her on her singing. This delighted her, and she smiled warmly.

OBSERVATIONS BY EDUCATIONAL STAFF AT THE CONCLUSION OF TEN WEEKS OF MUSIC THERAPY

Mathematics—"This youngster is doing absolutely nothing in the mathematics area; she is in Book One and will probably never go any higher. To encourage her even to make a single figure in her workbook, the instructor must be sitting beside her, guiding her every movement. She never utters a word in class and sits virtually motionless until time for the next class period."

Language Arts—"K. has shown measurable improvement in my classroom since September. She will now answer when spoken to and is always willing to help whenever called upon to do so. I believe there is something there to work with, even though we still have a long way to go."

Home Economics—"K. has displayed a definite improvement in this area. She has learned how to knit and do a simple basting stitch, but while working on a project, she will hesitate to go on by herself without verbal encouragement. She enjoys cooking and is surprisingly capable and compulsively neat. She is verbalizing more and displays a sense of humor."

Arts and Crafts—"Although there has been much improvement in K., one must describe her as a very withdrawn, placid girl who seeks no relationship. She rarely speaks—when she does, it is coherent. Her voice is very light and gentle. One feels she is much more aware and discriminating of her environment than her action in it reveals. One also catches glimpses of humor. K. requires much personal attention in order to participate. This year her group of eight requires much help and attention—one wonders whether one could have given more— and,

or whether the environment isn't too competitive for her now—that she might attempt to reach out."

Recreation—"Recently K. has become more loquacious with her peers and has a nice relationship with a few of them. Her inhibitions have become less, as she will now allow herself to touch others in a sign of affection, and will respond verbally to a question. Once she initiated a conversation with questioning. All her leisure time is spent watching television. She has a keen sense of humor. Through encouragement, she has participated in roller skating, sledding and ice skating. She frequently engages in short conversations with me, and seems eager to be talked to."

REMARKS

K.'s progress in therapy was due to close observations, applying and modifying techniques to responses in each situation. Music therapy was vital in strengthening of K.'s inner life. The manifestation of her verbal and physical expressions resulted in her becoming an eager participant in group activities with joy and satisfaction.

Though only a few techniques were used in K.'s sessions, it is highly important to have a vast amount of material and techniques to be used, as each child is an individual and no one technique can be used to fit all needs.

In my first observations, I saw a compulsive, nervous child; timid and fearful of her surroundings and of personal relations, but who could be seen smiling in response to humor. She could not function adequately in any program because of these severe difficulties. The only verbal communication I noticed was directed to her dolls, which seemed to be her only outlet for emotion.

Her compulsive rocking of 120 beats per minute, led me to believe that I could, perhaps, relate to her through this tempo by improvising various harmonies and melodies, then varying the tempo to develop a conscious listening ability.

Her response to the vibration of a bell in the first session made me feel that special harmonies; i.e., polychords and tone clusters could be used in breaking through her barriers.

Her positive reactions to humor when I sang, substituting the names of her dolls for real children's names, showed me that she was attentive and aware of the situation. Since in the past she had never spoken of her dolls to another male staff member, her doing so with me indicated that she was enjoying this new experi-

ence, displaying both delight and trust.

Since she was stimulated by humor, humorous lyrics set to music gave her delight and prepared her for singing. Her acute awareness of the words led her to respond overtly with hand and facial movements. She also had a capacity for remembering complete verses and relating them with great pleasure and extremely good rhythmic coordination.

With the use of a metronome, I found that she had a good performing rhythmic range, which would enable her to become free in all musical activities. This wide functioning rhythmic range could also promote functioning capacities in other areas; i. e., recreation, art, dance, and especially taking part in small drama productions.

K. had achieved fine results from individual and group music therapy. She was now participating in group work which had been developed an impossibility prior to the therapy sessions. She had also pride in her work and a desire to please others as well as herself in its performance.

K. was now communicating with most of the educational staff and with some of her peers. Although still shy and withdrawn, a seemingly refreshing and positive K. was noted, with an enthusiastic desire to be a part of a world which was formerly shut off.

It has been demonstrated, I believe, that music can help the withdrawn or fearful child establish trust in himself, as well as trust in others, thus helping the child discover a whole new world of pleasurable and meaningful experiences.

It is axiomatic that music stimulates and sedates, according to the emergent needs of the child i. e., aggressive or overactive, passive or withdrawn. This knowledge of music's usefulness is paramount in the planning of a good therapeutic program, directed toward stimulating personality growth and meaningful achievement.

The field of music therapy is still in its youthful and evolving stages. Hopefully, through techniques and experiments which will lead to new and revealing discoveries, we may bring ourselves closer to a wider scope of meaningful treatment in the never ending battle with mental illness. □

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