A HISTORICAL STUDY OF MUSIC THERAPY

by

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INTRODUCTION

History records the long persistance of musical therapy not only as a belief, but as a constant practice. Music permeates every phase of primitive life, the secular and the sacred. It is never purely for aesthetic and emotional enjoyment, but is primarily associated with cures both physical and social.

Ever since Biblical times when David played his harp to soothe the ailing King Saul, up to the present day, men have used the power of music in healing.

Throughout the ages, the therapy of music is found in two categories -- magic and scientific. In the magic category, the healer believes that it is possible to cure by means of songs and/or dances which possess supernatural power. Scientific therapy employs music in rhythm to obtain characteristics and experimentally verifiable physiological and psychological effects which contribute to the patient's well being.

There are four existing theories of musical therapy. The animistic theory stresses the supernatural power of music to overcome gods and spirits as evidenced by primitive practices, myths, and magic. The metaphysical theory is based upon the philosophy of Pythagoras which states

that all good things are expressions of numerical harmonies and assumes that the healing qualities of musical tones are due to their regular periodic vibrations.[1]

A similar but more modern version of this numerical harmony is found in the work of Corrinne D. Heline who states, "Every organ of man's body temple has been fashioned by the creative rhythms of the starry Hierarchies. The utterance of musical harmonies depends upon the tonal concord of planets which make it. The twelve semitones of the octave are a perfect replica of the twelve-powered cosmic scheme."[2]

The physiological theory concludes that music arouses the emotions which in turn release internal secretions in the body that aid in healing. Music arouses emotions and passions, according to the psychological theory, which agitate or pacify the nervous system to produce a healthy reaction. Modern science tends to favor the physiological and psychological aspects and the results of experiments will be discussed in Chapter II.

Although this study is primarily concerned with the triumph musical therapy has made in the field of mental pathology, some notation of its influence in other spheres

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[1]Diserens, Charles M., THE INFLUENCE OF MUSIC ON BEHAVIOR, p. 91.

[2]Heline, Corrine D., HEALING AND REGENERATION THROUGH MUSIC, p. 11.

must be made. It is interesting to observe that in other fields, too, the effect of music on the mind is apparent.

Veterans hospitals and institutions for the cerebral palsied, crippled and paralyzed patients use music as the pleasant accompaniment for exercise necessary to rebuild muscles. Slow, painful calisthenics are more tolerable under the influence of music and can acquire more rapidity when the tempo of the music is increased, thus bringing about muscular flexibility and strength and the feeling of accomplishment to the patient.

Music in industry is found among primitives who toil to the accompaniment of crude music, usually vocal, and seem to be unable to work without its aid. Trade songs or work songs of all occupations increase the workers' efficiency. Rowing songs, sea chanties sung by sailors, marching songs, etc., whether by jest, abuse, or reference to familiar scenes and loved ones, increase the will to work and uphold this theory.[3]

Bucher contends that each trade has its natural music. When the natural tone rhythm is absent or inadequate, it may be strengthened by the use of rhythmic music. Work will naturally tend to be performed in a rhythmic way and this will relieve the attention of workers otherwise obliged to concentrate on their tasks. By reducing fatigue,

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[3]Diserens, Charles, M., op. cit., p. 112.

productivity is increased and self satisfaction with a job well done is the result.[4]

Experiments conducted by Doctors Fere, Scripture, and Tarchanoff show that music increases or decreases muscular fatigue.[5] It was found that with the thumb-and-finger grip the greatest pressure that could be exerted was nine pounds. When 'Giants Motive' from Wagner's "Rheingold" was played, the grip pressure was ten pounds. 'Slumber Motive' from "Valkire" reduced the grip power to seven pounds. Thus music tends to reduce or delay fatigue and increase muscular endurance.[6]

Because music speaks a universal tongue, it appeals to all peoples. It has the inimitable quality of bringing repose and confidence to people when they need it most. This was clearly demonstrated during World War II when the victory theme of Beethoven's Fifth Symphony was transmitted to the world to give courage and hope to overcome hysteria and sorrow.

Why does music give us courage? Doran Antrim answers the question thus: "The reasons are physiological and psychological. It has been found to quicken and steady the

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[4]Ibid, p. 121.

[5]Gilliland, Esther G., "Music in the Treatment of the Sick", HYGEIA, 22: Dec. 1944, p. 896.

[6]Podolsky, Edward, "Physical Effects of Music", LITERARY DIGEST, Oct. 13, 1928, p. 83.

pulse beat, to induce deeper breathing, and to influence the internal glands. Psychologically, it substitutes hope for discouragement and depression. Music gives hope to replace hopelessness."[7]

There are approximately 500,000 patients in our State Mental Hospitals.[8] It is generally believed that from one-third to two-thirds of all the people seeking medical care today are suffering from some type of emotional or neurotic disturbance. Psychiatry is well aware of the contributions that frustration, tension, dissatisfaction, and conflict in the modern world are making toward mental illnesses. It is evident that the increase in population will, undoubtedly, mean an increase in the number of mentally ill and will create an even greater need for personnel trained to care for them.

Among a learned few and in various sections, musical therapy and its application is accepted, utilized, and praised. To many people, however, it is an unknown quantity. It is often regarded as a brand new idea, a new field, or a new fad with a dubious outcome. Except in the areas where established plans for the use and in-training of musical therapeutics has been incorporated in hospitals and college courses, a student, or potential therapist, has difficulty in

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[7] Antrim, Doran, K., "Music and the Battle of Life", ETUDE, 61: Nov. 1943, p. 754.

[8] JOURNAL OF NATIONAL ASSOCIATION OF RECREATIONAL THERAPISTS, Vol. V, No. 1, Feb. 1954, p. 13.

readily securing information concerning this education.

These false concepts and the lack of information available present the dual problem of this study and must be corrected if therapeutic music is to continue serving mankind. The two-fold purpose of this study is to present a historical review of music therapy and to interest conscientious students to train themselves for service in this field.

The magnitude of scope, procedure, and benefits of music therapy were noted by the writer while attending the American Association of Rehabilitation Therapists Conference held at the Edgewater Beach Hotel, Chicago, Illinois, September 8-11, 1953. Membership was established in the National Association for Music Therapy to acquire current information. A national survey was made by the author of all state mental hospitals to determine the extent of music therapy now in progress. The results of this survey and the purposes and organization of the National Association for Music Therapy will be found in Chapters III and IV.

The method of observation of music therapy is purely historical and factual. No attempt shall be made to prove or disprove any existing theory or experiment. The writer concedes that music is a help in treating mental patients and that any aid to better health deserves every consideration.

Chapter I

MUSIC THERAPY THROUGHOUT HISTORY

Musical therapy in its conception and utilization is indirectly evidenced in the archaelogical study of prehistoric times and dates directly from the earliest periods of recorded history.

Formulas inscribed on the walls of the funeral chamber of King Ounas (perhaps 3000 B.C.) were intended to guard the king from snakebite and appear to be rhythmic examples of magic chant.[9]

Primitive man believed that music gave him power over gods and evil spirits who caused his diseases and misfortunes. Music enabled the healing-practitioner to assist the patient in desiring recovery.

Old mythology offers many interesting sidelights on the belief of the powers of music. Throughout the legends of all peoples are tales of men and animals moved by or impowered with musical magic to overcome all obstacles.

Among the most ancient historical peoples, music was primarily a magical function. The first musicians were technical experts, so to speak, who were called upon to

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[9]Hughes, Charles W., "Rhythm and Health" in MUSIC AND MEDICINE ed. by Schullian and Schoen, p. 171.

benefit their group or to cure individuals. Musical magic usually in song form and often to the accompaniment of crude instruments was employed to induce cures.

Whether these myths and magic rituals were cure-alls is irrevelant. The fact remains that they contribute their quota toward the proof that music does have a profound effect upon the human organism.[10]

Ancient Egyptians credited music with the power to overwhelm their gods. The Persians regarded music as an expression of good principle and attributed many cures to the sound of the lute. The Greeks were so impressed by the therapeutic value of music that they named Apollo the god of music and healing.[11]

How deeply the principles of music had penetrated the medical practice of the ancients is illustrated by the reference to Herophilus, the famed Alexandrian physician. He is reported to have observed the arterial pulsation according to the musical scale and the age of the patient.[12] It has also been established that in 2000 B.C. there was at least one temple in Egypt where those suffering with melancholia found recreation and engaged in some pleasurable

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[10]Diserens, Charles M., op.cit., p. 41.

[11]Ibid, op.cit., p. 80.

[12]Meinecke, Bruno, "Music and Medicine in Classical Antiquity", in MUSIC AND MEDICINE, p. 68.

occupation.[13]

Polybius (204-122 B.C.) stated that the Arcadian government made music education compulsory and ordered its citizens to assemble once a year in the public theatres to dance and sing to the sound of the flute. To this practice, over a period of years, was attributed the eventual refinement of the Arcadians, their charming manners, fine complexions, gentle customs, and sweet dispositions.[14]

Evidence found in the works of both medical and non-medical authors of Greece and Rome verifies the acceptance of music as a therapeutic agent. They invoked the virtues of music to dispel disease and advocated that a down cast spirit with its resulting fatigue could predispose the body to susceptibility; a relaxed frame of mind could strengthen resistance.[15]

Pythagora's doctrines were that order, proportion, and measure were the essence of life. He believed that if one enjoyed music daily it would contribute to one's health. "Therefore, he investigated the physics of sound and discovered the basis of music from the monochord by means of which he fixed the ratios of his perfect musical consonances, namely, the octave, fifth, and fourth intervals. These are

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[13]Hoswell, Ernest B., "Art in Treatment of Mental Illness", HYGEIA, 22: Dec. 1944, p. 893.

[14]de Horvath, Felice, "The Greeks and Musical Therapeutics", ETUDE, 63: Sept. 1945, p. 524.

[15]Mienecke, Bruno, op.cit., p. 65.

still the fundamentals of our tonal system today."[16]

Plato believed that music was bestowed on man for the sake of effecting harmonious revolutions of the soul whenever its rhythmic motions were disturbed. When the soul lost its harmony, melody and rhythm must be used in restoring it to order. He advocated that music be used as an ennobling educational instrument promoting self control.

Aristotle viewed music as having three functions: first, a source of recreation and pleasure; second, a source well suited to the intellectual use of leisure; and third, a powerful, ethical force in building character. "Therefore, it is an important factor in achieving intellectual virtue, which is the ultimate end of education."[17]

Plutarch held to the general belief that among various genera of music, the chromatic exhilarated the mind, whereas the harmonic composed it and that in a similar manner, the harmonious instruments recorded in song the joy and grief of human experiences and reproduced judgement and feeling in those who used them.[18]

Cicero asserted that there was nothing so kindred to human feelings as rhythmic cadences and musical sounds by which man is stimulated and inflamed, soothed, and brought

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[16]Ibid, p. 56.

[17]Ibid, p. 59.

[18]Ibid, p. 65.

into a state of sorrow or cheerfulness. He showed an insight into the problem of mental health by contending "the mind rules the body and the body is in good health when its judgements and beliefs are in harmonious accord."[19]

During the thirteenth century the Arabs dominated a large part of Europe and founded hospitals. A striking feature of some of these institutions was a music room where musicians played constantly for the sick.

When the dancing mania known as St. John's or St. Vitus's dance swept over Europe from the thirteenth to the seventeenth centuries, music was the principle therapeutic agent employed as a means of hastening the crisis of the disease. Evil demons were believed to have caused the dancing epidemics which were characterized by violent convulsions, screaming, and frenzied leaping about. It is said that musicians were hired by German magistrates for the purpose of carrying the dancers more quickly through their attacks. In Italy, the bite of the tarantula was blamed for the disease which was called tarantism. Its cure was undertaken by bands of traveling musicians. The modern tarantella still survives as the outgrowth of the music adapted for the treatment of this malady.[20] Musical therapy popular in antiquity received its test of faith during the Middle Ages in the treatment of

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[19]Ibid, p. 65.

[20]Deserens, Charles M., op.cit., pp. 82-83.

tarantism and evidently succeeded. Renaissance and early modern authors write confidently of its medical virtues when referring to the subject.

The effect of music on the mind was recognized during the Renaissance. Tommas del Garbo advised that sorrow, anger, and worry be shunned, that sound imagination should be maintained, music enjoyed, and the pleasures of life upheld to support a healthy state of mind. Zarleno admitted that melody, harmony, and rhythm could have the power to affect the mind and induce passions. He compared these passions with the modes of music. For example, the Phrygian mode excites anger, the Mixolydian induces sadness, and the Dorian produces stability and temperance.[21]

According to Nathan and Dupre, the positive history of music therapy dates from the essays of Allbrecht published in 1743. Literature based on authenticated cases of cures with music was augmented by physicians' records which confirmed its favorable influence in delirium, hysteria, the plague, and epilepsy. Music also was prescribed for sciatica, gout, and even stupidity. Reference to much of this material can be found in the records of the Paris Academy of Science.[22]

Many physicians and philosophers of this period declared their belief in the therapeutic power of music, especially in

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[21]Carapetyan, Armen, "Music and Medicine in the Renaissance and in the 17th and 18th Centuries", in MUSIC AND MEDICINE, pp. 130-131.

[22]Diserens, Charles M., op.cit., p. 85.

the field of mental pathology. Jean Bodin (1606), Thomas Willis (1670), Richard Brown (1729), to mention a few, have stated their findings regarding the benefits of music to mankind.[23]

In a sense, music therapy was used to heal Americans long before the Europeans landed on these shores. The American Indian employed music to heal wounds and cure ills.

Miss Frances Densmore has made an extensive study of the songs and dances used in healing by the various tribes who inhabited this country. These primitives believed that music gave them power over the evil spirits who caused disease. Treatment of the native Arizonian is interesting.

Owl Woman lived at San Xavier and treated sickness with songs imparted to her from spirits. Two of these songs were supposedly received from the spirit of a man killed near Tucson. Another Papago, Jose Panco, treated the sick for twelve years with songs accompanied by gourd music. Charles Wilson, Yuma Indian doctor, was noted for employing music in the treatment of gunshot wounds.[24]

Florence Nightingale, the English nurse who is remembered for her work with the wounded of the Crimean War and for the organization of the first Training School for Nurses, declared that instruments capable of continuous sound had a beneficial,

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[23]Ibid, p. 86.

[24]Densmore, Frances, "The Use of Music in the Treatment of the Sick by the American Indian", in MUSIC AND MEDICINE, pp. 25-45.

soothing effect upon the sick.[25]

Music proved its worth as a therapeutic medium during World War I. Margaret Anderton conducted music therapy experiments among Canadian soldiers during 1918. She advocated music for any form of war neurosis and claimed, "Some of the cures seemed little short of miraculous -- and it depends on the definition of the word miracle whether they are short of it."[26]

Major Fred W. Mott, reporting on music therapy in the Fourth London General War Hospital, stated that music is more powerful than any other agent when an attempt to arouse the patient's interest is made. Music helps to recall familiar sights and sounds that cause patients to react along lines of long formed habits. "Fixation and organization of repeated experiences in the mind are shown by music, for a song that has been sung a number of times only requires the first word or note for it to be continued to the finish without any effort of consciousness; the last note or word uttered serves as the appropriate stimulus of the next; as by an instinct we have what is termed a chain reflex."[27]

Therapeutic music proved its efficacy in World War II.

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[25]Diserens, Charles M., op.cit., p. 101.

[26]Heline, Corrine D., op.cit., p.19.

[27]"Music for Shattered Minds", LITERARY DIGEST, 52: June 1916, p. 47.

"It was during the second World War that the greatest progress was made in army hospitals under the regime of Colonel Howard C. Bronson, Chief of the Music Branch of Special Services." When the Veterans Administration reorganized their hospitals, music therapy was included in their programs, thus showing governmental endorsement of its uses.[28]

The historical material available concerning the value of music in healing has been presented. Man's need for music and his application of its rhythmic force in curative processes continue with knowledge gleaned from physiological and psychological experiments contained in the following chapter.

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[28]Gilliland, Esther G., "Preface" to MUSIC THERAPY 1951, p. vii.

Chapter II

PHYSIOLOGICAL AND PSYCHOLOGICAL EXPERIMENTS IN MUSIC THERAPY

Before beginning the review of the physiological and psychological experiments conducted and the theories which pertain to the influence of music on the human organism, one should consider the why and the how of these effects. Dr. Ira M. Altshuler gives an interesting and informative explanation. According to Dr. Altshuler, music lends itself to therapy because it meets with little or no intellectual resistance and does not need to have logical appeal to initiate action. The meaning of spoken words appeals to the master brain and there must be no resistance or inhibition on the part of the master brain to initiate action. Man cannot remain aloof to music because the tone and rhythm of which music is composed have a strong affinity for living organisms. Man's cerebral hemispheres are in a perpetual state of rhythmical swing. The slightest change in the body causes a change in brain rhythm.

Various brain centers, the hypothalamus, the thalamus, and the cerebellum, in addition to the cerebral hemispheres and the master brain, take part not only in metamorphosing tone and rhythm into music, but in giving it an emotional and mental content. The hypothalamus exercises influence upon the physiological processes -- metabolism, sleep, bodily

rhythms, etc. It is connected by nerve pathways with the thalamus and, through it, with other brain centers. The thalamus, which lies below the master brain, is a subcortical brain center consisting of gray matter. It is the main relay station of emotions, sensations, and feelings. The theory is held by Dr. Altshuler and his colleagues that even aesthetic feelings are relayed by the thalamus to the master brain. The stimulation of the thalamus almost simultaneously arouses the master brain. Once the master brain is aroused, it sends impulses back to the thalamus and so a reverberating circuit is set in motion.

Music does not depend upon the master brain to gain its entry into the organism, but can still arouse by way of the thalamus -- the relay station of all emotions -- sensations and feelings. Once a stimulus has been able to reach the thalamus, the master brain is automatically invaded and if the stimulus is continued for some time, a closer contact between the master brain and reality can be established.[29]

There are nervous and mental patients who cannot be reached through the spoken word, that is, through the master brain. Because these patients are either inattentive, distractible, confused, depressed, hallucinated, or in a state of anxiety, verbal contact is next to impossible with them.

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[29]Altshuler, Ira M., "A Psychiatrist's Experiences with Music as a Therapeutic Agent", in MUSIC AND MEDICINE, pp. 266-274.

That temporary contact with music can be made with these mental patients is seen from the fact that they will tap their feet, sway their bodies, or nod their heads in response to music. These responses are known as thalamic reflexes and, when the music tempo is changed, the tempos of these reflexes are correspondingly affected.

Music also leaves a memory not only in the mind but in the emotional sphere and, because it is more firmly implanted in their systems, is more easily recalled by mental patients than anything else. Certain tunes and words may bring about associations of familiar things to these patients and often makes them more accessible to further outside stimuli.[30]

A. E. M. Gretry (1741-1813) in experimenting with the effects of music on the heart and circulation of the blood is generally credited with reporting the first observation on the physiological effects of music. Gretry placed three fingers of his right hand on the artery of his left arm and sang to himself at a tempo in accord with the action of his pulse. A little later he sang with great ardor and in another tempo. He felt his pulse quicken and slacken its action to accommodate the degrees of the new tempo.[31]

In 1880, Doigel conducted experiments of the influence of music on the circulation of the blood. The general con-

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[30]Ibid, p. 129.

[31]Diserens, Charles M., op.cit., p. 126.

clusions of his studies are: music does exhibit an influence on the circulatory system. The oscillations of the blood pressure depend chiefly upon the influence of auditory stimuli and the medulla oblongata. The respiratory changes agree with variations of the circulation.[32]

Increase and decline in the extent of knee-jerks were observed in the experiments conducted by Lombard. As the music approached and receded, the amplitude of the knee-jerks varied distinctly with the intensity of the auditory stimulus. The average knee-jerk at 7:00 p.m. was 32 mm; at 11:00 p.m., 29 mm; and the normal, about 30 mm at 10:30 p.m.[33]

Eugenio Tanzi experimented on the reaction time for major and minor chords. He concluded that minor chords produce reaction more rapidly than do major chords.

Dr. Dutto contends that music acts as a stimulus to organic metabolism and correlates Dr. Tarchanoff's experiments which found that some animals, when subjected to music's influence, consume more oxygen and eliminate more carbon dioxide. Tarchanoff also found that music influences the activity of the cutaneous glands of the body.

In 1899, Dr. Herbert Dixon reported a repetition of the experiments of Doigel and found similar results. He also mentioned the physiological effects of music on perspiration,

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[32]Ibid, p. 129.

[33]Podolsky, Edward, op. cit., p. 82.

crying, and remarked on the fact that music seldom makes a subject laugh.[34]

The acceleration of respiration and the decrease of its regularity under musical stimulation are reported by Doctors Binet and Courtier.[35] In a series of experiments, isolated tones, chords, and musical exercises possessing no intellectual or emotional associations were used; these sensorial stimuli produced no respiratory modification. Musical selections arousing emotional associations varied according to the introspection of the subjects. Sad melodies produced irregularities and accelerated respiration by 2.6 while gay military tunes showed an acceleration of 3.8 and less tendency to reduce amplitude.[36]

In a study of musical enjoyment, H. P. Weld found that the heart rate was usually quickened during the first few seconds of listening to music and that this tempo persisted throughout the music.[37]

Scalapino and Hyde investigated the influence of music upon electro-cardiograms and blood pressures. They found that minor tones increase pulse rates and stirring music increases pulse pressures.[38]

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[34]Diserens, op. cit., p. 145.

[35]Gilliland, Esther G., op. cit., p. 896.

[36]Podolsky, Edward, op.cit., p. 83.

[37]Diserens, Charles M., op. cit., p. 151.

[38]Ibid., p. 153.

Charles Diserens has made numerous experiments on the effect of music on the human organism. He found that efficiency, measured by average work accomplished, was increased 70% and fatigue reduced 50% when stirring music was played; soothing music showed a 60% increase in efficiency and a 40% reduction in fatigue. Under the influence of music there was noted an increase in the size of handwriting but only an occasional effect on the speed. Music, either fast or slow tempo, increased by 25.2% the rapidity of voluntary movement. Involuntary movements of striped muscles are also increased by music. Acting as a distracting factor, music has the tendency to reduce the extent of illusions. Diserens states that music also influences the electrical conductivity of the human body.[39]

The psychological nature of man demands order and accent. A uniform pulsation or beat is the fundamental basis of rhythm; the heart measures its beat in a fairly uniform fashion, and we breathe, swing our arms and walk at a uniform pace. Music is its own metronome. An increase in coordination between the mind and music brings an automatic increase in satisfaction, both musically and rhythmatically.[40]

Music supplies the mind's natural predilection for order because it consists of ordered intervals of sound and

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[39]Ibid., pp. 155-205.

[40]Hughes, Charles, op. cit., p. 183.

time. This unique art is credited with superior therapeutic value because it is the most feeling and intimate of all the arts. There is nothing more intimate to man than his feelings and the feeling man has for music is his and his alone.[41]

The chief psychological attribute of music is to command, and increase the span of attention. Severe mental derangement makes concentration difficult and, in many cases, music is the only agent which will attract attention.[42]

"Dr. Walter Kluge, Berlin psychoanalyst, found that when a patient was struck with a melody, he could repeat it until the patient would abandon all resistance. The sounds were repeated until the patient was unable to resist their influence. To prove his theory, Dr. Kluge invited interested persons to a session. They heard music played on a harmonium so constructed as to imitate tone qualities of different instruments. Little series of sounds tormented, excited or obsessed the mind. Repetitions of certain melodies had effects. It is easy to understand how this method used in solitude and atmosphere of analytic setting must produce effects on persons inaccessible to any other kind of influence".[43]

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[41]Schoen, Max, "Art the Healer", in MUSIC AND MEDICINE, p.405.

[42]Gilliland, Esther G., op. cit., p. 896.

[43]Brandt, A., "Music in Psychoanalysis", LITERARY DIGEST, Oct. 1932, p. 25.

Experiments conducted at the Psychopathic Hospital in Iowa prove that patients were up and had completed their simple tasks before breakfast fifteen minutes ahead of schedule when gay wake-up music was played. When soothing music was played at bedtime, most of the patients were asleep twenty minutes after the music began; the others were relaxed and enjoying their solitude. When stirring music was played at bedtime, the wards were noisy and unsettled for a long period past the scheduled hour. When music was omitted, the patients begged for more music to help them sleep.[44]

Music is used as an aid to calm excited patients under hydro-therapy treatment. Specially selected music proved to be 35% more effective than the wet sheet pack.[45]

Robert F. Unkefer, assistant director of adjunctive therapy at the Menninger Foundation, recently conducted an experiment in an attempt to ascertain the effect of music in insulin coma therapy. His findings indicate that the patients subjected to his study appeared more relaxed in the pre-coma phase when the sedative music was played than without it. He also states that music at the end of treatment was considered highly desirable. It is noteworthy that the music program suggested by Mr. Unkefer was considered to be

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[44]Pownell, Dorothy A., "To Soothe the Savage Breast", LADIES HOME JOURNAL, 62: May, 1945, p. 171.

[45]Gilliland, Esther G., op. cit., p. 896.

of enough value to be continued as a regular part of the treatment routine.[46]

Willem Van de Wall in his experience with therapeutic music lists three phases of music in reconditioning the mentally ill and the objectives of these phases. Active participation in a musical program, either solo or group, is best because the patient, in becoming a part of the program, becomes a part of the group and forgets his own problems. The objectives of active participation are that it assists in social adjustment, acts as a safety valve in releasing emotions, stimulates timing and awareness, and is a definite morale builder. When patients refuse to take an active part in a program but still listen for some purpose, this passive participation is beneficial because these patients often discuss the merits of the music or performers. When the patient's resentment, fixed or real, is overcome, he very often becomes an active participant. Passive participation also assists in social adjustment and utilizes music as a hobby because even those unable to play or sing still derive benefits. These patients' passive response often leads them to a feeling of well-being that eventually leads to their taking part in the program. In audio-reception the patient just listens to music but refuses to respond to it. This phase is equally important because it gives patients

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[46]Unkefer, Robert F., "The Effect of Music in Insulin Coma Therapy", in MUSIC THERAPY 1951, p. 186.

the pleasure of listening to music they enjoy hearing, supplements educational activities which may be otherwise uninteresting to them, and provides entertainment for them.[47]

A few years ago the New York Works Progress Administration conducted experiments testing the value of various types of music for mental patients. The tonic group included light, romantic songs, folk tunes, familiar airs, rhymes, etc. Marches, rounds, and polkas were classified as stimulant music, and sedative music included lullabies, largos, etc.[48]

Harriet Ayers Seymour, chairman of the Music Division of the Hospital Visiting Committee of New York, prescribed the following for soothing persons suffering from mental and nervous disorders: rhythmic folk songs, songs of Stephen Foster, Spanish tangoes, Brahms' Hungarian dances, Sousa's marches, Strauss' waltzes, Gilbert and Sullivan compositions, "Indian Love Call", "My Wild Irish Rose", "Wishing", and "Estrellita".[49]

Music, when it stirs and moves the hearer, has two important effects -- it attracts his attention and he forgets himself. It also creates within the listener an emotional response appropriate to the mood of the music and has helped countless men and women. For many it has been the connecting

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[47]Van de Wall, Willem, "Music in Hospitals", in MUSIC AND MEDICINE, pp. 295-316.

[48]Pownell, Dorothy A., op. cit., p. 72.

[49]Heline, Corinne D., op. cit., p. 20.

link from unreality back to reality and for others it has made the physically unbearable a little more tolerable.

As is evident to the reader, many of the physiological aspects of music remain virtually unexplored, and there are many opportunities for research in this field. As stated in the introduction, the writer wishes to present existing theories and experiments without necessarily accepting or rejecting any of the material reviewed. An organization has been founded to advance research in this field and the following chapter offers information concerning this group, the National Association for Music Therapy.

Chapter III

NATIONAL ASSOCIATION FOR MUSIC THERAPY

Therapeutic music has been employed to some extent in various mental hospitals throughout the country since 1900, but not until 1944 was a definite course of training established and a need for the program brought forward.

As mentioned in Chapter II, the need for such a program was recognized during World War I and World War II when the beneficial effects derived from music proved its worth as a therapeutic measure.

Pioneers in setting up a course to train music therapists include Roy Underwood, Dr. Ira M. Altshuler, and Dr. T. R. Gruber. Mr. Underwood, Chairman of the Music Department at Michigan State College, proposed a four year course of study leading to a Bachelor's degree, and Doctors Altshuler and Gruber cooperated with the plan by establishing internship at Wayne County Hospital at Eloise, Michigan.[50]

Since this time other institutions of higher learning have recognized the need for furthering the use of music in hospitals and are continually trying to improve the advantages and opportunities for interested persons to find adequate training.

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[50]Gilliland, Esther G., "Preface", MUSIC THERAPY 1951, p. vii.

In June of 1950, staunch advocates of the promotion of the use of music in medical treatment, founded the National Association for Music Therapy. The purposes of the organization are the progressive development of the use of music in medicine, and the advancement of research, interest, and standards of music therapy. The objectives as stated in the group's constitution include those which aid medical treatment most effectively toward patient welfare, improvement, and rehabilitation.[51]

The National Music Council, the Music Teachers National Association, and Sigma Alpha Iota aided and encouraged the efforts of this new group and these past four years have shown a continual growth in the interests and aims of the National Association for Music Therapy.

Many opportunities for discussion on music therapy have been offered by various national organizations and several conventions have been held to further the incorporation of music therapy in medical treatment. The National Federation of Music Clubs has promoted hospital music by furnishing extensive financial assistance in providing instruments and music, and its hospital music workshops have been helpful in training volunteers for work in this field. The number of national organizations that are interested in the progress

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[51]"Constitution of the National Association for Music Therapy", in MUSIC THERAPY 1952, p. ix.

of the association is increasing steadily and the future of the organization is indeed bright.[52]

Realizing the need to set up educational standards and coordinate training courses, the Educational Committee of the National Association for Music Therapy drew up curriculum requirements for music training leading to a Bachelor of Arts or Bachelor of Music in Music Therapy or a Bachelor of Music Therapy degree. These include general education requirements of English, speech, biology, physiology, and humanities. The music curriculum is comprised of basic theory, history of music, piano, voice, organ, class instruments, conducting, arranging, and recreational music. Social studies and psychology make up the professional subjects, and clinical training in an approved neuropsychiatric hospital is mandatory.[53]

The personality of the music therapist influences the results of the therapy he employs and the following traits are considered necessary personal qualities. The music therapist must be of mature mind and be emotionally stable and must have the desire to achieve and the will to overcome obstacles. He needs the ability for leadership which will promote comradeship among patients and must be willing to accept the patient as he is and not as one would wish him to

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[52]Gilliland, Esther G., "Preface", MUSIC THERAPY 1952, p. xix.

[53]"Music Therapy As a Career", pamphlet published by NAMT, 1952.

be. He must understand the basic healing processes in order to carry out a doctor's orders scientifically and successfully. Another important factor is that the music therapist must recognize and evaluate the importance of other therapies to the patient's welfare.[54]

The assistance offered by the association has aided in the establishment of from one to thirty openings for trained music therapists in every state in the union. Salaries range from $150.00 to $400.00 per month with room and board available at a very nominal sum. At the present time, job opportunities are primarily offered in mental hospitals and, with over six hundred neuropsychiatric institutions in our country, it should be some time before the saturation point is reached.[55]

George W. Ainlay suggests that music is not included in all hospitals for these reasons. He feels that doctors search for organic causes of disease first rather than the internal conflict which leads to functional disorders. He is of the opinion that physicians lack the knowledge and understanding of rhythm and sound and the effects of music upon individuals and that musicians lack training for scientific evaluation. Appropriate funds to establish programs are nonexistent, and there is a definite need for more

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[54] Ibid.

[55] Ibid.

personnel trained to understand both musical and medical aspects of healing with a sympathetic understanding of the effects both may have upon the patient.[56]

It has been the writer's intention to mention the work being accomplished by the National Association for Music Therapy and to stress the ever increasing need for interested persons to offer their talents and efforts to carry on the principles and aims of the organization.

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[56] Ainlay, George W., "The Place of Music in Military Hospitals", in MUSIC AND MEDICINE, pp. 322-350.

Chapter IV

MUSIC THERAPY IN OUR STATE MENTAL HOSPITALS

The use of music therapy is applicable to numerous types of physical disorders, but it is with the mental aspect that this study is primarily concerned. In order to determine the extent of the use of music therapy in state mental hospitals throughout the country the investigator sent letters to the health director of each state requesting a list of mental hospitals under state jurisdiction. One hundred forty-eight form letters were sent to the hospitals named by the state officials in the hope of receiving a clear picture of each state's standing with regard to the use of music in their hospital program. One hundred four hospitals in thirty-six states returned the completed questionnaires. The results of this survey are based upon those thirty-six states, or seventy-five per cent of the United States.

A sample form letter is included in the Appendix and a table indicating the results of the survey follows page 33. Numbers found in parentheses throughout this chapter refer to the corresponding column numbers in this table.

It is significant to note that from the information received only four states -- Delaware, Maine, Montana, and Oklahoma -- do not employ the use of music in their programs. Fifty-five per cent of the states replying to the survey

reported that they employ music directors (2).

Programs vary within each hospital, but there are some factors which are common to most. Vocal music ranging from individual instruction and ward singing to choruses and choirs is more prevalent than instrumental music. Of the states responding to the survey seventy-eight per cent have choirs (3), sixty-one per cent reported choruses (4), and forty-two per cent indicated glee clubs (5).

Individual instruction including both vocal and instrumental music is offered in forty-seven per cent of these states (6), and ensemble work is obtainable in fifty-five per cent (7).

Band opportunities are available in only twenty-two per cent of the states replying (8), but twenty-five per cent do afford the advantages of orchestral groups (9). In some institutions these orchestras, comprised of mental patients, furnish music for dancing and singing programs. Eighty-six per cent of all states cooperating reported various types of dancing recreation -- modern, folk, square, and ballroom (10). The music necessary for these activities is quite often gleaned from the patients, themselves. This obvious cooperation between the recreation and music directors is indeed gratifying.

A diversified program of music therapy exists throughout the United States -- fifty-five per cent have a definite therapeutic program in operation (11). Various uses of music

TABLE I

STATES EMPLOYING MUSIC THERAPY

State	1	2	3	4	5	6	7	8	9	10	11	12	13
Alabama													
*Arizona	1		1							1		1	
Arkansas													
*California	8	7	6	5	2	6	7	4	7	7	7	8	7
*Colorado	2	2		4		2	1			2	1	2	
*Connecticut	2	2	2	1	1	2	2	1		2	2	2	
*Delaware	1											1	
*Florida	1		1							1		1	
*Georgia	1		1	1	1					1		1	
Idaho													
*Illinois	6	5	6	5	2	5	5	3	2	6	6	6	2
*Indiana	2	2	1	1		2	2	1	1	2	1	2	
*Iowa	3	3	3	2	2	3	2	1	2	3	3	3	
*Kansas	5	4	5	5	3	3	2	1		4	5	5	5
*Kentucky	2									1		2	
*Louisiana	2	1	2	1			1			2	1	2	
*Maine	1											1	
Maryland													
*Massachusetts	1				1							1	
*Michigan	5	3	4	3	1	3	3		1	5	4	5	4
*Minnesota	7		6	6	2	2	3		3	6	3	7	3
*Mississippi	1		1	1	1		1			1		1	
*Missouri	3	2	2	2	1	1	2	1		3	3	3	1
*Montana	1											1	
*Nebraska	5	2	2	3	2	2	3			3	1	5	
Nevada													
*New Hampshire	1		1						1			1	
New Jersey													
New Mexico													
*New York	20	16	14	18	7	18	17	10	16	20	14	20	
No. Carolina													
*No. Dakota	1		1		1		1			1		1	
*Ohio	4	2	2	1	1	1	2			2	1	4	
*Oklahoma	1											1	
*Oregon	1	1	1								1	1	
*Pennsylvania	5	4	4	3		2	3			5	5	5	1
*Rhode Island	1	1	1				1			1	1	1	
*So. Carolina	1	1	1	1						1		1	
*So. Dakota	1	1	1	1		1	1		1	1	1	1	
*Tennessee	2		1							1		2	
Texas													
*Utah	1	1		1		1	1			1		1	
Vermont													
*Virginia	2		2	1		1				1	1	2	
*Washington	1	1	1	1						1	1	1	
*West Virginia	2		1							2		2	
Wisconsin													
Wyoming													
Institutions	104	61	74	65	28	55	60	22	34	87	62	104	23
States	36	20	28	22	15	17	20	8	9	29	20	36	7
% of States *		55%	78%	61%	42%	47%	55%	22%	25%	86%	55%	100%	19%

* States answering questionnaire

as a treatment as well as a recreational adjunct are finger painting with music, mood music, music for patients awaiting electro-shock treatment, music for relaxing senile patients, music appreciation classes, and music used with insulin shock.

Music may possess therapeutic value even when it is used for recreational purposes, but it can be considered a definite therapy only when its use is prescribed by a physician, psychologist, or other highly qualified specialist. Music per se is not a cure. Its value lies in its contribution to the total program.

The primary aim of all departments in rehabilitation is the resocialization of the patient. Music therapy is used as a tool to this end. Typical ends of music as a therapeutic medium are to reduce opportunity and inclination to surrender to idleness, boredom, and preoccupation, to release emotional tension and provide immediate satisfaction, and to make the best possible use of capabilities, strengthen and enrich taste, develop self reliance and impetus to produce music, no matter how simple. According to the results of the survey, there appears to be agreement upon the fact that melody, harmony, and rhythm promote a sense of well being, restfulness, and an inner sense of relationship with one's fellow man.

It is the unanimous opinion of all persons contacted through the survey that music therapy does contribute directly to the improvement of the patient (12), but only nineteen per cent of the states answering the questionnaire were able to

cite institutions of higher learning in their particular state that offer special courses in musical therapy and/or music direction for mental patients (13). The preceding chapter includes a proposed course of study set up by the National Association of Music Therapy with the purpose of insuring interested personnel a well rounded background and training that they may be qualified to fulfill their task more adequately.

This, then, gives a composite story of the present day status of music therapy as used in our state mental hospitals. This material has been presented objectively and it is hoped that the findings have been influenced in no way by the writer.

SUMMARY

Now that the survey of the material concerning music in healing is completed, it becomes evident that the treatment of this subject can be divided into two parts: a historical review of the use of therapeutic music through the ages, and the account of present endeavors to encourage its utilization for the betterment of mankind.

Both the historical and experimental data investigated point to the influence of music upon the human organism. Ethnological evidence gives the earliest accounts of cures induced by music in legend and myth. The magical aspect of music in healing shows its influence upon the patient to co-operate with the magic-practitioner, thus increasing his will to be cured. The doctrines and practices of the Ancients on through the Renaissance note the trend to link mental stability with health, and prescribe music to achieve this end. Early modern writers record their cures and experiments in this field and make way for more accurate investigation of music's therapeutic force.

The influence of music upon work has been noted, and from experiments cited the fact is brought out that rhythm and tone are effective in speeding voluntary and involuntary actions, reducing or delaying fatigue, and increasing muscular endurance.

The universal appeal that music has to all peoples has been discussed, and the physiological and psychological effects it produces on man explains its inimitable quality.

In summarizing the conclusions made in various physiological and psychological experiments, it may be stated that: music influences the circulatory system, the pulse, and the heart beat; it increases voluntary action, and increases body metabolism and glandular secretions. It accelerates or retards respiration and decreases its regularity, produces a change in the electrical conductivity of the body, and tends to excite many of the psychological conditions required for the genesis of emotion. Music can command attention and increases its span because it need not appeal to the master brain to initiate action but can arouse the thalamus. Once the thalamus is aroused the master brain is automatically invaded and action can be initiated.

The founding and statement of the purposes and objectives of the National Association for Music Therapy presents the modern outlook for music in healing. The educational curriculum proposed by this organization and its statement of personal characteristics and qualifications necessary for music therapists profides valuable data for the interested student.

Results of the national survey conducted of state mental hospitals will give a view of the work necessary in this field and it is hoped that funds will be provided to

bring music therapy to mental patients.

The evidence here presented to verify the use of music for therapeutic purposes throughout the history of the world is proof that music therapy is a time-tested practice with positive results. Therapeutic music is not an unknown quantity, new idea, or new fad with a dubious outcome. It is an age-old field that warrants renewed attention, application, and cooperation.

APPENDIX

The following is a sample form letter which was sent to the 148 state mental hospitals named by the health directors of each state and from which the results as found in Chapter IV were obtained.

Institution: _____ (1) _____

My staff ___(2)___ (has/has not) a music director. Music is employed in our institution in this manner:

choir (3) chorus (4) glee club (5)

individual sessions (6) ensemble work (7)

band (8) orchestra (9) dancing (10)

_____

(comments)

There ___(11)___ (is/is not) a definite musical therapy program in our hospital. It consists of: _____

_____

I feel that therapeutic music ___(12)___ (does/does not) contribute directly to the improvement of the patients.

The following institutions of higher learning in this state offer special courses in music therapy and/or music direction for mental patients: _____

_____.

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