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A Comparison of Music as a Therapy Before and After the 20th Century in America

Chu-En Lin

“Music has Charms to sooth a savage Breast,
To soften Rocks, or bend a knotted Oak.”¹
-William Congreve (The Mourning Bride, 1697)

Ancient history is replete with the idea that music can be used as a therapeutic agent. In the latter part of the sixth century B.C.E., Pythagoras and his followers discovered that the pleasant effects of music came from musical consonances that stemmed from ratios of the fourth, fifth, and octave intervals created by the pounding of different-sized hammers. The idea was similar to dividing a string into segments that have ratios of 2:1 (octave), 3:2 (fifth), and 4:3 (fourth).² In the fourth century B.C.E., Aristoxenus wrote that the Pythagoreans “used medicine for purifying the body, music for purifying the soul.” At around 400 B.C.E., Plato championed that “the intelligent man [should use] music to heal himself when he recognizes that his soul-circuits are out of kilter,” such as when one gets angry.³ In the second century A.D., Celsus mentioned in his eight books on medicine that in order to treat depression, “symphoniae et cymbala strepitusque,” or loud noise and cymbals, should be used.³ And in the Old Testament of the Bible, David the armor bearer was described as calming the mind of King Saul with his harp whenever the king was troubled by a distressing spirit.⁴ The above examples demonstrate that for thousands of years, music has been used to alleviate anxiety; nevertheless, its incorporation into a healthcare setting is comparatively new, at least in America.⁵

An examination of the history of music therapy in the United States reveals a major disparity in the periods before and after the twentieth century, in terms of the number and quality of publications in the field, the extent of the use of music in hospitals, as well as the prominence of music therapy in the undergraduate curriculum. An analysis of each of the three factors reveals how the growth of each correlates with both the growth of the remaining two factors, as well as the societal acceptance of music as a therapy. Perhaps the notion of music as therapy would be met with less resistance if the medical community had an appreciation for the historically established therapeutic benefits of music therapy, as well as its proposed role as *adjunctive* therapy—with no intention of replacing conventional therapies.

Before the twentieth century, only a handful of publications exists on music therapy. Worthy of note is the fact that in the entirety of the eighteenth century, only two articles on music therapy were published in the United States. One was published in the same month in which President George Washington was first elected, and the other a month before the end of his second term.⁶ Furthermore, there was a total of only nine publications on music therapy during the nineteenth century.⁷ As a result, the majority of the sources that include information on the history of music as a therapeutic agent are generally cited from the twentieth century.

Late eighteenth century music therapy can be described as the “expository” stage, or “a time of floating ideas.”⁶ An anonymous first article was published in the same month President Washington was elected in his first term in February. Titled “Music Physically Considered,” the article first referred to Rene Descartes in order to contrast the nonmaterial mind with the mechanistic body, and to further the idea that the mind’s influence on the body is reciprocal. It then referred to Drs. Hermann Boehaave (1668-1738) and William Cullen (1710-90), both physicians who were heavily influenced by Descartes, to expound upon this idea. Even though neither physician made the claim that the mind-body relationship should be applied to medical treatments, the article maintained that music could help balance the healthy state by exciting or relieving emotions. Perhaps the most convincing evidence for the therapeutic effects of music in the article was a case study in which music was used to treat “severe

and debilitating depression of a dancing teacher.”^{6,8} The study, however, was marred by a lack of adequate references. The article ended with a quote from poet John Armstrong’s (1717-95) “The Art of Preserving Health:”

Music exalts each joy, allays each grief,
Expels diseases, softens every pain,
Subdues the rage of poison and the plague;
And hence the wise of ancient days ador’d
One power of physic, melody and song.⁹

Quotes from sources that do not contain much scientific evidence such as the preceding example are not uncommon in works from the eighteenth and nineteenth centuries, as the first scientific journal for music therapy, the *Journal of Music Therapy*, was founded a century later, in 1964.¹⁰ In fact, the first nineteenth century essay on music therapy entitled, *An Inaugural Essay on the Influence of Music in the Cure of Diseases*, contained the same Armstrong quotation in its closing.^{6,11} Perhaps not surprisingly, Edwin Atlee, the author of the essay, asserted that music was most therapeutic in its treatment of mania, which he thought was “the consequences of a delirious or mistaken idea.” The comment on mania was perhaps itself a mistaken idea by today’s medical definitions.^{6,11} Two years after Atlee published his essay, his colleague Samuel J. Mathews wrote a dissertation, *On the Effects of Music in Curing and Palliating Diseases*, and included another quote from Armstrong’s “The Art of Preserving Health” in addition to quotes from Shakespeare and Pope.^{7,12} Between 1840 and 1841, a series of three articles, each entitled “Medical Powers of Music,” was published; all three contained numerous sources from classical Greco-Roman writers to support music as a cure, yet little scientific evidence was provided.^{6,29,30,31} Even in the late-nineteenth century, an article titled “The Medical Uses of Music,” written by George Beardsley and published in the *New England Medical Monthly*, gave only vague and previously documented stories of music treating illnesses.^{7,13}

The articles published in the eighteenth and nineteenth centuries, however, were not entirely without merit. A month before President Washington’s Farewell Address, an anonymous second article entitled “Remarkable Cure of a Fever by Music: An Attested Fact,” was published in the *New York Weekly Magazine*. The article was essentially a case study detailing the disappearance of symptoms of delirium while a musician performed in concert, with symptoms returning immediately after the concert had ended.^{6,14} The study had serious credibility issues if analyzed by modern standards; nevertheless, it is important to understand that during this time the republic was in its formative years, “hospitals were medieval death houses,” and that health-related publications had to compete for limited space in the popular press.⁶ Thus, even though there was an eight-year gap between the publishing of the first and second article in the eighteenth century, these two articles still reflected the interests of the general public in music as a therapeutic agent. In the nineteenth century, a period in which only nine articles regarding music therapy were published, Atlee’s three personal narratives on music therapy in the essay previously mentioned, *An Inaugural Essay on the Influence of Music in the Cure of Diseases*, may have been, according to Professor William Davis at Colorado State University, “the initial first-hand reports of music therapy in the United States.”⁷ Finally, Mathews’ dissertation, *On the Effects of Music in Curing and Palliating Diseases*, provided the basis for what modern music therapists refer to as the “iso” principle, or the idea of musical entrainment or “accommoda[tion] to the patient’s mind.”^{6,12}

Stronger support for music therapy came in the late nineteenth century in mental health reformer George Alder Blumer’s paper, “Music in its Relation to the Mind,” and in the establishment of adaptive music therapy in institutional settings in the early to mid-nineteenth century.^{6,7,15} Convinced that many of the articles written in both eighteenth and nineteenth century America had suspect claims, Blumer instead searched for first-hand reports, mainly from European and British sources on music therapy, and psychology publications for his paper. He concluded that music, along with other activities such as

reading, is effective in treating mental illnesses.^{6,7} In addition to publishing one of nine papers on music therapy in the nineteenth century, Blumer also contributed to the use of live musical performances in hospitals and by establishing the first “ongoing music program in an American hospital.” In this respect he is considered a “pioneer in the music therapy movement” in the United States.⁷ The introduction of music therapy in an institutional setting, however, occurred earlier in The Perkins School for the Blind in South Boston in 1832.⁶

From the modern perspective, music therapy is divided into two forms, palliative and adaptive. Adaptive music therapy generally involves therapists working with educators from special institutions in order to aid handicaps in learning, while palliative music therapists generally assist other healthcare professionals in treating patients.⁶ The first establishment of music therapy in an institution occurred in a school for the blind and was considered adaptive; the success of using music in this setting spurred the development of a similar program at the American Asylum for the Deaf in Hartford, Connecticut. Conversely, significant attention toward palliative music therapy occurred only after World War II.⁶

In regards to music therapy prior to the twentieth century, only eleven articles were published. Secondly, although adaptive music therapy was used in special institution settings, the use of music in hospitals was limited to the latter quarter of the nineteenth century. Thirdly, the first music therapy course was offered early in the twentieth century, while the undergraduate curriculum in music therapy was nonexistent prior to 1952.¹⁶ Altogether, the slow progression of music therapy may be due to the fact that there was no political force to “complement its historical, philosophical, and experimental efforts.”⁶ Compounding this absence are the dearth of quality articles published and the few demonstrations done on music as a therapy. By the mid-twentieth century, however, after the phonograph was invented and the National Association for Music Therapy was established, the field began to experience significant growth.⁶

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Edison’s invention of the phonograph in 1877 and the introduction of disc records in 1896 spurred renewed interest in hospitals’ use of music. Not only did experiments with animals and humans demonstrate the physiological effects of music in the twentieth century, in 1914 the American Medical Association (AMA) first acknowledged the possible benefits of music in hospital treatments through Dr. Evan O’Neill Kane’s letter in the *Journal of the American Medical Association*. Kane’s letter recorded the successful phonograph use in the operating room in order to calm patients before general and local anesthesia prior to operation.^{17,18} Three years later, the founder of the National Therapeutic Society of New York City, Eva Vescelius, predicted that music could one day be as necessary as “air, water, and food” when its therapeutic value is understood. In 1918, roughly one year after her prediction, Columbia University introduced the first course on music therapy, entitled “Musicotherapy.”^{16,19} Margaret Anderton and Isa Maud Ilsen, the instructors of the course, had both been involved in treating Canadian soldiers suffering from war-neurosis with music, and together they recommended criteria for future therapists; the qualifications included the use of trained musical professionals who also had knowledge of physics, psychology, anatomy, and physiology.¹⁶

Other successful accounts of the use of music in general hospitals included Dr. Esther L. Gatewood's thorough report in 1920, which included a possible mechanism through which music might work. Her idea was that the stimuli originating from music may bar negative stimuli, such as pain, from "entering into consciousness"—rendering music effective in concert with anesthesia.^{18,20} This idea was refined by dentist E.S. Best fifteen years later.^{18,21} A study closely followed Gatewood's report in 1924, when Ida L. Hyde from the State University of Kansas concluded after studying music's effect on cardiovascular systems of fifteen subjects, that "those selections of music... that exert a favorable reflex-action on the cardiovascular system, have also a favorable influence upon the muscle tone, working power, digestion, secretions and other functions of the body."^{18,22}

The formation of the National Association for Music in Hospitals by Ilsen was a major step forward in the field, and in 1929, the construction of Duke University Hospital marked the first commitment to hospital music—all recovery rooms and bed patients received radio reception through earphones or speakers. According to Dale Taylor, the director of music therapy at the University of Wisconsin, "increased music therapy research and application, improved technology and publications describing music in hospitals [allowed interests for music therapy to spread] from the operating room to other treatment areas [such as] in obstetrics and gynecology."¹⁸ A paper published in 1930 concluded that not only was music not a hindrance in the operating room, but music provided a great means of alleviating patient's fear and objections against chemical agents.^{18,23} Similar studies investigating music's effects in pediatric and orthopedic divisions of the hospital have also shown positive findings.¹⁸ Worthy of note is the fact that during this time, palliative music therapy was provided as a complementary or adjunct therapy, not a replacement for conventional therapies—thus diminishing the posed threat against mainstream medicine.

During the 1940s, additional universities began to offer training in music therapy. Affiliations were generally established between hospital officials and the faculty of music colleges, and students were required to perform in wards during their practicum training.¹⁶ During the same period, Esther Goetz Gilliland, a pioneer of music education and therapy, began to publish numerous scientific articles in an attempt to organize and establish music therapy as a profession. And in 1944, Kenneth Pickrell, a plastic surgeon from Duke University School of Medicine and Duke Hospital, initiated a project of including music in "the patient's room, the anesthesia room, the operating room, and the recovery room [in order to] simplif[y] the task of the surgeon, the house officers, the nurses, and...the patient."^{18,24} It became evident that the role of music therapy in the twentieth century had benefited from course expansions, numerous scientific publications, and its extensive use in hospital wards. Furthermore, the wording used by Pickrell indicated that music was used to "simplify" the task of surgeons and to provide a congenial therapeutic environment for the patients; the phrase "to be offered as a replacement for surgery" was never used. Music was thus viewed as an adjunct or complementary therapy instead of an alternative that holds the same status as conventional medicine.

Not only was music incorporated into hospitals during the mid-twentieth century, in order to meet hospital demands during the late 1940s when there were ample veterans from World War II, hospital officials began their own programs for training music therapists; these programs were established in both Iowa and California.¹⁶ At the same time, Music Department chairman Roy Underwood at Michigan State College established the first bachelor's degree program in music therapy. Dr. Shannon de l'Etoile, a professor of music therapy at Colorado State University, commented that "the structure of higher education during the 1940s allowed for department chairs to make significant decisions without input from committees, thus expediting what could have been a lengthy and time-consuming process."¹⁶ In 1950, the formation of the National Association for Music Therapy (NAMT), an organization dedicated to the "presentation and publication of music therapy applications" greatly increased the number of studies published in the next ten years.¹⁸ The driving force for the NAMT formation came from members of the Music Teacher's National Association; the main objective was to advance the use of music in medi-

cine, and also to develop standards for music therapy education.¹⁶ Fourteen years later, the *Journal of Music Therapy* was first issued.¹⁰

The development of the undergraduate curriculum in music therapy often depended on clinical practices at the time. For example, during the early-twentieth century, music was mainly used in hospitals for entertainment purposes; the primary qualification was thus technical instrumental skills. As music became increasingly incorporated into palliative care, however, training began to focus on maximizing the scientifically established benefits of music.¹⁶ The shift from mere entertainment to science-backed therapeutic practices was mainly due to the realization that the field's acceptance depended on its establishment as an organization, its development of a science and skill-based curriculum, and the quality and quantity of evidence-based publications related to music as a therapy. The latter factor has especially transformed clinical practices recently after studies have shown that music's rhythm entrainment aids movement recovery of patients with stroke, Parkinson's disease, cerebral palsy, and traumatic brain injury.²⁵ Furthermore, a historical review of music therapy journals from their infancy to 2001 entitled "A History of Music Therapy Journal Articles Published in the English Language" revealed that each of the nine major journals on music therapy began with a heavy clinical emphasis. As each journal became more established, historical, philosophical, and qualitative articles were subsequently added.¹⁰ Furthermore, when the nine journals were considered as a whole, the amount of quantitative and clinical research studies predominated other types of studies. Dr. Darlene Brooks, the author of the paper, raised an interesting point when she commented on the low number of historical, philosophical, and qualitative research articles published in these journals: "is it possible that researchers are not certain that these types of articles foster the growth of the profession and provide the recognition that music therapy is seeking from accrediting agencies?"¹⁰

Other than the quantity and quality of the journals published, perhaps the fact that music's therapeutic effects, however minor, have been accepted throughout Western civilization has allowed for a smoother transition into a hospital setting, as compared to other complementary and alternative modalities. Of interest are the written reflections from eighteenth and nineteenth century European composers that reveal a belief in music's effects on depression. After being informed of his incurable deafness, Beethoven contemplated suicide, writing "I would have ended my life—it was only my art that held me back...Oh Providence—grant me at last but one day of *pure joy*—it is so long since real joy echoed in my heart."^{2,26} Even though Beethoven was deaf at the time, well-trained composers have the ability to listen to music just by reading the score. In fact, Beethoven's ninth symphony, perhaps the greatest musical composition ever written, was composed when he was deaf.²

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Music, similarly, had an effect on depression as William Styron, after listening to Brahms' *Alto Rhapsody*, also decided against committing suicide:

This sound, which like all music—indeed, like all pleasure...pierced my heart like a dagger, and in a flood of swift recollection I thought of all the joys the house had known: the children who had rushed through its rooms, the festivals, the love and work, the honestly earned slumber, the voices and the nimble commotion, the perennial tribe of cats and dogs and bird... All this I realized was more than I could ever abandon.²⁷

Similarly, after Franz Liszt's concert, an attendee commented on his performance as quoted by Williams:

In my young soul there awakened for the first time the awareness that music, 'basic form of all the arts'; is more than mere entertainment or earning a living; that God has given it for the lifting up of hearts, for the bringing of comfort and consolation; and that the musician's profession is service to mankind's affirmation of life and joy in life.²⁸

This description about music as a profession may sound strikingly similar to that of medicine as a profession; more importantly, however, these comments represent the fact that, aside from ancient sources, European composers and members of the audience from the eighteenth and nineteenth centuries were able to provide information concerning music's therapeutic effects. Together, modern and ancient sources confirm Western civilization's belief of music as a therapy.

An examination of the history of music therapy in America reveals a major disparity in terms of the quantity and quality of music therapy publications, the extent of music's use in hospitals, and the status the therapeutic field holds in the undergraduate curriculum from the periods before and after the twentieth century. An inspection of these three factors reveals how the growth of each contributes to the development and acceptance of music therapy as a whole. Additionally, the fact that music has already been documented and received throughout Western civilization as some form of therapeutic agent, and the notion that music functions mainly as an adjunct therapy, not a replacement for conventional therapies allow its use and acceptance to be met with less resistance by the medical community. Finally, a comparison of music therapy from the periods before and after the twentieth century should lend further interests into the depth, breadth, and mechanisms of music's effects on people—both past and present.

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