

The

Music Making

and

Wellness Project

by Midori Koga with Frederick Tims

My grandfather was eighty-eight years old when he performed his first solo violin recital to celebrate his birthday. He had lived a full and extremely busy life to that point: He had lived through both World Wars, raised a family of four through difficult times and risen through the business ranks to retire at age 65 as president of a prominent electronics company in Tokyo. His had been a stressful life with heavy responsibilities.



In his sixties he had struggled with health problems that affected his work and his sense of well-being. It was not until he was almost 80 that he decided to begin violin lessons once again; he had studied briefly in his youth but hadn't played in more than fifty years. He began practicing one hour each morning, another in the afternoon and scheduled lessons with his teacher once a week. As he became more comfortable with his instrument, he joined a string quartet group—that was when he seemed to completely fall in love with music making. He felt challenged by the other members of the ensemble, and he progressed at an even faster rate than before. More importantly, he became inspired with his music, and the excitement seemed to pervade other parts of his life.

In Japan, the eighty-eighth birthday of a man's life is considered a milestone. As my grandfather approached this important event, he decided to present his first concert to celebrate the special day instead of hosting the traditional party. At the concert there was not a dry eye in the hall. Those close to him had become aware of the impact music making had on the quality of his daily life, but on that day it was unmistakable to everyone present. He played as a child plays, wholeheartedly, joyfully and with pure abandon.

Sadly, he passed away seven months after this event. His family and close friends were deeply affected by the fact that this man was able to participate in music and enjoy living through his strong spirit and love for music until the last days of his life. The group environment provided by the other quartet members was an ideal balance of enjoyment, support and challenge, where he was encouraged to grow and learn. As he used to say, "This is keeping me young! I wake up

"Since we have learned together relaxation and breathing exercises, my anxiety has dropped many levels. So much so, the other night I played for some friends. Even though I told them to stay in another room, before you knew it, they were all around me singing and having a good time. They were so excited about my playing and the progression I have made."

each morning happy to know that I have so much to learn today."

Stories such as this are told in private studios, community music schools, music therapy clinics and senior centers throughout the world. While there always has been this kind of anecdotal evidence that active participation in music making has tremendous emotional and physical health benefits, it was not until recently that researchers began specific studies in this area. The Music Making and Wellness Project was designed as a study to look at the quality of life and the physical and mental health benefits of active participation in music making for healthy Americans over age 65.

The Researchers

In 1995, Frederick Tims of the Michigan State University (MSU) Music Therapy Department assembled a multidisciplinary team of researchers. Joining Tims were specialists from the Aging Institute of the University of South Florida; Department of Psychiatry and Behavioral Science at the University of Miami School of Medicine; Karolinska Medical Institute, Stockholm Sweden; and from the Music Therapy Departments of Appalachian State University, Western Michigan University and the University of Kansas. During the course of the study, I was invited to join the team, as a member of MSU's Piano Pedagogy Department. My role was to review the lesson curriculum, design supplemental rhythm, movement and listening activities, and help train the teachers.

Many members of the same team previously had participated in another highly successful study from 1993–1995, measuring the effects of music making on the biology and behavior of Alzheimer's patients.¹ The results were significant, and the team reasoned that there were most

likely equally positive benefits for *healthy* older Americans participating in regular music making activities. It was at this point that we set out in search of an appropriate study environment.

The Environment

Fletcher Music Centers of Clearwater, Florida, is a unique company offering free, lifetime music lessons to seniors purchasing organs from any of their stores. After opening his first music center in 1975, Robert Fletcher began receiving letters from seniors participating in the lesson program. In those letters, students wrote of their gratitude to the company and teachers, telling stories of how much healthier they felt, both physically and emotionally, as a result of the organ lessons.

"It became clear to me that we weren't simply selling organs and providing free music lessons," says Fletcher. "I began to suspect that we were providing people with health, happiness and long life."

The philosophy and goals of the company and its CEO were well matched with those of the Music Making and Wellness Project researchers. The Fletcher Music Center proved to be the ideal "real-world" setting for the study.

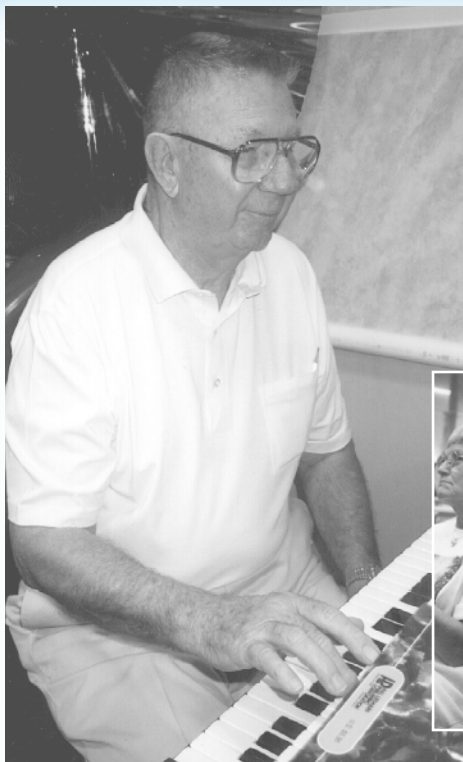
The Design

The study was projected over a five-year time span with three phases.

Phase I: Phase I was a preliminary trial from January 1996 to September 1997. In this phase, eighty students of varying levels from Fletcher Music Centers were invited to become subjects of the study. In the beginning, all students completed written wellness inventory tests to assess general physical health and self-perception of their mental states. The data were collected over fifty weeks; each ten-week period, students completed a take-home psychological assessment that

Midori Koga is assistant professor of piano and director of piano pedagogy at Michigan State University. She holds graduate degrees from the University of Michigan and the Mozarteum Hochschule für Musik in Salzburg, Austria.





included questions pertaining to general health, sense of control, perceived stress, depression, loneliness, coping strategies and social support. Blood tests also were taken every ten weeks. During this time period students participated in weekly group organ/musicianship classes and also were invited to meet for private help sessions and lessons with their teachers.

Phase II: While the results of Phase I were encouraging, the researchers concluded that a few changes in sampling strategy in Phase II would clarify any trends in the gathered data. In Phase II, from October 1997 to September 1998, the number of subjects was increased to 100. The experimental group comprised fifty adults participating in organ lessons; fifty other adults from the same demographic profile who did not participate in organ lessons were the control group. Both groups were asked to complete identical psychological surveys and take the same blood tests. The lesson period was decreased to twenty weeks during the winter months only, to avoid losing participants to the annual migration “north” during the hot and humid summer months in Florida. Blood work and written psychological surveys were taken at three points—approximately every ten weeks.

Phase III: The final phase was the analysis and interpretation of the various tests and the publication and dissemination of the study results.

The Lesson Program

The study’s success relied heavily on the lesson program’s strength, the teachers and the music center’s environment. The organ curriculum, which had an established history of successful results, originally was designed by Joan Manero, keyboard consultant to Fletcher Music Centers. The curriculum was appropriate for students with little or no musical background and based primarily on an aural approach. Notation was introduced further along in the curriculum but was not a main focus of the lessons. The lessons were weekly, fifty-minute sessions in a group setting of up to fifteen students. The students also were encouraged to go to the center for private tutorials throughout the week for extra help. Many of the students also enjoyed joining other classes during the week for a repetition of the material and interaction with other students. The lessons incorporated the following components:

Music Therapy Wellness Activities

These exercises, designed by Alicia Ann Clair, Ph.D., professor of music therapy at the University of Kansas, were introduced at the beginning of every class. Students were encouraged to experience the activities as a group, then take them home for continual use during the week. Exercises included special deep breathing, stretching and visualization/imagery activities designed to promote relaxation in the

mind as well as the body. Many students commented that they practiced the exercises at home and found them to be extremely helpful for relaxation and a general sense of well-being in all areas of their lives.

Listening, Singing and Movement

Immersion in musical experiences through listening, singing and movement activities was another key component of the lessons. As the students entered the classroom, they often were treated to live performances of their favorite popular, folk, patriotic or hymn melodies. These pieces often were ones they currently were learning or would be learning in the near future. Singing familiar tunes was also an integral part of the lesson and one in which all students were able to participate successfully from the beginning. Singing and knowing the songs prior to playing them ensured the students internalized the main rhythmic and melodic concepts before attempting the technical aspects of playing keyboard instruments. The students were able to play the melodies much more naturally and beautifully when they had already heard, sung and felt them. One of the most difficult skills to master, especially for these students entering music lessons later in life, was developing a strong sense of rhythmic pulse. By working with rhythmic skills away from the keyboard, students were able to develop a stronger sense of pulse and were more successful and confident as they played. Students were encouraged to feel the pulse through the use of their large motor skills by swaying, tapping, clapping, chanting and conducting to the music. Many students also commented on how much they enjoyed the feeling of freedom as they made music with their entire bodies.

Stylistically Appropriate Repertoire

According to research on the topic of “Musical Preferences of the Elderly,”²² seniors are clear about their repertoire likes and dislikes. We found that the students enrolled in this program responded most positively to the familiar—patriotic, hymn and popular songs from their youth. Playing familiar and well-loved melodies proved to be a strong motivational factor in the learning process. It was also important to take the vocal range of the students into consideration since, throughout the program, they often were encouraged to sing. In general, the range for women was from F3 to C5, calculated from the bass of a piano keyboard; the range for men was one octave lower.

Ensemble Performances

While students often were reluctant to perform solo for their friends and colleagues, they were more than willing to make music together in ensemble. The classrooms held up to five or six organs, allowing some students to play, others to sing and still others to provide a rhythmic background using rhythm instruments or simply clapping or tapping.

In this way, the rewards of making music together were immediate, and students could participate in the performance in a welcoming, comfortable environment.

Positive Working Environment

While learning music was the focal point and purpose of these lessons, characteristics of a positive working environment were evident.

The promise of social interaction in many cases was what initially may have brought the students to the classes. Students may have not yet become aware of, or understood the value of, music making and the power it had to make an impact on their physical, mental and emotional well-being. Many participants said they first started taking the classes when invited by friends or neighbors.

Other students also noted that the balance between a supportive, stress-free environment and one that was educationally challenging and stimulating was very important. Owe Ronstrom, in a paper entitled “I’m Old and I’m Proud!”²³, admonishes society for treating mature adults as anything less than the wise, intelligent and capable people they are.

Participating in many of the classes, I immediately became aware of the camaraderie and supportive nature of the interaction between the students and teachers. This was an environment where students felt safe to try new experiences.

A model in the classroom, which worked particularly well, was for teachers to aim for less lecture and encourage more active participation from the students. Students commented on how much easier it was to understand new concepts when allowed to immediately experiment with the ideas. An introduction of a new rhythmic note value, for example, was clearly understood when preceded by a few rhythmic movement activities in which students could feel the pulse and hear the length of the note. When students were then shown the symbol for the note value, there was immediate recognition.

Those of us who have ever had the opportunity to make music through singing or performing on an instrument know how rewarding and moving such an experience can be. While many of these students were working at a beginning level, they were appreciative of being able to make music in a personal and meaningful way.

Students of this particular demography also preferred to have a sense of control over their learning environment. The lesson curriculum utilized in this study was divided into relatively short units of ten lessons each. Students were permitted to choose to either repeat the unit or proceed to the next level. Many students preferred to repeat a unit, citing they enjoyed

playing the same repertoire again without any pressure. They would move to the next level when they felt ready. The flexibility of the curriculum was important to them.

Research Results

From the beginning this project was about people and making an impact through making music. If you could have seen the smiles, heard the laughter, singing and music making, and felt the energy and warmth in the music classrooms, you would have felt, as we did, the project was successful. As an added bonus, the positive research results corroborated the testimonials of the students.

Decreased anxiety was demonstrated by scores on the Mental Health Inventory,⁴ a standardized test administered to students at the beginning of each research period, ten weeks later and at the end of twenty weeks of lessons.

Anxiety dropped considerably from the beginning of the lesson sessions to midpoint, with a slight but insignificant



increase toward the end of the study. While there was bound to be some fluctuation in participants' anxiety levels, those participating in the music lessons generally showed lower anxiety levels than those who did not take lessons.

The Profile of Mood States Depression and Dejection Tests⁵ were used to measure mood levels. Both groups indicated similar depression levels at the beginning of the study. While the levels of those who did not take lessons rose significantly to the midpoint with a slight decrease at the end, the levels of those taking lessons continually declined throughout the study.

Lesson participants scored a decrease in perception of loneliness, with no reported change in external support from family and other personal relationships. Since there was no actual increase in external support in their personal lives, we concluded that it is highly possible their feelings of decreased loneliness stemmed from their involvement with the music classes.

The blood tests of those taking lessons indicated a 90% increase in levels of Human Growth Hormone (hGH), which normally decreases at a rapid rate as one ages. Higher hGH levels increase energy and sexual function, while causing fewer wrinkles and cases of osteoporosis. Those not taking lessons

showed very little change in hGH levels during the same time period.

Impact on Pedagogy

Primarily, our field has focused on educating our youth, and this area will continue to be an important focus for many. However, perhaps it is time to expand our attention to include educating healthy adults. The population demographics are changing dramatically. Currently, there are fifty-six million adults over age 55 in the United States, and experts believe this number will increase to at least sixty six million in the next five years. As the baby-boomer generation reaches ages 55 and 60, we will continue to see an increase in the older adult population. People are living longer,

“I lost my husband a couple of years ago. I needed a new challenge. When I go to Fletchers, I feel I am among friends. I get off the couch. I have always admired anyone who can play a musical instrument.

It may take me a long time to do this, but I will do it eventually. Thank you for the opportunity. I did this for myself!”

healthier and more active lives than before.

Many of these adults in their “golden years” have always wanted to play music but have not had the opportunity to take lessons or thought it was too late. It is not too late! I saw this in the eyes of my grandfather, who began taking violin lessons in his eighties and performed his first recital at age 88. I also saw this in the eyes of the participants in the Music Making and Wellness Project.

As teachers, we might ask ourselves if we are members of the health care profession as well as the education profession. Perhaps this is not only an opportunity for us, but also a responsibility.

AMT

NOTES

1. Kumar, A. M., F. Tims, D. G. Cruess, M. T. Mintzer, G. Ironson, D. Loewenstein, R. Cattan, J. B. Fernandez, C. Eisdorfer and M. Kumar. “Music Therapy Increases Serum Melatonin Levels in Patients with Alzheimer’s Disease.” *Alternative Therapies in Health and Medicine*, Vol. 5, No. 6, (Nov. 1999), pp. 49–57.

2. Moore, Randall S., Myra J. Staum and Melissa Brotons. “Musical Preferences of the Elderly: Repertoire, Vocal Ranges, Tempos, and Accompaniments for Singing.” *Journal of Music Therapy*, Vol. 29, No. 4, (Winter 1992), pp. 236–252.

3. Ronstrom, Owe. “I’m Old and I’m Proud!” *The World of Music*, Vol. 36, No. 3 (1994), pp. 5–27.

4. Ware, J. E. and D. C. Sherbourne. “The MOS 36-Item Short-Form Health Survey” (SF-36). *Medical Care*, Vol. 30 (1992), pp. 473–481.

5. McNair, D. M., M. Lorr and L. F. Droppelman. “EITS Manual for the Profile of Mood States.” (San Diego: Educational and Industrial Testing Service, 1971).

The Music Making and Wellness Research Team

In addition to Tims and Koga, the research team was made up of nationally and internationally known experts in the fields of medicine, biochemistry, psychology, psychiatry, aging, music therapy and keyboard pedagogy.

Dr. Alicia Clair
Director of Music Therapy
University of Kansas

Dr. Donna Cohen
Director of the Aging Institute and
Professor of Aging and Mental Health
University of South Florida

Dr. Carl Eisdorfer
Chair, Department of Psychiatry and
Behavioral Sciences
Director of the Center for Adult
Development
University of Miami, School of Medicine

Dr. Adarsh Kumar
Associate Professor of Psychiatry and
Behavioral Sciences
University of Miami, School of Medicine

Dr. Mahendra Kumar
Director of the Molecular
Neuroendocrinology and
Neurotransmitters Laboratory
Department of Psychiatry and Behavioral
Sciences
University of Miami, School of Medicine

Dr. Cathy McKinney
Director of Music Therapy
Appalachian State University, North
Carolina

Dr. Xke Seiger
Chair of General Medicine
Karolinska Medical Institute
Stockholm, Sweden