

The Singing-Health Connection

A growing body of research demonstrates enhanced health and emotional benefits
by John Sparks

To singers and others in the arts who are news-attentive, it seems that the evidence just keeps rolling in: Arts participation is good for your health. In recent years, one sees a news item every few months about a clinical study or survey that seems to bear out the idea that music and other art forms can help people deal with disease, aging, and in general, keep people healthier and happier.

Is there a “but” in all this good news? After all, news items can take on a life of their own and distort public perception. A case in point is the oversimplification of the studies about the effects of classical music on the intelligence of infants and the ability of children to learn. Don Campbell’s book, *The Mozart Effect: Awakening Your Child’s Mind, Health, and Creativity with Music*, was often cited as evidence, perhaps unfairly, for the popular notion in the 1990s that if your kids listen to Mozart each day, they would get high test scores.

Some researchers balked at the pronouncements of arts advocates that this was proof that arts education would help society to build a better worker bee. Whatever quibbles one might have with the research, the public acceptance today that the arts should be a core part of education is a tremendous step forward for all concerned.

The connection between health and the arts – choral singing in particular – seems stronger than ever. The results of new studies are bringing greater specificity to the claims of enhanced health and instigating new collaborative efforts – by universities, government agencies, music therapists, and arts advocates – to find out even more.

Aging Study Yields Powerful Results

Just concluded in 2004, one of the most specific studies on singing and health also focused on aging. The Levine School of Music in Washington, D.C. formed a Senior Singers Chorale in 2001 as part of a wider study examining how singing under professional direction could affect the health of people 55 and older.

The three-year study, “Creativity and Aging: The Impact of Professionally Conducted Cultural Programs on Older Adults,” was led by Dr. Gene D. Cohen, director of the Center on Aging, Health, and Humanities at George Washington University in Washington, D.C. It involved groups of seniors in three parts of the country participating in professionally directed cultural programs: painting in Brooklyn, writing in San Francisco, and singing in Washington, D.C. A key requirement for Cohen was that the intervention groups be run professionally, so as to sharpen the impact of the participation. And in each region, a control group was set up to compare results.

Cohen found clear differences in the health of seniors involved in the arts programs and those in the control groups. The intervention group, for example, reported an average of 30 fewer visits to the doctor as well as fewer eyesight problems, less incidence of depression, less need for medication, and fewer falls and other injuries.

Given their advanced ages, it was expected that both groups would show some overall decline in general health measures – what was not expected was the degree to which arts involvement would improve their health.

“My surprise was not a factor of whether the intervention would work, but how big an effect it would have at an advanced age,” said Cohen. “The average age of all the subjects was 80. This is higher than life expectancy, so, realistically, if an effect were to be achieved, one would ordinarily expect to see less decline in the intervention group compared to the control. The fact that there was so much improvement in many areas was the surprise factor,” he said.

Jeanne Kelly, director of the Levine School of Music, Arlington Campus, was asked by Cohen to form the Senior Singers Chorale that was used in the study. Kelly has worked with many choruses and opera companies over the years and was determined to keep standards high, and not make it easy for the new ensemble just because it comprised the elderly.

“The first time I walked in, I told them, ‘I’m going to treat all of you the way I treat all of my students.’ They liked that – they like to be pushed,” said Kelly. “The seniors do not want to sing only soft or easy repertoire – they like music that demands, and displays, energy.”

When the announcement was made that a chorus for seniors was being formed – no experience necessary, no requirement other than being 55 or older – Kelly was not sure how many would respond. However, 65 seniors showed up at the first rehearsal, more than expected. Now in its fourth year, the chorus numbers 93.

The seniors tell Kelly that they undoubtedly feel better because of their singing – both in daily life and specifically when they are singing. They find, for example, that their everyday voice quality is better, that the tone of their speaking voice does not seem to age as much, and they report easier breathing and better posture as well. One chorus member was quoted in a CBS News story saying, “You feel better – you don’t feel that ache in your legs,” noting that she doesn’t have time to think about her ailments because she is too busy thinking about meeting the challenge.

“They especially love the challenge of performing,” said Kelly. The chorus has already appeared at the Kennedy Center four times, in addition to other public performances in the Washington area. They have also performed with Levine School’s Virginia Big Band (composed of students ages 12 to 18) singing jazz favorites such as “It Don’t Mean A Thing,” and “Chattanooga Choo-Choo.”

They probably don’t mind the attention either, and not just from enthusiastic family and friends who attend their performances. *CBS Evening News*, newspapers, and other media outlets have featured the chorus, perhaps in part for the novelty of it, but more because of its serious role in the growing body of evidence linking choral singing and improved health. With the percentage of senior Americans on the rise, the study has even greater implications in caring for an aging population.

“This study has allowed people to do something that many say they would never have dreamed of doing,” observed Kelly. Many of the seniors simply never thought of themselves as choral singers, but for one reason or another they got involved in the study. Now that the study is over – it provided the funding for the chorus for the first three years – the group has obtained funds from other sources to keep going.

Singing Enhances Immunity, Well-Being

The results of a study conducted at the University of Frankfurt in Germany were released earlier this year, and add to the case that choral singing has a positive health impact. Researchers there took blood samples from chorus members before and after they sang Mozart’s *Requiem*. The levels of immunoglobulin A and cortisol were noticeably higher, indicating enhanced immunity. At

another time, the same choir was asked simply to listen to a recording of the same piece. The blood samples this time did not show elevated levels.

In another European study, a health educator and music professor teamed up for a study reported in England's *Journal of the Royal Society for the Promotion of Health*, in which they said that choral singing promoted not just physical health, but offered emotional and spiritual benefits as well. Using their own choir as a basis for their study, Dr. Stephen Clift and Grenville Hancox developed questionnaires to document physical and emotional feelings while singing. Singers reported improved lung capacity, high energy, relieved asthma, better posture, and enhanced feelings of relaxation, mood, and confidence. In a follow-up questionnaire, 89 percent of the singers reported intense happiness while singing, 79 percent felt less stressed, and 75 percent experienced heightened adrenaline and wakefulness.

Several studies have used saliva testing to compare physiological responses to choral singing. In one such study at the University of California, Irvine (featured in the *Voice*, Summer 2001), choristers showed significantly increased levels of immunity-building proteins just prior to performance and even more dramatically afterward. The researchers conducted their tests with members of the Pacific Chorale in Santa Ana, California at two rehearsals and one concert over an eight-week period. The singers were also questioned about their emotional states, and this data was reviewed in the study as well.

There was speculation that in tests immediately prior to singing, participants might be more likely to show lower levels of immune response because of performance anxiety, but the study found the opposite. An increased immune response *after* singing was expected – but researcher Robert Beck said he was surprised at its intensity.

Hospitals Getting Into the Act

In spring 2004, the Society for the Arts in Healthcare (SAH) in Washington, D.C. joined with two other organizations, Americans for the Arts and the Joint Commission on Accreditation of Healthcare Organizations, to survey hospitals about their use of the arts in patient treatment. According to Naj Wikoff, president of SAH, they were astonished by the response rate: More than two-thirds (2,700) of the hospitals completed the survey and 68 percent reported incorporating some form of arts therapy. [*Cultures of Care: A Study of Arts Programs in U.S. Hospitals*, published in November 2004, includes survey findings, profiles of innovative programs, and critical issues facing arts and healing practitioners. It is available from Americans for the Arts, www.americansforthearts.org.]

Music was the second most widely used art form, after visual art, and 74.8 percent of the respondents said they had a music component in their program. Nearly 40 percent of the hospitals also allowed the hospital staff to participate in the programs along with the patients, deriving benefits of their own.

According to the survey, the reasons why hospitals are motivated to incorporate arts into their treatment are many:

- 78.6 percent said the purpose is to create a better overall healing environment
- 72 percent said it is an important tool in direct treatment of patients
- 32 percent said it was an important part of good community relations – arts in the hospital made patients feel more welcome and offered them more choices about their surroundings and activities during their hospitalization, which in turn helped to create community goodwill and good publicity for the hospital
- 40 percent identified the arts programs as being very beneficial for the staff

“The arts helped the hospitals to humanize their facilities,” said Wikoff. “It’s good community relations, and it improves the way the patients feel about their care – it clearly increases customer satisfaction.” He added that the arts “also help the hospitals in dealing with staff burnout.”

The arts also provide a welcome “conversation starter” for the staff and the patients – they often find that they have more in common because of the emotional experience involved in the arts. Picture a hospital ward where a small chorus has just sung, and it’s not difficult to imagine patients, nurses, and doctors talking with each other about the music they heard – it offers another avenue for connection. “Hospitals are often glutted at holidays with people wanting to sing, but we need more people year round,” noted Wikoff.

Music Therapy Expands Reach

Organizations like SAH and the American Music Therapy Association in Silver Spring, Maryland have advocated for greater public awareness of the connection between the arts and health, and in particular the potential for improved healthcare treatment using the arts. They have worked with researchers and healthcare professionals for some time and now are working more with government.

Twelve years ago, amendments to the federal Older Americans Act specifically recognized music therapy as an area for further research and authorized government participation in such programs. In March 2003, the National Endowment for the Arts and SAH convened a symposium that brought together 40 representatives from medicine, the arts, social services, media, business, and government to develop a strategic plan for advancing cultural programming in healthcare.

“The arts and medicine: These are two human callings that belong together and our challenge is to rediscover the ways in which they can most effectively be brought together again,” NEA chairman Dana Gioia has said.

The gathering, not unexpectedly, produced a report calling for more research and meetings. Given the growing number of studies around the world about the intersection of arts in health and the concern that many Americans feel about the state of the healthcare system, this is a good time for people who see potential in the music-health connection to make their voices heard. For choruses, especially, there is an opportunity – perhaps even an obligation – to be part of this discussion and to make engagement with the healthcare field a priority. Timing is important in any plan for action, and with a preponderance of studies pointing to a strong choral singing component, this may be the best time for choruses to engage in the arts-health connection.

Author Credit

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