Singing Changes Your Brain

by Stacy Horn, Time

When you sing, musical vibrations move through you, altering your physical and emotional landscape. Group singing, for those who have done it, is the most exhilarating and transformative of all. It takes something incredibly intimate, a sound that begins inside you, shares it with a roomful of people and it comes back as something even more thrilling: harmony. So it’s not surprising that group singing is on the rise. According to Chorus America, 32.5 million adults sing in choirs, up by almost 10 million over the past six years. Many people think  of church music when you bring up group singing, but there are over 270,000 choruses across the country and they include gospel groups to show choirs like the ones depicted in *Glee* to strictly amateur groups like [Choir! Choir! Choir!](http://www.choirchoirchoir.com/) singing David Bowie’s [The Man Who Sold the World](http://www.youtube.com/watch?v=vwlZ6gZHKLc).

As the popularity of group singing grows, science has been hard at work trying to explain why it has such a calming yet energizing effect on people. What researchers are beginning to discover is that singing is like an infusion of the perfect tranquilizer, the kind that both soothes your nerves and elevates your spirits.

The elation may come from [endorphins](http://www.ncbi.nlm.nih.gov/pubmed/23089077), a hormone released by singing, which is associated with feelings of pleasure.  Or it might be from [oxytocin](http://www.ncbi.nlm.nih.gov/pubmed/12814197), another hormone released during singing, which has been found to alleviate anxiety and stress. Oxytocin also enhances feelings of trust and bonding, which may explain why still more studies have found that singing lessens feelings of[depression and loneliness](http://mpr-online.net/Issues/Volume%203.1%20Special%20Issue%20%5B2010%5D/Clift%20Published%20Web%20Version.pdf).  A very [recent study](http://psycnet.apa.org/psycinfo/2013-26499-001/) even attempts to make the case that “music evolved as a tool of social living,” and that the pleasure that comes from singing together is our evolutionary reward for coming together cooperatively, instead of hiding alone, every cave-dweller for him or herself.

The benefits of singing regularly seem to be cumulative. In one study, singers were found to have lower levels of[cortisol](http://www.ncbi.nlm.nih.gov/pubmed/15669447), indicating lower stress.  A very preliminary investigation suggesting that our [heart rates may sync up](http://www.frontiersin.org/Auditory_Cognitive_Neuroscience/10.3389/fpsyg.2013.00334/full#B18)during group singing could also explain why singing together sometimes feels like a guided group meditation. [Study](http://pom.sagepub.com/content/early/2013/04/08/0305735613477181.abstract?papetoc) after [study](http://www.ncbi.nlm.nih.gov/pubmed/22837766) has found that singing relieves anxiety and contributes to quality of life. Dr. Julene K. Johnson, a researcher who has focused on older singers, recently began a [five year study](http://communityofvoices.org/home/) to examine group singing as an affordable method to improve the health and well-being of older adults.

It turns out you don’t even have to be a good singer to reap the rewards.  According to one [2005 study](http://pom.sagepub.com/content/33/3/269.short), group singing “can produce satisfying and therapeutic sensations even when the sound produced by the vocal instrument is of mediocre quality.”  Singing groups vary from casual affairs where no audition is necessary to serious, committed professional or avocational choirs like the Los Angeles Master Chorale or [my chorus in New York City](http://www.thechoralsociety.org/), which I joined when I was 26 and depressed, all based on a single memory of singing in a choir at Christmas, an experience so euphoric I never forgot it.

If you want to find a singing group to join, [ChoirPlace](http://www.choirplace.com/) and [ChoralNet](http://www.choralnet.org/) are good places to begin, or more local sites like the [New York Choral Consortium](http://www.newyorkchoralconsortium.org/), which has links to the [Vocal Area Network](http://www.van.org/) and other sites, or the [Greater Boston Choral Consortium](http://www.bostonsings.org/chorus.htm).  But if you can’t find one at any of these sites, you can always google “choir” or “choral society” and your city or town to find more. Group singing is cheaper than therapy, healthier than drinking, and certainly more fun than working out.  It is the one thing in life where feeling better is pretty much guaranteed.  Even if you walked into rehearsal exhausted and depressed, by the end of the night you’ll walk out high as a kite on endorphins and good will.