# Harnessing Music's Superpowers to Heal, Change and Unite



There are countless ways to use music to serve others. Whether through formal concerts, one-on-one interaction, workshops, organized choirs, spontaneous communal singing, or other "Artivist" (artist activist) models, there are many ways you can use your unique gifts to serve and make a profound impact.

Here are some projects that might inspire you as you make plans for your own project:

- 1. Music for Social Justice and Peace
  - Homelessness (Dallas Street Choir, Homeless Gospel Choir, Cantus concerts on homelessness)
  - Prisons (Heartbeat Opera collaboration with prison inmates for Fidelio, Prison Choir Project, Conducting Hope- a documentary about a prison choir that lowers recidivism through performances outside of the prison)
  - Sexual assault and trafficking (Songs of Healing- songwriting with victims music therapy project, Laura Hynes' recital, Sing for Survivors)
  - LGBQT (Human Rights Recitals, Diverse Harmony- LGBQT-straight alliance youth chorus, Seattle Men's Chorus, Gala Choruses)
  - Refugees and Immigrants (Shropshire Music Foundation, Tacoma Refugee Choir, Pihcintu Multicultural Chorus)
  - Diversity (WITNESS, Cantaré!, Border CrosSing, Exigence)
  - General Social Justice Topics (Tonality, U. of Portland's Social Justice through Song)
  - Protest music (Justice Choir, Opera Singers against Hate, Protest Music Project)
  - Jerusalem (Common Ground Voices, YMCA Jerusalem Youth Chorus)
  - Peace building efforts (Peace Choirs, Seeds of Peace concerts and training)
- 2. Music for Community Building
  - Large-scale Community Singing Events (Bring the Sing, Singing for a New World, Community Sings)

- Participatory Workshops (Building a Vocal Community-Ysaye Barnwell, Music that Makes Community, Circle Singing)
- Pop-up choirs at informal settings (Beer Choir, Choir Now, Choir!Choir!Choir!)
- World Voice Day Events
- One Voice Arizona- joint venture to teach two selected songs to as many state residents as possible.
- Studio traditions- song sung by all students at recital
- Political Movements (Documentaries: "Amandla!" about Apartheid music, "Singing Revolution" about the Estonian Singing Revolution, BBC's "The Choir")
- 3. Music for Youth
  - Community Service Focus (America Sings festivals by John Jacobson)
  - Moderating Polarization (CommonChord Project- songwriting; Choral Village; Meet in the Middle; Orchestral Dialogues)
  - Motivation (Growth Mindset through HipHop- Blake Brandes)
  - Underserved Populations (Singing for Urban Children-Rollo Dilworth, BRIDGES: Harmony through Music)
- 4. Music in the Workplace
  - Song-writing workshops to musically emphasize company goals (TheSongTeam)
  - Company choirs (Boeing, Googapella, ChoirNation)
  - Voice lessons on-site at tech companies (Play at Work Now)
  - Team building through music (Business Training Works)
  - Working with physicians and leaders on tone of voice (Musically Spoken)
  - Public Speaker Coaching (Voice on Stage)
- 5. Music and Medicine
  - Cardiac care (Hearts Need Art)
  - Parkinson's- incorporating music and movement to preserve speech and mobility (Sing for PD)
  - Aging Populations: Alzheimer's, Dementia and Isolation (Music & Memory)
  - Stroke survivors (Aphasia Choir)
  - Autism (Autistic Adult Choir, voice lessons for Autism)



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Facebook group: Conductors and Singers Fostering Dialogue



## Examples of research on medical and emotional benefits of singing together

#### Emotional related changes associated with singing together

Expert and non-expert choir singers in Stockholm reported increased joy and relaxation in rehearsals (Sandgren and Borg, 2009).

Interviews with older adults who sing in a choir most commonly report feelings of joy and togetherness (Clift and Hancox, 2001, 2010).

Singing together in a choir rehearsal, as compared to having conversations in pairs, increased positive feelings and reduced negative feelings. No such change was seen in the speaking situation (Kreutz, 2014).

Parkinson (2016) studied the motivations and benefits amateur singers perceive regarding participating in community singing. Benefits included: social connectedness, personal development, mood enhancement, emotional resilience, aesthetic benefits, and health benefits. Men and women differ markedly in their motivations for participating.

## Singing related changes in body chemistry that may lead to changes in interpersonal behavior

Deep, slow activation of diaphragmatic breathing involves the vagus nerve, triggering the parasympathetic nervous system, which when active is associated with relaxation and calmness (Clift and Hancox, 2001; Clift et al., 2010).

Variations in saliva concentrations of oxytocin were studied in a group of choir singers, before and after a choir rehearsal and before and after paired conversations. Oxytocin levels were significantly higher after choral singing than they were after the conversations (Kreutz et al., 2014). Oxytocin has been assumed to have a role in group cohesion and child/parent bonding (Feldman et al, 2011).

When compared to baseline readings, salivary levels of cortisol (a key stress related hormone) were reduced by both choir and solo singing (Schladt et al, 2017)

Singing, dancing, and drumming all trigger endorphin release (indexed by an increase in postactivity pain tolerance) in contexts where merely listening to music and low energy musical activities do not; also, music performance results in elevated positive (but not negative) affect. The active performance of music is the cause of the endorphin high, not the music itself (Dunbar, Kaskatis, MacDonald, and Barra, 2012).

## Changes in body chemistry which may lead to health benefits

Comparing before and after a choir rehearsal, concentrations of plasma immunoglobulin A increased significantly in choir singers, while no such effect was observed after listening to the same music. Immunoglobulin A contributes to the immune system's defense against infections (Kreutz et al., 2004).

Symptoms of irritable bowel syndrome (IBS) were studied in patients in weekly choir singing versus weekly lectures and discussions. Mean free testosterone levels (an indicator of regenerative activity in the body) in saliva showed a 60 % increase in the first 6 months of the choir singing group, while no such effect was observed in the lecture/discussion group. Blood levels of fibrinogen (associated with inflammatory immune responses and increased risk of cardiovascular disease) decreased in the choir group while increasing in the lecture/talk group. Motilin, a hormone regulating bowel movements, showed a slight decrease in the choir group and an increase in the talk group (Grape, et al, 2008, 2010).

A small randomized trial assessed the impact of singing groups on lung function and quality of life in COPD patients (Bonilha et al, 2008). Subjects were either in a singing group or took a handicraft class. The singing group had a small improvement in maximal expiratory pressure while the control group had a larger decline, with the difference between the two being statistically significant.

A study by Morrison et al. (2013) looked at COPD patients in singing groups which met for 30 sessions over 10 months. Statistically significant increases in respiratory function as compared to baseline were found in forced expiratory volume in one second (FEV1), forced vital capacity (FVC), and FVC expected value percentage (FVC%). Scores in the St. George's Respiratory Questionnaire also declined (lower scores indicate self-perception of improvement) by a significant amount.

In a group of adults affected by cancer, group singing has been associated with increases in particular cytokines and reduction in inflammation, suggesting a correlation between improved immune response and singing (Fancourt at al, 2016).

Cohen et al (2007) performed a number of studies with 166 subjects, mean age 80 years, participating in singing workshops. In comparison with a control group, the singers reported fewer health problems, fewer falls, fewer doctor visits, and less usage of medications.

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