CultureCase

Singing can help the immune system and improve mood

This research was conducted by **Gunter Kreutz, Stephan Bongard, Sonja Rohrmann, Volker Hodapp, and Dorothee Grebe** at **Wolfgang Goethe-University Frankfurt am Main, Germany [Now at the University of Oldenburg, Germany]**

Summary

The research compared the levels of immunoglobulin A (S-IgA), cortisol and emotional states of people after they had participated in a choir practice with when they had simply listened to choral music. The research found that (compared to listening) those engaged in group singing increased their positive mood and levels of S-IgA. Since depletion of S-IgA is associated with tiring and stressful states, and S-IgA is crucial 'as the body’s first line of defence against bacterial and viral infections of the upper respiratory pathway' this means that if music enhances S-IgA levels then it could be an important means of relieving stress and improving health.

They recruited 31 members of an amateur choir to participate in the study

23 of the choir members were female and all were aged between 29 and 74. The participants completed tests of their emotional states, immunoglobulin and cortisol levels before and after each exercise.

Participants first sang and then listened to a recording of Mozart’s Requiem

Those in the singing group undertook a one-hour session of choral singing (including warm-up) and in that time sang an excerpt of the Requiem. The

same people participated in a listening exercise one week later, listening to someone read aloud from an encyclopedia on 18th Century arts, and a CD recording of the Requiem, having been instructed to listen as if they were singing.

The experimental conditions may have shaped the results

The researchers suggest that people's mood while singing may have further enhanced the production of S-IgA. Cortisol levels were unchanged in the singing group, and depleted in the listening group. The researchers wonder if the drop in cortisol levels was a result of the fact that the choir group would have preferred to sing, rather than be forced to listen to, the music.

Keywords

Germany **singing** **experiment** **health** **music** **immune** **choral**

Title	Effects of choir singing or listening on secretory immunoglobulin A, cortisol and emotional state
Author(s)	Kreutz, G., Bongard, S., Rohrmann, S., Grebe, D., Bastian, H.G. & Hodapp, V.
Publication date	2004
Source	Journal of Behavioral Medicine, Vol 27, Iss 6, pp 623-635.
Link	**http://link.springer.com/article/10.1007%2Fs10865-004-0006-9**
Author email	**gunter.kreutz@uni-oldenburg.de**

By **Culture.Case** | 14 April 2014 | **Impacts of arts and culture** , **Health and wellbeing impacts of arts and culture** |