

# Choral singing and psychological wellbeing: Findings from English choirs in a cross-national survey using the WHOQOL-BREF

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Over 600 choral singers drawn from English choirs completed the WHOQOL-BREF questionnaire to measure physical, psychological, social, and environmental wellbeing, and a 12-item “effects of choral singing scale.” They also provided accounts of the effects of choral singing on quality of life, wellbeing, and physical health in response to open questions. High average scores were found on all WHOQOL-BREF scales, and a high degree of consensus emerged on the positive benefits of choral singing, but substantial variations were also found. Within a group of participants with relatively low psychological wellbeing and strong perceptions of positive benefits associated with choral singing, four categories of significant personal and health challenges were found: enduring mental health problems; significant family/relationship problems; significant physical health challenges; and recent bereavement. Their accounts also revealed six “generative mechanisms” by which singing may impact on wellbeing and health: positive affect; focused attention; deep breathing; social support; cognitive stimulation; and regular commitment.

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A number of qualitative and survey studies with diverse samples have shown that singers report a wide range of social, psychological, spiritual, and health benefits associated with singing (e.g. Clift and Hancox 2001, Bailey and

Davidson 2005, Silber 2005, Beck *et al.* 2000). Clift and Hancox (2001), for example, report that 71% of singers in a university choral society agreed that singing was beneficial for their “mental wellbeing.” On a more objective level, research has demonstrated the impact of singing on physiological variables assumed to have wellbeing and health implications (e.g. Beck *et al.* 2000, Kreutz *et al.* 2004). In addition, Houston *et al.* (1998) report significant improvements in assessed levels of anxiety and depression in nursing home residents using common standardized measures, following a four-week program of singing, and Cohen *et al.* (2006) found significant improvements in both mental and physical health in elderly people participating over one year in a community choir. Shortcomings in the current literature, however, are the lack of a common conceptual understanding of wellbeing and health, and the absence of a theoretical framework that elucidates the generative causal mechanisms linking singing with wellbeing and health benefits (Harré 1972). The present study aims to address these shortcomings through a large-scale survey with choral singers in England, Germany, and Australia based on the World Health Organization Quality of Life project (Power *et al.* 1999). The present paper reports some preliminary findings from the English arm of the study.

## METHOD

### Participants

The sample consisted of 633 choral singers drawn from choral societies and choirs in the South East and North East of England. Response rates by choir ranged from 50-70%. The mean age of choristers was 61 years; 77% women and 23% men.

### Materials

The questionnaire employed included three open questions on the effects of singing on quality of life, wellbeing, and health, followed by 24 statements about possible effects of choral singing based on instruments used in studies reported by Clift and Hancox (2001) and Beck *et al.* (2000).

Participants also completed the WHOQOL-BREF (the short form of the World Health Organization Quality of Life Questionnaire) which measures four dimensions of life quality: physical (e.g. How much do you need medical treatment to function in your daily life?), psychological (e.g. How much do you enjoy life?), social (e.g. How satisfied are you with the support you get from your friends?), and environmental (e.g. How satisfied are you with the

conditions of your living place?), with high levels of reliability and validity (e.g. Skevington *et al.* 2004, Hawthorne *et al.* 2006)

### Procedure

Questionnaires were distributed to members of participating choirs during May 2007 for completion at home and return in a sealed envelope.

## RESULTS

Principal Components Analysis of the choral singing items identified a strong first component with substantial loadings from 12 items (e.g. improved mood, enhanced quality of life, greater happiness, stress reduction, and emotional wellbeing). These items were used to construct a single measure of the perceived effects of singing on wellbeing (Cronbach alpha  $\alpha=0.9$ , for both sexes). A high mean score confirmed that a large majority of choristers agreed that singing has a positive impact on personal wellbeing. Individual differences were apparent, however, with women showing higher scores: men mean=48.0, SD=6.9; women mean=50.2, SD=6.7;  $t=-3.39$ ,  $p<0.001$  (2-tailed).

On the WHO psychological scale, a majority of respondents scored well above the scale midpoint indicating good/excellent psychological wellbeing. Approximately 10% of choristers, however, gave low scores, which could indicate mental health difficulties. Women scored slightly lower on this scale: men mean=23.6, SD=2.7; women mean=23.0, SD=2.9;  $t=2.13$ ,  $p<0.05$  (two-tailed).

A significant correlation between the two measures emerged for women ( $r=0.27$ ,  $p<0.01$ ), but not for men. The correlation for women, however, was very low, and the effective lack of relationship in both sexes suggests that some choristers with relatively low general psychological wellbeing nevertheless experience high levels of benefit from singing. Respondents in the lowest third on the psychological wellbeing scale, and the highest third on the effects of singing scale were considered of particular interest for understanding the impact of singing on wellbeing. In answers to open questions given by this group, approximately one quarter disclosed significant challenges in their lives:

- People with an enduring mental health problem:

I have had to stop working due to an on-going medical condition [bipolar disorder]. I have had several episodes of this requiring varying

lengths of time spent in hospital, followed by months of time needing support for depression and lack of self-confidence. Being a member of this particular choir has lifted my self-esteem again and restored self-belief (woman, 54 years).

- People affected by significant family/relationship problems:

As a carer of two relatives stricken with schizophrenia, have suffered from reactive depression.... Having a pleasant start to the day knowing I shall meet like-minded people and enjoy music making, hopefully having a laugh along the way. Hearing the harmonies helps me forget family worries (woman, 70 years).

- People affected by significant physical health issues/disability:

It plays a significant part in my emotional health and wellbeing. I find music uplifting. When recovering from a major stroke, singing was one of the ways of lifting my spirits out of depression (man, 65 years).

- People who have been recently bereaved:

My husband died three months ago so all the questions about negative feelings etc. are distorted by this fact. One of the greatest supports in my life at this difficult time is the Silver Singers and the other silver activities—ukulele, guitar, ocarina/tin whistle. I think choral singing is fantastic for emotional health (woman, 64 years).

Accounts given by this group also suggested at least six generative mechanisms linking choral singing with wellbeing and health:

- Choral singing engenders happiness and raised spirits, which counteract feelings of sadness and depression:

When you sing, you cannot be sad for long. It really lifts your spirits. Being in a choir means you are in a team – you all help each other which gives tremendous satisfaction (woman, 52 years).

- Singing involves focused concentration, which blocks preoccupation with sources of worry:

Singing in a choir puts troubles “on hold”, as concentrating on the music requires all one’s attention (woman, 65 years).

- Singing involves deep controlled breathing, which counteracts anxiety:

Deep breathing, essential for singing, is one method of helping with signs of anxiety and stress (woman, 70 years).

- Choral singing offers social support and friendship, which ameliorate feelings of isolation and loneliness:

The effect of singing with a group helps to make friends, so this has widened my horizons quite a bit, and gets me out and about more. The support you receive from other people helps in general wellbeing (woman, 78 years).

- Choral singing involves education and learning, which keeps the mind active and counteracts decline of cognitive functions:

Apart from the relaxation benefits, I believe that for me, aged 57, keeping the brain active and having to concentrate for long periods will delay if not completely prevent senile dementia! (woman, 57 years).

- Choral singing involves a regular commitment to attend rehearsal, which motivates people to avoid being physically inactive:

Making the effort to attend choir practice on wet, cold evenings instead of watching TV must be better for health (woman, 69 years).

## DISCUSSION

This study addresses shortcomings of previous studies by undertaking a large-scale survey of singers using a rigorously developed cross-national instrument for assessing health related quality of life. The results confirm previous findings that a large majority of choristers perceive singing as beneficial for wellbeing. When choristers’ perceptions of the effects of singing were examined in relation to the psychological scale of the WHOQOL-BREF, a high degree of independence indicated that some choristers with relatively low psychological wellbeing nevertheless strongly endorsed the benefits of choral singing. Accounts from such participants revealed that participation in

singing has been of considerable help in coping with serious challenges to their general sense of wellbeing. More importantly, choristers provided valuable insights into various “generative causal mechanisms” (Harré 1972) through which singing serves to promote wellbeing by counteracting processes potentially detrimental to health.

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