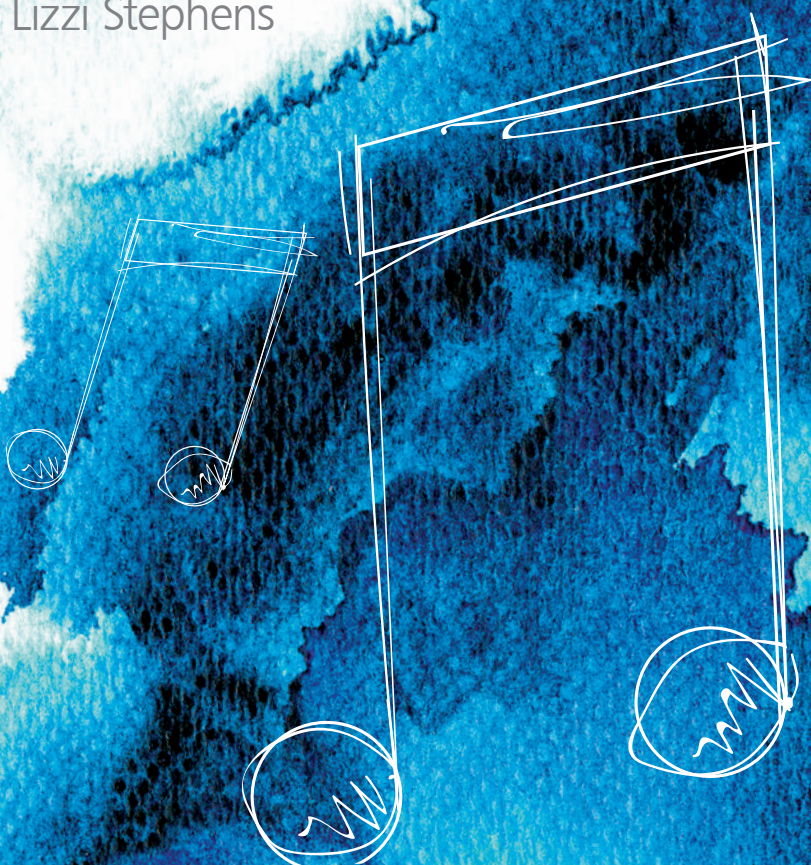


Singing for mental health and wellbeing

Findings from West Kent and Medway

Stephen Clift, Sharon Manship and Lizzi Stephens



In association with:





Dedication

This report is dedicated to Dr. Ian Morrison. Ian planned this study and would have been the Project Manager but for a sudden serious illness from which he is still in recovery. Everyone involved in the project and all the staff in the Sidney De Haan Research Centre for Arts and Health wish to express our deep affection for a dear friend and respected colleague.

Contents

Dedication.....	2
Acknowledgements.....	4
Foreword.....	5
Executive Summary.....	6
Introduction.....	7
Singing, Wellbeing and Health.....	8
East Kent Singing for Mental Health Project.....	10
West Kent and Medway Singing for Mental Health and Wellbeing Project.....	12
Methods.....	13
Design.....	13
Ethical Approval.....	13
Questionnaires.....	13
Interviews.....	14
Photography and Filming.....	15
Findings.....	15
Participants.....	15
Quantitative findings.....	16
Qualitative findings.....	23
Discussion.....	31
Mental health and wellbeing outcomes.....	32
Limitations.....	33
Recommendations.....	34
References.....	35

Acknowledgments

Thank you to Kent and Medway Clinical Commissioning Groups for the funding to support this project and the evaluation, and to Vicky Tovey, Ivan Rudd and Jess Mookherjee from Kent County Council (KCC) Public Health team for their advice and guidance. This work sits along side the Mental Health Wellbeing Programme that Public Health has funded to improve the mental wellbeing of the population across Kent. Interventions include: Library Wellbeing Hubs; Primary Care Link Workers; Kent Sheds; Six Ways to Wellbeing Campaign; Creative Arts Partnerships; Happier@Work Workplace Wellbeing Pilot and Mental Health First Aid.

The project would not have happened without the support of the following organisations who publicised the singing groups to potential participants:

Medway: All Saints Community Project, Medway Hospital Radio, Medway Engagement Group and Empowerment Network (MEGAN) CIC, Chatham Library, Medway Matters online

Dartford: Dartford, Gravesham and Swanley MIND, Invicta Advocacy, Live It Well Dartford, DGS Community Recovery Service, Dartford Borough Council, Darent Valley Hospital, Dartford Conservative Club, Gravesham Healthy Living Centre, Dartford Adult Education

Maidstone: Maidstone Area Arts Partnership, MIND, Rethink, Age UK, Voluntary Action Maidstone, Blackthorn Trust, community wardens, Dementia Friendly Community Network, Live it Well Maidstone, V Team, Topaz Community, Maidstone Healthy Living Centre

Sevenoaks: MIND, Live It Well Tonbridge, Sevenoaks, Tunbridge Wells and Tonbridge Healthy Living Centres

For all areas: Time to Talk Rochester, The Depressed Cake Shop Medway, The ME Medway Postcode Group, Kent Artist Network, Creatabot South East, University of the Third Age groups, Live It Well website, Voluntary Arts England, Porchlight, Health Trainers project manager, commissioner of informal community services at KCC, Arts & Regeneration at KCC, Kent Libraries, Kent Sheds, Older People's Forum

Special thanks to our facilitators: Jacky Hintze, Zoe Konez, Phoebe Osborne, Marina Perryman, and Nicola Wydenbach. Thank you to Matthew Shipton for his help in organising the performance event at Hazlitt Theatre, Maidstone, July 2015 and the project launch event at County Hall, Maidstone in December 2015.

We are grateful to John McLeod (Vidox productions) and Alan Langley (Dover Design Photography) for documenting the project through film and photography.

Grateful thanks finally to the Design and Reprographics teams at Canterbury Christ Church University for designing and producing this report.

The Sidney De Haan Research Centre for Arts and Health is generously supported by Oak Foundation:



Back cover: Members of the Sevenoaks group at the Hazlitt Theatre, Maidstone, July 2015

Authors: Stephen Clift, Sharon Manship and Lizzi Stephens

Sidney De Haan Research Centre for Arts and Health
Canterbury Christ Church University, 69 Tontine Street, Folkestone, Kent CT20 1JG

Published: December 2015

ISBN 978-1-909067-51-6

Foreword

I am often surprised when people question the evidence of whether singing is good for health or not. We certainly do not question the role of exercise in reducing blood pressure and risk of vascular disease. Singing after all is an aerobic activity that improves the efficiency of the cardiovascular system and encourages greater intake of oxygen, leading to increased alertness. It also has a wonderful effect on stress, just as all cardiovascular activity has.

Control of the breath is a fundamental part of our wellbeing. Think of the growing body of research on mindfulness and how the breath is used to calm the nervous system. Think also about how acting coaches manage to turn nervous speakers into confident extroverts – often by training people to use their own bodies properly. Singing uses all the same techniques and muscle groups that NHS respiratory therapists recommend for COPD. Add to this the benefits of the esteem built by learning a new skill and making new friends, and you have a recipe for wellbeing.

As a public health consultant, with a particular interest in wellbeing, I'm one of the converted who believes the mechanisms of singing (particularly with others) are health giving. However, I am concerned that the amount of high quality, peer reviewed research and evaluation into singing for mental wellbeing is dwarfed by the volume of research money devoted to cognitive behaviour therapy (CBT) and medication. This is why it was great to support the funding of this NHS research project.

The results are not surprising to me and they are source of delight. The intensity of positive emotions is enhanced, subjective feelings of distress decrease and social networks are formed. Singing is also part of our culture, our heritage, and sharing music together and through performance can make us feel proud and connected. When pride and connection are lost, people can feel 'fractured'. Indeed, it is possible to replace a fractured hip, but far harder to replace or mend the fractured 'soul'.

I hope that in reading the results of this study you will join me by seeing the health and wellbeing benefits of singing and perhaps – join a choir too.

Jessica Mookherjee, MSc, FFPH
Consultant in Public Health, Kent County Council
Lead for Mental Public Mental Health & Well-Being.

Executive Summary

Background

- An earlier study in East Kent of weekly singing for people with enduring mental health issues revealed clinically important improvements in mental wellbeing over a period of ten months.
- The present study was designed to assess whether the model developed in East Kent could be transferred to West Kent and Medway with similarly positive results.

Methods

- Four community singing groups were established for people with experience of mental health issues, which ran weekly from November 2014 to the end of 2015. The groups were allowed to establish themselves to ensure stability of attendance before formal evaluation of the project took place over a six-month period from February-July 2015.
- Participants completed the short Clinical Outcomes in Routine Evaluation questionnaire, CORE10, a measure of mental distress, and the full Warwick Edinburgh Mental Wellbeing Scale (WEMWBS), a measure of mental wellbeing, at baseline, and then three months and six months later.
- Of 47 participants regularly involved in the groups in early 2015, 26 (55%) completed baseline questionnaires in February, and after six months in July.
- Qualitative feedback on participants' experiences of the groups was also gathered through comments on the questionnaire and semi-structured interviews.

Findings

- Both the CORE10 and WEMWBS showed satisfactory reliabilities across the six-month period with significant negative correlations between the two scales.
- Scores on CORE10 significantly reduced over six months indicating reductions in reported mental distress. Scores on the WEMWBS significantly increased showing improved mental wellbeing.
- Significant improvements were found on the following CORE items, which signal reduction in specific problems affecting mental health: I have felt tense, anxious or nervous; I have had difficulty getting to sleep or staying asleep; I have felt unhappy, and Unwanted images or memories have been distressing me.
- Qualitative feedback from participants was strongly consistent with the quantitative findings and gives further insights into participants' mental health challenges and how regular singing helped ameliorate them.

Conclusions

- The current study replicates the earlier findings from the East Kent project and shows that regular group singing is associated with reductions in mental distress and increased mental wellbeing.
- The study has limitations due to the small sample size, self-report measures and the lack of a randomised control group, but it provides a good foundation for further more robust studies, including an assessment of implications for service utilisation and cost-effectiveness.

Introduction

The potential for the creative arts to contribute to the wellbeing and health of individuals, both in healthcare settings and in the community, is considerable. In the UK over the last twenty-five years there has been a growing acceptance of this, as the value of the arts for wellbeing has been demonstrated through innovative creative arts for health projects and an increasing body of evaluation and research. Clift (2012) argues that the creative arts should be seen as 'a public health resource' to help in tackling the multiple and growing public health challenges, associated with an increasingly elderly population.

The Royal Society for Public Health (RSPH) has played a significant role in promoting the value of the arts for health in the UK. It has devoted several issues of its journal *Perspectives in Public Health* to arts and wellbeing; has presented awards for innovative practice and research in arts and health annually since 2008; has organised conferences on arts and health (February 2012, June 2015), and has launched a new Special Interest Group for *Arts, Health and Wellbeing* for RSPH members, with an inaugural meeting of the group in October 2015.

Arts for health has attracted growing interest internationally. Clift and Camic (2015) have produced an international textbook on *Creative Arts, Health and Wellbeing*. This brings together reviews and case studies from across the globe – including Brazil, China and India – all of which highlight the contribution of the creative arts to health across the lifespan and in all the key health promoting settings of schools, workplaces, hospitals, social care, prisons and the community.

Despite this growth of interest, and the increasing body of evaluation and research supporting the value of the arts for health, practical provision of opportunities for people to engage in the creative arts for benefits to their health are often limited in scale and geographical coverage. If the creative arts are truly to be a 'public health resource' as Clift (2012) suggests, attention is needed to issues of scale and reach, and further research is needed to fully assess not only the effectiveness of larger-scale creative arts interventions, but also their cost effectiveness.

The Sidney De Haan Research Centre for Arts and Health, established in 2005, has attempted to contribute to the development of the wider field through an ambitious and wide-ranging programme of research on the value of regular group singing for wellbeing and health. The Centre has worked with people with a number of long term conditions, including enduring mental health challenges, dementia, Parkinson's and chronic obstructive pulmonary disease (COPD). The concern has been to contribute to the evidence base for the value of singing, and to work with health and social care services to promote and sustain the wider-scale development of singing for health initiatives.

In this report, details are given of work in West Kent and Medway to develop and evaluate a network of singing groups for people with enduring mental health challenges. The project attempts to replicate an earlier singing for mental health initiative in East Kent (Clift and Morrison, 2011) which provided evidence of measurable wellbeing benefits associated with regular group singing.

Singing, Wellbeing and Health

Since 2000, there has been a growth of scientific interest in singing, wellbeing and health. When Clift and Hancox (2001) undertook their first study on the perceived benefits of choral singing, they identified only four previously published studies which reported very limited data on the possible health benefits of group singing. Nine years later, Clift et al. (2010) undertook a systematic and critical review of the research on group singing and health, and found no fewer than 48 studies reported in 51 published papers. Additional reviews by Gick (2011) and Gick and Nicol (2015) identify further studies including the use of group and individual singing in therapeutic settings. At the time of writing a simple Google Scholar search revealed yet more studies published from 2012 onwards with the Clift and Hancox (2001) study cited by no fewer than 215 publications. The field is thus a growing one, and the increasing body of evidence lends support to the value of group singing for wellbeing and health.

The De Haan Centre is now in the tenth year of a programme of research on singing and health. Our continuing research mission is to build a robust and objective body of evidence on the ways in which, and the extent to which, regular engagement in group singing can be beneficial for wellbeing and health. Several substantial empirical projects have been undertaken to date to explore the wellbeing and health benefits of group singing with a variety of participant groups, including older people (Coulton et al., 2015), people with long-term mental health challenges (Clift and Morrison, 2011) and people with respiratory illness (Morrison et al., 2013; Skingley et al. 2014).

A community randomised controlled trial of community singing for older people

The most robust evidence for the value of singing for mental wellbeing, comes from a randomised control trial conducted by the Centre (Skingley et al., 2012; Skingley., et al., 2013, and Coulton et al., 2015), with funding from the National Institute for Health Research.

The study took place in five locations across East Kent in the South East of England, and was open to people over the age of 60 living independently who were not currently members of a singing group or choir. A variety of means were employed to advertise the study (e.g. through newspaper advertising and door-to-door leafleting) and 265 people were willing to be randomised into either a weekly singing group running for three months, or a usual activities control condition. Participants had an average age of 67.3 years and 84% were female, and were similar in age and sex composition to singers investigated in an earlier cross-national study involving choirs and choral societies in Australia, England and Germany (Clift and Hancox, 2010).

Participants completed a number of standardised health questionnaires before the start of the project; then at the end of the three-month singing intervention and then again after a further three months when no singing took place. The principal outcome measure for the study was self-assessed mental health related quality of life assessed by the York SF-12, a short questionnaire that also measures self-assessed physical health. The Hospital Anxiety and Depression Scale (HADS) was also used to measure anxiety and depression. There was consistent attendance at the singing groups and 80% of participants completed questionnaires on all three occasions.

The findings from the study showed clearly that regular singing resulted in a significant increase in mental wellbeing as measured by the York SF-12 immediately after the end of the intervention compared with the usual activity control. This improvement in mental wellbeing was maintained over a further three months, during which no singing took place (see Figure 1). There were also significant reductions in depression and anxiety scores on the HADS at three months, although the benefits for depression and anxiety were not sustained on follow-up.

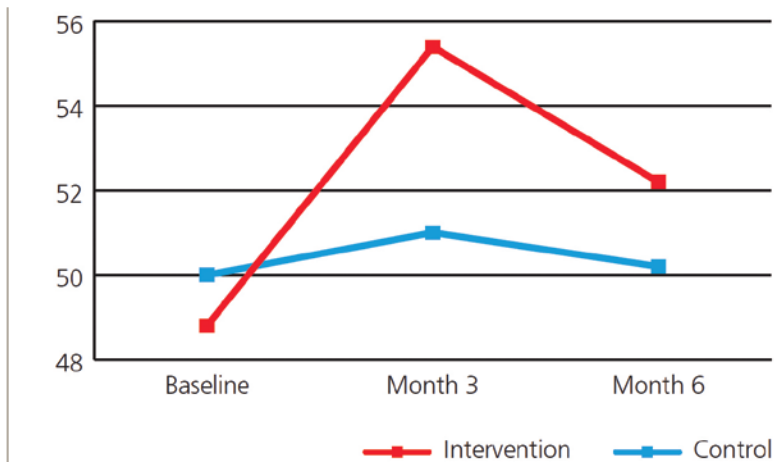


Figure 1: Changes in SF12 Mental Health scale over the course of the trial and three months follow-up

Attention was also given to the feedback provided by participants on the questionnaires completed (Skingley et al., 2015), and this clearly revealed a wide range of benefits experienced by those in the singing groups:

- Enjoyment and pleasure
- Impact on the quality of their singing
- Impact on mental health and wellbeing
- Social benefits through socialising and forming friendships
- Improvements in breathing
- The quality of the facilitation of the groups and the repertoire, and
- Their hopes for the continuation of the groups after the project

The following examples of comments given by participants express some of these themes:

Many times on the morning of the project I haven't felt like coming, but always I came and felt so much better afterwards. Group singing lifts the spirits.

I started my participation in this project just after I retired from work and feeling a little anxious about future life. This project has been instrumental in showing me there is life after work.

The singing has, I feel, boosted my confidence as I tend to be rather shy. I am hoping I may be able to join a singing group/church choir in the near future.

Introspection is the curse of old age – this project reduces such self-awareness and actually offers the realization that there is more living to be done.



Singing groups in the East Kent network performing at the end of the project Granville Theatre, Ramsgate, UK, June 2010

As noted above, this project recruited a cross-section of older people living independently in the community. Although many participants disclosed some existing health challenges, on average the level of assessed mental wellbeing at the outset was close to the population norm on the SF12 and means on the anxiety and depression scales of the HADS were below the clinical threshold on this instrument.

East Kent Singing for Mental Health Project

In 2009, the Centre established a network of seven singing groups for people with enduring mental health issues (Clift and Morrison, 2011) in towns across East Kent. Over the course of 10 months, the choirs grew in size and involved over 100 mental health service users together with friends, family and health professionals providing support. The choirs came together to form a large chorus for a public performance in February 2010 and then to mark the culmination of the project in June 2010 (see image above). A short film about the project based on the final performance has been produced, including interviews with members of the choirs (available to view on the Sidney De Haan Youtube channel)

The project was evaluated qualitatively on the basis of observation and interviews, and quantitatively employing the full form of the Clinical Outcomes in Routine Evaluation (CORE) questionnaire, an instrument widely used in clinical practice within the NHS in the UK. The questionnaire gives a total score measuring mental distress, but also four sub-scores measuring: 'wellbeing', 'problems', levels of daily 'functioning' and 'risk' to self and others (with lower scores being positive - for details of this instrument see Gray and Mellor-Clark, 2007 and visit: <http://www.coreims.co.uk/>).

For a sample of 42 choir members completing the CORE questionnaire at baseline then eight months later, there was a statistically significant reduction in the total mental distress score, together with improvements in three of the four sub-scales (see Table 1, from Clift and Morrison, 2011).

CORE questionnaire at baseline and end of the project

	n	Baseline Nov 2009	End of project June 2010	z	p
Total score	42	9.43 (6.58)	6.85 (5.26)	3.47	<0.01
Wellbeing	42	1.33 (0.88)	0.96 (0.74)	2.95	<0.01
Problems	42	1.11 (0.87)	0.80 (0.65)	2.78	<0.01
Functioning	42	1.03 (0.71)	0.74 (0.61)	3.00	<0.01
Risk	42	0.19 (0.45)	0.15 (0.26)	0.24	ns

Table 1: East Kent Singing for Mental Health Project: Means (standard deviations) on the CORE questionnaire at baseline and end of the project

These measurable changes were strongly supported by written feedback given by members of the choirs experiencing challenges of social anxiety, depression and other mental health issues:

I have bipolar disorder. When I am depressed, singing in the group and coming together with other people lifts my mood and gives me something positive and productive to focus on. When I am manic, singing is something I can channel my extra energy into and express my enthusiasm for life through. The choir provides structure and purpose in an otherwise sometimes empty life. The group reminds me that there are many people with difficulties of one kind or another. We can understand each other's problems and support one another.

It helps me to structure my week, to have something to keep going for. I enjoy meeting all types of people. It has been very good to meet new people who have experiences similar to my own. If I feel I might have a panic attack, I know how to breathe properly which helps. I would have very little reason to leave the house if I wasn't doing choirs.

Singing helps as I can become withdrawn with depression, so it helps me express myself. It is nice to be able to express myself through singing. I can be quite self-conscious at times and it is nice to be able to do something in unison. I find my mood is lifted and find myself singing when alone. To be part of a group has helped my self-consciousness.

West Kent and Medway Singing for Mental Health and Wellbeing Project

Aims and Objectives

The aims of the West Kent and Medway Project were to test the feasibility of establishing a network of singing for mental health and wellbeing groups in West Kent and Medway and to assess their effectiveness with respect to improved mental wellbeing.

Specific objectives were:

- to work with community services supporting people with challenges to their mental health and wellbeing to establish weekly community singing groups
- to assess changes in mental distress using the short form of the Clinical Outcomes in Routine Evaluation (CORE-10) questionnaire
- to assess changes in mental wellbeing using the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)
- to gather qualitative feedback from participants through written comments and interviews
- to document the project through photography and film

The Singing Groups

Four weekly singing groups were established in community venues in Chatham, Dartford, Maidstone and Sevenoaks starting in November 2014. Experienced singing leaders planned the repertoire and facilitated the groups.

Small local performance events were organised by the groups' facilitators during the course of the project when opportunities arose. A common element of repertoire was also agreed among the facilitators for a combined workshop which took place at the Jubilee Church Centre, Maidstone in April 2015. A further celebration event took place at the Hazlitt Theatre, Maidstone in July 2015 that included members of 'singing for health' choirs from East Kent. A performance from the combined West Kent and Medway singing groups also took place in a launch of the final report and documentary film about the project at County Hall, Maidstone, in December 2015.



East Kent Singing for Health groups at the Hazlitt Theatre

Methods

Design

A longitudinal observational design was adopted with baseline and follow-up assessments using validated questionnaires supplemented by qualitative accounts from participants.

Singing groups were formed in West Kent and Medway as described above in late 2014. They were allowed to establish themselves prior to initial questionnaire assessment of participants in February 2015, with a second and third assessment approximately three and six months later. The evaluation reported here is based on a sub-group who fully completed the assessment questionnaires at baseline and six-month follow-up.

Ethical Approval

The proposal for this study was submitted for ethical review under the Canterbury Christ Church University Protocol for proportionate ethical review and fully complied with the University's research governance requirements. Participants were provided with an information sheet about the evaluation and the methods involved. They had the opportunity to consider their involvement and ask questions before signing a consent form. A separate consent form was also employed for photography and filming. All of the images included in this report have the consent of the individuals pictured. All quotations from written comments on the questionnaires and comments made during interviews are given anonymously. For the film accompanying this report, however, participants interviewed have given permission for their forenames to be given.

Questionnaires

Two validated questionnaires were employed as outcome measures for this evaluation.

Clinical Outcomes in Routine Evaluation questionnaires (CORE and CORE10)

The CORE questionnaire is widely used in clinical practice to assess the outcomes of counselling and psychotherapy. It consists of 34 statements describing feelings and behaviours related to mental distress, and respondents are asked to indicate how often they have felt or behaved that way over the previous week on a five-point scale. The questionnaire is scored by calculating the mean item rating and multiplying by ten, giving a scale from zero to 40 – the CORE outcome measure (CORE-OM). A high score indicates mental distress. Sets of items within the questionnaire relate to overall 'subjective wellbeing', psychological 'problems', daily 'functioning' and 'risk' to self and others and sub-scale scores can be derived. The CORE-OM has excellent reliability and validity, and a score of ten has been established as a clinical cut-off point. Individuals scoring below ten are relatively 'well' and those scoring ten or above are 'unwell'. In addition, a change of five points represents a reliable movement towards deterioration or improvement in wellbeing and a movement of five points over the cut-off value of ten represents a change that is both reliable and clinically important (Connell et al., 2007; Gray and Mellor-Clark, 2007).

In the current project, the short version of the CORE consisting of 10 items (CORE10) was employed. A simple sum of ratings (with reverse scoring for two positive items) also produces a scale running from 0 to 40, with higher scores indicative of greater mental distress.

Examples of items from the CORE10 questionnaire:

- I have felt tense, anxious or nervous*
- Talking to people has been too much for me*
- I have had difficulty getting to sleep or staying asleep*
- Unwanted images or memories have been distressing me*

Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)

WEMWBS is a population level survey instrument designed to measure positive wellbeing. It has good psychometric properties and is currently employed as part of the Scottish national indicators for wellbeing (Tennant, Hiller, Fishwick et al., 2007; Stewart-Brown, Tennant, Tennent et al., 2009). The questionnaire consists of 14 simple positively-worded 'statements about feelings and thoughts' and respondents are asked to 'tick the box that best describes your experiences of each over the last 2 weeks'. A five-point frequency scale is provided: 'None of the time', 'Rarely', 'Some of the time', 'Often' and 'All of the time', scored from 1 to 5 respectively. These give a summed score from 14 to 70, with higher scores equating to more positive mental wellbeing. A large scale survey in England in 2011 of a representative sample of over 7000 adults, reported a mean of 51.6 with a standard deviation of 8.7 (see: www2.warwick.ac.uk/fac/med/research/platform/wemwbs/)

Examples of items included in WEMWBS:

- I've been feeling relaxed*
- I've been feeling good about myself*
- I've been feeling confident*
- I've been feeling cheerful*

Interviews

Between the second and third questionnaire assessments, members of the singing groups were invited to participate in semi-structured individual interviews. With their permission these were digitally recorded. The central questions to gain feedback on experiences of the singing group and any benefits experienced were:

Looking back, could you tell me how you got to hear about the singing group and why you were interested to join?

How long have you been a member and have you been able to attend regularly?

What have you thought about the activity and what do you feel you have gained from it?

Do you feel that it has helped your mental wellbeing and health? In what ways?

What about your social wellbeing? Has it helped with this in any way being part of this group?

Photography and Filming

Photography and filming were used to document the settings of the groups, the participants and facilitators involved, and the combined workshop and performance events organised. Audio-visual recordings communicate directly the character and content of the singing activities and provides an opportunity for participants to give an account of their experiences and any benefits they have gained.



Lizzi Stephens, Leading the Hazlitt Theatre event

Findings

Participants

In the course of this project, a total of 168 people engaged with the singing groups on at least one occasion. Of this total, 70 people were regular attendees who were able to participate in their singing group most weeks from the start of 2015 onwards. The Dartford group had the highest number of regular attendees (30), which was mainly due to the venue being an Age UK day centre. Many of these attendees were affected by cognitive loss, however, and only 7 participants with a history of mental health issues took part in the evaluation. The other groups took place in community settings and each had a good number of core attendees: Chatham 15, Maidstone 14 and Sevenoaks 11.

As noted earlier not all participants were recruited prior to the baseline assessment. In addition, when the questionnaires were administered (February, April, July), not all of the members of the groups were available to complete them due to absence for a variety of reasons. In total, out of 47 participants regularly engaged in the project, 26 (55%) completed the questionnaires at baseline and then again six months later (7 males, 19 females; age range from 30s to 80s). The quantitative analyses reported below will be restricted to this sub-sample, but presentation of written comments from the questionnaires will draw on the complete set of completed questionnaires. No differences were apparent between males and females on the outcome measures at baseline or follow up so results are not separated by sex.

Quantitative Findings

Reliabilities of the WEMWBS and CORE10 questionnaires

Two outcome measures were employed at baseline and follow-up: the WEMWBS, a 14 item scale which measures mental wellbeing and the CORE10 which measures mental distress. Table 2 reports on the correlations for the two measures between baseline and follow-up and the high positive correlations point to a reassuring level of reliability over a six-month period. In addition, the four possible correlations between WEMWBS and CORE10 are all significantly negative, indicating that high scores on the WEMWBS are associated with low scores on the CORE. This is consistent with the related constructs they each measure even though the item content of the two questionnaires is distinctly different.

Table 2: Correlations between WEMWBS and CORE at baseline and 6-month follow-up

	WEMWBS baseline	WEMWBS follow-up	CORE baseline	CORE follow-up
WEMWBS baseline	—	0.75**	-0.51**	-0.67**
WEMWBS follow-up		—	-0.51**	-0.69**
CORE baseline			—	0.78**
CORE follow-up				—

** p < 0.01 (one-tailed)

Changes in WEMWBS and CORE10 scores

Table 3 reports the means (standard deviations) for the WEMWBS and CORE10 scales at baseline and follow-up.

At baseline, the WEMWBS mean is significantly lower than the adult population mean of 51.6 (one sample t-test, $p < 0.05$, one-tailed). The CORE10 score at baseline is also significantly higher than the clinical cut off score of 10.0 (one sample t-test, $p < 0.05$, one-tailed). On follow-up by contrast, mean scores on both measures did not differ significantly from these reference points.

Comparing means at six-month follow up with the baseline shows a significant increase in the WEMWBS mental wellbeing score, and a stronger significant decrease in the CORE10 mental distress score. For CORE10 it is notable that the mean initially is above the clinical cut-off point of 10 whereas at follow-up the mean is below 10.

Table 3: Changes in WEMWBS and CORE from baseline to six-month follow-up

	Baseline	Follow-up	n	t
WEMWBS full form total	46.80 (11.20)	49.96 (10.82)	25	-2.04*
CORE short form total	13.00 (8.62)	9.67 (8.96)	24	-2.86**

* $p < 0.05$ ** $p < 0.01$ (one-tailed)

Item changes on the WEMWBS and CORE10 questionnaires

In order to understand more clearly the changes taking place over time with these measures, it is of interest to consider changes on individual items. Table 4 reports a comparison of mean scores on the WEMWBS items at baseline and follow up. Most items show significant consistency over six months, with seven items showing correlations in excess of 0.7. In addition, all of the items show a small increase in mean values with a movement from an average response of 'some of the time' (3) over the last two weeks towards 'often' (4). However, despite the significant improvement in the total score, only two items provide an indication of clearly significant change: 'I've been thinking clearly' and 'I've been feeling good about myself'.

Table 5 reports a similar item comparison for the CORE10. For this measure most items show moderate to strong significant correlations over six months, and several items show significant changes. As noted above, the full version of the CORE questionnaire can be coded to provide subscales for 'wellbeing', 'problems', 'functioning' and 'risk'. The short version does not allow for these sub-scales, but the items are labelled to indicate these dimensions. It is clear that the items showing significant improvements are all indicators of 'problems' indicating that there is an improvement specifically in this aspect of mental distress as measured by the CORE10 instrument: 'I have felt tense, anxious or nervous', 'I have had difficulty getting to sleep or staying asleep', 'I have felt unhappy' and 'Unwanted images or memories have been distressing me.'

West Kent and Medway results on the CORE10 compared with East Kent findings

A key justification for the current study was to replicate the approach first trialled in East Kent and assess the extent to which the model could be transferred to another locality with similar results. A comparison with findings from the CORE in the earlier study is thus of interest.

Table 6 gives the results obtained for the East Kent project using the full version of the CORE, and those items from the full scale which make up the short form CORE10. The correspondence between the West Kent and East Kent pattern of changes is very striking. Not only did a significant improvement take place on the total CORE measure in both projects, but the pattern of item changes for the West Kent group substantially replicates the pattern of changes found in the earlier East Kent project.

Table 4: Comparison of WEMWBS items at baseline and follow up: means (SD)

Experiences over the last two weeks	Baseline	Post-test	n	t	r
WEMWBS full form total	46.80 (11.20)	49.96 (10.82)	25	-2.04*	0.76**
I've been feeling optimistic about the future	3.44 (1.04)	3.60 (0.96)	25	-0.75	0.43*
I've been feeling useful	3.48 (0.87)	3.68 (1.15)	25	-1.00	0.54**
I've been feeling relaxed	3.32 (1.07)	5.56 (0.92)	25	-1.30	0.57**
I've been interested in other people	3.84 (0.80)	4.08 (0.70)	25	-1.54	0.47*
I've had energy to spare	2.75 (1.18)	2.96 (1.08)	25	-0.72	0.50*
I've been dealing with problems well	3.40 (0.91)	3.52 (0.92)	25	-0.62	0.44*
I've been thinking clearly	3.32 (0.95)	3.68 (0.95)	25	-2.22*	0.63*
I've been feeling good about myself	3.12 (0.78)	3.60 (0.91)	25	-3.36**	0.66*
I've been feeling close to people	3.44 (0.92)	3.96 (0.79)	25	-1.41	0.70**
I've been feeling confident	3.28 (0.89)	3.52 (0.96)	25	-1.54	0.65**
I've been able to make up my own mind	3.76 (0.72)	3.96 (0.79)	25	-1.16	0.37
I've been feeling loved	3.60 (1.12)	3.72 (1.06)	25	-0.68	0.67**
I've been interested in new things	3.60 (1.04)	3.72 (1.06)	25	-0.65	0.63**
I've been feeling cheerful	3.56 (0.92)	3.64 (0.91)	25	-0.53	0.65**

Table 5: Comparison of CORE10 item scores at baseline and follow-up (West Kent and Medway)

How have you felt over the last week?	Baseline	Post-test	n	t	r
CORE short form total	13.00 (8.62)	9.67 (8.96)	24	2.86**	0.78**
I have felt tense, anxious or nervous (P)	1.96 (1.00)	1.25 (1.00)	24	3.82**	0.58**
I have felt I have someone to turn to for support when needed (F reversed scored)	1.42 (1.14)	1.21 (1.44)	24	0.86	0.61**
I felt able to cope when things go wrong (F reversed scored)	1.54 (1.22)	1.29 (1.08)	24	1.14	0.57**
Talking to people has been too much for me (F)	1.00 (1.10)	0.96 (1.08)	24	0.24	0.69*
I have felt terror or panic (P)	1.13 (1.36)	0.75 (1.23)	24	1.52	0.57**
I made plans to end my life (R)	0.33 (0.92)	0.17 (0.92)	24	0.94	0.42*
I have had difficulty getting to sleep or staying asleep (P)	1.63 (1.50)	1.21 (1.32)	24	2.20*	0.79*
I have felt despairing or hopeless (P)	1.00 (1.18)	0.83 (1.09)	24	0.81	0.61**
I have felt unhappy (P)	1.46 (1.14)	0.96 (1.12)	24	2.08*	0.46*
Unwanted images or memories have been distressing me (P)	1.50 (1.35)	0.88 (1.15)	24	2.61**	0.57**

* $p < 0.05$ ** $p < 0.01$ (one-tailed)

Table 6: Comparison of CORE10 item scores at baseline and follow-up (East Kent)

How have you felt over the last week?	Baseline	Post-test	n	t	r
CORE full form total	9.43 (6.58)	6.85 (5.26)	42	3.59**	0.71**
I have felt tense, anxious or nervous (P)	1.29 (1.21)	0.83 (1.05)	41	3.04**	0.63**
I have felt I have someone to turn to for support when needed (F reversed scored)	1.63 (1.55)	1.41 (1.50)	41	1.01	0.99**
I felt able to cope when things go wrong (F reversed scored)	1.20 (1.40)	1.00 (1.38)	41	0.77	0.32*
Talking to people has been too much for me (F)	0.81 (1.04)	0.60 (0.99)	41	1.94*	0.75**
I have felt terror or panic (P)	0.61 (1.02)	0.41 (0.87)	41	1.28	0.57*
I made plans to end my life (R)	0.12 (0.5)	0.07 (0.46)	42	0.53	0.28
I have had difficulty getting to sleep or staying asleep (P)	1.27 (1.30)	1.00 (1.16)	41	1.68*	0.66**
I have felt despairing or hopeless (P)	0.81 (1.17)	0.50 (0.86)	42	3.57**	0.29
I have felt unhappy (P)	1.26 (1.19)	0.88 (0.83)	42	2.64**	0.62**
Unwanted images or memories have been distressing me (P)	1.19 (1.15)	0.64 (0.98)	42	3.08**	0.43*

* p < 0.05 ** p < 0.01 (one-tailed)

Individual CORE10 changes for West Kent and Medway and CORE for East Kent

Finally, Figure 2 reports the pattern of CORE10 changes on an individual basis for participants in the West Kent and Medway project, and Figure 3 the corresponding pattern found earlier for CORE in the East Kent project (Clift and Morrison, 2011). The similarities are very striking.

The black diagonal line represents no change in CORE scores over time, and in both samples there are people who scored identically or very closely over time. It is striking, for example, that in Figure 2, for the West Kent and Medway project, there is one participant who scored very highly both at baseline and at follow-up, indicating a high level of continuing mental distress, which remained high despite their involvement in the project. Similarly there are an additional four participants who scored well above the clinical cut-off point of 10 at the start of the project and remain above that level at post-test (vertical and horizontal lines respectively). The same can be said for three participants in the East Kent project.

The red line represents a five-point increase in CORE scores between baseline and follow-up. For the West Kent and Medway project only one person shows such a shift from below the clinical cut-off point of 10 to just above it. Similarly, for the East Kent project only one individual showed a shift of this kind.

The green line represents a five-point decrease in CORE scores over the six months of the evaluation. This line represents an important change on an individual level if a person moves from above the clinical cut-off point of 10 to at least five points lower. The change is clinically important if it also brings a person below the cut-off point of 10. For the West Kent and Medway sample, nine out of 24 participants reduced their scores by 5 points or more, and of these, 4 moved from being above to clinical cut-off point to being below it (17%). For the East Kent project, 12 of 42 participants showed a reduction of 5 or more points on the CORE and of these, 7 showed a clinically important improvement in mental distress (17%).

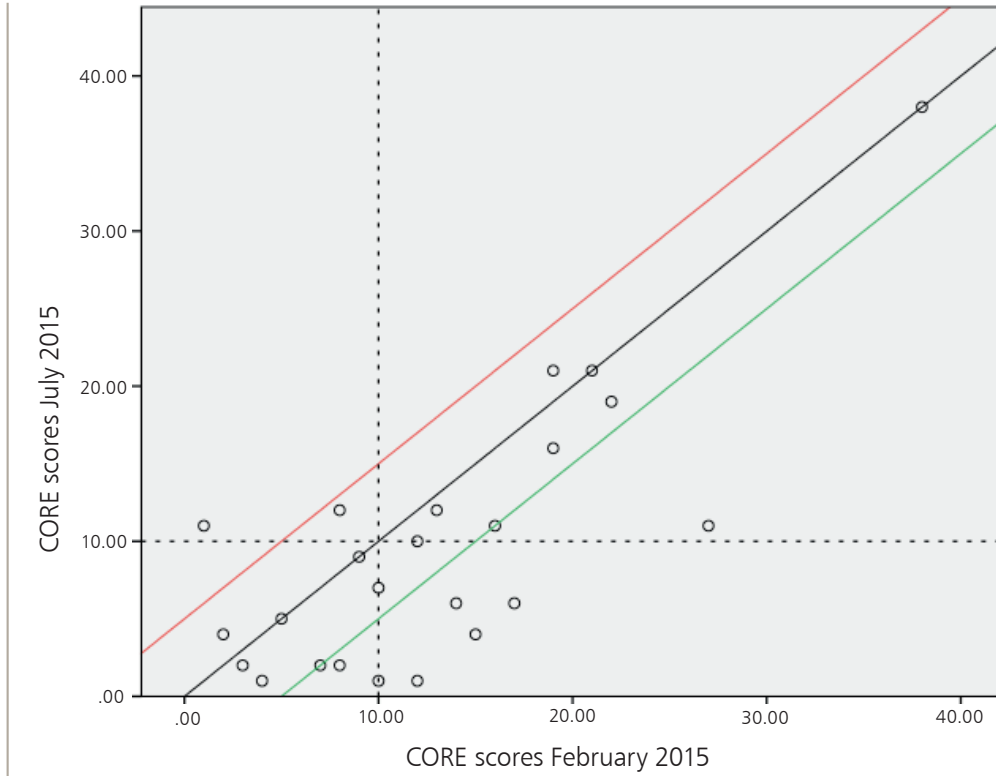


Figure 2: West Kent and Medway Project: Short form CORE scores (n=24)

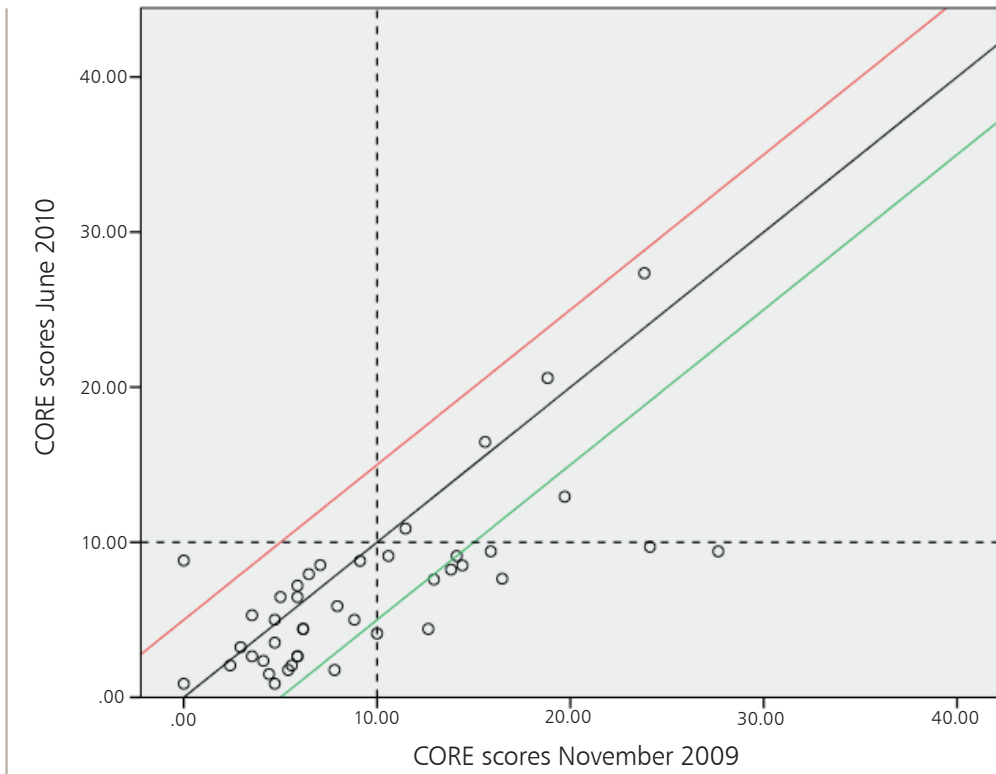


Figure 3: East Kent Project: Full form CORE scores (n=42)

Qualitative Findings

Written comments on the questionnaires

At baseline, three months and six months, participants were asked to write comments about their experiences at the end of the questionnaire:

'We are very interested to have your feedback of the singing group so far. Tell us what you think of it and whether you feel you have benefited in any way from coming along.'

Not everyone took advantage of this opportunity, but many did and the comments are illuminating.

As noted above, the baseline assessment did not take place prior to starting the groups. Given the history of mental distress experienced by the participants, it was considered important to establish the groups, and to allow participants to feel comfortable and get to know fellow participants and the facilitator, prior to inviting them formally to be part of the evaluation and asking for written consent. This meant that almost all members of each group had already had some experience of singing before the first questionnaire was completed, as happened in the earlier East Kent feasibility study. For this reason, it is possible that members of the groups had already experienced some benefits for their mental and social wellbeing prior to the baseline assessment and their scores could be higher (on the WEMWBS) or lower (on the CORE10) than they might have been at the time of joining the group.

Comments on the baseline questionnaire

This possibility is indeed supported by the written feedback given by participants on the baseline questionnaire. Comments point to some of the features of the singing and the group experience that were found to be helpful, and provide a more personal and realistic account of the range of benefits experienced. Important themes from the outset are:

- Having something to look forward to
- A supportive happy group environment which engenders a more positive mood
- A chance to meet new people and make friends
- Learning new material and feeling a sense of achievement
- A stimulus for promoting a sense of alertness and energy
- A source of motivation to engage in activity
- An experience which has a lasting effect for the rest of the day and even the rest of the week
- Benefits to both mental and physical health



Members of the Sevenoaks group at the Hazlitt Theatre

Participants found the group enjoyable and fun, a source of friendship and something both to look forward to, and to remember with pleasure after the sessions:

Attending the group in the mornings has left me feeling more awake and alert with more energy for the rest of the day compared with days the group isn't on

I very much look forward to my weekly singing sessions. I love to learn something new in such a happy stirring upbeat environment. We have the chance to practice at home, wherever and whenever we want to. It really helps me to tackle my problems

It has given me something for myself that I look forward to every week. It makes me happy and keeps me that way for most of the week. I can't wait to go along and join my friends

I thoroughly enjoy attending this singing group. The facilitators are lovely and very talented! I find that I look forward to the weekly meeting and enjoy meeting the other members. Singing itself definitely raises my spirits!

Participants also commented on the benefits they had experienced for their sense of wellbeing, motivation and confidence, and dealing with challenges they experience socially and psychologically:

Benefit from feelings and stresses released in singing group. Felt supported and confident with staff and other members of the group. Being engaged and active has filled me with positive thoughts and takes my mind off negative impulses

I have enjoyed myself since I joined and feel that I have been helped a lot with my problems

This has been good for me to have something to get up for and am finding it fun and enjoyable

It has helped me to build confidence, meet other people etc. Be part of a group, without being scorned! Nice people

The group leaders are friendly and enthusiastic, and singing and learning to sing well gives me confidence. After I went to singing group I felt really happy, despite the rainy weather and I went to my Mum's house and sang the songs to her

I have really enjoyed the singing group. I feel happier and less lonely on the walk home. I find myself singing some of the tunes which stick in my head. I am a very anxious and nervous person. I'm hoping the group continues to lift my mood and I feel confident enough to continue attending

Interestingly, some of the participants also identified benefits for physical health issues as well as for mental health:

It has helped me to relax, thus has freed me from most of painful effects of angina.

I have COPD. Singing lessons beneficial

I enjoy the group very much. Look forward to Friday lunchtime. I am not good at new ventures but am very pleased I have joined this group. Breathing exercises helping with my asthma

I have enjoyed coming to the group, especially as I am a complete newcomer. I think it fits in with my recovery from Parkinson's

It has strengthened my voice after surgery on my vocal cords



Members of the Sevenoaks group at the Hazlitt Theatre

Only two people identified some reservations about their singing group in the baseline questionnaire:

I quite enjoyed the first session, but I found it confusing as well because I didn't know all the songs and was a bit disappointed because we had no music. There was a lot a take in all at once as well, but I'm going to continue coming because I love singing indoors and want to be able to sing with people eventually. This is a good opportunity that is being done for mental health and wellbeing

To start with I enjoyed the group as we were singing a complete song e.g. The Holly and the Ivy. Lately we have been doing part songs or short songs which have not been so enjoyable. Also I am not comfortable with the idea of doing another concert and may drop out before

Comments on the follow-up questionnaires

Further comments made on the second and third questionnaires generally reiterate the participants' positive experiences of singing and further reinforce the beneficial effects that singing can have for mental and physical wellbeing:

I have found the singing more enjoyable during the duration of the course and feel it has improved my feeling of wellbeing as well as helping to alleviate my asthma

My memory and breathing have improved. I have made lots of new friends and I have really enjoyed singing again with a group for the first time in 50 years. Although I sing at home when I'm doing housework I now arrange harmonies when singing along to the radio and it really gives me something to look forward to each week

I have benefitted from coming to the group. I tend to be asthmatic and the breathing exercises have helped. Also it's helped with social isolation

The singing group is very good; and it has helped me to deal with problems. I have felt more self-confident, and very importantly, less self-conscious. It has helped my creativity in the form of writing. It has led to me meeting new people

I felt much better since coming to singing and find it has helped me a lot. I always look forward to coming on Tuesdays

Really look forward to and enjoy the weekly singing sessions. These sessions have helped me in so many ways – having fun, socialising, gained more self-confidence, something to look forward to!!

Very therapeutic – as I've lost my mum and therefore suffering from bereavement I find singing helps to ease the pain. As I suffer also from anxiety I find that singing also helps me to learn about breath control and as a result helps to relax

Definite positive feelings come from taking part in singing group. Feel more confident and relaxed after regular singing. Given me something to achieve in and aim for

I have found it very useful as I have had quite a difficult year so far and it helps take my mind off my problems for a while

I found the singing group to be very beneficial to me. It livens me a lot and have made many friends. It also helps lift me out of depressing times. Generally helps my wellbeing

I have found this group extremely beneficial and has made me want to sing more as it helps my mood and anxiety

Joining the singing group has helped me a lot. Its made me happy and better and more confident and I wouldn't be without it now. It's now part of my life. I don't [want] to lose [it] since I enjoy it so much. It's improved my mental health

Interestingly, the participant who expressed reservations about 'doing another concert' attended the group to support his wife. His initial view of performances changed over the following months:

I joined the group together with my wife who has a form of dementia. She definitely benefits from the weekly sessions both with improved speech and looking forward to the group sessions. Surprisingly, the performances have been particularly beneficial. As the carer I have benefited in this joint activity as this helps to provide an activity to look forward to together, in a situation that has few positives

Individual interviews

In addition to gathering written qualitative feedback from participants on the questionnaire, a number of individual interviews were also undertaken with members of the singing groups. All participants were offered the opportunity to undertake interviews and 25 volunteered.



Members of the Maidstone group at the Hazlitt Theatre

During the interviews a wide range of experience of mental health issues was identified including depression, anxiety, agoraphobia, bereavement, Obsessive Compulsive Disorder, Bipolar Disorder, Dissociative Personality Disorder, previous psychotic episodes, previous mental/emotional breakdowns, insomnia, experiencing isolation and 'the general ups and downs of life'. For many participants the singing group proved a catalyst to overcoming these issues, as demonstrated by the following quote:

I have lost all my family and have had a lot of loss and am still bereaving. I do a lot of avoiding. I don't like opening letters or answering the phone. I am now clearing out a lot of the paperwork and I don't think I would have done that before I did the singing. It just seems the last 38 years has been one loss after another

The interviews uncovered broadly similar themes as those identified from the comments recorded on the questionnaires. Most participants spoke of their enjoyment in attending the singing group and having something to look forward to each week:

It's been brilliant to have something so specific to get up for, something that I'm looking forward to every single week that it's just, you sit there and think 'Well what's the point?' and then I think 'Well hang on, I've only got another few days until singing group!' Yes it is definitely an inspiration and motivation

I've gained an outlet and just not been stuck in the house on a Friday. Getting up earlier, setting myself up for the day

Participants commented positively on the social benefits of attending the singing groups which provided an opportunity to meet new people and make friends, which some found difficult to do normally on account of their mental health issues:

I tend very often with bipolar to withdraw into myself and I try not to do that and this has helped. It has been good meeting another group of people

Many individuals reported that attending the weekly singing group had helped them to improve their confidence and increased their resilience in overcoming adversity and personal issues:

Certainly the singing has helped how I feel in myself, and now I feel more positive. I still know I have the crutch of the tablets but we are working on that... I still get the blips but I feel more able to cope with the blips

There's usually a reason why people come – either they're looking after somebody or the person has come for themselves, and the confidence for somebody who is ill like that or who has got a condition, the confidence is just a huge issue, because you suddenly have things taken away from you. And going into a singing group does help to get some of that back

A sense of belonging and feeling a valued part of a supportive group were commonly reported benefits from the participants:

I do feel there is a real sense of community and camaraderie amongst the group... You can come in, have fun and if you start off in a bad mood, as I did this morning for example, you can come in and, you know, a few hellos and cheery smiles and then a little bit of warming up and a little bit of singing and it's all gone away and you're happy again

It's not a competition but it's the way it blends together. You feel really part of it. You're contributing your bit towards the group

Many participants reported that the singing group had a very positive impact on their mental health and provided an opportunity to relax and release tension, and that this feeling had a lasting effect after the session:

It's a sort of meditation when you sing a song. It stimulates me but I find it very calming as well. The breathing that goes with it

If you're not feeling too good, you know often most people can get like that, you come here and you feel good and then it leaves you for the rest of the day. You go out feeling that's great, I'm glad I did that

Because it has been keeping my general mood up it means I've actually been accessing the services less frequently and less severely I would say. So on the few occasions I have had to get in touch it's been not as bad as it could otherwise have been... I think having the singing group has been keeping me quite balanced for a while which means that it's actually been a lot easier to get through the psychiatric process and waiting lists and things like that so it's been an immense help in that respect

Learning new things and feeling a sense of challenge and achievement were also commonly reported benefits of attending the weekly singing group for participants:

I really do like the mental challenge of remembering words and I do find sometimes that my memory fails me and I used to try and practice times-tables but learning a song is definitely far more interesting, so it's definitely helped the old brain matter

Discussion

Since 2005 when the De Haan Centre was established there has been a clear growth of interest in the value of regular group singing for wellbeing and health. This is reflected not only in the growth of community singing groups in the UK, but the substantial increase in evaluation and research documented in recent reviews (Clift et al., 2010; Gick, 2011; Gick and Nicol, 2015). Singing is a holistic activity. It engages people physically, mentally, emotionally and socially and can be seen as a form of 'exercise' on each of these levels, with singing commonly experienced as 'energising', 'calming', 'uplifting' and 'enjoyable.'

The research challenge, currently, is not so much to evidence such benefits which are so widely reported, but more to address the extent to which regular community singing can have clinical benefits for people experiencing challenges to their mental and physical health. In addition, work is needed to explore the feasibility of setting up and running singing groups in association with, or embedded within, existing health and social care structures. These type of creative interventions may reduce demand for more intensive services.

In the current project, we aimed to build upon an earlier project on singing for mental health in East Kent to test the feasibility of establishing a network of singing for mental health and wellbeing groups in West Kent and Medway and to assess their effectiveness with respect to improved mental wellbeing.

Specific objectives were:

- to work with community services supporting people with challenges to their mental health and wellbeing to establish weekly community singing groups
- to assess changes in mental distress using the short form of the Clinical Outcomes in Routine Evaluation (CORE-10) questionnaire
- to assess changes in mental wellbeing using the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS)
- to gather qualitative feedback from participants through written comments and interviews
- to document the project through photography and film

Our aims and objectives were clearly achieved as this report and the associated documentary film demonstrate. We were able to work with a range of community services supporting people with challenges to their mental health and wellbeing to establish and sustain four community singing groups. These groups were successfully brought together for a larger singing workshop; a performance event jointly with groups in East Kent, and for a launch event for the current report. In addition, we gathered feedback from participants using two structured questionnaires for assessing mental distress and mental wellbeing, together with qualitative evidence based on written comments and interviews. Finally, participants in the project were very willing to engage with both photography and filming to provide audio-visual documentation of the project and what it achieved.

Mental health and wellbeing outcomes

Key objectives of this project were to assess whether the positive findings previously reported by Clift and Morrison (2011) in the East Kent Singing for Mental Health Project would be replicated in a further study in West Kent and Medway.

In this respect, the project was successful in showing measurable reductions in mental distress and improvements in mental wellbeing, supported by uniformly positive qualitative feedback through written comments and interviews. In the current study, the short form CORE10 questionnaire was employed, whereas in the earlier study the full 34-item version was used. Comparing CORE10 scores at baseline and six-month follow-up showed a reassuringly good level of reliability over the course of the study period.

For both studies, despite the use of different versions of the CORE scale, a significant reduction in total CORE scores were found indicating reduced mental distress. Moreover, significant changes were found on the same CORE10 items relating to reported symptoms or problems with mental health (Tables 5 and 6). The common items in both studies showing reductions were:

I have felt tense, anxious or nervous

I have had difficulty getting to sleep or staying asleep

I have felt unhappy

Unwanted images or memories have been distressing me

It is also notable that the pattern of changes between baseline and follow-up in the two studies are strikingly similar (Figures 2 and 3), as are the proportions of participants showing levels of change that can be regarded as 'clinically important' – 17% in both studies.

In addition to the CORE10, the Warwick Edinburgh Mental Wellbeing Scale (WEMWBS) was also employed. This was included as the WEMWBS has been increasingly used in evaluations of mental wellbeing interventions in the UK, and is an instrument used in the evaluation of other community wellbeing projects in Kent. Comparison of WEMWBS scores at baseline and follow-up showed a good level of reliability, but more interestingly, significant negative correlations were found for all combinations of the CORE10 and WEMWBS over the six-month period. The two questionnaires do contain some items with similar content, but they are very differently focused and the fact that significant negative correlations emerged supports their validity in measuring mental distress/wellbeing.

Two items showed significant improvements:

I have been thinking clearly

I have been feeling good about myself



Singers from East Kent supporting the Hazlitt Theatre event

Limitations of the present study

The present study achieved its aims and objectives and produced positive findings with regard to the outcome measures. Nevertheless it does have some limitations which further research could address.

Recruitment proved to be a challenge in this study and a wide range of community services and other channels of communication had to be employed to build up the four groups and ensure they were viable. Nevertheless, the numbers of people who regularly engaged in the singing groups was approximately half the original target.

Baseline assessments took place several months after the groups were first established. This was a planned part of the project both to allow time for the groups to build and consolidate, and also to allow participants to feel confident about the group and the facilitator before asking them to take part in the evaluation. However, this did mean that many of the participants had already experienced up to two months of singing before the baseline assessment took place. It was clear from qualitative feedback on the first questionnaire that participants had already experienced a range of psychological, social and even physical benefits.

The study had a longitudinal, observational design with assessments at baseline and follow-up, but there was no randomised control group or comparison group. As a result, it not possible to definitively attribute the changes seen to the singing activity or other processes specific to the groups.

Finally, while the outcomes for mental wellbeing were assessed with structured, previously validated questionnaires, the data has the limitation of being subjective self-reports of mental health and wellbeing. Such data should be taken seriously, and is further supported by qualitative written comments and testimony gathered through interviews and on film. Nevertheless, more objective data based on service utilisation, specialist diagnosis, use of medication and even bio-markers of wellbeing, were not employed in this study.

Recommendations

A number of recommendations can be made from the current study with respect both to further research and to the practical delivery of singing or health groups.

The current study, building as it does on the earlier East Kent study, demonstrates the feasibility and acceptability of establishing singing groups for people with a history of mental health issues. The groups were also sustained over the course of a year with regular attendance from a core group of participants.

The study also shows the utility of the CORE10 and WEMWBS as outcome measures. However, design limitations mean that the changes on these scales found over time cannot be definitively attributed to the singing intervention due to the lack of an appropriate control group. It should be recognised, however, that the participants themselves clearly attribute beneficial changes to their participation. The study thus provides an excellent grounding for designing a randomised controlled trial for a community-based singing for mental health intervention in association with NHS professionals providing care and support for people with long-term mental health issues.

In addition, consideration should be given to ways in which the groups established in West Kent and Medway might be sustained beyond the end of the year when project funding for facilitators and venues comes to an end. This is an issue that group members and facilitators have discussed and efforts are being made to explore ways of continuing with the groups through individual financial contributions and seeking external support. In all of the De Haan Centre's previous community singing projects the same issue has been faced and groups have successfully sustained themselves through different models of fund-raising. Currently, four such groups in East Kent are supported by local Clinical Commissioning Groups, and the De Haan Centre is assisting them in the on-going monitoring of benefits which regular singing provides to members who are living with a wide range of challenging health issues.

It is hoped that further discussions can take place with commissioners and clinicians across the whole of Kent and in Medway to explore ways of taking these recommendations forward.



Members of the Chatham group at the Hazlitt Theatre

References

- Clift, S. (2012) Creative arts as a public health resource: moving from practice-based research to evidence-based practice, *Perspectives in Public Health*, 132, 3, 120-127.
- Clift, S. and Camic, P. (2015) (Eds.) *Creative Arts, Health and Wellbeing*, Oxford: Oxford University Press.
- Clift, S and Hancox, G. (2001) The perceived benefits of singing: Findings from preliminary surveys of a university college choral society, *The Journal of the Royal Society for the Promotion of Health*, 121, 4, 248-256.
- Clift, S. and Hancox, G. (2011) The significance of choral signing for sustaining psychological wellbeing: Findings from a survey of choristers in England, Australia and Germany, *Music Performance Research*, 3, 1, 79-96.
- Clift, S. and Morrison, I. (2011) Group singing fosters mental health and wellbeing: Findings from the East Kent 'singing for health' network project, *Mental Health and Social Inclusion*, 15, 2, 88-97.
- Clift, S., Nicols, J., Raisbeck, M., Whitmore, C. and Morrison, I. (2010) Group singing, wellbeing and health: A systematic mapping of research evidence, *UNESCO Journal*, 2, 1, Available at: <http://www.abp.unimelb.edu.au/unesco/ejournal>
- Connell, J., Barkham, M., Stiles, W.B., Twigg, E., Singleton, N., Evans, O. and Miles, J.N. (2007), Distribution of CORE-OM scores in a general population, clinical cut-off points, and comparison with the CIS-R, *British Journal of Psychiatry*, 190, 1, 69-74.
- Coulton, S., Clift, S., Skingley, A. and Rodriguez, J. (2015) Effectiveness and cost-effectiveness of community singing on mental health-related quality of life of older people: randomised controlled trial, *British Journal of Psychiatry*, 1-6, doi: 10.1192/bjp.bp.113.129908.
- Gick, M.L. (2011) Singing, health and well-being: a health psychologist's review. *Psychomusicology*, 21, 176-207.
- Gick, M and Nicol, J. (2014) Singing for respiratory health: theory, evidence and challenges, *Health Promotion International*, 1-10 pre-publication online access: doi: 10.1093/heapro/dav013
- Grey, P. and Mellor-Clark, J. (2007) CORE: *A Decade of Development*, Rugby: CORE-IMS. available at: www.coreims.co.uk/
- Morrison, I., Clift, S., Page, S., Salisbury, I., Shipton, M., Skingley, A., Vella-Burrows, T., Coulton, S. and Treadwell, P. (2013) A UK feasibility study on the value of singing for people with chronic obstructive pulmonary disease (COPD), *UNESCO Journal*, 3, 3, 1-19, Available at: <http://education.unimelb.edu.au/>
- Skingley, A., Bungay, H., Clift, S. and Warden, J. (2014) Experiences of being a control group: lessons from a UK-based randomized control trial of group singing as a health promotion initiative for older people, *Health Promotion International*, 29, 751-758.
- Skingley, A. Martin, A. and Clift, S. (2015) The contribution of community singing groups to the well-being and older people: Participant perspectives from the United Kingdom, *Journal of Applied Gerontology*, 23, 1-23, doi: 10.1177/0733464815577141.
- Skingley, A., Page, S., Clift, S., Morrison, I., Coulton, S., Treadwell, P., Vella-Burrows, Salisbury, I., and Shipton, M. (2014) 'Singing for breathing': participants' perceptions of a group singing programme for people with COPD. *Arts & Health: An international journal for research, policy and practice*, 6, 59-74.
- Stewart-Brown, S., Tennant, A., Tennant, R., Platt, S., Parkinson, J. and Weich, S. (2009) Internal construct validity of the Warwick-Edinburgh Mental Well-being Scale (WEMWBS): a Rasch analysis using data from the Scottish Health Education Population Survey, *Health and Quality of Life Outcomes*, 7, 15, doi:10.1186/1477-7525-7-15.
- Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., Parkinson, J., Secker, J. and Stewart-Brown, S. (2007) The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development and UK validation, *Health and Quality of Life Outcomes*, 5, 63, doi:10.1186/1477-7525-5-63.
- WEMWBS website: <http://www2.warwick.ac.uk/fac/med/research/platform/wemwbs/>



I thoroughly enjoy attending this singing group. The facilitators are lovely and very talented! I find that I look forward to the weekly meeting and enjoy meeting the other members. Singing itself definitely raises my spirits!

I have enjoyed myself since I joined and feel that I have been helped a lot with my problems

Attending the group in the mornings has left me feeling more awake and alert with more energy for the rest of the day compared with days the group isn't on

The staff are excellent no matter what. If you're not feeling too good, you know often most people can get like that, you come here and you feel good and then it leaves you for the rest of the day. You go out feeling that's great, I'm glad I did that

Joining the singing group has helped me a lot. It's made me happy and better and more confident and I wouldn't be without it now. It's now part of my life. I don't [want] to lose [it] since I enjoy it so much. It's improved my mental health