

“To Be Heard” – the social and mental health benefits of choir singing for disadvantaged adults

Genevieve Dingle¹, Christopher Brander¹, Julie Ballantyne² & Felicity Baker²

¹School of Psychology

²School of Music

The University of Queensland

Compared with other members of the general population, adults living with a chronic mental illness or disability tend to participate less frequently in occupational and social interactions. This may exacerbate problems such as emotional flattening and social isolation. Supported activities like choir singing present an opportunity for meaningful activity and social connectedness for these individuals. The aim of this study was to explore the personal experiences of choir members (89% of whom experienced chronic mental health problems, 28% physical disabilities and 11% intellectual disability) in relation to their well-being using interpretative phenomenological analysis (IPA). Semi-structured interviews were carried out with 21 members of the choir at three time points in the choir’s inaugural year: at the inception of the choir, after six months, and after twelve months. Three content themes emerged: (1) personal impact (positive emotions, emotional regulation, spiritual experience, self-perception, finding a voice); (2) social impact (connectedness within the choir, connection with audience, social functioning); and (3) functional outcomes (health benefits, employment capacity, and routine). A fourth theme of time was also apparent in the data. Results of this study were consistent with the social identity theory notion that forming a new and valued group identity (as a choir member) was associated with emotional and health benefits for the participants.

Keywords: choir singing, mental health, wellbeing, social inclusion, disability

Introduction

In the 2003 Australian census, 6.3% of people reported that they experienced a severe or profound disability, and most of these were due to chronic mental illness or to intellectual / developmental disabilities (Australian_Bureau_of_Statistics, 2004). The term chronic mental illness commonly refers to people who have schizophrenia, bipolar disorder, or major depressive disorder, and is sometimes extended to people with post traumatic stress disorder, a personality disorder, or anorexia nervosa (Woods et al., 2008). Mental illness can have a negative effect on daily functioning as well as impairing or preventing typical developmental milestones such as receiving tertiary education, participating in paid employment, getting married, and raising children (Seltzer et al., 1997). People with serious mental illness are likely to have fewer social contacts and supports and are likely to be receiving less income (Shibusawa and Padgett, 2009, SANE_Australia, 2010). They are also at greater risk of homelessness, imprisonment, and social marginalisation (Boardman, 2006). Although medications have demonstrated efficacy in the treatment of positive symptoms such as hallucinations and delusions, they are less successful at treating negative symptoms such as emotional flattening, loss of motivation and social withdrawal (Carpenter, 2005, Buchanan et al., 2010). Repeated psychiatric hospitalisations and coping with symptoms such as paranoia, hallucinations, and depression can make it difficult for people with mental illness to form intimate relationships or keep stable employment (SANE_Australia, 2010). For these reasons, and consistent with the ethos of deinstitutionalisation, there is a need for community based strategies to assist individuals with chronic mental health problems to achieve mental health and wellbeing while remaining out of hospital. Supported activities (in which support workers from government or non-government charitable agencies

assist the individual to attend and engage with an activity) such as choir singing present an opportunity for meaningful activity, social connectedness and quality of life for these individuals.

Choir singing

Choir singing has demonstrated powerful effects on both professional and amateur singers, as shown in reductions in the stress hormone cortisol during choir rehearsals (Beck et al., 2000), increased oxytocin, improvements in immune system functioning, and self rated improvements in mood and well-being (Grape et al., 2003, Kreutz et al., 2004, Valentine and Evans, 2001, Clift et al., 2010). A study of 84 members of a university college choir in England identified 6 dimensions of benefits associated with singing: benefits for well being and relaxation, breathing and posture, social benefits, spiritual benefits, emotional benefits, and benefits for heart and immune system (Clift and Hancox, 2001). Bailey and Davidson conducted a series of studies exploring the effects of group singing among homeless and marginalised people as well as among a group of middle class people (Bailey and Davidson, 2002, Bailey and Davidson, 2003, Bailey and Davidson, 2005). The positive effects of group singing and performance in these samples were found on four outcomes: clinical type benefits (energy, relaxation, singer's high), group process (social support, camaraderie, normalcy), choir/audience reciprocity (empowerment, contribution, pride), and cognitive stimulation (concentration, ordered thought process). Australian researchers (Grocke et al., 2009) investigated the effect of group music therapy on quality of life and social anxiety among 17 people with chronic mental illness. Ten one-hour weekly sessions were conducted with activities such as singing, song writing and improvisation and a recording session at the end. Although no significant changes were found on psychiatric symptoms, the group music therapy

resulted in significant improvements on 5 items of a quality of life scale, including increased general quality of life, health, and perceived support from friends.

Theorising how choir singing may relate to health outcomes

Beyond the health benefits of music and singing, choir singing is a regular group activity that tends to draw members together as a single entity that must work together to produce a good sound. Choir rehearsals provide the opportunity for members to form an additional social support group and an additional social identity. A whole body of social psychology research – Social Identity theory – explains that it's not just group memberships that relate to positive health, but when the members strongly identify with the group and when the groups provide stability, meaning and purpose, that groups can have a positive impact on a person's mental health (Tajfel and Turner, 1986). Conversely, when our social identity is threatened, whether by leaving or changing groups, this can have a negative impact on our wellbeing. For instance, a change in career can result in a loss of social connections and also a loss of a social identity. There is growing evidence that being socially active and belonging to a number of different social groups can help us cope with life changes and can be an important predictor of health outcomes (Haslam et al., 2009).

A study by Iyer and colleagues (2009) with university students provides an example where belonging to multiple social groups was related to increased resilience in students transitioning to University. One hundred and four first-year university students were surveyed in relation to their transition into university. Students who belonged to more groups prior to attending university were better able to adjust to their new social identity of being a university student and were found to have lower levels of depression (Iyer et al., 2009).

Studies on stroke patients have illustrated the importance of group membership in predicting positive health outcomes. A study by Haslam and colleagues (Haslam et al., 2008) surveyed 53 patients recovering from a stroke. The results indicated that there was a significant correlation between life satisfaction and both the number of group memberships before the stroke and the number of group memberships maintained after the stroke. In another study of 655 stroke patients, it was found that patients who were socially isolated were more than twice as likely to have another stroke within the next 5 years as people who had meaningful social relationships (Boden-Albala et al., 2005). Being socially isolated was found to be an even greater risk factor than having coronary heart disease or physical inactivity (Boden-Albala et al., 2005).

Bailis and colleagues (2008) investigated the effects of collective self-esteem on 144 community dwelling older adults. Collective self-esteem was a measure of how many social groups the participants belonged to, how closely they identified with those groups and how they thought those groups were perceived by others. Higher levels of collective self-esteem were found to slow the rate of developing chronic illnesses and increase the rate of daily physical activity (Bailis et al., 2008). This research is particularly relevant for disadvantaged people – many of whom live in social isolation. Participation in a choir or other group activity can increase their level of social interaction and potentially provide an additional social identity, which could have positive outcomes for their health and well being.

The ReLink Transformers choir

This study concerns the Transformers choir, which is organised and supported by the charitable agency ReLink (Dingle et al., 2010). ReLink - which receives funding from the Australian commonwealth government, local government and

charitable donations - is an inter-agency networking organisation located in 17 networks across urban, regional and remote Australia. Reclink co-ordinators liaise with local services (such as mental health, disability, drug and alcohol, homeless, domestic violence, immigrant support services, and so on) to provide disadvantaged adults a range of sporting and cultural activities with varying levels of intensity and support. Some examples of Reclink activities include choirs, artist collectives, tag football, bowling, and yoga. Individuals are referred to a Reclink activity by their existing health worker or agency, and those that require support to attend and engage with an activity can access this support either from their home agency or a Reclink support worker. The Transformers choir is also supported by a number of volunteers who assist members during rehearsals and provide catering for meals.

The current study

Supported recreational and cultural activities such as choirs deserve attention as they have potential to improve the quality of life for people with chronic mental illness and disabilities. The current study aimed to investigate the effects of participating in a supported choir for people with mental illness and social disadvantage using qualitative analysis of interview transcripts. A qualitative approach was chosen in part to capture the detailed and idiosyncratic experiences that choir members described, and partly because many of the choir members did not have the capacity to complete a set of questionnaires that would assess similar concepts. The study used interpretive phenomenological analysis (IPA) (Smith, 1996, Smith et al., 2009) in which semi-structured interviews allow for participants to describe their experiences in a rich and personalised manner (the phenomenological aspect), while the questions themselves cover topics of interest to the researchers (the interpretive aspect) – in this case, mood, wellbeing, general health, social connectedness and

social identity. The IPA approach has been called the most psychological of the thematic analysis approaches, with a particular focus on the cognitions and emotions of participants (Pistrang and Barker, 2010), which makes it a suitable approach for the current study.

Methods

Participants

The first author was invited by the Reclink community development coordinator to attend choir rehearsals from the first day and she briefly spoke to the choir about the study and encouraged members to participate on several occasions. She then approached individual members before rehearsals and during meal breaks to provide written information about the study and to obtain signed consent from those willing to participate in the study. All procedures and materials for this study were approved by the University of Queensland Behavioural and Social Sciences Ethics Review Committee. During the year, membership of the choir fluctuated around 40 participants, with 21 members consenting to be interviewed for the study. This sample represented the majority of members who joined at the start of the choir and who had the capacity to be interviewed and/or to complete pencil-and-paper questionnaires. The first author spoke to the support workers who accompanied choir members with intellectual disabilities and those who were able to be interviewed were included, however many of these individuals were not able to complete the questionnaires. It is therefore possible that the data presented in the study are biased towards the higher intellectually functioning members of the choir.

Demographic information presented in Table 1 shows that 57% of the sample was female, and ages ranged from 31 to 74 years with an average of 47 years (3 participants did not provide an age). The vast majority of choir members identified as

Anglo Australian ethnicity (90%), with one Greek Australian and one person of Anglo Indian ethnicity. Table 1 further shows that most of the sample (89%) experienced chronic mental illness, and a smaller but still sizeable percentage reported physical (28%) or intellectual (11%) disabilities. Sixty percent reported taking prescribed medication for a mental health problem. Only one participant reported being in treatment for an alcohol problem, however, choir organisers were aware that substance misuse was affecting the choir attendance of around 10% of members. Previous musical experience varied widely among the participants, with half of the sample (54%) reporting less than a year of musical involvement (singing or playing an instrument) over their lifetime, while some participants reported over 10 years of musical involvement. The overall mean of musical experience was 6.77 years (SD = 10.24).

[insert Table 1 about here]

The Choir

The participants chose the name “Transformers” by popular vote. Rehearsals were held once a week for 3.5 hours in a community hall, including morning tea and lunch breaks (nutritious meals were provided by a group of volunteers). The choir director was experienced in directing choirs for adults and young people, including individuals experiencing social disadvantage. She selected the musical repertoire in consultation with the keyboard accompanist and other musically trained support workers, and included world music, ballads, and popular music. Music was typically provided in the form of the lyrics to which choir members could add their own notes, however, choir members who played musical instruments could request copies of the sheet music for most songs. Most songs were sung in four part harmony with the keyboard accompaniment, although some songs were performed a capella (such as an

African lullaby). Choir members were also taught simple choreography to go with the songs, such as swaying, steps, and clapping.

Interview procedure

Interviews were conducted one-on-one in a quiet place within or near the rehearsal hall by either the first or the second authors at three points in time: at the inception of the choir, after six months (which was after the choir's first public performances), and after 12 months. Interviews of around 20 minutes duration were conducted before or after rehearsals or during the lunch break, as many of the participants relied on the charity's minibus or public transport to get home. The kinds of questions asked during the interviews are summarised in Table 2.

Of the 21 participants interviewed at the start of the year, 10 were interviewed at 6 months, and 6 were interviewed at 12 months, making a total of 37 interview transcripts for analysis. Of these 21 participants, six (29%) were interviewed at 12 months as mentioned, four had dropped out of the choir, two were in hospital at 12 months, 1 was still in the choir but declined to be interviewed, and the remaining seven were not present when the 12 month interviews were being conducted (some away on holidays and others whose information is unknown).

[Table 2 about here]

Interpretive phenomenological analysis

Semi-structured interview schedules (summarised in Table 2) were devised according to the procedure described by Smith (Smith, 1996, Smith et al., 1999, Smith et al., 2009). According to Smith and colleagues (Smith et al., 1999), this approach is phenomenological in that it aims to understand the "individuals' personal perception or account of an object or event as opposed to an attempt to produce an objective statement of the object or event in itself" (p. 218), and it is also interpretive because

the researcher aims to “develop an understanding of participants’ experiences, with the themes that are identified considered to come from your personal interaction with, and interpretation of, the interview data, regardless of the particular strategy you choose to employ” (p. 230). In this case, the first author and later the second author joined the choir and attended rehearsals in order to build rapport and familiarity with the choir members. The data obtained in interviews is therefore likely to reflect the subjective experience of the choir members and the interviewers in interaction.

Although the interviewers clearly identified ourselves as “researchers” independent from the agents running the choir, the fact that we joined the choir could be seen as a positive endorsement which may have influenced the participants to provide socially desirable responses. We aimed to provide participants with the opportunity to speak freely about their experiences – both positive and negative – by asking specific questions about positive and negative experiences and also more generally in the process of recruitment and informed consent.

Responses were recorded and transcribed verbatim for the thematic analysis. Transcripts were organised according to questions and time point, so the initial interviews came first, followed by the six month and then the 12 month interviews. Transcripts were read and reread a number of times to gain a thorough understanding of the data. Transcripts were coded by the all the authors independently, followed by a series of meetings to discuss and refine dominant themes and subthemes (Smith, 1996). There was general agreement on the three content themes arising from the data, however, there was some discrepancy among coders on the detail of the subthemes. For example, one researcher perceived the subtheme of the choir as an “outside activity” that involved leaving the home as important, while other researchers perceived this theme as part of the subtheme of “Routine and Structure”

under the major theme of Functional Outcomes. The fourth theme of Time was discussed several times, and later added as a separate component in the thematic map to indicate how the various experiences described by participants progressed over the three interviews from more Personal Impact of singing in the choir, to the Social Impact of becoming closer to other choir members and performing for the audiences around six months, and then to Functional Outcomes largely described at 12 months as participants reviewed their first year in the choir. The final themes are presented in a thematic map (Figure 1).

[Figure 1 about here]

Results

The three main content themes that emerged from the qualitative analysis were: (1) personal impact, (2) social impact, and (3) functional outcomes. These are presented in the thematic map (Figure 1). Subthemes related to each of these main themes are discussed with examples below. Given that time played a role in the kinds of experiences described by participants, we added another theme (4) Time along the bottom of the thematic map, indicating that experiences progressed from largely Personal, to Social, and then to Functional across the three time points. The timepoint is indicated next to each direct quote from a participant. In particular the main theme Personal Impact was derived heavily from early (time 1) experience, the theme of Social Impact was largely informed by 6 month and 12 month experiences of giving concerts, connecting with the audience, and building more meaningful relationships with other choir members; and the theme of Functional Outcomes was largely informed by interview data gathered at 12 months (Time 3).

Theme 1 - personal impact

Positive emotions

One of the most common descriptions of the experience of being in the choir was the positive feelings and sense of wellbeing associated with singing. When asked about the feelings experienced when singing during choir rehearsals, responses included:

Jillian (Time 1): *It makes me feel very positive...makes me feel good for the whole day.*

Tom, Fiona, Gary (all Time 1): *Energised.*

And when asked about how the choir influenced their mood, responses included:

Bob (Time 1): *Uplifted, positive influence on my mood. I get a feeling of accomplishment that I've done another week in the choir.*

Karen (Time 1): *Your endorphins are flying, your hands are buzzing. It's a good thing for the body and mind to do. If you are feeling down, I definitely feel better because the body switches on everywhere.*

Emotional regulation

Many choir members reported that singing helped reduce stress and tension and allowed for relaxation. Some examples include:

Bob (Time 1): *It's like a release of anxiety and pressure. Generally I feel comfortable. Singing makes you feel relaxed.*

Paul (Time 1): *I'm inclined to worry about things. The choir can help to break the cycle.*

Negative aspects

Of course not all emotional experiences in the choir were positive. When asked about negative aspects, nine choir members could not think of any negative. However, some members reported negative aspects associated with the choir:

Jack (Time 1): *Tired, sore throat, anxious feeling that I can't do as well as other people. Transport. It takes over an hour to get here. I take a bus, city cat (ferry), then another bus. Also I get a sore throat.*

Tina (Time 2 – experience of the first performance): *Very stressed. Very scared. Certain of singing wrong notes and at the wrong time. Agitated. Had to not think about it - try not to think about it AT ALL or it was too much. Too much adrenalin.*

Spiritual experience

Although there were no questions that asked about a spiritual experience, a few choir members did report a spiritual impact from being in the choir:

Brooke (Time 1): *It lets those emotions out – I believe it gives it to a higher power because I'm a Christian.*

Karen (Time 2): *It means getting back through to the more spiritual side of myself, because of the safety in this group, I'm starting to come out... I thought I'd have to stop the choir to stay stable but actually I need to stay IN the choir to stay stable in all the demands of the play. Spiritual unblocking...It means a great deal. It's healing my creative soul. It's healing my spirit. It's the most normal life I've lived in a long time.*

Improved self perception

Being in the choir appeared to have a positive impact on the choir members' perception of themselves. An increase in confidence was commonly reported:

Jillian (Time 2): *It gives me confidence and that I am capable and can do things when I try. I am not a failure... Yes, I'm feeling quite chuffed with myself belonging to the Transformers and I'm becoming busy in my life like I never used*

to be and people are noticing how I'm becoming a nicer person to know and how capable I feel within ME.

Alice (Time 2): *[Being in the choir] means a great deal. I feel honoured to be part of the choir and to have the opportunity. It's a big part of my week. [It's] helped with self-esteem and confidence. To be involved in a choir like this is just what I needed... It's given me what I needed to be on the road to recovery. It's made me stronger, more able to connect and try new things. It gives us something you can take out into the community in everyday life to meet other goals with more confidence.*

Improved singing ability

An increase in choir members' perception of their singing ability was also expressed:

Jack (Time 2): *It's giving me confidence in the musical abilities, like singing in front of people like [the choir organizer] today. I imagine that's because of being involved in the choir... Because of being in the choir, I got the opportunity to be in [the recycled instrument making] group, the Reclaimers. That's good as well. I'm learning about how music is made and the rhythms and timing and things like that.*

When asked about intentions to stay in the choir and future goals in the choir, the most common response was a desire to improve their singing ability:

Louise (Time 3): *Yeah, as long as it goes. Probably to sing better – to sing better than I am.*

Tom (Time 3): *Yes, most definitely. Yes to be able to sing. Lots of other stuff too. (Prompt: Anything else that springs to mind?) Yes to develop rhythms, appreciation of rhythms.*

Finding a voice

Finding a voice was a subtheme that contributed to both the Personal Impact and Social Impact of the choir. People experiencing chronic mental health problems and disabilities often do not receive much attention by society but the choir was an opportunity to make themselves heard. This was evident in members' replies to the question about their favourite song in the choir (see Appendix for lyrics to the song "To Be Heard" by Brian Procopis who works and sings with the Transformers):

Brooke (Time 1): *"To Be Heard" – I can identify with some people who have more abilities can put you in the background. The song is about finding a voice and saying what you want so others can understand you.*

Simon (Time 1): *"To Be Heard" – it conjures up the whole box and dice of homelessness, mental health, addiction problems. At times [people are] really marginalized. [This song] gives others some awareness and insight into some people's lives...bringing it into the mainstream society.*

[insert Figure 1 about here]

Theme 2 - social impact

Connectedness within the choir

A sense of acceptance and belonging within the choir was one of the most prevalent subthemes. For example, when asked, "Do you feel connected with other choir members?" All but two participants responded with a yes, while the other 2 gave a mixed response. Identification as a member of the Transformers choir was probably reinforced by the supply of a uniform for the concerts: a striking black t-shirt with an orange Transformers logo that the choir members helped to design, black skirt

or trousers and a black cap. Some examples of the connectedness within the choir sub theme were:

Jillian (Time 1): *Yes it's a wonderful family. It's my choir family... It means.. um, a sense of belonging to an awesome group of people. To be part of something that fulfils me, gives me happiness and self confidence and I feel accepted as part of the group and I love choir. It's the highlight of my week... People know my name even without my name badge. We can talk more freely to each other and feel more comfortable to be able to be ourselves to a point but with respect for others. We are all equals!*

Karen (Time 2): *Yes, I realised when we went to the Town Hall [concert], looking around at others, that I was really forming a peer group that I'm very comfortable with.*

Connection with local community

A number of participants reported that choir had helped them reconnect with their local community. Some examples of the connection with the local community subtheme include:

Simon (Time 1): *Participating is a positive outlet in the community. I've been homeless and living rough for years. I'm just getting back into life. [The choir] is completely different from AA meetings and (Salvation Army homeless men's lodge)... definitely. It's opening up... getting back into life, extending my perimeter. It's a social outlet.*

Paul (Time 2): *(Recalling the first performances - laughs). Yeah, the exhilaration of having been so well received by the audience. I felt relieved and I felt like it didn't matter sort of. We all did it together.*

Rana (Time 3): *Um... I think one of the initial things was to start me getting out again. I had dropped out of a lot of things like jazz club. And it was the start of going out again. I'm now back at the jazz club and the Silver club. I suffered from depression you see and I felt very alone.*

Connection with the audience

A sense of connection with the audience was another common theme. When asked about their favourite moment in the choir so far, a large number of people responded that it was during the performances and the warm reception from the audience:

Jillian (Time 2): *I felt really, really good inside. A warm and fuzzy feeling. A major adrenaline rush. To me, it was a 99.9% success.*

Louise (Time 3): *Um, the favourite one was the Christmas performance at Queen St Mall. A lot of people were standing around and listening. It was a good feeling. We did two sessions. A good feeling. It makes you feel better – a good reaction from the audience.*

Improved social functioning

An increase in general social functioning was reported by a number of participants. This was considered relevant to Social Impact but also Functional Outcomes. Increased social interaction within the choir appeared to benefit members' relationships outside of the choir as well:

Jillian (Time 1): *Yes, I don't get as crabby as I used to...I'm more tolerant... I'm learning to be more at ease in myself and not judgmental of others. To be more open to people in every walk of my life. All sorts of people make the world go round and learning not to be so wrapped up in "ME".*

Tina (Time 2): *People tell me my confidence has grown. Choir is the only activity I do so I guess that means I might be less isolated than before.*

Karen (Time 2): *I definitely see a bigger sense of wellbeing [here and in the instrument making workshop]. Able to work with men and women, safe and finding boundaries...it's been difficult. The people running it are solid in themselves and open in who they are.*

Theme 3 - functional outcomes

Functional outcomes refers to improvements in broader areas of functioning as a result of being in the choir.

Health benefits

Positive health benefits were reported by a number of choir members:

Louise (Time 3): *Um, very good. I am about to come off the tablets I'm on now. I have no troubles at the moment. It gives me a pick up on energy. A lot of benefits.*

Pauline (Time 3): *I have been dealt a lot of hard blows in the last year but having the choir and my husband come into my life – I've done well. I've got my son back, I've got my sanity back, I've got my soul back.*

Improved work capacity

Another improvement in functioning that was reported was an increase in employment opportunities. When asked about changes in work capacity, responses included:

Jillian (Time 3): *Yes. My support worker thinks I'm more than capable of getting some part time work. A few days a week paid work.*

Pauline (Time 3): *Yes. I'm applying for a permanent part time job, which I wasn't able to do before.*

Routine and structure in daily life

Being in the choir also seemed to help choir members construct routine and structure in their lives. Having a consistent activity to attend every week helped with planning and was something to look forward to:

Jack (Time 2): *It's a steady influence. It's helped me in making routines.*

Tina (Time 2): *Being a member is a hard word. Very hard. The Transformers is the only activity I do during the week and the only place I've gone to mostly willingly for YEARS. Sometimes it's like the only positive in my life.*

Overall, participants had very positive impressions of the choir. For instance, when asked “Do you intend to stay in the Transformers?”, all but one respondent said “yes”, and the remaining participant was unsure about his availability. When asked, “Is there anything else you would like to add in relation to the choir experience?”, participants had this to say:

Rana: *I do enjoy the kindness and the feeling of belonging to something....I'm 75 and I don't feel like I'm being judged for my age.*

Karen: *No. It's just been great. I thank them every time we rehearse. I felt like methadone was taking my life away and now the choir has given me my life back as a clean person.*

Discussion

This longitudinal qualitative study was designed to investigate the experiences of disadvantaged adults during their first year of singing in a supported choir. The themes emerging from the interviews indicated that there were three major benefits of choir singing for this group: personal impact, social impact, and broader functional outcomes. The most prominent finding in terms of personal impact was that choir singing made members feel good and also helped to resolve negative emotional states and problems such as pain. These findings are consistent with previous research on the emotional function of music (Hunter and Schellenberg, 2010), Clift and Hancox's (2001) emotional component and Bailey and Davidson's (2005) therapeutic benefits theme. One notable difference in the current thematic map is the distinction between feeling good after singing (Positive Emotions) and the ability of singing to reduce stress (Emotional Regulation). Other researchers (Laiho, 2004) acknowledge the multiple emotional functions of music yet we feel it is useful for the model to separate these two functions. Also, previous models have focused only on the positive aspects of participating in a choir. An advantage of the current model is that it acknowledges that there are some negative emotional experiences of joining a choir for some participants. For people with a chronic mental illness, there is perhaps a greater chance of a choir being a stressful experience due to the demands of remembering words, singing in tune, getting along with other choir members, getting oneself organised to attend rehearsals and concerts in addition to managing ones symptoms. Yet the findings of this study suggest that with an appropriate level of support, these individuals were able to overcome challenges and enjoy singing and performing to an audience.

Research on music and emotions is a rapidly growing field as shown for example in the recent publication of a 33 chapter Handbook of Music and Emotion (Juslin and Sloboda, 2010) yet little is known about how various mental disorders influence the way music is perceived and responded to emotionally. There is some evidence that depression decreases the activation of reward circuitry in the brain when listening to favourite music (Osuch et al., 2009). Furthermore, adults with schizophrenia show deficits in the ability to perceive emotions in others' voices (Leitman et al., 2010). It is a notable finding of the current study that participants in the choir (the majority of whom experienced chronic mental health problems such as depression and schizophrenia) were able to overcome the impact of their mental disorders and experience a range of emotional responses while singing. Our results add support to those of Grocke and colleagues (2009) and Ansdell and Meehan, 2010, that were conducted with similar samples of adults experiencing mental health problems.

The Spiritual subtheme matches with the spiritual component in Clift and Hancox's (2001) study of singing in a choir. The Self-Perception/ Accomplishment subtheme has some overlap with the self actualisation theme reported by Tarrant and colleagues in relation to adolescents' reasons for listening to music (Tarrant et al., 2000), and both the Identity and Agency functions of Laiho's (2004) model. An increase in confidence in particular stood out in responses from participants in the current study. Finding a voice was a subtheme that we thought had both personal and social impacts. The choir was seen as an opportunity for disadvantaged people to be heard. This was similar to the safe environment to experience voice and empowerment subthemes developed by Bailey and Davidson (2005) from their studies of choirs for homeless men and women.

The Social Impact theme was also consistent with previous studies emphasising social and interpersonal benefits of choir singing (Bailey & Davidson, 2005; Clift & Hancox, 2001; Clift et al., 2010) The current study extends on previous cross sectional research as it shows the longitudinal development of social connectedness over the 12 months period (the fourth theme of Time). A majority of choir members interviewed at 12 months reported that their social contact with other choir members had extended beyond the choir rehearsals and included phone calls, invitations to other social events, and offers of transport and other forms of social support. Two members of the choir became engaged and another couple were married during the year, there was a gradual increase in social demands as choir members were exposed first to each other, then to audiences of supporters and finally to members of the general public (e.g. Christmas carols in the city mall). The theme of connection with the audience was also reported as audience reciprocity in the study by Bailey and Davidson (2005). Adults with mental health problems and/or disabilities often experience discrimination and social exclusion (SANE_Australia, 2010), so a positive response from the audience was reported to have an enormous positive impact on the members' mood and self-perception. An increase in social interaction appears to have positive effects on relationships outside of the choir as well. It appears that the regular experience of helpful accepting relationships within the choir provided confidence for choir members to increase their social interactions outside of choir times. For people with chronic mental health problems and/or disabilities, this accumulation of positive social experiences can be seen as an important step in the process of achieving broader outcomes such as entering paid employment and maintaining stable housing, which rely on interpersonal skill and confidence.

The findings of this study build upon the existing research on health benefits of choirs by adding a theoretical framework. For participants, joining the choir represented a new and valued social (group) identity, and this was linked to increased social connectedness and improved health. This phenomena is consistent with the Social Identity theory notion that group membership and identity has important health benefits, and extends previous research showing the health benefits of social groups for adults making the transition into University and adults recovering after a stroke (Haslam et al., 2008; Haslam et al., 2009; Iyer et al., 2009) to this sample of adults with chronic mental health and/or disabilities. Further research measuring established social identity theory concepts in a mental health context is warranted to better understand what it is about joining a new and meaningful group that is beneficial to participants' mental health and wellbeing, and how this process works.

The results of this study also link to Social Capital theory more broadly – in particular the notion that cultural capital shares many of the characteristics of economic capital (Bourdieu, 1979/1984) in that cultural participation plays an important role in social relationships and networks and consequently in collective well-being (Hyypä, 2010). This link has been supported by cross sectional empirical studies conducted in the UK (Windsor, 2005), the USA (Wilkinson et al., 2007), and in South Korea (Kim and Kim, 2009), showing that participants with a higher level of cultural participation (e.g. going to art galleries, music concerts, libraries, cinema, etc) tended to have a higher subjective wellbeing.

An increase in employment capacity is a theme that has not been found in previous studies and is a significant finding as little is known about the specific processes that are required to help adults experiencing chronic mental health problems or disabilities to increase their participation in employment. There could be a number

of reasons for this finding. The social interaction from the choir may have given the participants the social skills necessary for employment. An increase in energy and health benefits, and also an increase in confidence and self-esteem could have improved employment prospects. Future research could explore this promising finding further. The ability of the choir to provide routine and structure was commonly reported by participants. Having an activity to look forward to each week appeared to have a stabilising effect on the choir members. For many who live in social isolation, this was the only activity they did consistently each week.

The study was limited by the attrition of participants by the Time 3 interviews, so that we can only describe the year long experience of a minority of choir members. We were unable to interview participants who had left the choir or were unavailable at the time of the 12 month interviews and this may have influenced the study findings. We are also unsure of the extent to which the benefits described by these choir members were attributable to choir singing per se, rather than participating in any other meaningful group activity in the community. The first author and colleagues are currently conducting a larger study of socially disadvantaged adults participating in a range of sporting and cultural groups to investigate this question further.

Conclusion

The study extended on previous exploratory choir research with the longitudinal approach across the year and the addition of a theoretical framework of social identity theory. This study demonstrates that with appropriate support, adults experiencing chronic mental health problems or disabilities are able to gain important social and health benefits from choir singing.

Acknowledgements: we would like to thank the choir members, Ben Pennings and the Reclink staff in Brisbane, and the wonderful support workers and volunteers for their support of this project.

References

- ANSDALL, G. & MEEHAN, J. 2010. "Some Light at the End of the Tunnel". *Music and Medicine*, 2, 29-40.
- AUSTRALIAN_BUREAU_OF_STATISTICS 2004. 4430.0 - Disability, Ageing and Carers, Australia: Summary of Findings, 2003. Canberra.
- BAILEY, B. A. & DAVIDSON, J. W. 2002. Adaptive characteristics of group singing: Perceptions from members of a choir for homeless men. *Musicae Scientiae*, 6, 221-256.
- BAILEY, B. A. & DAVIDSON, J. W. 2003. Amateur Group Singing as a Therapeutic Instrument. *Nordic Journal of Music Therapy*, 12, 18-32.
- BAILEY, B. A. & DAVIDSON, J. W. 2005. Effects of group singing and performance for marginalized and middle-class singers. *Psychology of Music*, 33, 269-303.
- BAILIS, D. S., CHIPPERFIELD, J. G. & HELGASON, T. R. 2008. Collective self-esteem and the onset of chronic conditions and reduced activity in a longitudinal study of aging. *Social Science and Medicine*, 66, 1817-1827.
- BECK, R. J., CESARIO, T. C., YOUSEFI, A. & ENAMOTO, H. 2000. Choral singing, performance perception, and immune system changes in salivary immunoglobulin A and cortisol. *Music Perception*, 18, 87-106.
- BOARDMAN, J. B. 2006. Health access and integration for adults with serious and persistent mental illness. *Families, Systems, and Health*, 24, 3-18.
- BODEN-ALBALA, B., LITWAK, E., ELKIND, M. S. V., RUNDEK, T. & SACCO, R. L. 2005. Social isolation and outcomes post stroke. *Neurology*, 64(11), 1888-1892. *Neurology*, 64, 1888-1892.
- BOLAS, H., VAN WERSCH, A. & FLYNN, D. 2007. The well-being of young people who care for a dependent relative: An interpretative phenomenological analysis. *Psychology and Health*, 22, 829-850.
- BORDIEU, P. 1979/1984. *La Distinction. Critique sociale du jugement (Distinction: a social critique of the judgement of taste)*, Cambridge, MA, Harvard University Press.
- BUCHANAN, R. W., KREYENBUHL, J., KELLY, D. L., NOEL, J. M., BOGGS, D. L., FISCHER, B. A. & AL., E. 2010. The 2009 schizophrenia PORT psychopharmacological treatment recommendations and summary statements. *Schizophrenia Bulletin*, 36, 71-93.
- CARPENTER, W. 2005. Editorial: Unmet Therapeutic Needs. *Schizophrenia Bulletin*, 31, 793-794.
- CLIFT, S. & HANCOX, G. 2001. The perceived benefits of singing: findings from preliminary surveys of a university college choral society. *Journal of the Royal Society for the Promotion of Health*, 121, 248-256.
- CLIFT, S., HANCOX, G., MORRISON, I., HESS, B., KREUTZ, G. & STEWART, D. 2010. Choral singing and psychological wellbeing: Quantitative and qualitative findings from English choirs in a cross-national survey. *Journal of Applied Arts and Health*, 1.
- DINGLE, G., PENNINGS, B., BRANDER, C. & JETTEN, J. 2010. The Reclink Transformers Choir. *Parity*, 23 6: 51-52
- GRAPE, C., SANDGREN, M., HANSSON, L.-O., ERICSON, M. & THEORELL, T. 2003. Does singing promote well-being? An empirical study of professional and amateur singers during a singing lesson. *Integrative Physiological and Behavioral Science*, 38, 65-74.

- GROCKE, D., BLOCH, S. & CASTLE, D. 2009. The effect of group music therapy on quality of life for participants living with a severe and enduring mental illness. *Journal of Music Therapy*, 46, 90-104.
- HASLAM, C., HOLME, A., HASLAM, S. A., IYER, A., JETTEN, J. & WILLIAMS, W. H. 2008. Maintaining group memberships: Social identity continuity predicts well-being after stroke. *Neuropsychological Rehabilitation*, 18, 671-691.
- HASLAM, S. A., JETTEN, J., POSTMES, T. & HASLAM, C. 2009. Social identity, health and well-being: An emerging agenda for applied psychology. *Applied Psychology: An International Review*, 58, 1-23.
- HUNTER, P. G. & SCHELLENBERG, E. G. 2010. Music and Emotion. In: JONES, M. R., FAY, R. R. & POPPER, A. N. (eds.) *Music Perception*. 36 ed. New York: Springer.
- HYYPPA, M. T. 2010. *Healthy Ties: Social Capital, Population Health and Survival*, London, New York, Springer.
- IYER, A., JETTEN, J., TSIVRIKOS, D., POSTMES, T. & HASLAM, S. A. 2009. The more (and the more compatible) the merrier: Multiple group memberships and identity compatibility as predictors of adjustment after life transitions. *British Journal of Social Psychology*, 48, 707-733.
- JUSLIN, P. N. & SLOBODA, J. A. 2010. *Handbook of Music and Emotion*, Oxford, Oxford University Press.
- KELLETT, S., GREENHALGH, R., BEAIL, N. & RIDGWAY, N. 2010. Compulsive Hoarding: An Interpretative Phenomenological Analysis. *Behavioural and Cognitive Psychotherapy*, 38, 141-155.
- KIM, S. & KIM, H. 2009. Does Cultural Capital Matter?: Cultural Divide and Quality of Life. *Social Indicators Research*, 93, 295-313.
- KREUTZ, G., BONGARD, S., ROHRMANN, S., HODAPP, V. & GREBE, D. 2004. Effects of choir singing or listening on secretory immunoglobulin A, cortisol, and emotional state. *Journal of Behavioral Medicine*, 27, 623-635.
- LAIHO, S. 2004. The psychological functions of music in adolescence. *Nordic Journal of Music Therapy*, 13, 47-63.
- LEITMAN, D. I., LAUKKA, P., JUSLIN, P. N., SACCENTE, E., BUTLER, P. & JAVITT, D. C. 2010. Getting the Cue: Sensory Contributions to Auditory Emotion Recognition Impairments in Schizophrenia. *Schizophrenia Bulletin*, 36, 545-556.
- MCMANUS, F., PEERBHOY, D., LARKIN, M. & CLARK, D. M. 2010. Learning to change a way of being: An interpretative phenomenological perspective on cognitive therapy for social phobia. *Journal of Anxiety Disorders*, 24, 581-589.
- OSUCH, E. A., BLUHM, R. L., WILLIAMSON, P. C., THEBERGE, J., DENSMORE, M. & NEUFELD, R. W. J. 2009. Brain activation to favorite music in healthy controls and depressed patients. *NeuroReport*, 20, 1204-1208.
- PISTRANG, N. & BARKER, C. 2010. Scientific, practical and personal decisions in selecting qualitative methods. In: BARKHAM, M., HARDY, G. E. & MELLOR-CLARK, J. (eds.) *Developing and delivering practice-based evidence.*: John Wiley and sons.
- SANE_AUSTRALIA 2010. Social inclusion and mental illness. *SANE Research Bulletin*, 12.

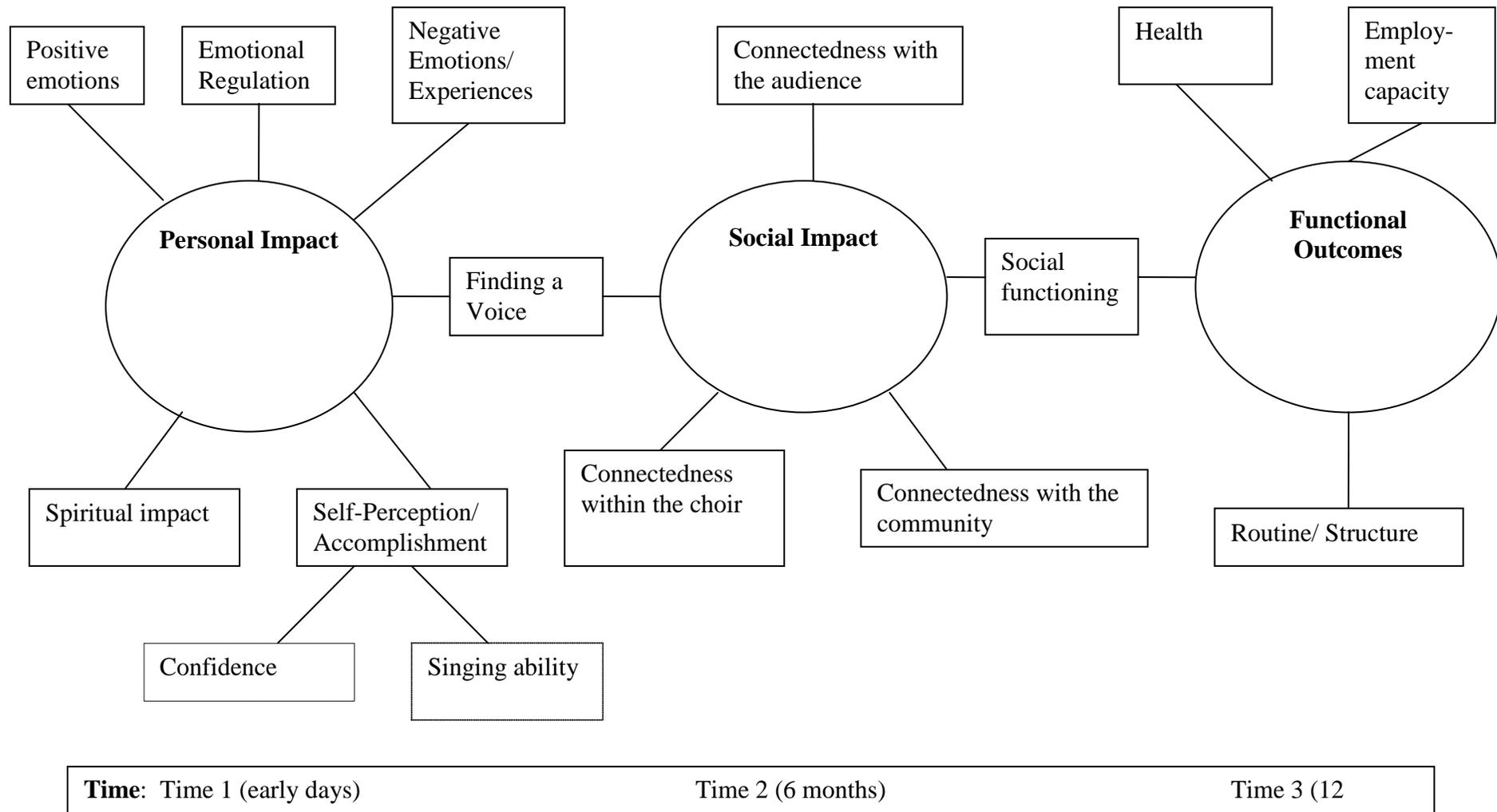
- SELTZER, M. M., GREENBERG, J. S., KRAUSS, M. W. & HONG, J. 1997. Predictors and outcomes of the end of co-resident caregiving in aging families of adults with mental retardation or mental illness. *Family Relations*, 46, 13-22.
- SHIBUSAWA, T. & PADGETT, D. 2009. The experiences of "aging" among formerly homeless adults with chronic mental illness: A qualitative study. *Journal of Aging Studies*, 23, 189-196.
- SMITH, J. A. 1996. Beyond the divide between cognition and discourse: Using interpretive phenomenological analysis in health psychology. *Psychology and Health*, 11, 261-271.
- SMITH, J. A., FLOWERS, P. & LARKIN, M. 2009. *Interpretive phenomenological analysis: Theory, method, and research.*, London, Sage.
- SMITH, J. A., JARMAN, M. & OSBORN, M. 1999. *Qualitative health psychology*, London, Sage.
- TAJFEL, H. & TURNER, J. C. 1986. The social identity theory of intergroup behaviour. In: WORCHEL, S. & AUSTIN, W. G. (eds.) *Psychology of intergroup relations*. 2nd ed. Chicago: Nelson-Hall.
- TARRANT, M., NORTH, A. C. & HARGREAVES, D. J. 2000. English and American adolescents' reasons for listening to music. *Psychology of Music*, 28, 166-173.
- VALENTINE, E. & EVANS, C. 2001. The effects of solo singing, choral singing and swimming on mood and physiological indices. *British Journal of Medical Psychology*, 74, 115-120.
- WILKINSON, A. V., WATERS, A. J., BYGREN, L. O. & TARLOV, A. R. 2007. Are variations in rates of attending cultural activities associated with population health in the United States? *BMC Public Health*, 7, 226-231.
- WINDSOR, J. 2005. *Your health and the arts: a study of the association between arts engagement and health*. London: Arts Council England.
- WOODS, A., WILLISON, K., KINGTON, C. & GAVIN, A. 2008. Palliative care for people with severe persistent mental illness: A review of the literature. *The Canadian Journal of Psychiatry / La Revue Canadienne de Psychiatrie*, 53, 725-736.

Table 1. Details of the participants in the choir study (names have been changed)

Name	Age	Relationship	Ethnicity	Health status	Financial support
Jillian	48	Single	Anglo/Aust	Mental illness	Social security
Bob	43	Single	Anglo/Aust	Mental illness	Social security
Louise	49	Engaged	Anglo/Aust	Mental illness & phys disability	Social security
Tom	61	Engaged	Anglo/Aust	Mental illness	Social security
Jack	54	Separated	Anglo/Aust	Mental illness	Paid work & social security
Joan	61	Single	Anglo/Aust	Mental illness & phys disability	Social security
Paul	47	Single	Anglo/Aust	Mental illness	Social security
Brooke	39	Single	Anglo/Aust	Mental illness	Paid work & social security
Amy	34	In a relationship	Anglo/Aust	Mental illness	Health insurance
Pauline	39	In a relationship	Anglo/Aust	Mental illness	Social security
Simon	52	Divorced	Anglo/Aust	Mental illness	Social security
Fiona	37	Single	Anglo/Aust	Mental illness	Paid work & social security
Gary	51	Single	Anglo/Aust	Mental illness & phys disability	Social security
Ernie	-	Single	Anglo/Aust	Physical & intellectual disabilities	Other
Karen	39	Single	Anglo/Aust	Mental illness	Social security
Robert	-	Single	Greek Aust	Intellectual disability	Social security
Cassie	-	Single	Anglo/Aust	Mental illness	Social security

				& physical disability	
Tina	31	Single	Anglo/Aust	Mental illness	Insurance
Alice	49	Separated	Anglo/Aust	Mental illness	Social security
Rana	74	Divorced	Anglo/Indian	Mental illness	Social security
Chris	44	Single	Anglo/Aust	Mental illness	Paid work

Figure 1. Thematic map derived from interviews with choir participants.



Appendix

To Be Heard (*words and music by Brian Procopis, reproduced with permission*)

Woh – oh oh woh – oh oh woh - oh oh woh

A time for talking for sayin' it all

To feel the tears - let them fall

Let them fall

Chorus:

To be heard is a liberating thing

No matter where no matter who or whenever

When there's something way down burning within

To be heard is a liberating thing.

Lost inside the hurt and the sorrow

Wishing there was no tomorrow

No tomorrow

Chorus

Dreams in pieces thrown about

First a whisper then a shout

Then a shout!

Woh – oh oh woh – oh oh woh - oh oh woh

A time for movin' through the pain (a time for movin')

To find our voice – sing again

Sing again

Chorus

To be heard to be heard to be heard is a liberating feeling. To be heard.