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Lifting spirits and building community: the social, emotional and practical benefits of all-female group singing

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Summary

A mixed-methods concurrent identical design was implemented to explore the following research question: what are the emotional, social, and practical impacts of group singing for women from a regeneration area? Members of an all-female community choir based in an area of disadvantage participated in a focus group and survey. The most significant quantitative finding was an increase in the overall perceived level of health, which seemed linked to qualitative themes of 'positive emotions', 'redefining and reclaiming identity', 'choir as an extended family' and 'community interaction and impact'. Three themes arose from qualitative data: social impact, health and well-being aspects, and practical issues. Integrating qualitative and quantitative findings identified an overarching concept that 'choir participation may increase emotional and social health and well-being'. Group singing was found beneficial, with a potential to serve as a resource in cultivating resilience in individuals living in areas of disadvantage.

Lay summary

There is a growing body of evidence supporting the health and emotional, social, and psychological well-being benefits of group singing (Clift *et al.*, 2008, 2010; Clift and Hancox, 2010; Reagon *et al.*, 2016; Fancourt and Finn, 2019). This study explored the experience of group singing for a specific demographic: women from an area of disadvantage. Members of an all-female choir based in a council estate of Limerick participated in a focus group and completed a survey investigating the emotional, social and practical impacts of group singing. Gains were noted across all three categories, and participant feedback was overwhelmingly positive regarding the benefits of choir membership. There were two particularly noteworthy findings: the 'universality of singing' across various age groups and 'weariness of labels', a novel subtheme that emerged during the focus group.

Keywords: group singing, disadvantage, women, community music therapy

INTRODUCTION

The emotional, psychological and social benefits of group singing are well documented both in and outside of medical settings (Clift and Hancox, 2001, 2010; Clift *et al.*, 2010; Ahessy, 2015; Reagon *et al.*, 2016). Studies have indicated similar benefits of group singing for individuals facing socio-economic hardships and from areas of disadvantage (Davidson, 2004; Bailey and Davidson, 2005; Cronley *et al.*, 2018), as well as for adults living with a chronic mental illness or disability (Brander *et al.*, 2013; Fogg-Rogers *et al.*, 2016; Moss and Donoghue, 2019). Research to date on choral singing indicates many physical, cognitive and social benefits (Clift *et al.*, 2010; Clift and Hancox, 2010; Moss *et al.*, 2018). Many empirical research studies have also explored the value of singing for people with long-term health conditions, including Parkinson's disease and stroke, respiratory illnesses, and dementia (Skingley *et al.*, 2017; Tamplin *et al.*, 2019; Pentikäinen *et al.*, 2021) as well as benefits for workplace well-being (Moss and O'Donoghue, 2019). A systematic review by Williams *et al.* (2018) indicates that group singing

could be a promising social intervention for people with mental health conditions.

Limited research has been conducted around the impact of singing in an all-female group (Bingley, 2011; Southcott and Joseph, 2015; Batt-Rawden and Andersen, 2020). The role of singing as part of women's education and as a conduit for health promotion in developing countries such as Sierra Leone has been documented (Bingley, 2011) with some evidence that singing in all-women groups can increase social connection and reduce isolation (Southcott and Joseph, 2015). However, research on the benefits of women-only singing groups is scarce. Similarly, research is limited on the impact of CCs to address issues of social and educational disadvantage. This paper contributes one of few studies of a CC to address economic, physical and social needs in an area of social and economic disadvantage.

Within Ireland, the term 'regeneration area' has been applied to specific regions. This work focuses on a council estate in Limerick that received this categorization after three teenagers threw a petrol bomb through the back window of a resident's car when she refused to give them a ride to town. The vehicle was ignited and two of the woman's young children were severely injured (University of Limerick, 2018).

The extremity of this violent 2006 incident prompted the 'Addressing issues of social exclusion in Moyross and other disadvantaged areas of Limerick City' report (Fitzgerald, 2007), which proposed a 5-year plan to combat such anti-social behaviour as crime and violence, that had been occurring in the community and other areas of disadvantage for some time; areas in need of 'regeneration', meaning a transformation or rebirth. That same year, Limerick City Children's Services Committee commissioned a report entitled 'How are our kids? Experiences and needs of children and families in Limerick regeneration areas' (Paul Partnership Limerick, 2012). The report was published in 2012 and identified four regeneration areas in Limerick.

The term 'regeneration area' has a far more positive connotation than other phrases and labels. Limerick and its council estates have been called in the past. In the 1980s, Limerick was known as Stab City, viewed and portrayed solely as a place of violence, social dysfunction and danger: a troubled region of Ireland. Journalists tended to remind readers of Limerick's negative past, citing pressure from editors to publish the easy-to-sell bad news stories, even when positive events were taking place. As a result of this stigmatization, Limerick residents have experienced prejudice, stereotypes, and inequity in access to social and financial services (Devereux *et al.*, 2011).

Fitzgerald's 2007 and 'How are our kids?' (Paul Partnership Limerick, 2012) reports offer roadmaps

to combating this stigmatization, and addressing economic, physical and social needs. Since the reports were published, efforts have been on-going to regenerate the specified regions by addressing these needs.

One such effort, related to social needs, began in 2018 when the University of Limerick's music therapy department partnered with a local primary school (PS) to form a community choir (CC). The community engagement project invited community members and parents of students at PS to participate.

Community music therapy

Community can be a critical resource for individuals undergoing hardships. 'Relationship-Resourced Resilience' (RRR) is a relatively recent theory that posits individuals can 'flock' to relationship-based resources, like a CC, as opposed to 'fighting' or 'fleeing' when experiencing chronic stress from living in an impoverished area (Ebersöhn, 2012). Ebersöhn writes: 'Flock entails a process of alone-standing individuals, experiencing shared and persistent burdens, connecting to access, share, mobilise and sustain use of resources for positive adaptation' (p. 29).

This community engagement project was guided by the principles of community music therapy (CoMT), an approach rooted in social change that considers individuals within their social and cultural contexts (Ansdell, 2002). CoMT endeavours to empower individuals (Rolvsjord, 2004); create space for musicking (Small, 1998), expression and the sharing of common human values; and help connect people, communities and establishments (Ruud, 2004). CoMT often incorporates performance (Ansdell and Pavlicevic, 2004; Baker, 2013) as it has been shown to benefit one's health and well-being, contribute to a feeling of inclusion within the community in which the performance is occurring (Clements-Cortés and Pearson, 2014), and therapeutically help both the choir members and community (Everitt, 1997). Potential positive repercussions of CoMT have been categorized as a 'ripple effect', wherein 'the impact of music therapy can work "outwards" for an isolated person towards community, and it can also bring the community in, and can create community within a building' (Ansdell and Pavlicevic, 2004, p. 16). RRR strongly links to CoMT in that it endeavours to promote social change by providing community members with resources that have the potential to transform and revitalize their ecology.

Group singing for women

Though literature about the impact of group singing for women from an area of disadvantage is sparse, there are studies indicating all-female choir singing can yield benefits related to health, relationships, feelings of unity and combating isolation (Bingley, 2011;

Southcott and Joseph, 2015). Bingley (2011) found 'clear evidence that music has a vital role to play in promoting health and well-being in rural Sierra Leone' (p. 76), a country on the coast of West Africa still contending with destroyed infrastructure and extensive trauma following a 10-year civil war. Social connection and unity were also referenced in a study of an all-female choir comprised of older, Italian immigrants living in Australia, along with increased self-confidence, improved health and well-being, acquisition of new skills, and the opportunity to break stereotypes related to the abilities of older women. Choir members were enthusiastic about, and dedicated to, preserving and passing on traditional Italian songs to the next generation (Southcott and Joseph, 2015). As very few studies on women-only singing groups exist, especially in relation to women living in areas of social disadvantage, it is important to evaluate what benefits, if any, exist in providing a women-only space through the medium of music.

A qualitative approach has been implemented when exploring social and emotional realms to 'capture the detailed and idiosyncratic experiences that choir members described' (Brander *et al.*, 2013, p. 408). Practical shifts, such as changes in the overall perceived level of health since joining the choir, are also assessed. In the health services sector, it is common for this type of information to be collected quantitatively through surveys with closed questions (O'Cathain, and Thomas, 2004). Mixed methods are often recommended for this area of research (Dingle *et al.*, 2019).

PURPOSE AND AIM

The aim of this research study was to explore the emotional, social and practical impacts of group singing for women from an area of disadvantage.

METHOD

A mixed-methods approach rooted in pragmatism was deemed appropriate to address the areas of emotional, social and practical impacts of group singing. A quantitative method (survey) was adopted to explore the practical impacts of group singing and a qualitative method (focus group) explored the social and emotional impacts of the experience.

Previous studies recommend a mixed methodology (Dingle *et al.*, 2019). A concurrent identical design was selected, wherein qualitative data were collected via a focus group and quantitative data via a survey. Creswell and Plano Clark's (2017) four-step guide for the implementation of a concurrent mixed-methods design was followed, namely (i) collect the quantitative and qualitative data simultaneously; (ii) analyse the

qualitative and quantitative data independently; (iii) use strategies to merge the two sets of results, identifying differences and similarities; and (iv) interpret the merged results as they relate to the research question, offering an explanation as to why the data connect or diverge. Pragmatism posits 'that there are singular and multiple realities that are open to empirical inquiry… with different elements or layers, some objective, some subjective, and some a mixture of the two' (Yvonne Feilzer, 2010, p. 8). By incorporating both objective and subjective elements, research questions can be answered more fully.

Participants and sampling

A CC, based in a regeneration area and led by a trained music therapist incorporating CoMT principles, was the focus of this study. While some members of the choir had sung together before, the current iteration of this group was formed in September 2018. Ethical approval was received from the University of Limerick's AHSS Research Ethics Committee. Data were collected in November 2019, at which time the choir had 16 members, all mothers and grandmothers of PS students. Inclusion criteria for the research were relatively simple: potential informants needed to be members of the choir, which specifically catered for parents and guardians of children attending one PS in the regeneration area. Seven of the 16 current choir members elected to take part in the research. There was no time commitment required by members to participate and no health screening was undertaken prior to inclusion.

Participants were recruited using convenience sampling, and the sample size fell within the minimum recommended range of 6–12 participants for social science focus group research (Bernard, 1995). Choir participants were offered an information sheet by school staff who acted as choir administrators and informed consent was obtained. Nine individuals were present at the start of the focus group. However, two individuals (Betty[1] and Hannah) departed approximately halfway through the focus group. Seven individuals were present for the entirety of the focus group and completed the survey.

Data collection

A gatekeeper was recruited to liaise with the choir and informed consent was obtained from the seven research participants. A focus group and survey were conducted in November 2019, and consent forms were signed allowing the focus group to be video and audio recorded. The focus group ran for 1 hour and included the questions outlined in Supplementary File 1.

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[1]All names have been changed to maintain confidentiality.

Directly following the conclusion of the focus group, a survey (Supplementary File 2) comprised of demographic questions as well as queries linked to practical impacts, such as changes in limitations to everyday activities since joining the choir and shifts in overall perceived level of health, was distributed to participants. The survey took approximately 10 minutes to complete and was informed by the Healthy Ireland Survey of 2017 (Department of Health, 2017). Researcher 1 conducted all data collection. Researchers 2 and 3 contributed to data analysis and supervision of the research. The survey collected demographic information including age, education, marital status, and employment status, and tracked changes in the use of medication related to mental distress, changes in limitations to everyday activities since joining the choir and perceived level of health since joining the choir (Supplementary File 2).

Data analysis

Creswell and Plano Clark's (2017) four-step guide for the implementation of a concurrent mixed-methods design was followed to analyse data.

1. Collect the quantitative and qualitative data simultaneously.
2. Analyse the qualitative and quantitative data independently.
3. Use strategies to merge the two sets of results, identifying differences and similarities.
4. Interpret the merged results as they relate to the research question, offering an explanation as to why the data connect or diverge.

Each strand was evaluated independently, following separate protocols based on data type. Qualitative data from the focus group were transcribed. Initial codes were then generated, and a thematic map was created (Supplementary File 3). Data were analysed using the six steps of Braun and Clarke's (2006) framework for thematic analysis, namely: (i) familiarize yourself with the data; (ii) generate initial codes; (iii) search for patterns or themes in your codes across the focus group transcript; (iv) review themes; (v) define and name themes; (vi) produce your report.

Quantitative data, collected concurrently through the survey, were coded, and then entered into an Excel spreadsheet. The descriptive statistics analysis tool in Excel was then utilized. Quantitative findings were merged with qualitative data using the Pillar integration process (PIP). PIP is a four-part technique in which raw data are listed by data type, matched with confirming strands of data, matches are checked and a Pillar column is created that identifies overarching concepts (Johnson *et al.*, 2019).

QUANTITATIVE FINDINGS

Practical impacts potentially linked to participation in the choir were investigated quantitatively, namely changes in limitations to everyday activities since joining the choir and shifts in overall perceived level of health. Respondents were asked to report their status prior to joining the choir in September of 2018 versus at the time of data collection in 2019 to compare health status pre- and post-choir engagement. Quantitative findings were analysed using descriptive statistics (Supplementary File 4) only, given the small number of participants.

Demographics

Seven participants completed the survey. All respondents were Irish and female, ranging in age from 28 to 61, with a median age of 42. Three noted having children or grandchildren who had attended PS (*n* = 3, 42.9%), with an equal number noting that they either did not have children or grandchildren, or theirs hadn't attended PS (*n* = 3, 42.9%). One individual did not answer this question. A majority of them were single (*n* = 4, 57.1%), with three individuals being divorced, married or in a civil cohabitation (*n* = 1, 14.3%). Four out of seven were educated to secondary school level (*n* = 4, 57.1%).

Perceived level of health

Respondents were asked to comment on their health prior to joining the choir versus at the time of data collection, using a five-point Likert scale ranging from very good (1) to very bad (5). The majority rated their prior health as 'very good' (*n* = 4, 57.1%), with two noting 'fair' (*n* = 2, 28.6%) and one 'very bad' (*n* = 1, 14.3%). The mean response, numerically, was 2.14, indicating an average response falling between 'fair' and 'good'. The same number reported their health since joining the choir as 'very good' (*n* = 4, 57.1%), with two noting 'good' (*n* = 2, 28.6%) and one 'fair' (*n* = 1, 14.3%). The mean response, numerically, was 1.57, indicating an average response falling between 'good' and 'very good'.

This shift communicated an overall increase in the perceived level of health by individuals since joining the choir. Additionally, the range of response and standard deviation lessened, indicating that a greater number of individual responses viewed themselves as either 'good' or 'very good' with less variation.

Use of medication

The questionnaire included a query about the use of medication to assist with emotional, nervous or psychiatric problems, such as depression or anxiety. Respondents were asked whether they had been

Table 1: Qualitative data by category and participant response

Social impact
1. Choir as an extended family
2. Community engagement and impact
3. Universality of singing

Health and well-being aspects
4. Positive emotions
5. Redefining and reclaiming identity
6. Combatting isolation

Practical issues
7. Importance of leadership
8. Source of motivation
9. Weariness of labels

	1	2	3	4	5	6	7	8	9
Amy	x	x	x	x			x		x
Cora	x	x	x	x	x	x		x	x
Dee		x	x	x	x		x	x	x
Elise	x	x		x	x		x		x
Felicia	x	x	x	x	x	x			x
Gloria	x		x	x	x	x	x	x	x
Janet	x		x	x	x	x		x	x
Betty	x	x						x	
Hannah		x					x		

using any such medication prior to joining the choir and if, following membership in the choir, they were still using that medication. Two individuals ($n = 2$, 28.6%) responded 'Yes' to using medication prior to joining the choir. This decreased to one individual ($n = 1$, 14.7%) when asked about the current use of medication.

Limitations in everyday activities

A three-point Likert scale (not limited at all (1), limited but not severely (2), severely limited (3)) addressing limitations in everyday activities was included in the questionnaire (i.e. an on-going physical or mental health problem, illness or disability). Respondents were asked to report limitations prior to joining the choir versus currently. Six out of seven participants provided answers. The majority ($n = 4$, 57.1%) noted prior limitations as 'limited but not severely', with two responding 'not limited at all' ($n = 2$, 28.6%). The mean response, numerically, was 1.67, indicating an average response falling between 'not limited at all' and 'limited but not severely'. Limitations increased slightly regarding status, with one respondent marking 'severely limited' ($n = 1$, 14.7%), three noting 'limited but not severely' ($n = 2$, 28.6%) and two 'not limited at all' ($n = 2$, 28.6%). The mean response, numerically, was 1.83. This average remained within the same range as limitations prior to joining the choir, though slightly closer to 'limited but not severely'. This minimal increase in limitations was not considered significant.

QUALITATIVE FINDINGS

Three themes emerged following data analysis, with nine subthemes. The three themes are social impact, health and well-being aspects, and practical issues. A full list is provided in Table 1 along with the frequency of subthemes mentioned by participants. Quotations from the data are used here to support the thematic analysis.

Theme 1: social impact
Choir as an extended family
Though rehearsals only occur weekly, the choir has become more significant than a casual social activity. Seven participants warmly expressed the love and pride they felt for their fellow choristers and choristers' families, sharing stories of attending events for choir members' children or grandchildren. In addition to benefiting from this peer support, the choir expressed gratitude for the encouragement they've felt from the community.

> Elise: You're, you're all friends now, it's not just a choir.
> Felicia: More.

…
Amy: It's like a, it's like a family.
Elise: It is.
Felicia: It's an extended family, isn't it?

The choir had become a known entity in the area, in large part, due to the efforts of the choir leader. Seven choir members noted the value of connecting with the community. The impact of this connection was evident in a story shared about performing at a local bereavement mass for a resident. Apparent during these types of performances was the reciprocally beneficial relationship between the choir and the larger community; choir members felt supported, and the community enjoyed the same support in return. In this sense, the choir seemed to be a valuable, buoying resource for both its members and residents of the area.

Amy: At the end of the bereavement mass, the last one, I…the…the church, like, it was just.
[indicates stillness] and people just rose and just started clapping. It was very…overwhelming. I didn't realise that the people were just…so…
Cora: Involved?
Amy: Still.
Felicia: You, we had an impact on people…

Six choir members spoke proudly about children and grandchildren currently involved in group singing, an activity they felt contributed to the children's confidence, happiness and community connection.

Gloria: I think as well that it's good that, um, that the adults are doing a, a choir as well because it, it helps the younger generation, do you know, feel that it, that bit, better –
Felicia: If they can do it, we can do it.
Gloria: Exactly. Do you know? And it'll help them boost their confidence and stuff as well, do you know.

There was a conversation about the connection created between older and younger generations through this shared activity, and recognition that seeing a member of the older generation singing, impacted the younger.

She [daughter] used to sing in the room at home and then she joined the choir here, and she was grand. And now she's sort of gone back into herself as, again, that she won't sing in front of me…She's in the play now and she's enjoying it with Neil, and…she knows everyone up there, and she's way, way happier. Way, way happier… she's even starting to sing the songs now in front of me a little bit again cause she's getting the confidence back again.
-Janet

Theme 2: health and well-being aspects

Seven participants credited involvement in the choir with prompting positive emotions, including feeling safe, respected and experiencing an increase in confidence. At times, there seemed to be a fierceness linked to protecting the safety of the choir space. Contributing to, and possibly enabling, this safe environment was a sense of respect felt by and for group members. In addition to feeling safe and respected, these participants reported that singing in the choir built their self-esteem.

If you can't have your moment, and you can't say exactly what you're feeling, then there's no point in being in this room.
-Felicia
It's a confidence builder, and being positive, and knowing that every, that I can have a laugh with the women, you know, and be myself. Which, it took me a long, long time to be, you know?
-Janet

While singing and music seem to be lifelong passions renewed and reclaimed through participation in the choir, having the confidence to speak up appears to be a newer trait. A universal love for music and singing was expressed. Unfortunately, coupled with this were instances of being made to feel bad about singing. Having their love of singing and music stifled was a common experience. A more positive shared bond, noted by six participants, has been the choir's supportive role in the women's reclamation of their musical identity and redefinition of sense of self. This journey of redefinition and reclamation is on-going.

They all understand. We have a voice. We have an opinion.
-Elise

Members of the group were clear about the importance of a women-only group being important, for safety and in terms of being able to express themselves freely.

Felicia: The men in the community do not-
Cora: No interest.
Felicia: - fit in mixing with us women.
Gloria: Especially if they're with other women.
Felicia: Yeah.
Cora: They still have that stigma.
Felicia: It's a stigma.

Gloria: Because we'd automatically be…accused of all sorts. Especially if we're laughing and joking with them, so.
…
Felicia: I mean, lads, I'm speaking the truth. It's a stigma. They just, they're not, it's basically, they're not allowed.

Four choir members cited loneliness as an impetus for joining the group. Participants noted that combating isolation was a chief reason for the choir's formation and voiced how successful the effort has been.

Cora: I think it's all about being stuck at home, isn't it?
Felicia: Make sure that you're not…Cause then you're not isolated and you don't feel alone.
Gloria: Yeah. I'm very lonely at home. Yeah. So, this is very good for me.

Theme 3: practical issues
Importance of leadership
Prior to the current formation of the CC in September 2018, the group was comprised of different singers, with a different choir leader. The change and uncertainty of leadership were mentioned by five members. The shift in leadership had emotional impacts, including feelings of loss.

It's only now it's hit me, the last year, I don't know what it is, but I think it's because…she's like Lily, she's like Kate now as well. I was f*****g devastated like. I, I'm still upset over Lily not being here because she was here a long time.
-Dee

The importance of sustainable, trustworthy choir leaders was noted by participants as contributing significantly to their motivation and commitment to attending the group.

Source of motivation
Considering the enjoyment gleaned from participating in the choir, it is unsurprising that more than half of the choir members were motivated to attend rehearsals and performances regularly. This motivation seemed to carry over to other areas of life.

It helps you great with a routine as well…
-Gloria

Weariness of labels
In discussing possible titles for the research study, the inclusion of the term 'regeneration area' was proposed.

Despite the area receiving this official designation (Fitzgerald, 2007; Paul Partnership Limerick, 2012), seven focus group participants felt neither a connection between the choir and regeneration efforts nor a personal link to the term 'regeneration area'. Rather than adding 'regeneration area' to the list of labels, the council estate has been given over the years, the group voiced their inclination for the town to simply be called by its name or referred to as a community.

Janet: We were called deprived area. Disadvantaged area.
Amy: Disadvantaged area.
Janet: And, it's like. It's like putting a stamp –
Amy: A mark of –
Cora: Labelling us-
Janet: - on each of us. But the thing about it is, the thing about it is, we're not a disadvantaged area. We're a community.

Bringing together the qualitative findings
The social and emotional impacts of the choir can be summarized as building strength in the community through fostering a sense of pride, achievement, social connection, friendship, motivation and reducing isolation. The choir offered safety and support to members, who experienced a sense of family in the group, held by a consistent choir facilitator and an all-female membership. Belonging to the group, receiving applause and acclamation after performances, performing on stage at the city concert hall and visiting the university were highlights of the choir experience during the period of the research. Findings indicate that emotional and social benefits of choir participation were uppermost in members' experience. The essence of the qualitative analysis is captured in members' suggestions for a title for this research: lifting spirits and building community.

DISCUSSION
The current study was designed to explore the social and emotional experience of group singing for women from an area of disadvantage. It also sought to investigate the practical impacts of participation and members' perceived level of health since joining the choir. Qualitative (QUAL) and Quantitative (QUANT) results indicated that there were emotional, social and practical benefits of group singing for choir members. These findings are consistent with previous studies investigating the impact of group singing. The overarching themes of social impact, health and well-being aspects and practical issues were deemed fitting and corroborated such respective findings within the current literature: peer support (Ahessy, 2015) and benefits of

connecting with the community through performance (Ansdell and Pavlicevic, 2004; Baker, 2013; Clements-Cortés and Pearson, 2014); positive emotions (Bailey and Davidson, 2005), shifts in self-perception (Brander *et al.*, 2013) and combating isolation (Bingley, 2011; Southcott and Joseph, 2015); the importance of leadership (Southcott and Joseph, 2015) and the development of a routine (Brander *et al.*, 2013).

Singing in an all-female choir from a regeneration area: cultivating resilience

Certain gains reported by the choir supported previous findings of singing in an all-female group, such as benefits related to health, feelings of unity and combating isolation (Bingley, 2011; Southcott and Joseph, 2015). However, the primary impetus behind this homogenous element for the CC seemed to be fear of societal repercussions, contributing a new perspective to the current literature. The choir appeared unified in their belief that singing in a mixed group was not an option, as the societal repercussions would supersede any possible benefits. The women did not seem bothered by this, just cognizant of the reality of the situation.

One notable gain, particularly pertinent for individuals from an area of disadvantage, is that the choir served as a relationship-based resource, supporting RRR (Ebersöhn, 2012). This potential link to RRR was evident when participants discussed the experience of performing at the bereavement mass. The positive aspect of this experience appears to be notably different from other local bereavement masses, perhaps indicating a shift in the ecology that is potentially emanating from the choir. This emanation fits neatly within the definition of community music therapy's 'ripple effect' (Ansdell and Pavlicevic, 2004; Pavlicevic *et al.*, 2015); formerly isolated residents of the council estate and surrounding areas joined the choir and, together, instigated a greater sense of cohesion amongst community members who attended the mass. This could, perhaps, be a result of the current choir leaders' integration of CoMT principles.

This study confirms Batt-Rawden and Anderson's (2020) study of an all-woman choir that identified choral singing as a benefit to women's well-being in four ways: (i) through the joy of singing, (ii) experiencing singing as essential for survival, (iii) group singing as a route to social connection, which enhanced a sense of identity and of belonging, and thereby increased self-confidence and self-esteem, and (iv) through promoting social inclusion. In the context of these findings, choral singing can be understood as a 'salutogenic' activity, that is, one that supports health and well-being. This has implications for self-care practice, social prescribing programmes and public health policy.

The conversation around the term 'regeneration area' was enlightening and challenging. It was reported, anecdotally, that funding was delegated to the choir because it lies within a designated 'regeneration area' (Fitzgerald Report, 2007; Paul Partnership Limerick, 2012). This information was not emphasized to the choir. Underscoring this fact to the choir may not be particularly valuable. Having endured such monikers as 'Stab City' and 'troubled' (Devereux *et al.*, 2011), resistance to being saddled with yet another reminder of the town's socio-economic status is understandable.

QUAL and QUAN findings were integrated using PIP. Table 2 illustrates potential links between QUAL and QUAN findings. The 'QUAN Categories' and 'QUAL categories' columns include findings, by data type, within the broad categories of social impact, health and well-being aspects, and practical issues. 'QUAN data' note descriptive statistics linked to a relevant QUAN category. The most significant QUAN result was an increase in the overall perceived level of health. The World Health Organization's (WHO) (2020) definition of health, 'a state of complete physical, mental, and social well-being…not merely the absence of disease or infirmity', was key in identifying QUAL categories that could link to this QUAN result. The health and well-being aspects themes of 'positive emotions' and 'redefining and reclaiming identity' and social impact themes of 'choir as extended family' and 'community interaction and impact' listed in 'QUAL categories', could be seen as factors in one's mental and social health and well-being. Considered together, these QUAL and QUAN findings could form the Pillar theme of 'choir participation may increase emotional and social health and well-being'.

Other quantitative findings were inconclusive. For example, it cannot be stated definitively that participation in the choir directly impacted choir members' use of medication and the sample size is too small to draw conclusions here.

Limitations and recommendations

Sensitive research such as that conducted in this study requires a deep cultivation of the relationship between the researcher and participants. It is possible that responses may have been biased based on participants wanting to please the researcher (e.g. reporting an improvement in perceived level of health since joining the choir as this might be perceived as desirable). A longitudinal study, in which significant time is allotted to cultivate relationships and build rapport, could address the issues of bias in participant responses and enable greater discussion of sensitive topics.

Several steps were taken to ensure qualitative and quantitative findings were accurate. Following the first researcher's analysis of the data, a section of the

Table 2: PIP stage 4: Pillar building of the community choir study—potential links and discordances

QUAN data	QUAN categories	Pillar-building themes	QUAL categories	QUAL codes
LINKS				
Mean level of health increased from 2.14 to 1.57 Standard deviation decreased from 1.57 to 0.79 Range decreased from 4 to 2	Practical issues Increased perceived level of health	Choir participation may increase emotional and social health and well-being	Health and well-being aspects Positive emotions Redefining and reclaiming identity Social impact Choir as an extended family Community interaction and impact	'It's a confidence builder'. '…this choir has boosted my confidence that I don't care anymore what they say'. 'It took me a long time to come out of my shell but only for the choir, I wouldn't be where I am today. Without the support of the choir, the support of the school, the support of, um, my partner and kids, do you know, I wouldn't be where I am today.' 'And even afterwards, people complimenting you on your performance…you have an effect on people'.
DISCORDANCES				
Mean increase 1.67 to 1.83 Standard deviation increased from 0.52 to 0.75 Range increased 1 to 2	Practical issues Increase in limitations in everyday activities	Physical limitations independent of choir	Practical issues Source of motivation Social impact Community interaction and impact Health and well-being aspects Combating isolation	'Now it's a long time since I felt like I wanted to do something enough to want to go to it'. '…we started going places, and meeting people, and getting things out of it like'. '…what choir meant, is getting out and about and not feeling isolated at home, which I was for a very, very long time'.

transcript was sent to a colleague to code. Similar codes were produced. Findings were also brought to the focus group and survey participants for review. Participants were asked to review whether the qualitative and quantitative findings were accurate reflections of their experience of participating in the choir. Choir members also discussed a title for the research report, with one suggesting 'uplifting spirits in the community'. The title of this paper came from this consultation: 'Lifting spirits and building community'.

Limitations in method and sample sizes must be noted. Quantitative data were small and generalizable findings are not possible. Qualitative aspects of the study offer more robust results. Literacy may have been an issue with survey completion. Larger sample sizes would be needed to validate the quantitative findings.

Further exploration of findings in this study, particularly the practical impacts of 'increase in perceived level of health' and 'reduced use of medication' are warranted, ideally with a large sample size allowing for potential generalizability of findings.

Additional research into 'universality of singing', specifically from the viewpoint of the younger generation, is recommended. Research around resilience indicates that young people who excel despite facing extreme hardships have benefitted from 'facilitative environments that provide children with the potential to do well' (Ungar, 2011, p. 4). Strong relationships

between family members are integral in developing resilience amongst children, a trait that has proven particularly applicable to those growing up in areas of disadvantage (Ungar and Liebenberg, 2011). Although comments and allusions were made to the possible benefits of seeing one's mother or grandmother singing in the CC, there was not enough data present to draw any conclusions. Further research around group singing's links to RRR (Ebersöhn, 2012) and fostering resilience for individuals living in areas of disadvantage, particularly young people, is recommended. Similarly, exploration of the impact of culture and context on the health outcomes of singing is recommended. This has been partially addressed by a new supplement on singing and health in diverse cultural contexts (Fahey *et al.*, 2022; Mani, 2022; Stewart *et al.*, 2022; Thompson and O'Brien, 2022).

The authors also strongly encourage the creation of group singing opportunities, and believe professionals such as music therapists, trained in music facilitation for health and well-being, are particularly well suited to lead such endeavours.

CONCLUSION

This mixed-methods concurrent identical research study investigated the emotional, social and practical impacts of group singing for women from a

regeneration area. The study confirmed several positive emotional, social and practical gains noted in previous studies investigating group singing. In the instance of exploring the all-female aspect of choir singing, this study expanded on previous findings, as the potential societal repercussions of singing in a mixed choir were new information. The novel finding of weariness of labels and the choir potentially serving as a relationship-based resource are the most significant new contributions to knowledge.

It can be challenging within a research context to balance mindfulness of and respect for the lived experience of participants with the larger implications of a study. However, findings linked to choir singing potentially serving as a relationship-based resource could be valuable for areas with similar socio-economic make-ups. The most efficacious way to make these findings easily accessible is by including keywords like 'deprived' and 'disadvantaged'. Though enabling easier transference of knowledge, these keywords continue the detrimental cycle of labelling communities. This is a consideration that should certainly be taken into account and explored by future researchers.

Supplementary material

Supplementary material is available at *Health Promotion International* online.

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