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When the music stops: the effects of lockdown on amateur music groups

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Article Info.	Abstract
	When the UK government announced a ban on mass gatherings and non-essential travel in response to the COVID-19 pandemic in March 2020, rehearsals by amateur music groups around the country came to an abrupt halt. Regular rehearsals and preparations for public concerts were abandoned and group members had to adjust to the loss of a leisure activity that in many cases will have been central to their social lives and wellbeing (as shown in previous research e.g. Pitts, 2019). This article reports on empirical research that investigated amateur musicians' coping strategies during lockdown, including the ways that they continued to make music and to maintain contact with their friendship networks. An online survey with 235 complete responses investigated participants' wellbeing and the extent to which this is normally affected by their music group participation, and asked about their hopes and fears for when rehearsals resume after social distancing measures are lifted. Participants reported mixed experiences of the online rehearsals that had temporarily replaced meeting in person, and some use of other leisure activities to fill the gap left by music-making in their lives. These findings shed new light on the value that amateur musicians place on their shared rehearsals and performances, and offer ways forward for reframing musical participation after lockdown.

1. Introduction

When the UK government announced a ban on mass gatherings and non-essential travel in response to the COVID-19 pandemic in March 2020, rehearsals by amateur music groups around the country came to an abrupt halt. Regular rehearsals and preparations for public concerts were abandoned and group members had to adjust to the loss of a leisure activity that in many cases will have been central to their social lives and wellbeing (as shown in previous research e.g. Pitts, 2019). While coping with the stress and disruption to daily life caused by government lockdown restrictions, many amateur musicians were simultaneously deprived of one of their main sources of fulfilling leisure time use, social connection and creative activity.

Research on musical participation also needed to change its focus during these months, presenting a challenge for scholars, including the first author of this paper, who had been about to embark on a study with established performing groups. Seizing upon what was an unwelcome situation, but an opportunity nonetheless, we identified a research question that had previously been almost impossible to answer: namely, how do amateur musicians cope when their outlet for making music together is temporarily withdrawn? This question had heightened relevance during the pandemic, but also has broader implications for understanding the motivations and experiences of adult musicians, whose reasons for continuing or ceasing their voluntary activity have previously received only limited attention (e.g. Pitts and Robinson, 2016). By investigating the strategies used by amateur musicians to maintain musical activity, social bonding and personal wellbeing during lockdown, the findings from our survey have potential to help the recovery of leisure-time music groups after the pandemic, as well as to contribute to understanding of the value of musical participation in daily life.

2.   Literature review: pandemics, participation and wellbeing

COVID-19 caused disruption to social life on a massive scale, with lockdowns in countries around the world meaning that friends and families from different households were unable to meet in person for several months. Levels of loneliness, anxiety and mental illness increased for many people (Killgore, Cloonen, Taylor and Dailey, 2020), with some studies suggesting that the health impact of social isolation was greater than that of the virus itself (Ornell, Schuch, Sordi and Kessler, 2020: 232).

Regular participants in group music-making have been shown to value the connectivity, friendship networks and social bonding offered by those groups (Perkins, Mason-Bertrand, Fancourt, Baxter and Williamon, 2020). These positive effects have been demonstrated through a range of research techniques within music psychology, providing evidence of the neural networks of interpersonal synchrony in group music-making (Overy and Molnar-Szakacs, 2009), the endorphin release that facilitates social cohesion in such groups (Weinstein, Launay, Pearce, Dunbar and Stewart, 2016: 153), and the self-reported subjective wellbeing and enjoyment of participation (Williamson and Bonshor, 2019).

Since the positive effects of social connection and shared experiences through group music-making were exactly the qualities that were needed but not available during lockdown, participants were vulnerable to a particular sense of loss related to their group membership and its disruption. There is some prior evidence of the capacity of music to help people through difficult life circumstances, including homelessness (Bailey and Davidson, 2002), incarceration (Silber, 2005), and serious illness (Warran, Fancourt and Perkins, 2019). For example, cancer patients participating in a choir reported better regulated emotions, enhanced confidence, and a positive distraction from illness that improved their overall mental health and provided a renewed hope for life (Reagon, Gale, Dow, Lewis and Deursen, 2017). Much less is known about the effects that challenging circumstances can have upon music-making, beyond some studies of professional musicians' loss of identity after career-ending injuries (Kenny and Ackermann, 2015). As Stebbins' (1992) theory of 'value commitment' articulates, the idea of an unhappy amateur is a contradiction in terms, since (in normal circumstances), musical participation is continued by those who enjoy it, and ceased by those who no longer find it pleasurable (Pitts, Robinson and Goh, 2015).

The loss of opportunities for group music-making is therefore an under-researched subject, but became of importance for regular participants during the pandemic lockdown. These distinctive circumstances presented a fresh perspective on group music-making, as participants could be asked what they missed about their involvement, how they stayed engaged with music during lockdown, and what other activities filled their time. Studies of group music-making only rarely compare this experience with that of other leisure pursuits (Lamont and Ranaweera, 2019), but this enforced hiatus in musical activities invited such comparisons. This study therefore aimed to investigate the impact of the COVID-19 pandemic on social bonding, mental health and wellbeing in members of music groups during the lockdown, by addressing the following questions:

- What did members gain from participating in music groups before the lockdown?

- What strategies were used by members of music groups to maintain music engagements during the lockdown?

- What was the difference in the effect of music engagements on individuals compared with other recreational activities during the lockdown?

- What were members' fears and hopes regarding their music groups in the future?

3.   Research methods

The design of this study was determined by the desire to gain a large yet in depth sample of participants' views, and the need to comply with social distancing while carrying out research. An online survey approach was therefore chosen as the most effective way to gain substantial and timely insight on the lockdown situation for music groups and their members.

The online survey included an information sheet and consent form and three sections of mixed quantitative and qualitative questions. The first section collected demographic information and general background related to social relationships, mental health and wellbeing from participating in a music group(s) before the lockdown, drawing upon factors identified in previous research on the functions of group music-making (Schäfer and Sedlmeier, 2009; Stewart and Lonsdale, 2016; Williamson and Bonshor, 2019). The second section was designed to investigate the impact of lockdown on members of music groups. Selected questions from the Oxford Happiness Questionnaire (Hills and Argyle, 2002) were used, as they provided a well-established scale to investigate individuals' general wellbeing. The last section was about maintaining music engagements during the first lockdown and the further consideration of music groups. The survey questions are provided in full as an Appendix to this article.

The recruitment of participants began with personal approaches to local contacts, then spread nationally through the Making Music network, and globally through music group pages on Facebook. The questionnaire was distributed to various amateur music groups worldwide, starting on the 16th April 2020 via email and social media, including Facebook, WhatsApp and Twitter. Participating in the survey was voluntary and anonymous, and all the participants were required to complete an ethical consent form. The data collection took place during the lockdown in the UK, and the survey was closed on the 5th July 2020, at which time UK government policy still restricted large indoor gatherings, and the potential for resuming rehearsals was uncertain.

3.1   Participant demographics

A total of 238 voluntary participants responded to the questionnaire; three of these did not fully complete the consent form and so their data were discarded. All the participants were involved in at least one music group affected by the pandemic lockdown. Table 1 shows the detailed demographic information about participants.

Table 1.   The demographic information of 235 participants (*N* = Number of participants; *%* = Percentage of participants).

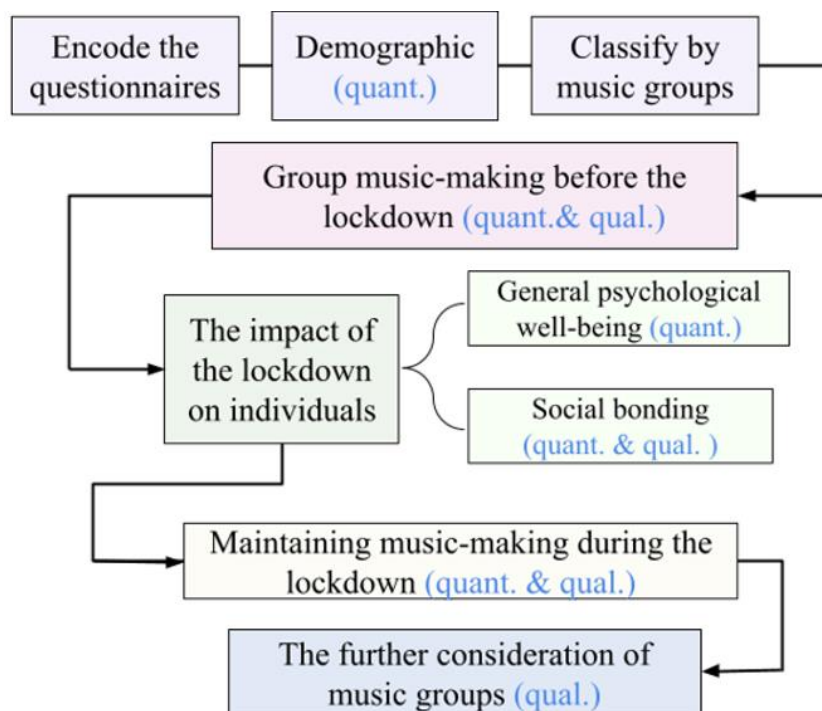| Demographic Information		N	%
Gender	Females	170	72.3%
	Males	59	25.1%
	Not indicated	6	2.6%
Age Range	18-24	19	8.1%
	25-34	18	7.7%
	35-44	32	13.6%
	45-54	37	15.7%
	55-64	59	25.1%
	65-74	53	22.6%
	75+	13	5.5%
	Not indicated	4	1.7%
Location	The UK	182	77.4%
	Other countries	48	20.4%
	Not indicated	5	2.1%
Music group	Multiple music groups	93	39.6%
	Choir	90	38.3%
	Orchestra	27	11.5%
	Ensemble	10	4.3%
	Band	10	4.3%
	Musical theatre group	4	1.7%
	Dance group	1	0.4%

There were more responses from females (72.3%, *N*=170) than males (25.1% , *N*=59), and 2.6% (*N*=6) of respondents did not indicate their gender. Participants selected from categories to indicate their age: more were relatively old (aged: above 55) and middle-aged (age range: 35-54) adults than relatively young adults (age range: 18-34). Most music groups were located in the UK (77.4%, *N*=182); others were spread across the US, Canada, Australia, Singapore, Cameroon and European countries. The sample can therefore be seen as representative of amateur music-making in organised groups, with a predominance of older, retired participants and more females than males (cf. Pitts, 2019).

The music groups included choirs, orchestras, ensembles, bands, and opera, music theatre and dance groups. Over a third of responses (39.6%, *N*=93) were from participants involved with multiple types of music groups, such as a member of a choir who was also a member of an orchestra. Similarly, 40% (*N*=94) of participants were members of more than one music group of the same type, such as belonging to two choirs. The majority had belonged to music groups for over ten years and over half (57%, *N*=134) reported that they had more than ten friends in their music groups, showing that loyalty and personal connections were important to many members; only 10 out of 235 participants indicated that they had no friends in their music groups.

3.2   Process of analysis

The mixed quantitative and qualitative design of the survey resulted in analyses that combined descriptive statistics (mean, standard deviation, sum and percentages) with thematic analysis (Braun and Clarke 2006). Figure 1 illustrates the five steps of the data analysis.

Figure 1.   Diagram illustrating the process of data analysis (quant. = quantitative analysis; qual. = qualitative analysis).

Each questionnaire was coded according to the demographic information of the participants [Gender (F = Female, M = Male) + response order number + music group(s) (C = Choir, O = Orchestra, E = Ensemble, B = Band, MT = Musical theatre group, Op = Opera, D = Dance group), + country]. An overview of group music-making before the lockdown was then produced (see Section 4.1), followed by calculation of the impact of the lockdown on general psychological wellbeing (see Section 4.2). A thematic analysis was undertaken of the qualitative data to identify the impact of the lockdown on individuals, including strategies for maintaining music-making and sustaining its positive psychological effects. Further analysis explored additional considerations for music groups, including members' hopes and fears for the continuation of musical engagement after lockdown.

4.   Findings and Discussion

The findings of the study generated four main topics, to be addressed in turn in the following sections: group music-making before the lockdown; the effects of the lockdown on individuals; maintaining music-making during the lockdown, with a specific focus on virtual rehearsals; and the potential future direction of music groups. Figure 2 shows the coding for the main themes of each topic, derived from the thematic analysis.

4.1   Reasons for participation before lockdown

Responses to the survey came from members of a variety of music groups, and so an initial analysis of the quantitative data was undertaken to identify differences in perspective between, for example, choral singers and orchestral players. This separation showed, however, that motivations to participate were consistent across the sample (see Table 2), so allowing us to treat the data as a whole for the subsequent analyses.

Figure 2.   Coding the main themes for each topic of the qualitative data analysis.
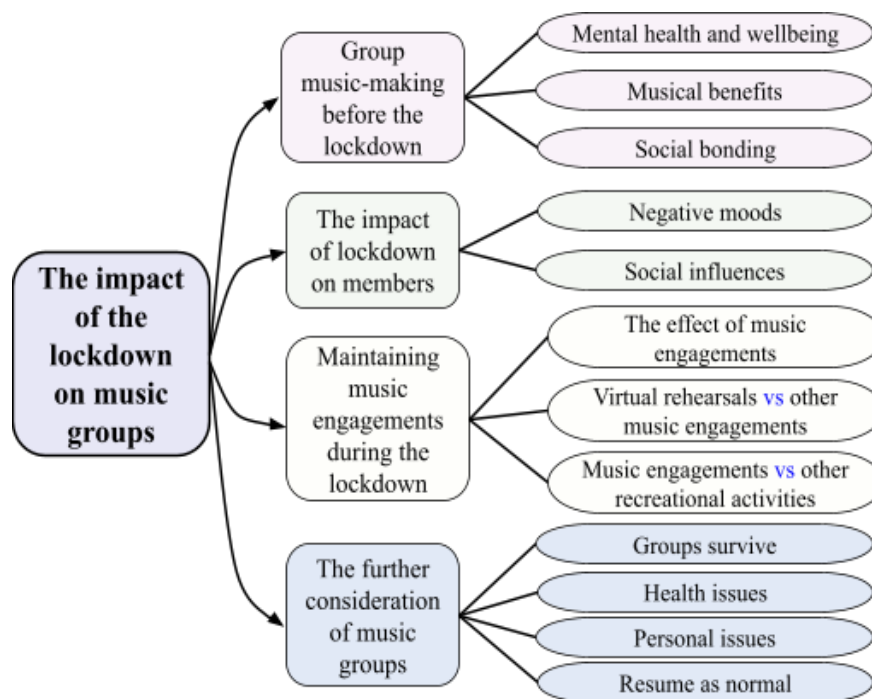

Table 2.   The reasons for different music group members participating in a music group(s) before the lockdown (multiple choice responses to Q8 and Q10; see Appendix).

|	The reasons	Multiple music groups (*N*=93)	Choir (*N*=90)	Orchestra (*N*=27)	Ensemble (*N*=10)	Band (*N*=10)	Musical theatre group (*N*=4)	Dance group (*N*=1)
Enjoyment	Rehearsals/Music-making	80 (86.0%)	88 (97.8%)	24 (88.9%)	9 (90%)	7 (70%)	4 (100%)	0
	Performances	69 (74.2%)	65 (72.2%)	16 (59.3%)	5 (50%)	6 (60%)	4 (100%)	0
	Audience responses	60 (64.5%)	53 (58.9%	14 (51.9%)	6 (60%)	5 (50%)	4 (100%)	0
	Social activities	56 (60.2%)	43 (47.8%)	10 (37.0%)	7 (70%)	4 (40%)	3 (75%)	1 (100%)
Benefits	Happy memory	74 (79.6%)	65 (72.2%)	20 (74.1%)	6 (60%)	8 (80%)	2 (50%)	1 (100%)
	Social bonding	88 (94.6%)	77 (85.6%)	22 (81.5%)	7 (70%)	7 (70%)	4 (100%)	1 (100%)
	Emotion regulation	86 (92.5%)	84 (93.3%)	21 (77.8%)	8 (80%)	8 (80%)	4 (100%)	1 (100%)
	Self-regulation	85 (91.4%)	82 (91.1%)	23 (85.2%)	7 (70%)	7 (70%)	3 (75%)	1 (100%)
	Self-identity	78 (83.9%)	67 (74.4%)	16 (59.3%)	9 (90%)	9 (90%)	4 (100%)	1 (100%)

Many respondents were members of more than one group, and gave general responses to multiple choice questions about their participation, accounting for the similarities across different types of ensemble. Table 3 shows the main reasons for group music-making before the lockdown, summarising the multiple choice responses to Q8 and Q10, and categorising the qualitative responses to Q9 and Q15, in which collaboration was mentioned frequently as an additional factor in participants' enjoyment of group music-making.

Table 3.   The main reasons for participating in a music group(s) before the lockdown (*N*=235).

The beneficial effects before the lockdown	*N*	*%*
Mental health and wellbeing	229	97.4%
Musical	226	96.2%
Social	209	88.9%
Collaboration	129	54.9%

These quantitative measures demonstrated the strength of psychological, musical and social motivations to participate, consistent with the literature reviewed above. Further analysis of the qualitative responses allowed us to explore those findings in more depth, and illustrated the mutual relationships between collaboration, selected as important by just over half the respondents, and participants' experiences of group music-making, shared musical goals and cooperation (see Figure 3).

Figure 3.   Coding for the analysis of group music-making before the lockdown.
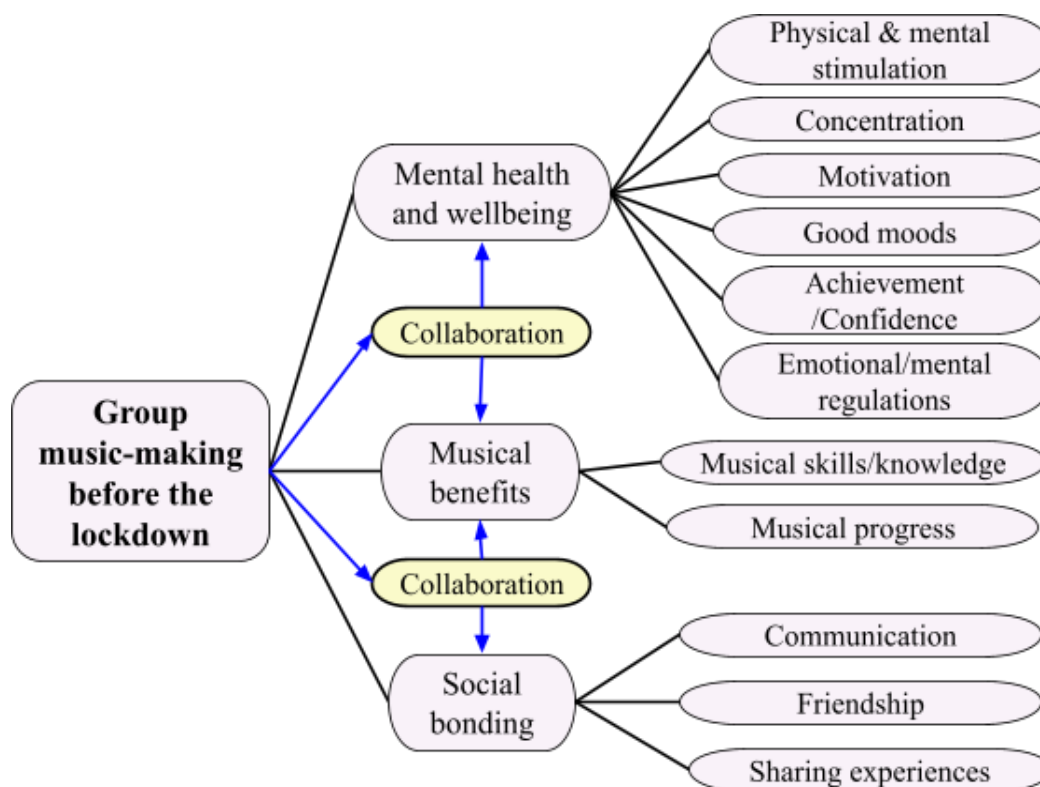
Group music-making promoting mental health and wellbeing was a strongly represented theme, as participation was reported to bring positive moods, motivation and confidence, as well as contributing to concentration and emotional regulation, reducing anxiety and depression, and overcoming mental difficulties. Participants described group music-making as a process of stimulation which could temporarily deflect mental anxiety and physical pain, so making a lasting contribution to wellbeing if sustained through regular rehearsals:

> The act of singing in a group (pre-virus) is the most beneficial. For those who have worries, anxieties it has a positive effect. Also very healthy. I have COPD [chronic obstructive

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pulmonary disease] and my lung capacity has not reduced in the last 10 years. People gain confidence and it is fun!

(F108C, UK)

Some survey respondents noted that the positive effects of group music-making also reached their audiences: a music director described how the audience's enjoyment was conveyed to the performers through applause, and such positive feedback would also bring happiness to the performers. This in turn gave members a sense of achievement and motivated them to keep making music together, creating a mutually reinforcing positive cycle of musical engagement:

...there is a unique bond between the performing group and the audience that helps both groups equally enjoy the musical experience.

(F188CE, USA)

The findings also showed that participating in a music group provides an opportunity for self-improvement in musical techniques. Some participants indicated that although their musical skill was not very good, they kept improving with the support of other members. An orchestra member highlighted that group music-making facilitated musical progress and expanded their knowledge of musical genres. Learning together, at whatever musical skill level, was inseparable from the company of the other members:

Group experience of learning and performing is exhilarating. friendships form from shared experiences like this, and we socialise as a group who 'get' each other because of this.

(F172C, UK)

The improvement of social relationships could also be gained by communicating with other group members, whether in rehearsal breaks or organised social activities. Vulnerable participants benefited particularly from this feature of group membership: one choir brought together members who have similar experiences of cancer, including patients and caregivers, enabling them to form friendships within an environment of mutual trust. At a broader level, working together towards a musical goal provided a focus that was beneficial, as in the case of this singer who had participated in choirs for approximately 60 years:

Reading music and cooperating with other members of your line and other sections helps to keep the brain active and the concentration required means that worries and niggles both physical and mental can be temporarily forgotten.

(F13C, UK)

These accounts of survey respondents' motivations for and experiences of musical participation before lockdown are consistent with previous research, highlighting the musical, social, personal and wellbeing benefits reported by leisure-time music makers (Pitts, 2019; Perkins et al., 2020). The timing of this data collection, however, heightens the elements of participation that were most under threat during lockdown, namely the focus and enjoyment of working towards a shared musical goal, the sense of belonging and bonding within a group, and the contribution of a regular rehearsal routine to physical and mental wellbeing.

4.2   The impact of lockdown
Survey respondents completed a 17 item measure of psychological wellbeing, indicating their response on a 7 point scale from -3 (disagree strongly) to 3 (agree strongly) with the midpoint 0 as neutral (see Appendix, Q12). The spread of responses was calculated by means and standard deviations as shown in Table 4: these showed that the negative effect of the lockdown on mental health was not as strong as

might be expected, but comparisons with pre-lockdown states were not included in the survey and so the significance of the lockdown effect cannot be determined from these results.

Table 4.   The mean and standard deviation (SD) for each item of general psychological wellbeing measurement in members of music groups during the lockdown.

Wellbeing	Items	N	Mean	SD
Mental heath	I feel sad most of the time	233	-0.78	2.11
	I feel anxious a lot	233	-0.46	2.06
	I feel stressed most of the time	231	-0.58	1.96
	I feel lonely most of the time	232	-0.76	2.06
Psychoticism	I rarely wake up feeling rested	234	-0.74	2.15
	I always feel tired	233	-0.62	2.04
	I am not always committed and involved	229	-0.28	1.94
	I have trouble concentrating on most things	231	-0.59	1.95
Life satisfaction	I have no interest in most things	233	-1.25	1.83
	I do not have a particular sense of meaning and purpose in my life	228	-1.04	2.01
	I feel that life is not rewarding	233	-1.10	2.00
	I am not well satisfied about everything in my life	229	-0.50	2.06
	I do not think that the world is a good place	229	-0.86	1.88
Self-esteem	I feel not able to take anything on	229	-1.13	1.89
	I don't feel particularly pleased with the way I am	230	-0.70	1.96
	I feel that I am not especially in control of my life	224	-0.11	2.10
	I am not particularly optimistic about the future	227	-0.27	1.95

The results of the mean for each item of general psychological wellbeing measurement tended to 'disagree'. Notably, the negative impact of the lockdown on life satisfaction showed a strong tendency to 'disagree'. The standard deviations (highest: 2.15; lowest: 1.83) indicate that the spread of responses was quite scattered, showing that experiences of lockdown were understandably varied across respondents. Other measures in the survey (Q11 and Q13) showed a stronger negative result for effects of lockdown: over two thirds of participants rated 3 or above on a 5 point scale to indicate that lockdown had a stronger negative effect on their moods (70.6%, *N*=166) and social interactions (80.5%, *N*=189).

Although the quantitative results suggested relatively limited effects of lockdown on general psychological wellbeing, the qualitative data presented a more nuanced picture of the specific effects of ceasing group music-making. Most participants reported that they missed being able to participate in regular rehearsals or performances. Negative moods were attributed to being unable to access the benefits which they usually gained through group music-making. Figure 4 presents the two main themes of negative moods and social influences that were identified from the qualitative responses about the impact of lockdown on members.

Views about the impact of lockdown were often expressed in strong terms, indicating the depth of feeling from participants who were missing their regular contact with other group members:

I'm missing being able to play the flute with the orchestra, the sound of the orchestra, working on a piece of music from scratch and sometimes not knowing how I will master the piece but through practice and determination eventually the entire orchestra sounds great for the final concert day! I am missing the social aspect of meeting with like minded people. Most of all – I feel at home playing in the orchestra. I can't quite describe the feeling any other way but it's a feeling of being content and emotionally happy when I am playing. All those feelings have now

gone! The lights have been turned off!

(F235O, UK)

Figure 4.   Coding for the analysis of the impact of the lockdown on members of music groups (*N*=235).
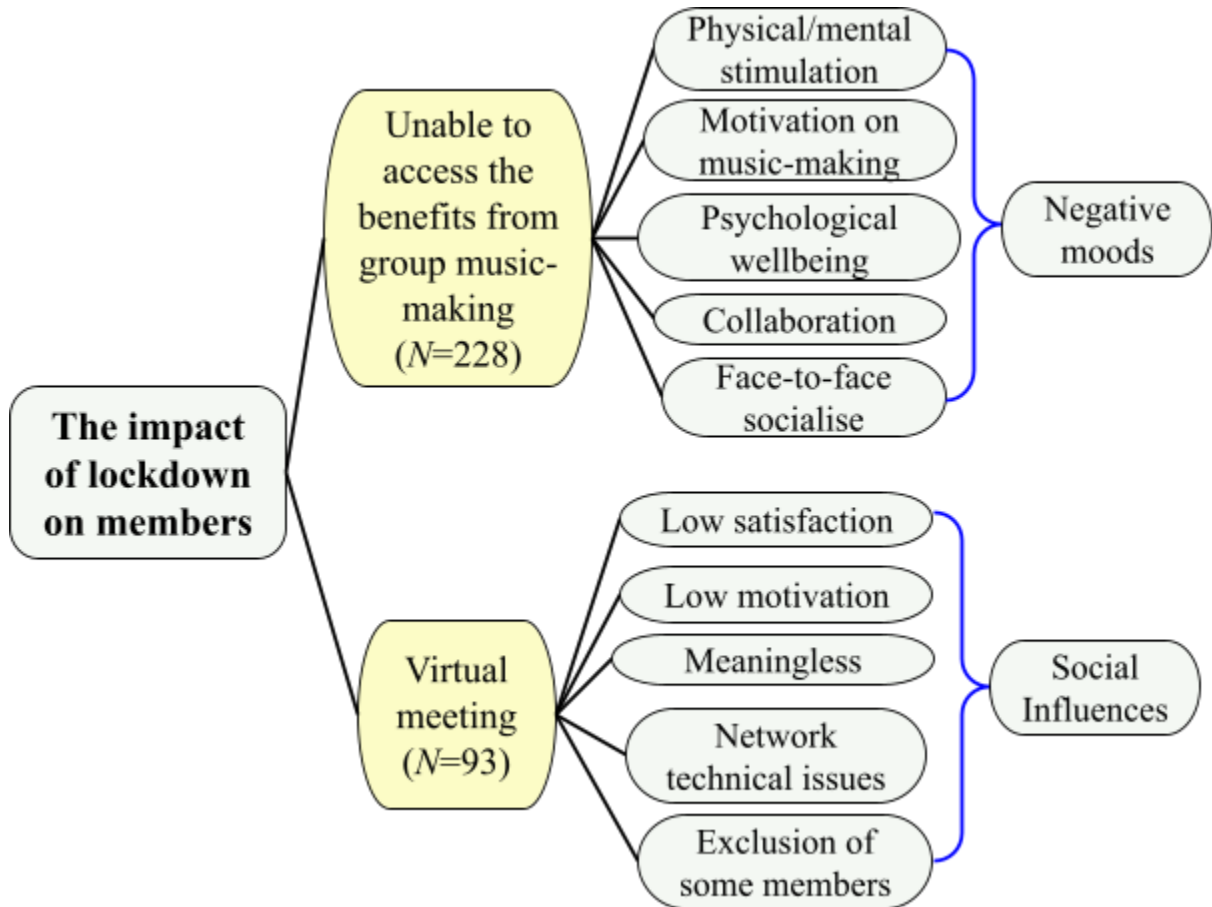
This strength of feeling must be acknowledged as being at one extreme of the possible responses to lockdown: in our self-selecting sample, those with passionate opinions will have been more likely to respond, while others who had adjusted more readily to the absence of rehearsals may be under-represented. Nonetheless, the close connection between playing for a purpose, interacting with friends, and being optimistic about the future is powerfully illustrated in this response, and highlights that the absence of music-making was only one aspect of the ceasing of rehearsals.

4.3   Maintaining music engagement during lockdown
        The next section of our survey investigated how respondents maintained music engagement during lockdown, with this wider term of 'engagement' encompassing the listening to music that replaced participation for some respondents. Table 5 shows the different strategies which members used to maintain their music engagement during lockdown (Q16).

Table 5.   The strategies for maintaining music engagement during lockdown (*N*=235).

Strategy	N	%
Practice alone	160	68.1%
Listen to music	156	66.4%
Virtual rehearsal	93	39.6%
Virtual performance	29	12.3%
Online learning/teaching	16	6.8%
No music engagement	8	3.4%

Participants typically reported at least two types of music engagement, with practising alone and listening to music most strongly represented. Music engagement brought positive moods to members (*N*=227) during the lockdown, with 37.4% (*N*=85) of participants rating this at the highest end of a 5 point scale and only 2.2% (*N*=5) of participants indicating that their music engagement had no influences on their moods (Q21). Figure 5 shows the intensity of the positive effect of music engagements on participants' moods during the lockdown.

Figure 5.   The intensity of positive effects of music engagements on participants' moods during the lockdown.
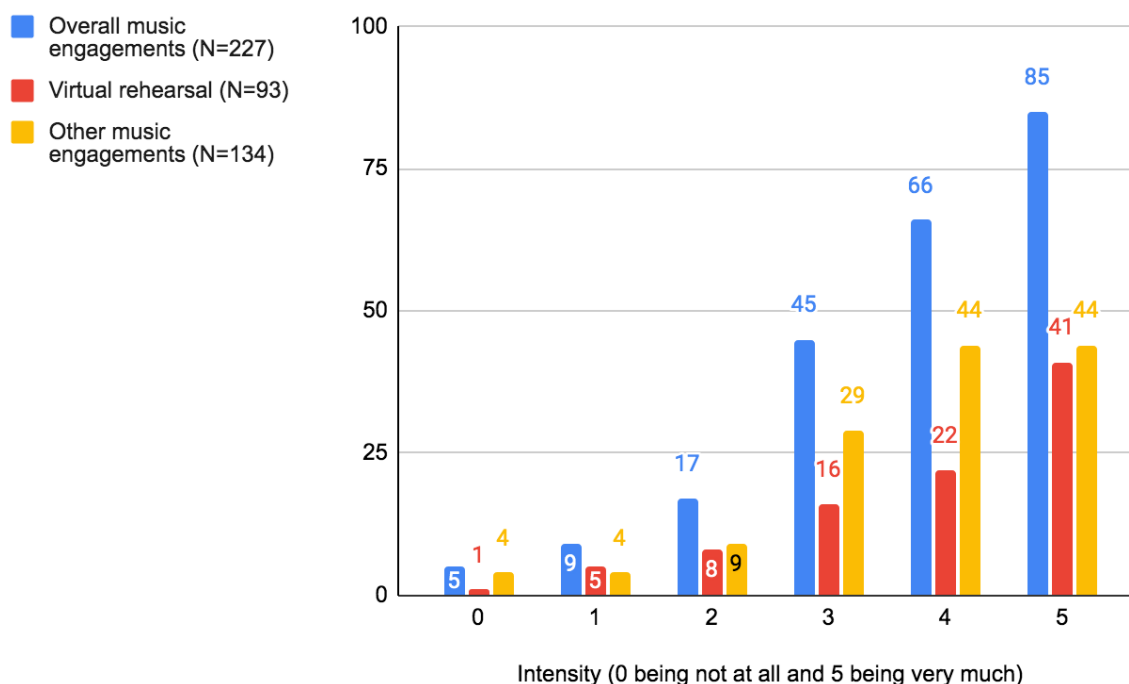
A significantly positive effect of virtual rehearsals on mood was demonstrated, such that although only 41% (*N*=93) of respondents engaged with this musical provision, 44.1 % (*N*=41) of them rated this as strongly improving their mood, compared to 32.8% (*N*=44 out of 134) of members who had other music engagements. This suggests that motivation to participate in virtual rehearsals was high, with a self-fulfilling high level of satisfaction, compared to participants in the broader range of musical activities (see section 4.4).

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The findings from the qualitative research regarding the effect of maintaining music engagements during the lockdown are summarised in Figure 6. Music engagements during the lockdown affected mental health and wellbeing, musical skills, and social bonding differently from group music-making before the lockdown. In addition to the comparison of virtual rehearsals and other music engagements from the quantitative results, participants compared their musical engagement with other recreational activities during lockdown, revealing differences in mental, social and physical effects.

Figure 6.   Coding for the analysis of the effects of music engagements on members during the lockdown.
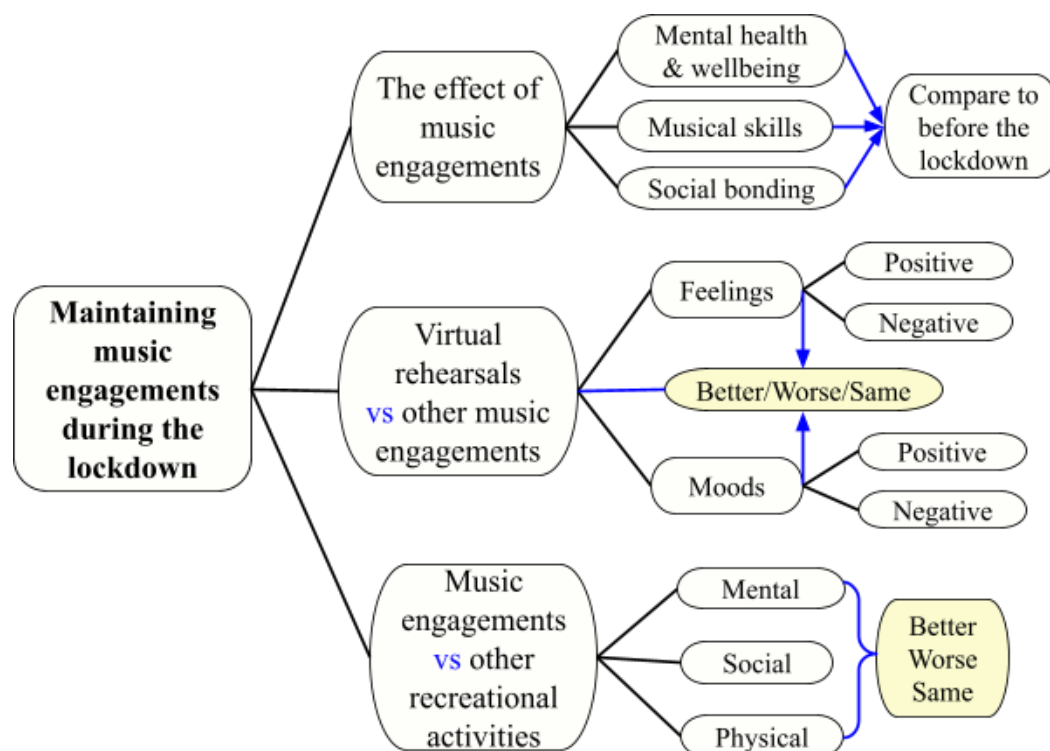
The majority of participants (66.5%, *N*=151) reported that engaging with music relieved the boredom and loneliness caused by the lockdown. However, music engagement during the lockdown also had some adverse effects on mental health and wellbeing, particularly by bringing back memories of group music-making and so generating a sense of loss. Additionally, not all participants were able to practise music in their homes, and the adverse effect on mental state is illustrated by this singer:

> I'm finding not being able to make music is making me very unhappy, stressed and depressed. It is not the same just listening to music and this sometimes makes me feel sadder that I'm not participating.
>
> (F85CB, UK)

While many types of music engagement such as listening to music or practising alone could be achieved individually during the lockdown, there was a consensus that this was no substitute for group music-making. One participant described the loss of motivation that resulted from the cancellation of rehearsals and concerts:

> It's difficult to motivate myself to practice when I have no gigs coming up. Before lockdown I often used to read through orchestral parts and choir scores on train journeys due to limited time available for practice with the ensembles or alone, so I'm pretty used to silent practice. I've still

been teaching/lecturing on music and this has gone on pretty much as usual, although the mode of delivery has changed.

(F217COE, UK)

In addition to the lack of opportunity to make music together during lockdown, the uncertainty of future group music-making may also have reduced the motivation of members to make music and heightened their fears that their past enjoyment of music-making would not return (see section 4.6).

4.4   Virtual rehearsals

Pre-pandemic research into virtual rehearsals by Fancourt and Steptoe (2019) endorses the positive findings of our quantitative data (see section 4.3): their comparison of virtual and live choral singing found that the virtual setting provided a higher sense of social presence and a more considerable improvement in self-esteem and self-identity. While virtual choir participants before lockdown were making more of a choice to participate online, the positive effects were still evident for members seeking a substitute for their usual in person rehearsals. One music director explained the positive attitudes to online participation as follows:

It provides hope that we will eventually be able to come together again. While the virtual rehearsals and virtual recording projects are not what we used to do they offer different challenges that make them interesting.

(M194CMT, UK)

The development of virtual rehearsals also had positive effects on social aspects during the lockdown. The majority of participants who participated in virtual events responded that it provided a chance for them to keep in touch with others and gave a sense of belonging. However, for most participants who were not accessing virtual music programmes, the lockdown had a significant negative impact on their social bonding as they were unable to make music as a group and unable to be together. As a singer who participated in one of several online national choirs set up during the first UK lockdown reflected:

it's nice making and listening to music but I miss being with other people and being surrounded by other voices.

(F27C, UK)

Virtual rehearsals were better than nothing: they provided a chance to socialise, a motivation to keep on music-making, and an opportunity to develop a new technique for music engagement. The disadvantages of virtual rehearsals were reported as poor quality experience due to internet speed variances and latency, limited sense of integration with the group, and reduced effectiveness due to limited musical feedback. Making music together was therefore remembered as a meaningful and powerful activity, with its absence keenly felt by respondents.

Where virtual rehearsals were appreciated by participants, it was mainly for their social benefits and the sense of maintaining momentum for the musical group:

Virtual rehearsals are a less satisfying playing experience, but are informative, encourage us to continue thinking about and exploring music, keep us playing, keep us together as a group and offer an opportunity to socialize together.

(F52O, UK)

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Considerable fears were expressed that music-making might never return to normal for some of the groups in the survey (see section 4.6), so heightening concerns about the limitations of virtual rehearsing, and leading some participants to seek other forms of fulfilling leisure use during lockdown.

4.5   Alternatives to music-making

In the absence of opportunities to make music together during lockdown, our survey asked participants how they had been using their available leisure time and how these activities affected them differently from engaging in music (Q24). Most participants responded that they had increased their physical activities such as walking, running and gardening during the lockdown. The benefits of these activities were reported in ways that were similar to motivations for group music-making, namely improving mood, helping people to relax, and keeping positive states that improve mental health. It was impossible to achieve social benefits through these activities in lockdown conditions, but respondents were aware of their contribution to physical health, whereas no members attributed this benefit to music engagements during the lockdown.

Most participants believed that although music engagements and other lockdown activities had shared some similar positive effects on mental health,   group music-making provided additional different positive effects, as this participant explained:

> It's a cliché but I've enjoyed baking and cooking more during lockdown. There are similarities in the effect on my mood when you compare to music. Both put me into a flow state and prevent me thinking constantly about work or the news cycle. However music is different if I'm collaborating or sharing with someone else. Not only am I making something creative but I'm sharing that experience with someone else and connecting with them too.
>
> (F73CO, UK)

This response represents a widely expressed view that group music-making was not only about musical collaboration but also about sharing and spiritual communication, more than for other recreational activities. In addition, as mentioned in many responses, music-making requires high concentration that helped provide a distraction from concerns of the COVID-19 pandemic. In this aspect, other recreational activities might be relatively weak, as illustrated here:

> Walking and gardening. The former is particularly good for my physical and mental health. Both focus my attention on nature, beauty and the potential for regeneration. Neither are quite as effective as rehearsing and singing, as these take my total concentration and provide a welcome relief from wider concerns.
>
> (F22C, UK)

Participants who were previously enthusiastic group music-makers turned in some cases to alternative activities as respite from the dissatisfactions of trying to maintain musical engagement alone:

> More exercise, more cooking/baking. Both work equally well as distractions (physical and mental). They are probably more effective than music as [they are] just as satisfying to do alone, where music isn't for me.
>
> (F103COE, UK)

Other participants (13.2%, *N*=30) also responded that they were more satisfied with other activities and more motivated to engage with them compared with music listening or practising during the lockdown. This can be seen as a potential threat to music groups, as participants become accustomed to other recreational activities during this longer lockdown period, and so lose the previous momentum of their regular rehearsals and musical collaboration.

4.6   Fears for the future of music groups

Our survey asked directly about participants' hopes and fears for the future of their music groups (Q26 and Q27), and revealed a high level of concern about whether the groups would survive the lockdown, owing to concerns about members' health issues, continued fears about the spread of COVID-19, and a resulting decline in membership and audiences (summarised in Figure 7).

Figure 7.   Coding for the analysis of the fears and hopes about the future development of music groups (*N*=235).
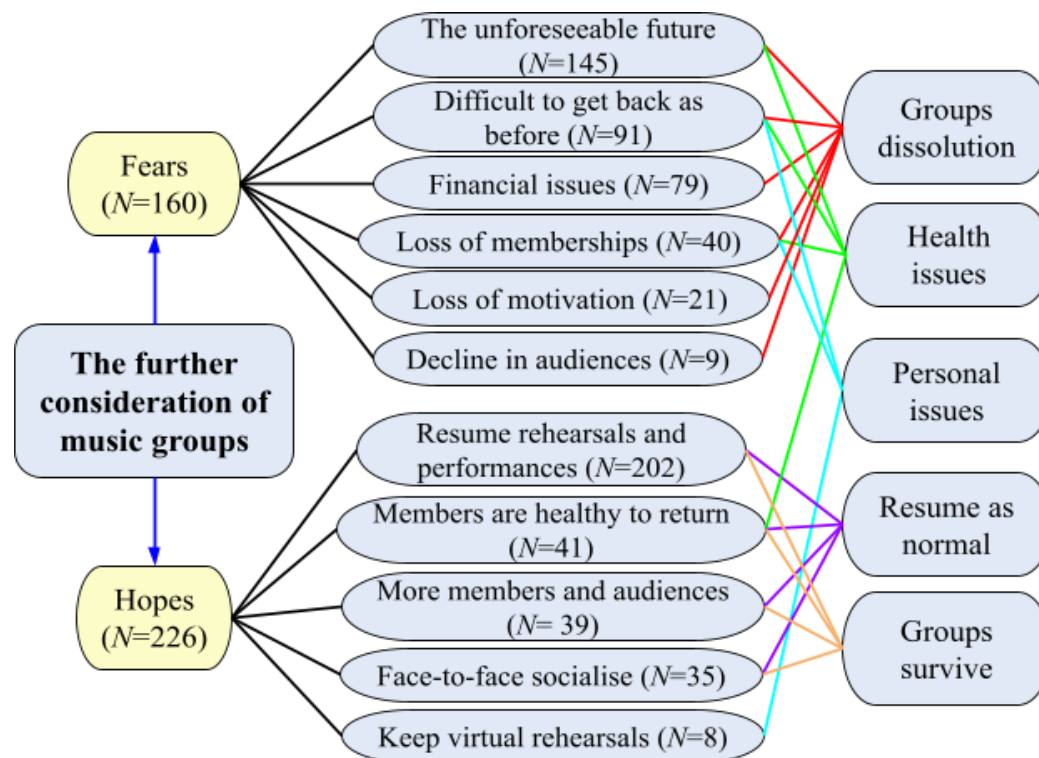
Most participants indicated that it was an unforeseeable future for the development of music groups and worried their music groups might be dissolved because of the financial issues resulting from declining membership and loss of subscription and concert ticket revenue. Groups with an older membership had particular concerns about the health of their vulnerable members, who might need to continue shielding even after the lifting of wider lockdown restrictions. Media reports about aerosol transmission of COVID-19 (e.g. Read, 2020; Public Health England, 2020) had caused particular concerns for the safety of communal singing, meaning that many participants could not envisage a form of group music-making that would be both safe and enjoyable:

> I have very strong concerns about our future. I have read about the dispersal of viral particles whilst singing at volume in groups. The membership of our choir is pretty elderly and hence at greatest risk and I can't imagine members feeling safe enough to resume rehearsals or put on concerts until a vaccine has been developed and rolled out. At an aesthetic level, I can't imagine producing a pleasant, blended sound if the only way we can meet is by having two metres between us....and wearing masks?!! We may come up with innovative ways of continuing but at present I'm struggling to come up with ideas.
>
> (F22C, UK)

Despite these fears and limitations, the majority of participants expressed a hope that group music-making would be able to resume as normal, so offering the possibility that the long period of enforced absence from group music-making could heighten members' appreciation of how vital music groups are to their lives:

> [I hope] that we keep making music, keep working towards high quality performances with big audiences, keep providing people with a space to explore their passion and mix with people they might not have met in everyday life.
>
> (F23O, UK)

Some participants who had experienced virtual rehearsals hoped that their music groups would continue with these, at least in the interim period before a vaccination programme (not in place at the time of data collection) could reduce the need for social distancing and the risk to vulnerable group members:

> [I hope] that they are allowed to meet again in person! However, I would be quite happy if some of the virtual choirs were to continue too, as they offer something slightly different but still fulfilling (and without the travelling time).
>
> (F142C, UK)

However, the development of virtual music-making was seen by some participants to be a threat to music groups, and to the future of arts and culture more widely:

> All performing artists need to be physically close to work. It's delusional to predict a future without this, and I'm getting tired of those arts funders who are promoting a "new normal". What they're really doing is hoping for a future where more people are involved and reached through [technology] for less money, quite forgetting the massive drop in quality on many levels that this will lead to. I hope for a return to face to face normality, and I believe humans have a fundamental tribal need to be together, close up, celebrating and making culture together.
>
> (M153E, UK)

The convenience and low cost of virtual rehearsals may attract more participants and be a lifeline for music groups whose rehearsals and performances are still limited (at the time of writing) by government restrictions and safety concerns. However, our findings showed a consensus that for the future survival of high-quality collaborative music, it is necessary to resume group music-making in person, and there was a cautious eagerness from participants to do this as soon as is safely possible.

5.   Conclusions and ongoing challenges

This research aimed to investigate the effects of the COVID-19 pandemic on group music-making. The findings clearly showed that group music-making before lockdown had beneficial effects on social bonding, mental health and wellbeing in members of music groups. The absence of these opportunities during the COVID-19 pandemic had detrimental effects on members and also threatened the survival of music groups.

The lockdown provided an opportunity (albeit an unwelcome one) to consider the ways in which amateur musicians would replace their in-person participation with other musical engagements and leisure activities during the enforced cancellation of rehearsals and performances. The findings suggested that no form of music engagement during the lockdown provided the same sense as group music-making before the lockdown. Members reported more positive effects of virtual rehearsals than other music engagements, and those members who engaged with music in some form reported more beneficial effects on mental health and social interactions, whereas engaging in other recreational activities afforded more physical benefits. The strength of music as a distraction from negative situations, including the pandemic,

was illustrated strongly, but the need to share this musical engagement with other people was also powerfully expressed. This helps to highlight the particular benefits of music as a meaningful leisure activity which combines the aesthetic satisfaction of working towards a shared musical goal with a sense of community belonging, so generating personal fulfilment and mood enhancement (see Pitts, 2019; Perkins et al., 2020).

The findings also showed that the lockdown came as a terrible blow to music groups. Participants were keenly aware that some music groups may face dissolution because of financial issues and the loss of members and audiences. However, the long period of enforced absence from group music-making due to the lockdown had reinforced the importance of music-making to many members, who hoped to resume rehearsals and performances in the future. This motivation may be crucial to the survival of the music groups, and to communicating their value to funders, new members and audiences.

The data collected were concentrated in the earlier stage of the lockdown between April and May 2020, and it is likely that the strength of both negative and positive feelings has increased since then, as participants become more frustrated with the absence of music-making opportunities, but also more adept at filling those gaps in their lives. Since the survey, UK government guidance on the gathering of small and larger groups has fluctuated in response to the rate of COVID-19 infection, and amateur music groups have often been overlooked in the constantly changing regulations. Professional performances which contribute to the economy and to the sense of 'normal life' for a wider section of the population have understandably been the priority in government legislation, but the omission of amateur groups from the guidance has caused confusion and distress, as shown in the #BringBackMyBand social media campaign from Making Music in August 2020.

As the effects of the pandemic and lockdowns continue to be felt around the world, there is an ongoing practical challenge for amateur music groups, and an opportunity for researchers to support their recovery through continued investigation of the impact of COVID-19 on groups and their members. A research project in Sheffield is working with arts organisations, freelancers, audiences and amateur groups to address the wellbeing impacts of lockdown closures, and to support the local cultural sector in its recovery (see https://www.sheffield.ac.uk/city-region/enhancing-cultural-vibrancy/covid-research). Other national projects are also underway (e.g. Walmsley, Gilmore and O'Brien, 2021), and so the collective knowledge about the impact of COVID-19 on artists and audiences is set to grow substantially in the months ahead. This has been an extraordinary year in so many ways, and a return to amateur music-making is one way in which recovery from the impacts of COVID-19 will be achieved for our survey participants and the many others like them.

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Appendix

Section 1: Information about you and participating in a music group(s)

1. What is your gender?
Mark only one oval.

- ○ Female
- ○ Male
- ○ Prefer not to say
- ○ Other: _____

2. What is your age?
Mark only one oval.

- ○ 18-24
- ○ 25-34
- ○ 35-44
- ○ 45-54
- ○ 55-64
- ○ 65-74
- ○ 75+
- ○ Prefer not to say

3. Please indicate which type of music group(s) you belong to.

Tick all that apply.

- □ Choir
- □ Musical theatre group
- □ Opera
- □ Orchestra
- □ Ensemble
- □ Band
- □ Dance group
- □ Other: _____

4. Please indicate the country and the name of the music group(s) in which you participate.

_____

5. Please indicate what role(s) you play in the music group(s).

_____

6. How long have you been a participant in a music group(s)?

Mark only one oval.

- ○ Less than 1 year
- ○ 1-3 years
- ○ 4-6 years
- ○ 7-9 years
- ○ 10-15 years
- ○ 16-20 years
- ○ Over 20 years
- ○ Other:_____

7. How many of your circle of friends are in the music group(s)?

Mark only one oval.

- ○ 1-3
- ○ 4-6
- ○ 7-9
- ○ 10-15
- ○ 16-20
- ○ Over 20
- ○ Other:_____

8. What do you enjoy the most about being a member of a music group?

Tick all that apply.

- □ The regular rehearsals
- □ The day of performance
- □ The audience response
- □ Social activities
- □ Other: _____

9. Please state the reason(s) for your answer about Q8.

_____
_____
_____

10. What have you gained from being a member of the music group(s)?
Tick all that apply.

- □ Brings you happy memories
- □ Put you in a good mood
- □ Makes you feel ecstatic
- □ Helps you relax and unwind
- □ Helps you forget your problems and worries
- □ Supplies you with important or interesting information
- □ Enables you to experiment with different sides of your personality
- □ Enables you to better understand your thoughts and feelings
- □ Expresses your values
- □ Helps you express your identity
- □ Helps you feel close to others
- □ Helps you meet people
- □ Enables you to identify with the artists
- □ Other: _____

Section 2: The impact of lockdown on you and your music participation as a group

11. How much do you think the lockdown has a negative effect on your moods?
Mark only one oval.

Not at all   0   1   2   3   4   5   very much

12. Please can you tell me about your general sense of wellbeing during the lockdown by rating your agreement or disagreement with the following statements?
Mark only one oval per row.

From left to right, -3(Strongly Disagree), -2(Moderately Disagree), -1(Slightly Disagree), 0(Neutral), 1(Slightly Agree), 2(Moderately Agree), 3(Strongly Agree).

I feel sad most of the time	-3 -2 -1 0 1 2 3
I feel anxious a lot	-3 -2 -1 0 1 2 3
I feel stressed most of the time	-3 -2 -1 0 1 2 3
I feel lonely most of the time	-3 -2 -1 0 1 2 3
I rarely wake up feeling rested	-3 -2 -1 0 1 2 3
I always feel tired	-3 -2 -1 0 1 2 3
I am not always committed and involved	-3 -2 -1 0 1 2 3
I have trouble concentrating on most things	-3 -2 -1 0 1 2 3
I have no interest in most things	-3 -2 -1 0 1 2 3

I do not have a particular sense of meaning and purpose in my life	-3 -2 -1 0 1 2 3
I feel that life is not rewarding	-3 -2 -1 0 1 2 3
I am not well satisfied about everything in my life	-3 -2 -1 0 1 2 3
I do not think that the world is a good place	-3 -2 -1 0 1 2 3
I feel not able to take anything on	-3 -2 -1 0 1 2 3
I don't feel particularly pleased with the way I am	-3 -2 -1 0 1 2 3
I feel that I am not especially in control of my life	-3 -2 -1 0 1 2 3
I am not particularly optimistic about the future	-3 -2 -1 0 1 2 3

13. How much do you think the lockdown affects your social communication with your music group(s)?
Mark only one oval.

Not at all   0   1   2   3   4   5   very much

14. Please state the reason(s) for your rating.

_____
_____
_____

15. What do you miss the most about the rehearsals or/and performances due to the lockdown?

_____
_____
_____
_____
_____

Section 3: Information about coping with music participation during the lockdown

16. How are you maintaining your music during the lockdown?
Tick all that apply.

- □ Virtual rehearsal
- □ Practice alone
- □ Listen to music
- □ No involvement in music
- □ Other: _____

17. How do you feel about using the above method(s) compared to the rehearsal before the lockdown?

_____
_____
_____

23. Do you keep in touch with your circle of friends who are in the same music group(s) as you during the lockdown? If yes, please explain how and your feelings about it.

_____
_____
_____
_____
_____

24. What other leisure activities do you engage in during the lockdown? Do these activities affect you differently from engaging in music?

_____
_____
_____
_____
_____

25. Please summarise what you gain from engaging with music during the lockdown.

_____
_____
_____
_____
_____

26. Do you have any worries about the future of your music group(s)? If yes, please explain.

_____
_____
_____
_____
_____

27. What are you hoping for the future of your music group(s)?

_____
_____
_____
_____
_____

28. Thank you for your answer. Is there anything else you would like to add?

_____
_____
_____
_____
_____