

An explorative study of young people's perception of their emotional relationship to music during the first two years of the COVID-19 Pandemic

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ABSTRACT

Research into the COVID-19 Pandemic's impact on young people's wellbeing responds to the adverse and unprecedented effects on daily life which has impacted people globally (Ougrin, 2020). The Pandemic's disruption of daily routine and mental health has been found to have disproportionately affected young people (Power, et al. 2020). How young people have dealt with these effects, and how significant music making and listening has been to young people's emotional regulation during the Pandemic is a topic which scholars have been exploring (Luo et al, 2022; Levstek et al., 2021; Vidas, et al. 2021). This present study builds on research around music and wellbeing (Croom, 2012) as well as qualitative and quantitative studies of young people, music, and emotional regulation during Pandemic (Krause, et al. 2021). The aim of this present study is to provide exploration of young people's perceptions of their emotional relationship to music during the first two years of the COVID-19 Pandemic. This present study concludes that participants found music to be a useful wellbeing tool during COVID-19 although the negative perceptions of music's impact on young people was also highlighted. Results also show a bias for music listening over making as a wellbeing tool.

1. INTRODUCTION

Music as a tool for wellbeing and emotional regulation is an area of research which has explored the different benefits of music making and listening. Music can regulate mood, evoke positive feelings, relieve stress, and help with negotiating social relationships (Weinberg and Joseph, 2017). Croom (2015) discusses how music can allow for human beings to flourish in areas of psychological well-being; positive emotion, engagement, relationships, meaning, and accomplishment. Affect regulation has been found to be a key benefit of listening to music, with Groarke and Hogan (2016) finding that in a study of participants aged 18-30, and 60-85, the most important reason people said they listen to music is to enhance their wellbeing. This study also shows the difference between young and older people; with young people noting music's social function as a bigger factor in its usefulness for wellbeing, and older people highlighting affect regulation as more important (Ibid.). This is relevant because the pandemic rapidly changed daily routines of young people and how they were able to socialise and participate in leisure (Woodrow and Moore, 2021).

Music is a popular leisure activity for young people and has been found to have influential effects on how adolescents express identity and relationships (Papinczak, et al. 2015). Why young people specifically use music as a tool for emotional regulation and wellbeing is an area of research which is comparatively under-studied (Ibid.). Papinczak et al., (2015, p. 1119) state that the period where an individual is between the ages of 15-25 is often "characterised by much personal change and is the peak onset of mental health problems". These changes common in young people's lives are associated with elevated levels of stress (Graupensperger, 2022). In the UK, it has recently been found that approximately 50% of mental health disorders become evident by teenage years, and 75% by the age of 24 (Owens, et al. 2022). Therefore, how people within this age group regulate their emotions is of particular interest in investigating the best ways for people to support their wellbeing during this time of their life, particularly in times significant world change.

COVID-19 has had significant economic, social, and psychological impacts on people worldwide, affecting daily routines and ordinary coping strategies employed by individuals to regulate their emotional wellbeing (Hou, et al. 2020). Different countries enforced different regulations, which impacted people's abilities to do things like travel, meet people outside of their home, and attend work and school to manage the spread of COVID-19 (2020). How governments chose to implement these restrictions was varied between nations. To what extent this impacted the general well-being of individuals also varied between individuals (Esposito, et al. 2022). Consequences of the pandemic include "social isolation and widespread fear of contagion" amongst the general population (Marchini, et al. 2021).

Understanding the impact of COVID-19 on young people's mental health has gained more precedence in academic research (Dewa et al., 2021). Three qualitative themes in Dewa's study were identified, including the employment of pre-existing or developing of coping strategies, mental health difficulties worsening, and the requirement of mental health and nonmental health support needed during and after lockdown (Ibid.). The effects of the Pandemic on young people and adolescents have shown to be more pronounced than average (Ibid.). Marchini et al., (2021)

study of 18–25-year-olds who experienced lockdown measures whilst living in Belgium and Italy during April 2020 highlighted a big growth of mental health care needs. Zhou et al., (2020) found that in a study of Chinese adolescents, symptoms of anxiety and depression presented twice as much as prior to the outbreak of COVID-19 and highlighted the extensiveness of mental health issues amongst this group which negatively correlated to their awareness of COVID-19.

When significant events impact daily life and wellbeing, research into methods of improving positive emotions become more relevant (Martínez-Castilla, 2021). Studies which approach the wellbeing efficacy of music on people during the pandemic have highlighted the different spheres which music has proven to be effective. For example, music therapy was proven to improve wellbeing amongst a group of Italian health-care workers (Giordano, 2020). Music was shown to be an effective tool for mood regulation in the beginning of the pandemic by people across many different countries. Those who felt personally more affected by the pandemic reported greater signs of mood improvement (Hennessy, et al. 2021). In the US, a retroactive study which interviewed 14 participants, showed independent music creation to be useful in mood management and providing comfort to some over the course of the Pandemic (Lewis, 2022).

Wellbeing coping strategies for young people during 2020-2021 have also been of recent interest to the field of music psychology (Krause, et al. 2021). Music listening and participation during COVID-19 have also been linked to how people achieved 'wellbeing goals' (Martínez-Castilla, 2021). Signs of wellbeing and life satisfaction have also been compared with what young people's relationships to media and music over the course of the Pandemic consisted of (Krause, et al. 2021.). Notably, COVID-19 has also led to disruption of children's musical education and leisure activities (Ilari, et al. 2022).

Since music has been found to have wellbeing regulatory capabilities, it is interesting to consider its relationship to how people coped with challenges brought about by the pandemic. Furthermore, the spectrum of how actively or passively music can be engaged with as a wellbeing aid presents a unique method for people to utilise. This present study will evaluate the wellbeing effects of music listening and creation during the first two years of the COVID-19 pandemic, in young people aged between 18-22 years old. As this is a retroactive study, respondents were asked to reflect on their emotional relationship to music since 2020, meaning, some participants will be recalling memories of being as young as 15. This research is relevant because young people have been overlooked in music and wellbeing research, whilst being found to have been affected negatively by the pandemic (Papinczak, et al. 2015).

My research aims to explore how young people perceive their emotional relationship to music during the first two years of the COVID-19 pandemic (2020-2021) taking a closer look at what music-related strategies young people remember employing to tackle changes to their wellbeing which the pandemic presented to them. This present study aims to build on retroactive research on musical experiences and emotional regulation during the first two years of the COVID-19. More broadly, the effect of COVID-19 on individuals as well as general attitudes towards their emotional relationship to both music listening and creation will be addressed, as previous studies have separated the two. In this study, music creation was defined as broadly as "making, composing and writing" music. The explorative approach to research allows participants to provide emotionally descriptive answers and provides a broader dataset to engage with.

This research project will assess if young people perceive music to have been an effective well-being tool since 2020. It will explore music's importance in improving mood during a highly uncertain and stressful time, where participant's age indicates stress factors are likely to be higher. This present study aims to highlight if young people's perception of music listening and making has changed over this time. The comparison between thoughts on music's ability to evoke positive wellbeing amongst young people will be explored through open-ended questions like Likert Scale questions. Results will highlight key themes important to participants and aspects of hindsight will also be considered. Overall, the key aim of this present study is to expand on research focusing on the perceptions of music, wellbeing, and young people post-COVID-19 (Weinberg and Joseph, 2017).

2. METHODOLOGY

Design. This present study was constructed as an online survey using Qualtrics. The survey collected mostly qualitative data, consisting of a mixture of open questions, where volunteer participants were asked to provide detailed responses, and Likert Scale questions where participants were asked to rank their agreement or disagreement with a given statement. Responses included Strongly Disagree, Agree, Neither Agree or Disagree, Disagree and Strongly Disagree. The design of the project aimed to provide mostly qualitative data which then underwent thematic analysis (Braun and Clarke, 2006). This was to provide this study with detailed data, where participants can express in depth their thoughts and opinions in a faster and more anonymised forum than in an interview setting.

Participants. Participants (N = 40) were recruited voluntarily through online distribution of the questionnaire over social media and module forums. Two participants were removed from the dataset (N = 38). The study originally aimed to gather data from between 30-40 participants as a mid-range compared with previous larger and smaller studies. Most of participants were Durham University students, but a portion were not. This sample consisted of 6 men, 26 women, 2 nonbinary people, 2 people who identified as 'Other' and 2 who preferred not to say (M =2.16, SD = .93). Of the participants, 1 was 18 years old, 5 were 19, 14 were 20, 13 were 21 and 5 were 22 (M =3.42, SD = .96). The survey also asked for details whether participants had tested positive for COVID-19 during 2020-2021. 20 participants said they had have not tested positive for COVID-19, 13 said they have tested positive, and 5 said that they have not tested positive but believe that they had had the virus during this time (M = 1.74, SD)= .99). Of the participants, 36 said that they probably did not identify as being part of an 'at-risk' group, vulnerable to COVID-19, during 2020-2021, and two participants said that they either definitely or probably were vulnerable (M = 1.29, SD = .82). As of now, 36 participants said they did not or probably did not identify as being part of a group currently vulnerable to COVID-19, 1 participant said they may or may not be, and 1 participant said they are currently vulnerable (M = 1.42, SD = .78). 87% of participants experienced COVID-10 lockdown restrictions during 2020-2021 in the UK (including Wales, Scotland, and England), 2.56% in Canada, 2.56% in the US. Of this group 10.25% lived in multiple countries, including Vietnam, Singapore, and China. Musical experience ranged from little to none, to hobbyists, those who had taken graded exams, and those studying it at higher

Materials and Procedure. The questionnaire was designed to take approximately 20 minutes to complete but prompted participants to describe responses in as much detail as they wished. Participants read an information sheet and filled out a consent form. Participants were asked to rate statements relating to the effects of COVID-19 on their emotional wellbeing and loneliness. They were also asked to rate statements regarding whether they use music listening and making to improve their mood, both now and during a time when they felt particularly effected by the Pandemic. No musical stimuli were provided, instead it was left up to participant's discretion whether specific music genres, styles, artists, or pieces were referenced in their open responses. Most questions in the study asked for participants' views on how they were affected by the pandemic, aside from musical discussion. They were asked for their thoughts on their relationship to music listening and making now versus during 2020-2021, and asked to reflect on how effective they thought music was in improving their emotional wellbeing during 2020-2021, then asked if, on reflection, those thoughts had changed.

3. RESULTS

The results of this present study highlight the variety of ways in which participants perceived their emotional relationship to music during 2020-2021, as well as how hindsight has changed how some participants view this relationship. Participants were asked to complete 13 non-demographic questions, 5 of which were Likert scales. Firstly, I will outline the results of each Likert Scale question. A small number of participants chose not to participate in these questions.

Pandemic Impacts. Questions 2 and 3 asked participants to rate the negative impacts of the Pandemic on themselves, as well as the impact of loneliness. Question 2 shows that most participants agreed or strongly agreed that their emotional wellbeing was negatively affected by the Pandemic during 2020-2021 (M = 4.23, SD 0.87) (See Figure 1).

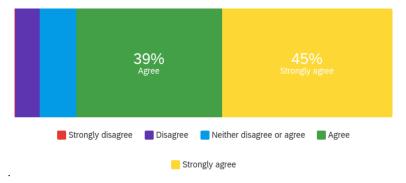


Figure 1. Results for Question 2

Question 3 shows that most participants agreed or strongly agreed that they felt lonely because of the Pandemic during 2020-2021, (M = 4.13, SD = .79) (See Figure 2).

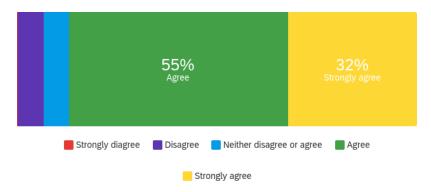


Figure 2. Results for Question 3

Music Listening and Creation to Improve Mood. Questions 8 and 9 asked participants to rate how much they currently use music listening and creation to improve their mood. Question 8 shows that most participants strongly agreed or agreed that they currently use listening to music to improve their mood (M = 4.42, SD = .77) (Figure 3)

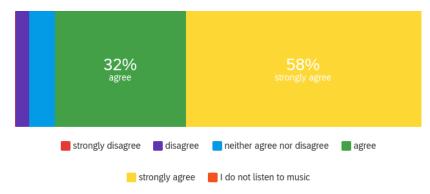


Figure 3. Results for Question 8

Question 9 shows that 8 participants strongly disagreed and 2 disagreed that they currently use creating music to improve their mood, with 4 participants neither agreeing nor disagreeing, as well as 3 agreeing, 3 strongly agreeing. 11 participants said they do not create music (M = 2.62, SD = 1.53) (See Figure 4).

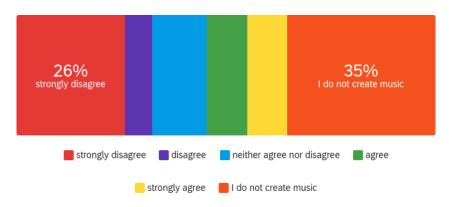


Figure 4. Results for Question 9

Questions 10 and 11 asked participants to rate how much they used music listening and creation to improve their mood during 2020-2021. Question 10 showed that most participants remembered listening to music to improve their mood at a time where they felt affected by COVID-19 (M = 4.16, SD = .95) (See Figure 5).

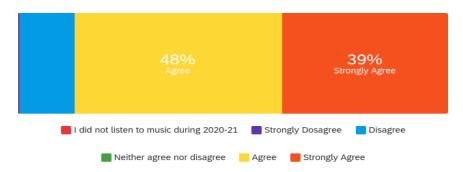


Figure 5. Results for Question 10

Question 11 showed that an equal number of participants either agreed or disagreed (5) that they remembered creating music to improve their mood at a time when they felt effected by the COVID-19 Pandemic during 2020-2021. 21 of the participants said they did not create music during this time (M = 3.09, SD = 1.04). (See Figure 6).

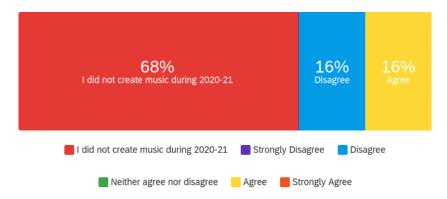


Figure 6. Results for Question 11

A paired-samples t-test was used to determine whether there was a statistically significant mean difference between participants listening to music now and during 2020-2021 to improve their mood. There was not a significant difference in this condition; t(28) = 1.58, p = .125, d = .29. Furthermore, another paired-samples t-test was used to determine whether there was a significant mean different between participants creating music now and during 2020-2021 to improve their mood. There was not a significant difference in this condition; t(10) = .39, p = .703, d = -.12. Although both results were not significant, listening was closer to being significant than creation. A larger sample size would have the potential to show a significant result.

A further paired-samples t-test was used to determine whether there was a statistically significant mean difference between participants listening and creating music to improve their mood during 2020-2021. There was a significant difference in this condition; t(10) = 4.54, p = .001, d = 1.37. This shows that listening was perceived as being used significantly more than creating to improve mood during 2020-2021. Furthermore, a paired-samples t-test was used to determine whether there was a statistically significant mean difference between participants listening and creating music to improve their mood currently. There was a significant difference in this condition; t(20) = 4.75, p < .001, d = 1.04. This means that listening is currently perceived as being used significantly more than creating to improve mood.

My qualitative data was coded into concepts and ideas which appeared in the data, question by question. Then these codes were organised into themes of topics, emotions and ideas which appeared. Typically, thematic analysis is done by multiple people to cross-compare. As this was not an option, I coded data three times to account for subjectivity and cross compared my own results.

Pandemic Impacts. Question 1 revealed 7 themes in relation to more general effects of the COVID-19 Pandemic on participants; Negative Emotions, Mental Health, Freedom, Physical Health, Disruption or Practical Struggle, and Ways they Spent Time (See Table 1). One participant detailed how a "chronic illness flair up" led to them being taken into hospital, leading to a decline in their mental health. Another participant stated a feeling of being "free" due to "everything being closed and ha(ving) no deadlines." One participant said that "family relations became strained" and noted that they spent "a lot of time alone."

Table 1. Themes and Codes for Question 1

THEMES:	NEGATIVE EMOTIONS	MENTAL HEALTH	FREEDOM	PHYSICAL HEALTH	DISRUPTION OR PRACTICAL STRUGGLE	WAYS THEY SPENT TIME
CODES:	Empty	Depression	Increased	Healthcare system	Exams cancelled	Self-care
	Worry	Anxiety	Travel restrictions	Personal illness	Parents working	Hobbies
	Stress	Suicidal	Social difficulties	Loved one sick/ vulnerable	Disruption to learning	Watching the news
	Loneliness	Disordered eating	Social changes			
	Paranoia	Insomnia				
	Sadness	Improvement				



Figure 7. Word Cloud of Question 1 responses

Music Listening. Question 4 explored current relationships towards listening to music, and Question 5 explored relationships towards music during 2020-2021. The themes identified in Question 4 were Frequency and Environment, Motivation, Mood, and Emotion, Mind Wandering, and Aesthetics (See Table 2). Within this data, one participant said that they listen to music "to fill the silence and also to help (them) focus while studying", and another said that they used music every day for a range of reasons, including "for fun and to calm anxiety". For Question 5, the themes identified were Time, Loneliness, Changes to Habit, Social, Environment, Mood and Emotion, Aesthetics (See Table 3). One participant noted that music was used as "an outlet", as they spent time finding "new artists and new genres". Another participant mentioned that they would "put music on when (they were not) feeling good".

Table 2. Themes and Codes for Question 4

THEMES:	MOTIVATION	MOOD & EMOTION	FREQUENCY & ENVIRONMENT	MIND WANDERING	AESTHETICS
CODES:	Socialising	Lifting	Frequently	Distraction	Streaming Services Pick for them
	Getting ready	Release	At Home	Escapism	Discover new styles and artists
	Exercise	Nostalgia	Walking	Fills silence	Collecting
	Studying	Familiarity	For sleep		Resonate with lyrics
	Fun		Off and on		Artistic Appreciation
			Does not Listen		Emotional Music
			Hobby		

Table 3. Themes and Codes for Question 5.

THEMES:	TIME	LONELINESS	CHANGES TO HABITS	SOCIAL	ENVIRNOMENT	EMOTIONS AND MOOD	AESTHETICS
CODES:	Frequentl y	Simulate company	Increase/ Decrease	Shared playlist s	Studying	Catharsis	Discover new artists and styles
	Pass the time	Less alone	No change	Way to connect	Walking somewhere	Match mood	Specific genres in particular
	Decrease / Increase	Own world/ Space	Other forms of media	Not engagin g with what others listened to	Exercising	Sparked joy of listening	Linking to personal identity
	Good for attention span	Imaging the future	Tik Tok/ Viral songs		Sleep	Lift mood	
	Obsessiv e	Fills silence	Used for sleep		Whilst doing other activities	Норе	
	Nostalgia		Did not listen to specific songs with certain attachmen ts			Emotional Aid	
						Mood regulation	
						Validates emotions	
						Protection	
						Distraction / escapism	
						Induces moods	

Music Creation. Questions 6 and 7 explored relationships to music creation currently and during the pandemic. The themes for Question 6 were Not Enjoying, Description of How, No Relationship (See Table 4). Some negative comments made by the participants included saying that they "cringe a lot and feel like (they) don't know a lot about harmonies or possess the right techniques. So then (they) get frustrated and put the guitar back on its stand", and that "GCSE made (them) hate it a bit, (they) wish (they) could get back into it but also (they) do not know enough theory." Alternatively, positive comments on current music creation included a participant leading "a children's choir and enjoy making arrangements with them". For Question 7, the themes were similarly Description of How and Negative Associations (See Table 5). Participants mentioned starting to learn new musical skills and trying to continue with making music. A portion mentioned a "frustration" with music-making during the pandemic. One participant said "I tried to learn how to play the guitar in lockdown but didn't get very far with it. I think I started with the hopes of being able to make music, but I quickly got frustrated with it and gave up practicing."

Table 4. Themes and Codes for Question 6.

THEMES:	NOT ENJOYING	DESCRIPTIONS OF HOW	NO RELATIONSHIP
CODES:	Insecurity	Mixing	Do not believe they engage with this
	Lack of knowledge	Practising	Enjoy works of others
	Put off by school	Composing	
	Less frequent	Informal	
	Unable	Hobby	
	Difficulty with practising	Creative	
	Not since Uni	Frequently	

Table 5. Themes and Codes for Question 7

THEMES:	NEGATIVE ASSOCIATIONS	DESCRIPTIONS OF HOW				
CODES:	Rarely played	DAWs				
	Lack of access/ opportunity	Songwriting				
	Frustration	More time to practise playing				
	Lack of confidence					
	Lack of motivation					
	Make more music now compared to 2020-					
	Did not get far with new instrument					
	Decrease in composing					
	Disruption					
	No relationship					
	Exams/ formal music education put them off					

Music to Improve Emotional Wellbeing. Question 12 shows how participants view music in improving their emotional wellbeing. For Question 12, the themes were Aesthetics, Personal/ Spiritual, Mood/ Emotion, Social, and Productivity (See Table 6). One participant explained, in depth, about how music can improve mood in certain conditions; "I think it improves my emotional well-being if I'm already happy or feeling neutral. If I'm feeling sad then it can worsen my feelings or have little effect depending on the type of music...it acts like a plaster in that I'm only happier for the time that the song is on and then I am back to my previous mood after, it is like a temporary escape." Other participants spoke more positively about the use of music for their wellbeing, explaining that it "can help switch off your mind", "enhance" positive emotions, and "focus more".

Table 6, Themes and Codes for Question 12.

THEMES:	AESTHETICS	PERSONAL/ SPIRITUAL	MOOD/ EMOTION	SOCIAL	PRODUCTIVITY
CODES:	Artistic appreciation	Connect to God	Dampen negative emotions	Combat loneliness	Motivation
	Just Noise	Connect to personal identity	Release	Way to connect	Focus
	Playlists	Feel good about self	Temporary improvement	Socialising	Energy
	Resonate with lyrics	Confidence	Nostalgia		
	Fills silence	Embody	Wallowing		
	Envy	Reminds of home when homesick	Working through emotions		
		Remember happy memories	Catharsis		
		Obsession	Perspective		
			Connect to		
			emotions		
			Switch off		
			Empathetic		
			response Distraction		
			Feeling present		
			Preventative		
			Enhances mood		
			Grounding		
			Inducing moods/ emotions		



Figure 8. Word Cloud of Question 12 Responses

Music at a Time Affected by COVID-19. Question 13 and 14 explore participant's relationship to music at a time where they felt personally effected by COVID-19. Question 13 asks about how participants felt at that time, and 14 asked for a response which considers hindsight. The themes for Question 13 were Time, Social, Mood and Emotion, Productivity, Personal, Aesthetics, and Neutral/Not Useful (See Table 7). One participant said that music was "able to lift my spirits at least a little and prevent them from sinking further" during this time. Another commented on the unintentional way music aided them, saying that "listening to music during that time was a

nice way to distract" them. For Question 14, the themes were Mood and Emotion, Opportunity, Aesthetic, Personal, and Not Useful (See Table 8). One participant stressed the value of music's use explaining that "If (they) didn't have music in this time (they) really don't think (they) would have coped." On the other hand, another participant said that music's usefulness was dependant "on the type of music (they were) listening to" because "some of it definitely made things worse."

Table 7. Themes and Codes for Question 13

THEME S:	TIME	SOCIA L	MOOD & EMOTIO N	PRODUCTIVIT Y	PERSONA L	AESHETIC S	NOT USEFUL/ NEUTRA L
CODES:	Often	Way to connect	Lift mood	Motivation	Identity	Discovering of new artists and styles	No change
	Pass time	Less alone	Wallowin g	Got me through it	Relate to it	Playlists	Used other ways instead
	Look forward to the future	Social aspect remove d, less exposur e	Groundin g	Energy			Does not remember
	Mark time	Remind s of family they cannot see	Inducing emotion/ mood	Норе			Did not deal with actual issue
	Nostalgi a		Regulate	Background when doing other activities			
	Combat boredo m		Valued				
			Catharsis				
			Calming				

Table 8. Themes and Codes for Question 14

THEMES:	MOOD & EMOTION	OPPORTUNITY	AESTHETIC	PERSONAL	NOT USEFUL
CODES:	Achievement	Time to indulge	Artistic Appreciation	Identify	Temporary fix
	Process emotions	Opened up world	Playlists	Understanding self	Wallowing
	Crutch	To connect	Discover new styles and artists		Not productive
	Cope	Fill time	Associations with other concepts		Restricted what they listened to
	Normality				Mixed thoughts
	Purpose				Made them feel worse
	Nostalgia				Looked to other forms of media
	Regulate mood				Less opportunities to take part in things
	Induce positive emotions				Desensitized to music's meaning
	Relaxing				
	Outlet				
	Escapism				

4. DISCUSSION

Most participants reported negative effects to their wellbeing due to the COVID-19 Pandemic. The majority perceived an increased feeling of loneliness. This aligns with research which has shown that loneliness and mental health issues have intensified for many young people due to the pandemic, although some studies suggest loneliness has had a greater effect on older people (Khan and Yoshiko, 2021). The effect of the pandemic on participants was reported as majority negative, with many self-reports of decline in already present mental health issues and increases in negative emotions. Many participants discussed the negative impacts on them socially, as well as expressing a reduction in freedom.

Overall, this present study builds on current research which indicates that young people's wellbeing has been negatively affected by the COVID-19 pandemic (Dewa, et al. 2021). It also shows the range of ways music is perceived to improve or regulate emotional wellbeing of young people in this sample. Results show differences between current relationships towards music and wellbeing, and relationships fostered during 2020-2021 (Krause, et al. 2021). This present study also reveals some young people's recognition of the drawbacks and harmful effects which using music as a wellbeing tool has potentially had on them. Young people suffering from poor mental health frequently use media when they are in a negative mood and can use it as a source of dependency (Stewart, et al. 2019). This present study highlights how this can prove to provide a crutch, or outlet for some, but makes others feel potentially worse. In hindsight, a portion of participants identified that they feel like they would characterise music as less effective in improving their emotional wellbeing, than how they thought about it at a time when they felt effected by COVID-19. Some participants highlighted how music was able to induce and improve positive emotions and moods, as well as act to process and release emotion. However, others identified

music as a more temporary fix which did not get to the root cause of their negative emotional wellbeing and may have in some cases made them feel worse, on reflection. For example, that participant who described music as a "bandage over a wound", and the other who said that music can "worsen my feelings...it acts like a plaster". This highlights an area for future consideration; looking at how reports of effectiveness of music as a wellbeing tool during the pandemic have changed with hindsight, and how these perceptions may be negative (Lewis, 2022; Martinez-Castilla, et al. 2021). How young people contextualise music's efficacy in this area retrospectively has the potential to give more objective insight into its impact. However, a limitation of this method and this present study is that distance from the time may make it more difficult for participants to remember clearly as opposed to providing more objective observations of their own current experiences.

Participants were more inclined to listening as opposed to music creation to improve mood. The wellbeing goals outlined by participants such as enjoyment and catharsis, is comparable to other studies regarding music and the pandemic (Granot, et al. 2021). Most, and almost the same number of participants said that currently and during 2020-2021, they use music listening to improve their mood. However, participants more strongly agreed that they use music currently. This shows that participants remember relying on music listening as a wellbeing tool less during 2020-2021 or indicates that the pandemic may have changed their relationship with music listening and wellbeing, impacting their current habits, for example, like the participant who said that the Pandemic "sparked a joy for listening." It could be argued that the pandemic has shifted young people's perception of their music listening and wellbeing habits. This links to previous studies which show how University students listening habits changed during the pandemic, such as how they connected with others on platforms such as Spotify (Hurwitz and Krumhansl, 2021). How these habits have persisted is an area for future investigation. This aligns with this present study's identifying of social themes amongst responses regarding both current and pandemic listening and wellbeing relationships, where it appears that some participants adjusted their experiences of music listening as a social wellbeing tool (using things like shared playlists and songs which reminded them of people, to connect with others). Participants responded more prominently about using music listening as a tool to combat loneliness during 2020-2021 compared to how their relationship to music currently. This study by Groarke and Hogan (2016) suggests that young people's perception of music as a wellbeing tool is connected more in social function, compared to that of older people.

Results between listening and creating music differed where most participants stated that they did not create music both in 2020-2021 and currently. With those who do/did create music, there was a more even split of those who felt it was effective in improving their mood at a time when they felt effected by the COVID-19 pandemic, although the sample of these participants was small. This highlights a potential limitation of this present study, in its demographic dataset of people where majority do not feel like they "create" music now or created music during 2020-2021. An area for future research could be a similarly designed study which is targeted specifically at young people who identify as people who "create" music. When discussing their relationship to music creation and emotional wellbeing, a significantly higher number of negative or neutral responses were received compared to that of music listening. A factor for many participants in their negative perception of music creation as a wellbeing tool, was that of lack of access, insecurity, frustration, or lack of knowledge- sometimes aggravated by the pandemic. Overall, this highlights how this dataset of young people perceive music creation as a less effective wellbeing tool currently and during the pandemic than music listening. For those who did feel the positive impacts of music creation and wellbeing, themes of Creativity and Outlets were identified. Many participants were more descriptive of their "creation" activities rather than their emotional relationship to music creation itself.

Limitations of this present study include a large gender bias, a smaller age range collected than originally intended, a limited sample size of 38, and a broad approach to the research area. However, the small sample size and age range provides more focused and manageable data collection of detailed responses from participants about a range of prompts, which has highlighted several areas for future research. This includes focusing on subgroups of people who do/do not create music and do/do not listen to music. There is further opportunity to build on research which shows how music can be used as an effective wellbeing tool in ways which are personal and variable between participants, as well as potentially negatively impact wellbeing for some. An interview study with a smaller sample size and more varied gender and geographic demographics with COVID-19, music, and wellbeing in mind, could provide fruitful further insights into this area of research.

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APPENDIX

Demographic Questions:

- What is your gender?
- What is your current age?
- Did you ever test positive for COVID-19 during time period 2020-21?
- During time period 2020-21, did you identify as being part of an 'at-risk' group, vulnerable to COVID-19?
- Do you currently identify as being part of an 'at-risk' group that is vulnerable to COVID-19?
- During time period 2020-21, did you identify as being part of an 'at-risk' group, vulnerable to COVID-19?
- If you experienced COVID-19 Lockdown restrictions between 2020-21, in which country/ countries did you experience them?
- How would you describe your musical training as of January 2020? (i.e., undergraduate degree, graded exams, informal training, GSCE etc.)
- How would you describe your musical training as of now? (i.e., undergraduate degree, graded exams, informal training, GSCE etc.)

Non-demographic Questions:

- 1. Please give a detailed description of some or all the personal effects of the COVID-19 pandemic you experienced during 2020-21
- 2. To what extent do you agree with the statement: "My emotional wellbeing was negatively impacted by the COVID-19 pandemic during 2020-21"
- 3. To what extent do you agree with the statement: "I felt lonely because of the COVID-19 pandemic during 2020-21"
- 4. Describe, in detail, what your relationship to listening to music currently
- 5. Describe, in detail, what you remember your relationship to listening to music was like during a time which you felt affected by the COVID-19 pandemic from 2020-21.
- 6. Describe, in detail, what your relationship to making/writing/composing music is currently.
- 7. Describe, in detail, what you remember your relationship to making/ writing / composing music was like during a time which you felt affected by the COVID-19 pandemic from 2020-21
- 8. To what extent do you agree with the statement: "I currently use listening to music to improve my mood."
- 9. To what extent do you agree with the statement: "I currently use creating music to improve my mood."
- 10. To what extent do you agree with the statement: "I remember listening to music to improve my mood at a time when I felt affected by the COVID-10 pandemic in 2020-21"
- 11. To what extent do you agree with the statement: "I remember creating music to improve my mood at a time when I felt affected by the COVID-10 pandemic."
- 12. Is music something which you feel improves your emotional wellbeing? If yes, please describe in detail how so. If no, please elaborate.
- 13. Think back to a time where you felt personally affected by the COVID-19 pandemic from 2020-21. At the time, did you use music to improve your emotional wellbeing? If so, please describe in detail how and why. If not, please elaborate.
- 14. In hindsight, do you think music was useful in improving your emotional wellbeing during that same time? If yes, please describe in detail how so. If no, please elaborate. How do your feelings differ from then and now, if at all?