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How can musicians make music with people with dementia?

An investigation of musician-led musical practices for those living with dementia



Image 1 - Team and participants of Turtle Song Oxford 2020.

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Abstract

Recent studies demonstrate that music can significantly contribute to improving the overall quality of life of people living with dementia. However, precise information regarding the *how* to practically use music in order to successfully achieve its benefits is scarce.

This project's main research question explores what and how music practices can be employed in music workshops for people with dementia. Four related questions are studied: (1) why song-writing is the focus of Turtle Song and what makes it a powerful practice; (2) what skill-set musicians should have to work in this field; (3) whether workshops should focus on a single music practice or a broad variety of them; and (4) how experiencing a project like Turtle Song impacts young musicians. All this was explored through participation in Turtle Song - a music project for people with dementia.

Conclusions are supported by empirical data collected during Turtle Song: a session diary (supported by observation and audio-recordings) and interviews with the musicians involved. Key findings are that (1) song-writing can be extremely beneficial for people with dementia as it is a very complete activity - involving brainstorming, recalling memories, discussing lyrics, singing - therefore activating several cognitive and non-cognitive skills; (2) human skills such as compassion and attentiveness are crucial to work in this field but skills such as leadership and adaptability are also fundamental; (3) variety of music practices allows diversity and enjoyment but having a general structure can provide an important sense of familiarity; (4) directly experiencing music workshops for dementia can significantly increase musicians' interest and confidence to successfully lead workshops.

This work culminates in a guide-like model of a workshop session. The guide describes how to employ specific music practices in that context, being a valuable tool for musicians interested in successfully engaging with people living with dementia.

Introduction

Motivation and questions

In 1993, Kitwood - one of the most respected scholars on the area of dementia care - expressed his concern regarding the focus of the available studies about dementia. He observed that:

“Neither psychiatry nor clinical psychology have provided the foundations for a theory of dementia care. Generally they have preferred to remain on more solid ground, assigning individuals to diagnostic categories (...) As yet, however, the issue of caring for a person with dementia has scarcely been addressed.”¹

Now, almost thirty years after, I reach a similar conclusion regarding the available studies about music for dementia care: most studies which investigate the impact of music in specific symptoms of dementia (e.g. depression, agitation, memory), either (a) mention the music activities used but do not explain *how* they were employed or (b) do *not* specify the music practices used. In particular for a music student hoping to step into this area, where much help is needed and increasingly so given the steady ageing of the average world population, there is lack of clarity regarding what they could do musically and *how* they could approach this context of musical practice. For this reason, the present study looks at music for dementia from the perspective of the musicians, its main research question being: *What musical practices can musicians employ when engaging with people living with dementia?*

I first joined Turtle Song (TS) - a creative music project for people with dementia - in 2018. Due to the variety of music practices it employs, this project is the ideal setting to explore the field of music practices for dementia. Therefore, this year I joined the team not only as a violinist but also as a researcher. Along with my main research question mentioned above, I explored four related questions: (1) *what makes song-writing TS's focus and therefore a good practice for dementia?*; (2) *what skills should musicians have and develop in order to work with people with dementia?*; (3) *should music practices be varied, or should musicians choose one practice to focus on during a music workshop?* and (4) *how does being part of a project like TS impact musicians?* Conclusions are supported by empirical data collected during TS: a session-diary supported by observations and audio-recordings, and interviews with the musicians in the project. This then culminates in a guide-like model of a workshop session, inspired by the main questions and concerns shared by the musicians during their interviews, and by my observations during TS.

¹ Tom Kitwood, 'Towards a theory of dementia care: the interpersonal process', *Ageing & Society* 13.1 (1993), p. 52.

Structure

After a literature review providing an overview about dementia and why music can be beneficial for people living with it, the next chapter will focus on methods: an overview of the TS participants, TS sessions, the musical practices employed and the methods for data collection and analysis during the sessions.

Following this, the Results section explores the main topic of this study - music practices for people with dementia - by answering the four related questions detailed in the previous sub-section.

This leads to a model of a session, particularly helpful for those interested in organising their own music workshops. It provides a sample session plan, detailed guidance on how to employ specific music practices - warm-up, singing activity, song-writing and cool-down -, as well as advice regarding matters such as core team and time distribution during the session.

Literature review: Dementia and music-making

Dementia: symptoms and non-pharmacological alternatives to medication

Recent studies demonstrate that music can significantly contribute to improving the overall quality of life of people living with dementia (Cooke, 2010; Allison, 2011; McDermot, 2014; Smilde, 2014). This enhanced quality of life is obtained because music has a positive impact on a vast range of symptoms which characterise dementia and the diseases which this umbrella-term encompasses - such as Alzheimer's Disease, Lewy Body Dementia, Vascular Dementia, amongst others. Symptoms of dementia can vary greatly: two people with the same type of dementia can experience its symptoms with different intensity - depending on factors such as personality and life history -, and the actual symptoms experienced can even be different (Vella-Burrows, 2012).

Medication for dementia is often employed to help control the intensity and discomfort caused by its symptoms, but there is no known cure. These drugs cause side effects and many argue that these negative effects exceed the positive ones (Vella-Burrows, 2012; Pedersen, 2017; Spiro, 2019). As a result, there is a growing interest in finding non-pharmacological alternatives that are effective in helping to control the symptoms of dementia, leading to a better quality of life for the patients.

Why use music to help people living with dementia

There is a fundamental difference between the kind of work discussed in this project and music therapy. Succinctly, therapy focuses on the clinical outcome of using music to help manage or alleviate the symptoms of dementia; the focus of music workshops or concerts delivered by musicians (non-therapists) are the creative and community aspects (Smilde, 2014). So why using music in this specific context?

Music combats some of the main symptoms of dementia

Music is increasingly popular as it offers an extremely helpful blend of cognitive exercising, while being a naturally social and creative activity. Its main benefits include cognitive stimulation and delayed loss of cognitive functions (Hong, 2011; Hsin Chu, 2014; Gallego, 2017); overall memory enhancement (Simmons-Stern, 2010; Ahessy, 2017; Gallego, 2017); triggering of autobiographical and self-defining memories (Hsin Chu, 2014; El Haj, 2015; Ahessy,

2017); reduced levels of depression (Hsin Chu, 2014; Garrido, 2018); reduced anxiety and agitation levels (McDermott, 2014; Pedersen, 2017); increased social engagement and reduced loneliness (Vella-Burrows, 2012; McDermott, 2014; Smilde, 2014); energising effect (McDermott, 2014); stimulation of creativity (Allison, 2011; Ahessy, 2017) and increased calmness and relaxation (Hsin Chu, 2014).

Music is accessible

Having a technical music knowledge is not a pre-requisite to participate in music activities: everyone can join because music is part of everyone's lives: "even those who call themselves non-musicians have been listening to and appreciating music for many decades"².

Moreover, the area of the brain responsible for musical functions is hardly damaged by dementia (Raglio, 2010; Ahessy, 2017). This means that when patients' cognitive functions - such as verbal, motor and memory skills - start to fail, their musical skills are still highly functional. Music can therefore be used even when cognitive functions are severely compromised, being "(...) one of the few mediums people at all stages of dementia immediately responded to"³.

A language when words fail

Once the disease is so developed that it severely compromises rational thought-process, music can spark reactions that words and dialogue cannot express anymore. Music becomes a means of communicating and connecting emotionally through observing the patient's responses to music: their vocal and facial expressions and body movements (McDermott, 2014; Campbell, 2017). As Smilde (2014) described regarding the 'Music for Life' project, "Staff (...) come away from the project knowing each individual better (...) based on having seen that person express their personality"⁴.

Re-finding the person's identity

As memory deteriorates, that damages not only the patients' memories of the world but also of themselves, causing loss of identity which can be extremely distressing (Ahessy, 2017). For this reason, music can be an effective way of retrieving biographical and self-defining memories - crucial for "re-finding the person behind the dementia"⁵ - through, for example, music listening (Hsin Chu, 2014; El Haj, 2015) or discussions and brainstorming for song-writing (Allison, 2011; Ahessy, 2017).

² Theresa A. Allison, 'Songwriting and transcending institutional boundaries in the nursing home', *The Oxford handbook of medical ethnomusicology* (2011), p. 226.

³ Orii McDermott, Martin Orrell, and Hanne Mette Ridder. 'The importance of music for people with dementia: the perspectives of people with dementia, family carers, staff and music therapists' *Aging & Mental Health* 18.6 (2014), p. 710.

⁴ Rineke Smilde, Kate Page, and Peter Alheit, *While the music lasts: on music and dementia* (Eburon Academic Publishers, 2014), p. 3.

⁵ Rineke Smilde, *While the music lasts: on music and dementia*, p. 13.

Music as a social activity

Dementia is a common cause of isolation and loneliness, which can increase levels of depression and speed up the deterioration of cognitive functions. Therefore, social activities play a crucial role for those with dementia, making them feel accepted and part of society (Kitwood, 1993; McDermott, 2014). Music is naturally a social activity: by singing or playing instruments together, inspiring creativity and imagination, stimulating conversations and sharing of personal stories, and by creating a sense of belonging and of working as a team to achieve a common goal.

Methods

1. Participants

15 people with dementia signed up for Turtle Song, aged 52 – 69 years old. Among these, 12 participated in all sessions (or missed only one due to a trip or illness) - for consistency of data, 12 were considered in this study. Among these 12 participants, six always came with a carer or family member, one was sometimes accompanied and five always came alone. Several different types and stages of dementia were identified: six had Alzheimer's, two Lewy Body Dementia, two Semantic Dementia, two Fronto-temporal Atrophy, one Posterior Cortical Atrophy, one Parkinson's with dementia and one had memory loss subsequent to brain haemorrhage.

There were 11 members of the TS core team in 4 roles: (1) two workshop leaders (one director and one composer), (2) one project coordinator; (3) myself as the Royal College of Music's Ambassador and violinist; and (4) seven music students from the Oxford University. During musical moments, the composer would play the keyboard to guide the songs. To enrich the musical aspect, he was joined by our 'band' (myself playing the violin and the Oxford musicians: a guitarist, flutist, horn and saxophone players) and "choir" (the other three musicians) assisting participants with the singing.

People with dementia applied for TS from their own initiative or that of their carer, and there were both people who lived in care homes or at their private homes. The music students applied for TS as part of their studies at the Oxford University: a module studying music in the community context.

2. Turtle Song

The core of TS is collaborative song-writing. Each project has a general topic and, within that, each weekly session is about a related sub-topic which represents the theme for each weekly song. For instance, for this Oxford project "Maps" was the general topic, which inspired subtopics such as "Our journeys around the world" and "Life journey: our stepping stones." These created discussions and participants shared their life experiences, memories and ideas; then all of those were used to write lyrics together. Eight, weekly 2-hour sessions took place⁶ at the St. Clement's Centre in Oxford: during this period we wrote seven original songs.

⁶ Originally, nine sessions were planned. Due to the Covid-19, the last session was cancelled and happened later, at the end of April, via Zoom.

During the sessions, all participants sat in a circle: half of the circle was occupied by the dementia patients, their carers, and the three students part of the student choir; the other half was taken by the band, the composer, the director and the coordinator.

Each session started with a warm-up and ended with a cool-down. The warm-up was divided in two parts: a physical warm-up led by the project director, and a vocal one led by the composer. Then, as the core of TS is song-writing, the following activities were related to creating and singing our songs (practices happening during the session will be observed in detail in the next chapters). Finally, the cool-down was a musical performance by the music students as a goodbye until the next week.

3. Data collection

Data collection during TS sessions consisted of two main components: a session-diary and interviews with six TS musicians.

The session-diary was written immediately after each weekly session. As relying exclusively on observation and memory of the session could compromise the quality of the data collected, notes and recorded audio-clips of the different activities during each session were kept. The diary was divided in sections dedicated to each of the music practices used throughout the session. For each practice, seven parameters were observed: (1) type of music practice; (2) who led the activity; (3) type of music played; (4) observed benefits for the participants with dementia; (5) their general reaction; (6) specific reactions which stood out, and (7) how could / did musicians enhance that activity.

Two interviews were conducted individually with each of the six musicians. The first set of interviews took place by the end of the second week of the project; the second happened after the end of the eight-week project and was completed online⁷. Having two interviews allowed for observing the impact of experience.

The first interview allowed insight into (1) musicians' previous experience with music and dementia; (2) their motivation to work in this context; (3) how confident they felt to do so initially; (3) their general and (4) particular knowledge of the field; (5) their interest in continuing work in this area in the future.

The second interview explored (1) how participation in TS made musicians feel (or not) more confident to work within the field of music and dementia; (2) what practical knowledge they obtained from it; (3) what sort of specific knowledge

⁷ The last interview couldn't happen in person as it was scheduled for the last session of the project, which was cancelled.

they feel they lack and would like to learn / see clarified; (4) their opinions on the different music practices used during the sessions, namely which seemed more or less successful; (5) if this experience made them feel inspired to do more work in the context of dementia in the future.

Ethical approval was granted by the Conservatoires UK Research Ethics Committee on the 10th of December 2019. Informed consent was obtained from each participant for all data collection. All accepted that any information collected could be shared for the purpose of this research if anonymity was maintained. For this reason, participant's names are not provided: when mentioned or quoted, participants with dementia are called Participant A, B; and musicians are Musician A, B.

4. Data analysis

Data collected during TS was analysed using interpretative phenomenological analysis (IPA), which offers insights into the meaning of a certain experience to the participants involved (Smith, 2012; Perkins, 2016).

The session-diary was analysed following five steps: (1) identifying all musical practices employed throughout the eight sessions; (2) observing which practices were always used, often used or rarely used; (3) observing comments regarding participants' general reaction and relevant individual reactions to each practice - understanding which practices seemed to cause the most positive impact; (4) understanding how musicians can lead and enhance each of the activities; (5) further description and analysis of the practices, supported by session notes and recordings.

Interviews were analysed in five steps: (1) transcription; (2) highlighting main points and comments from each interview; (3) highlighting emergent themes common among the different interviews; (4) extracting all the comments and emergent topics into a separate document; (5) analysing these and draw conclusions based on the topics which inspired the interview questions - mentioned above in the 'Data collection' section.

Results

This section addresses (1) the main reasons why song-writing can be extremely positive for people living with dementia; (2) a selection of essential skills musicians in this field should develop; (3) why employing a variety of music practices can be a valuable approach as long as these are part of a consistent session frame; and (4) how the impact of direct experience of music workshops for dementia increased TS musicians' interest and confidence in this area.

By answering these questions, this section provides advice for musicians interested in this field of practice. Some of these points are answers to questions asked by TS musicians during their interviews, others are answers to questions I asked myself and learned from experiencing TS and performing at dementia care-homes.

All four sub-sections below are based on and supported by my observation and analysis of TS sessions, quotes from the interviews with TS musicians and insights from my experience of other care home music activities for people with dementia.

1. Why song-writing

Few studies observe the topic of song-writing in the particular context of dementia (Baker, 2009). However, studies such as the ones by Allison (2011) and Ahessy (2017) and my experience in TS have demonstrated how and why this practice is so effective in the context of dementia. Below are the main findings:

Song-writing stimulates several cognitive and non-cognitive skills

The song-writing process includes several different activities within it, offering a great variety of opportunities to explore creativity, social interaction and have fun while engaging crucial brain functions.

Based on observation, analysis, participation in TS activities and on interviews with the musicians, Table 1 breaks TS's song-writing process in its main steps, accompanied by the main skills which may be activated during each of those moments. The Model Session (p. 14) detailedly explains the first three tasks in Table 1 (brainstorming, exploring musical styles and organising lyrics), while learning and rehearsing songs are more self-explanatory practices. Appendix 1 completes the data provided in Table 1 by explaining how each activity stimulates the skills identified below, supported by observation, analysis and participation in TS activities, by participants' quotes while engaging in each practice, and by musicians' opinions shared during their interviews.

Table 1: TS stages of song-writing and respective skills stimulated

Song-writing related tasks in Turtle Song	Skills
Brainstorming and discussions: sharing ideas and experiences	Memory; Creativity and imagination; Inter-personal skills such as listening to and respecting others; Attention; Logical reasoning;
Exploring music styles, keys, tempi and moods to suit the song (composer / musicians composed the music but participants suggest type / mood of music)	Taste and personality; Creativity and Imagination.
Organising ideas from brainstorming to create lyrics	Team-work; Organisation; Attention; Logical reasoning;
Learning the new song	Memory; Team-work; Ear training through singing; Sense of pulse and rhythm; Attention.
Rehearsing previously learned songs	

Memory trigger

Listening and discussing about songs based on personal memories and stories is a great way of helping participants remember past experiences. Furthermore, it can help retrieving further memories, as open discussions can often trigger spontaneous, unexpected memories and reactions (Ahessy, 2017).

For example, TS participant A was often absent and irresponsible during the activities, unless encouraged directly. I was sitting next to A during our group brainstorming for the song “One for the Road”. The workshop composer asked the group: “Who would you like to see first if returning home after a long journey?” and I answered “My cats!”. After general laughter, A suddenly shouted “BLUE! Blue was my cat!”. We were all thrilled to see him suddenly so excited - we promptly included this in the song:

*“Who will you find when you get home? Hey nonny no
Sybil the dog and Blue the cat,
Berrie the Frenchie, fancy that!
Hey nonny nonny nat, it’s homeward we shall go.”*

Sense of achievement and pride

When singing through our composed songs, TS participants would often recognise their own ideas or memories in the lyrics. This created joy, pride and excitement, and they would often demonstrate it through laughter and exclamations such as “That’s me!”. Ahessy (2017) and Allison (2011) document this same excitement and accomplishment in their

patients. Three of the six music students highlighted that, to them, the sense of pride and accomplishment when listening to the group's own songs is the greatest benefit of song-writing. As Musician D said, the "gradual accumulation of a corpus of work creates a material sense of musical purpose, success and reward, to complement the more general beneficial effect on physical, mental, and emotional health and wellbeing."

Encouraging reflection

In TS, writing songs can have a great impact in the participants with dementia because the songs are based on their life experiences and opinions. The song-writing process encourages and allows space for reflection on several topics. For instance, one of our TS's songs - "Stepping Stones" - invited participants to reflect on their lives' "milestones". Many mentioned happy moments:

"A first time for everything. First job, first kiss, first time falling love." (...)

"Falling into my daughter's eyes, minutes after her birth

The absolute joy of parenthood, nurturing a child through life"

However, it was mesmerising how this also encouraged others to reflect on their present situations, provoking deep and meaningful conversations, then reflected in the lyrics:

"And at the end, when the time comes

The saying goodbye to a loved one"

(...)

"Learning to live with dementia,

Acceptance of a new life after diagnosis"

Safe and supportive environment

In TS, sharing of ideas is encouraged through the creation of a supportive environment. To initiate discussions and inspire all participants to share their ideas, the team asks general questions - "What countries has everyone visited?" -, and direct questions - "What is your favourite city, B?". Supportive eye-contact and encouraging gestures were also used to make participants feel valued and heard. All ideas were treated with importance and respect: each was written in a big sheet of paper or in a computer. This created a sense of inclusiveness, acceptance and comfort, highlighted by three of the musicians interviewed as crucial in making participants understand that TS is a safe environment: "an inclusive

musical community (Musician D), where “there’s no such thing as a ‘wrong answer’” (Musician C). This also built a strong sense of empathy and friendship among participants: Ahessy (2017) too observed this regarding his patient: “The song promoted her identity and enabled attachment”⁸.

While engaging multiple cognitive and inter-personal skills, song-writing successfully demonstrated to have a great impact in memory retrieval, to provide a safe environment to share reflections and personal memories and to make participants feel proud and accomplished when listening to the songs they wrote. I therefore believe song-writing deserves further focus on in future studies as it demonstrated to be a powerful practice for people living with dementia.

2. The musicians: fundamental skills

The musicians’ role in music workshops goes beyond singing and playing instruments. Based on analysis of the session-diary and interviews with the musicians, this section observes the main skills needed to work in this context of practice.

Kindness

Understanding that dementia can cause suffering, mood swings, confusion, difficulty to communicate and memory loss is important. Being kind therefore means: “being patient” (Musician C) as people with dementia might need extra time to formulate a sentence or they might forget what was said; being understanding and tolerant if they say something slightly uncomfortable (for instance, Participant A told that Musician’s B cool-down performance was too loud: no offence was intended, A simply felt uncomfortable with louder sounds); listening to what participants say without being judgmental or dismissive - a faulty memory plays tricks and might lead people to say something untrue or peculiar (Allison, 2011). Musician E shared that “this experience has deepened my understanding of, and empathy for, those with dementia”.

Positivity

Being positive and smiling is important because positivity can be ‘contagious’, mainly to those whose emotions are often unstable. I observed this firstly from my own experience, as my grandmother has Alzheimer’s disease. She often feels confused, sad and restless. However, when one calmly looks at her and smiles, that seems to calm her down: as if

⁸ Bill Ahessy, ‘Song writing with clients who have dementia: A case study’, *The Arts in Psychotherapy* 55 (2017), p. 28.

she absorbs and adopts that tranquillity.

Similarly, TS participant B was constantly smiling and laughing during the sessions. However, in the last session B was tremendously sad and teary. Nonetheless, every time I would smile at B, B would smile back. Even if just for a few seconds, it was worth it for a few glimpses of happiness.

Socialising

The importance of socialising should not be underestimated: four of the musicians interviewed highlighted socialisation as the most important aspect of TS, directly combating loneliness: “team-building and group bonding shouldn’t be undervalued – I think a lot of what participants valued was the group interaction and doing something social within their week” (Musician A). Moments such as the participants arrival to the session are crucial: make them feel welcomed and give them attention (ask how their week was, how they feel), as people with dementia can often feel isolated.

From my experience performing in care homes, I also learned that although (most!) people enjoy listening to my violin playing, often what they truly want is to speak and have someone who looks at and listens to them.

Clarity

Imitation of others plays an important role, particularly with participants in later stages of dementia. Leading activities with clarity and amplified gestures is fundamental: “encourage lots of exaggerated movement at the start of the session” (Musician A); extra articulation when singing and speaking; and a lot of eye-contact with everyone in the room. These strategies greatly enhanced TS participants’ engagement and excitement.

Being observant

Being observant is a crucial skill: observe participants, mainly those who cannot speak and express themselves as effectively, as their facial expressions and body language become their way of communicating. For instance, Musician C noted that “it’s important to be observant and attentive to the participants’ needs, for example some are sensitive to loud noises, so don’t slam the doors around them”. Furthermore, introvert participants might speak quietly or they might need extra encouragement: musicians must be like “the safety net, or the people ‘watching your back’ (...) their playing says, ‘go on, go on’”⁹.

⁹ Rineke Smilde, Kate Page, and Peter Alheit, *While the music lasts: on music and dementia* (Eburon Academic Publishers, 2014), p. 17.

Knowing when to “take the wheel”

It happens often that, during conversations, a person with dementia can forget what they or you were saying. However, there is no need to avoid memory-related questions - such as “how was your week?”. Knowing that participants might struggle answering questions, feel confused or nervous is important. If this happens, change topic natural and positively, as if nothing happened. Musician B added that “participants know they have dementia, so it is fine if the topic comes up!” Ultimately, don’t feel like that is a ‘taboo’ topic that you must avoid, mainly if they bring it up in a conversation with you.

Adaptability

It is useful to have a session plan but it is important to be flexible and allow it to run differently from what was scheduled: it is important “to be very flexible to go with somebody else’s idea”¹⁰, and as Musician B suggests, “Be spontaneous and feel free to deviate from plans!”.

3. Variety of musical practices within a general frame

As mentioned previously, while song-writing is TS’s main activity, many other music practices were employed during the sessions. However, in dementia, confusion and disorganisation are common causes of discomfort as memory is compromised and, for this reason, providing participants with a sense of routine and familiarity can give them comfort:

Environment

Have a fixed time of the week and of the day to hold the sessions. TS sessions always happened on Friday mornings; if possible, sessions should also happen in the same space: a safe, well-lit and comfortably warm room; the disposition of participants in the room during the session can also be a way of maintaining a sense of routine: a circle is welcoming and inclusive, and we also used stickers with participant’s names on the chairs.

Session structure - start and end sessions in the same way

TS sessions always started and ended in the same manner, respectively with a warm-up and a cool-down. The warm-up was divided in two sections: physical and vocal warm-up. The cool-down was the last activity of the session, and it a

¹⁰ Rineke Smilde, Kate Page, and Peter Alheit, *While the music lasts: on music and dementia* (Eburon Academic Publishers, 2014), p. 27.

performance by the musicians as a goodbye until the following week. This general frame was very successful: “The structured nature of the sessions was a really effective way to cultivate productivity and also to create a sense of routine and familiarity” (Musician E).

Then, once this sense of routine is introduced, why is variety important?

In between the warm-up and the cool-down, the music practices employed varied weekly. I documented eight other activities during TS: 1) whole group song-writing; 2) small groups song-writing; 3) learning our new songs; 4) practicing our previously learned songs; 5) vocal improvisation¹¹; 6) dancing and actions (gestures for the lyrics); 7) drawing; and 8) singing a traditional or well-known song together. The first five activities happened in half or more of the sessions, being directly related to song-writing and singing - the core of TS. The last three activities (dancing, drawing and singing well-known tunes) were employed in less than half of the sessions: these introduced novelty.

Variety is firstly crucial in guaranteeing that each participant enjoys the session, as different people have different tastes and preferences. For instance, TS Participant C did not join dancing activities, but liked sharing thoughts during brainstorming and playing his electric guitar. After noticing this, the composer started giving C a hand-drum during dancing activities: C then enjoyed this practice with everyone else, in his own way.

Secondly, variety is fundamental as it allows all participants, regardless of their individual stages of dementia, to be involved in whatever way they can. For instance, Participant D was often absent, confused, and not engaging in activities. During activities such as song-writing, which involved more cognitively challenging tasks, D would rarely participate and often lost focus. However, as soon as we started singing, specially happier songs, D would change dramatically: posture suddenly straight, eyes wide open and curious and D would slowly start trying to sing. So even though for a large part of the session D was absent or confused, D truly enjoyed the music moments.

One of my initial questions was if some activities would be better received than others. The conclusion is that this is irrelevant: all practices were impactful in their own way, stimulating different skills and provoking different reactions. In group sessions there are many people from different backgrounds and with different preferences: an activity that one participant does not enjoy might be another participant’s favourite. As Musician C concluded, “I think that all practices are relevant and effective (...) Having all these different musical practices to choose from allows for flexibility”.

¹¹ As improvisations can take different strategies, the TS approach is described in the Model Session ahead and a sample recording from a session is provided in Appendix 4.

4. Experience increased musicians' confidence and interest in music for dementia

I was very interested in understanding how direct experience of working with people with dementia, rather than simply reading or hearing about it, can impact musicians. Some TS musicians had done some reading on this topic, but through the interviews it became clear that experiencing it is very different: "I have read a lot about the impacts of music and dementia, but it is profoundly different to experience it first-hand" (Musician E). I have organised the results obtained from the interviews in the following table:

Table 2: Musicians' interest and confidence before and after TS

	Before Turtle Song	After Turtle Song
Interest in working with people with dementia in the future	<ul style="list-style-type: none">- 4 of the 6 would definitely be interested- 2 of 6 were uncertain	All students reported that participating in TS significantly increased their interest in working with people with dementia in the future
Confidence in interacting with people with dementia, and potentially organising own music sessions and concerts	<ul style="list-style-type: none">- 1 felt confident- 2 felt confident only for assisting with tasks under guidance of the workshop leaders;- 3 did not feel confident at all initially	All students reported that participating in TS significantly increased their confidence in interacting with people with dementia, and in developing their own activities in the future

Furthermore, the musicians explained the main reasons why experience increased their interest and confidence:

- 1) all six musicians reported having learned essential leading and workshop-specific skills by observing the workshop leaders and by actively participating in the sessions: "My confidence in leading has also grown as I have these new skills and a bank of creative activities" (Musician B).
- 2) three of the six said that seeing first-hand how music impacts those with dementia was inspiring and therefore increased their interest in this area: Musician F highlighted that the most inspiring part of TS was "having seen first-hand the impact of music in a practical sense. Seeing a participant's face light up and their body start moving where they had first been sitting quite still with a straight face is fascinating".
- 3) two highlighted that, through TS, they learned about how to interact and speak to people with dementia, and that was crucial in increasing their confidence: "I now have some experience of helping in these activities and interacting with the participants, which I could draw on to create a new project" (Musician C).

5. Model session

Below is a model session for a music workshop for people living with dementia. In writing it, TS musicians' suggestions and questions - expressed during their interviews - were considered, as they likely represent questions other musicians might have. It is a model for a group session, however it can easily be adapted to individual sessions.

This model follows the principle discussed in sub-section three regarding the importance of variety of practices while maintaining a general frame, and sub-section two provides complimentary guidance regarding general skills and behaviour expected from the musicians. The session plan is inspired by my experience at TS, analysis of the sessions' practices and structure, and by questions and advice provided by the TS musicians.

General aspects to consider in advance of a session

The team

If working with one single participant with dementia, you might feel comfortable leading the session on your own. However, if planning a group session, it is best to have a team. Having a team with at least three musicians allows for activities in smaller groups as each of the team members can then accompany each of the groups - this is a great way of creating stronger connections and encouraging further input from all participants: "mixture of small, and large group activities served this aim, giving the quieter participants a chance to put their ideas forwards" (Musician E).

Ultimately, the number of participants involved will dictate the ideal size of your team. The goal is to have a team that can pay attention to all participants, making them feel safe and listened to, while helping ensuring that activities run smoothly. For instance, TS had a team of 10, comprising workshop leaders and musicians, for an average of 18 participants per session (participants with dementia plus carers).

Time distribution

Allow extra time for:

- Setting up before participants arrive: TS core team met 45 minutes before participants arrived to set up the room and all materials needed;
- Socialising: in TS we had a "coffee and biscuits" moment at the beginning of each session. As observed in the previous chapter, socialising and bonding are fundamental aspects;
- Explanations between activities and any necessary changes in settings - for example, if activities require dividing participants in smaller groups.

TS sessions lasted roughly one-and-a-half hours. To that, half-an-hour was added for our “coffee and biscuits” and for goodbyes at the end. The duration of the session can be agreed with the organisation you are working with - this will vary according to factors such as participants’ stages of dementia.

Participants disposition in the room

Having participants sitting and standing in a circle is the most welcoming and encouraging way. Being able to see everyone in the room is important in making participants feel part of the activities and it encourages them to engage by seeing others participate. The musicians can also spread between the participants to encourage and support them.

Activities don’t have to be basic

This idea was highlighted by two musicians during the interviews and it deserves mentioning: although the tendency might be to oversimplify practices, “don’t feel you have to use particularly simplified musical material” (Musician B): dare to be ambitious. For instance, some might think song-writing is too difficult, but in TS it is an invaluable source of joy, as participants feel “a sense of accomplishment and pride in having contributed to this new, well-composed song” (Musician F).

Session plan

This plan is designed as a workshop for a group of people with dementia and a core team including yourself and at least one assistant musician. The activities are planned for a total of one hour and 10 minutes, for a session that is designed to last one and a half hours: this allows 20 minutes for introductions, activity explanations and room shuffling (as it will be necessary to allow movement - warm-up, singing - and division in smaller groups).

1. Warm-up - 15’

The keys to TS warm-ups are creativity and liveliness. By stimulating imagination and mental imagery, participants found the warm-up games fun and exciting: “I was fascinated by and learnt a lot about the way in which the warm-up can be led in a playful manner” (Musician F). The warm-up can be divided into a physical and vocal section: this prepares participants for the whole range of activities to follow. Generally, encouraging participants to stand up can stimulate engagement. Appendix 2 provides a variety of ideas for warm-up games.

2. Sing together as a canon - 10'

Singing in canon is challenging yet fun, as there are different groups of people singing the same tune at different times. It is a fantastic way of achieving a great musical result together quickly - an ideal ice-breaker.

For this activity, a verse of three or four lines is enough. In TS we used “Hey Ho, Nobody Home”. Teach it to the participants by singing, line-by-line, first alone and then having them repeat after you; then sing it all together a few times until participants seem confident about the song. At this point, split participants in two or three groups (depending on if you have one or more assistants; for our song, three groups was ideal), each group with one of your team members leading. Explain how group 1 will start singing alone and the other group(s) will gradually join in - a sample recording, lyrics and further details on this activity are provided in Appendix 4.

3. Song-writing - 35'

Small groups brainstorming (15')

Introduce your song's general topic to the whole group and then split participants in smaller groups (two or three depending on number of musicians involved). In these smaller groups, the musicians start discussions with participants using open questions related to the topic, encouraging brainstorming. For instance, if the topic is People, start by asking general, easier questions such as “Who are the most important people in your life?”; then gradually ask more challenging / personal questions: “What personality traits are your favourite?”.

Talking in smaller groups guarantees that everyone can have an opportunity to speak. Taking all ideas that participants share makes them feel valued: write all suggestions in a big sheet of paper, and receive participant's input with positivity and encouragement, “never with a patronising tone” (Musician E).

Whole group sharing (5')

Here the whole group is brought together again to briefly share the ideas discussed in small groups. This moment can inspire new ideas too, as observed in earlier results. With the musicians' help, participants then identify the recurring topics - these will likely represent the core message of the song. You can also start thinking of a general structure for the song: for example, if many participants mentioned their children or partners as the most important people in their life, ‘family’ might be the ideal topic for the chorus.

Music (5')

Once the song's core theme is clear, discuss openly the type of music which could suit it, so that participants can contribute to the musical aspect too. For instance, if you choose to focus on family, participants can suggest music that sounds comforting and positive - major key -, serene and comfortable - a somewhat slow, calm speed. Discuss this with participants: the project's composer often asked the group if they could think of any famous songs which could fit the song's topic. Then it will be your task to write the music.

Lyrics (10')

The small-group's brainstorming paper sheets, where each group wrote their ideas earlier, are crucial now. Present all that information to the whole group: together, choose which are your favourite words or phrases, find how they can work as song lines and organise them in verses by topics. By this step, you should have a clear core theme for your song, so start with the chorus and then explore how your other verses can relate to it. Rhymes and basic verse formats such as AABB or ABAB make songs easier to learn and more memorable.

In TS we always aimed at completing the chorus (lyrics and general melody) and the verses (even if just lyrics) together during the session. Musicians can then work on finalising the song and present it to the group in the next session. Appendix 2 gives an example of a TS song with comments on the process of song-writing.

4. Cool-down - 10'

Shibazaki (2017) observed that live music performances can increase levels of cooperation and social interaction, decrease levels of agitation and depression, and it can also be beneficial for the patient's carers and family members.

The cool-down is a performance moment for participants to enjoy live music. It is not mandatory to be classical music: in TS we also performed jazz and blues pieces, for example. Regardless of your chosen style, the crucial aspect is to engage with participants: look at them, smile and encourage singing or dancing if it suits your piece's mood. This is the end of the session and what participants will go home with, so make it enjoyable!

Conclusion

This study observed specific music practices which can be employed with people living with dementia and how musicians can practically deliver those. The main conclusions reached are that (1) song-writing can be very effective with people living with dementia as it stimulates a wide range of cognitive and non-cognitive skills, it can encourage reflection, help triggering memories, provide a sense of pride and accomplishment and build a safe and creative environment; (2) the essential skills musicians in this field should develop are interpersonal and human skills such as kindness and compassion, but also skills such as leadership and adaptability; (3) variety of music practices is important, but this should be kept within a general session frame, giving participants a sense of routine and familiarity; and (4) directly experiencing music workshops for dementia can significantly increase musicians' interest and confidence in leading activities in this context. In view of the fourth finding, creating ways of allowing more musicians to assist and engage in music community workshops can be a way of significantly increasing their interest in creating and delivering their own workshops: for instance, universities can help by facilitating these opportunities for their students.

Projects such as TS are essential and can be transformative for people living with dementia. During the interviews, TS musicians shared their key reasons to support this argument: (1) four musicians highlighted how projects like this “directly combat loneliness” (Musician A) by encouraging inclusiveness and “new friendships” (Musician C); (2) three noted how music can bring “smiles, laughs and pure joy” (Musician B), even to participants in later stages of dementia; (3) three loved how TS made participants with dementia feel accepted, “valued and empowered” (Musician E), by being “a space in which all individuals and their ideas are valued” (Musician F).

To my fellow musicians, I hope that this work is helpful and inspiring. To those who are not musicians but are curious or have loved ones suffering with dementia, I hope this work demonstrates how impactful music can be for those living with dementia and why projects such as Turtle Song can be life-changing.

Bibliography

- Ahessy, Bill. "Song writing with clients who have dementia: A case study." *The Arts in Psychotherapy* 55 (2017): 23-31.
- Allison, Theresa A. "Songwriting and transcending institutional boundaries in the nursing home." *The Oxford handbook of medical ethnomusicology* (2011).
- Argyle, E. and Kelly, T. "Implementing person centred dementia care: a musical intervention", *Working with Older People*, Vol. 19 No. 2 (2015): 77-84.
- Baker, Felicity, et al. "Therapeutic songwriting in music therapy, Part II: Comparing the literature with practice across diverse clinical populations." *Nordic Journal of Music Therapy* 18.1 (2009): 32-56.
- Campbell, Sarah, et al. "Music in Mind" and Manchester Camerata: an exploratory qualitative evaluation of engagement in one care home in Northwest England." *Quality in Ageing and Older Adults* 18.1 (2017): 69-80.
- Cheong, Chin Yee, et al. "Creative music therapy in an acute care setting for older patients with delirium and dementia." *Dementia and geriatric cognitive disorders extra* 6.2 (2016): 268-275.
- Chu, Hsin, et al. "The impact of group music therapy on depression and cognition in elderly persons with dementia: a randomized controlled study." *Biological research for Nursing* 16.2 (2014): 209-217.
- Cooke, Marie, et al. "A randomized controlled trial exploring the effect of music on quality of life and depression in older people with dementia." *Journal of Health Psychology* 15.5 (2010): 765-776.
- El Haj, Mohamad, et al. "Self-defining memories during exposure to music in Alzheimer's disease." *International psychogeriatrics* 27.10 (2015): 1719-1730.
- Gallego, M. Gómez, and J. Gómez Garcia. "Music therapy and Alzheimer's disease: Cognitive, psychological, and behavioural effects." *Neurología (English Edition)* 32.5 (2017): 300-308.
- Garrido, Sandra, et al. "Music and dementia: Individual differences in response to personalized playlists." *Journal of Alzheimer's Disease Preprint* (2018): 1-9.
- Hong, In Sil, and Min Joo Choi. "Songwriting oriented activities improve the cognitive functions of the aged with dementia." *The Arts in Psychotherapy* 38.4 (2011): 221-228.
- Kitwood, Tom. "Towards a theory of dementia care: the interpersonal process." *Ageing & Society* 13.1 (1993): 51-67.
- McDermott, Orii, Martin Orrell, and Hanne Mette Ridder. "The importance of music for people with dementia: the perspectives of people with dementia, family carers, staff and music therapists." *Aging & Mental Health* 18.6 (2014): 706-716.

- Pedersen, Siv KA, et al. "Effects of music on agitation in dementia: a meta-analysis." *Frontiers in psychology* 8 (2017): 742.
- Perkins, Rosie, and Aaron Williamon. "Learning to make music in older adulthood: A mixed-methods exploration of impacts on wellbeing." *Psychology of Music* 42.4 (2014): 550-567.
- Perkins, Rosie, Lisa Aufegger, and Aaron Williamon. "Learning through teaching: Exploring what conservatoire students learn from teaching beginner older adults." *International Journal of Music Education* 33.1 (2015): 80-90.
- Perkins, Rosie, et al. "Making music for mental health: how group drumming mediates recovery." *Psychology of Well-being* 6.1 (2016): 11.
- Raglio, Alfredo, and Fondazione Sospiro. "Music therapy in dementia." *Non Pharmacol Ther Dem* 1 (2010): 1-14.
- Shibazaki, Kagari, and Nigel A. Marshall. "Exploring the impact of music concerts in promoting well-being in dementia care." *Aging & mental health* 21.5 (2017): 468-476.
- Simmons-Stern, Nicholas R., Andrew E. Budson, and Brandon A. Ally. "Music as a memory enhancer in patients with Alzheimer's disease." *Neuropsychologia* 48.10 (2010): 3164-3167.
- Sixsmith, Andrew, and Grant Gibson. "Music and the wellbeing of people with dementia." *Ageing & Society* 27.1 (2007): 127-145.
- Smilde, Rineke, Kate Page, and Peter Alheit. "While the music lasts: on music and dementia.", Eburon Academic Publishers (2014).
- Smith, Jonathan A., and Pnina Shinebourne. "Interpretative phenomenological analysis". American Psychological Association (2012).
- Spiro, Neta. "Music and dementia: Observing effects and searching for underlying theories." (2010): 891-899.
- Van der Steen, Jenny T., et al. "Music-based therapeutic interventions for people with dementia." *Cochrane Database of Systematic Reviews* 7 (2018).
- Vella-Burrows, Trish. *Singing and people with dementia*. Canterbury Christ Church University (2012).

Websites

- Alzheimer's Research UK. 2020. *Types Of Dementia*. Available at: <https://www.alzheimersresearchuk.org/dementia-information/types-of-dementia/> (Accessed 18 May 2020).
- Turtle Key Arts. 2020. *Turtle Song*. Available at: <https://www.turtlekeyarts.org.uk/turtle-song> (Accessed on October 14th 2019).

Appendices

Appendix 1 - Turtle Song's stages of song-writing and the skills stimulated

The following information supports the data provided in Table 1, regarding the stages of song-writing and respective cognitive and non-cognitive skills each stimulates. The following is based on analysis of TS observations and audio-recordings, on quotes from the participants with dementia and on musicians' opinions shared during their interviews.

1. Brainstorming and discussions: sharing of ideas and personal experiences

Memory: memory is trained as participants are encouraged to remember personal past experiences and stories, and share these with the group. This often also encouraged the retrieval of partially lost memories: for instance, when discussing Nature during one of our song brainstormings, Participant A shared a memory of how A's uncle "loved to keep bees". At the end of the session, his accompanying family member told us that he had never shared that memory before.

Creativity and imagination: having to create ideas and opinions to share during the brainstorming process stimulates creativity and imagination. A clear example is our "Mystical Maps" song-cycle: three songs inspired by magic and phantasy. Participants created extremely imaginative creatures for these songs: 'Fairko the phoenix', 'Cedric the giant', 'Penelope the mermaid' and 'Augustus the dragon'.

Inter-personal skills (e.g. listening, respecting others' opinions, teamwork): inter-personal skills are essential when working as a group. For instance, ability to listen is practiced as participants speak in turns and must listen to everyone's ideas; respect is essential as everyone's ideas in TS are valued and appreciated, all ideas are taken and respected: as observed in the sessions and described in the Results section of this work, all ideas were written in paper or on the computer; team-work is also crucial and it was great to witness how participants would help each other: for example, Participant E is very comfortable with dialogue and would not only share his own ideas but also ask questions to other participants about their opinions or experiences, encouraging them to also share more and feel included.

Attention: discussions are active processes which require great attention: by sharing their own ideas as well as listening to and supporting other people's, participants were focused on writing great lyrics together. Of course to some (e.g. Participants A and D, as mentioned in the Results section) maintaining that attention and focus is particularly challenging: in these cases, the musicians' job is to encourage them to stay as engaged as their condition allows.

Logical reasoning: brainstorming is initiated with a topic or a question, which then takes participants through thought processes connected to that topic. As people share more ideas, further ideas come up from listening to the other participants' ones. A clear example is the one shared on the Results section: during brainstorming for our song "One for the Road" Participant A (who is often absent) suddenly wanted to share his memory of his cat after hearing me mention my cats: "BLUE! Blue was my cat!", he exclaimed.

2. Exploring music styles, keys, tempi and moods: choose which suits best the topic of the new song

Taste and personality: each participant's personalities and musical tastes often are reflected in this stage of song-writing. As studied previous, a feeling of self-identity is crucial for those with dementia as it can easily be forgotten. This is therefore a wonderful skill to employ with participants, through making them think about their favourite types of music. For instance, when we were discussing and deciding the style for our new song, participants were encouraged to name songs that they liked in order to illustrate the sort of style or mood they thought could fit our new song.

Creativity and imagination: having to connect a given topic to a type / style of music is a very creative and enjoyable process, stimulating imagination. For example, when discussing in small groups what sort of music would fit our topic of travelling, the image of road-trips was recurrent: this led participants to suggest country and folk music, arising from thoughts of American movies about road-trips and the classic Route 66.

3. Organising ideas from the brainstorming to create lyrics

Team-work: at this stage, all participants work together to organise the lyrics, so team-work is essential in this group effort to write a great song. Together, through open discussions, we chose our favourite key-words (and often suggested new ones at this point), identified our recurrent topics, decided how words can be put in verses, etc.

Organisation, attention, logical reasoning: specific skills such as organisation are employed when writing the lyrics in order to convey our desired message in a clear way. Attention and logical thought-processes are crucial skills when organising the lyrics so that they make sense and follow a certain line of thought. For instance, understanding which are the main messages that we want to convey through our lyrics requires attention - e.g. identifying the main ideas from a large list of possibilities - and logical reasoning - e.g. distinguishing the most impactful words. Then, organisation is crucial in the process of choosing the main ideas to go in the chorus, and the sub-topics to form the other verses.

4. Learning the new song + Reviewing and rehearsing previously learned songs written together

These two practices are grouped together because the main skills observed to be stimulated during both were the same. This is the case because both practices are based on singing.

Memory: memory is stimulated as participants try to learn and remember the lyrics and melodies as they learn the new songs. For songs which they already learned in previous sessions, they are also practicing their memory of those learned songs. For example, by the end of TS most participants were very familiar with all our song's choruses: they could sing the choruses with confidence, demonstrating to know the melody and the words. Furthermore, "people enjoyed the whole-group songs because it was a chance to hear their own memories/thoughts put into lyrics" (Musician A).

Team-work: singing as a group involves respect for others, singing as part of a team. Musician E explained this beautifully, saying that singing our songs together "was an activity that was completely inclusive (...), it seemed to create a tangible sense of community as we were all striving towards a common goal".

Ear training through singing; sense of pulse and rhythm: logically, singing actively practices participants' ability to follow melodies and to be in tune with each other and the instruments; through singing, pulse and rhythm are also trained.

Attention: Musician E commented that, to him, singing was the practice that engaged participants the most, "especially when paired with actions. This was an activity that (...) engaged the participants in a number of ways: physically, mentally, musically". Singing as a group requires attention not only to the lyrics but also to the music. Furthermore, if songs include actions or choreographies, there is that extra challenge that participants must pay attention to.

Appendix 2 - Examples of warm-up games

This selection of examples of warm-up games is based on Turtle Song's warm-ups.

Physical warm-up ideas

Yawning: a nice way of starting with a nice stretch: three big yawns reaching up with the arms and stretching towards the ceiling. Participants found it fun to watch and hear each other yawning.

Hand and body washing: a way to warm up the whole body, starting with rubbing our hands as if washing them and gradually moving up the arms, head and the rest of the body. Don't be afraid to have fun and be 'silly': fun comments will not only make the group laugh and have a good time, it will also encourage them to engage more with the activities.

Balloon: this game is all about mental imagery. Ask participants to take a balloon from their pockets and blow it until it is as big as possible, having them mimic the balloon getting bigger and bigger with their arms. Then ask them to tie a knot on it and have them bounce it on the floor like a basketball - exaggerating movements is always a good way of encouraging everyone to be more active. Then "throw" your balloon to one of the participants and ask them to throw theirs at someone else, encouraging everyone to join in and throw their balloons around the room. When everyone has tried this a few times, ask participants to get their imaginary needle from their pockets and pop the balloon - imitate the noise of a balloon popping and follow it flying around the room with your hands.

Cooking together: a great game to stimulate imagination and encourage participation. Ask participants what they want to cook: it can be pizza, soup - we even had a love potion for Valentine's Day! For instance, if they choose a soup, have them imagine an enormous pot in the middle of the circle. Then have them suggest which ingredients go in your recipe and for each ingredient pretend you are holding it and throwing it in the enormous pot: exaggerate your movements and participants will do so too. Take in all the 'ingredients' people suggest and have fun with the unusual ones (such as chocolate on a soup or a frog's leg on a love potion!) - your goal is not to have right or wrong answers: your goals are creativity, fun and creating an all-inclusive, encouraging environment.

Vocal warm-up ideas

Smell and taste your cooking: often in our sessions, the last physical warm-up would be the cooking - a great way to transition to the vocal warm-ups smoothly. Ask participants to smell what you just cooked together. Inhale together and on the exhale make a sound of someone who smelled or tasted something delicious: "ahh"; then change the sounds to "hmm", "uhh" and others.

Repetition games: sing a short melodic pattern and encourage participants to repeat after you, then sing again and continue in turns. If your singing cells are based on melodies and scales, try asking participants to imagine they are opera singers in a stage and see how that affects their attitude - it worked really well in our sessions as some participants really embraced the character! You can also try sounds such as "tsstss", "grrr", "kaka", or even words

such as “hello” - with the latter, encourage eye contact and engagement with the whole group. Having participants imitating different and “eccentric” types of laughter is also really fun - it always ended in real laughter during our TS sessions.

Short vocal improvisation: demonstrate to participants, by singing, the different sounds they can choose - different pitches sang using different vowels. Explain that they can then choose the vowels and the pitch they want to sing for each exhalation. Breathe in together and on the exhale breathe out singing the chosen sound. Continue doing so for a few breaths, not trying to be together with anyone as breath lengths are all different for each participant - and that is precisely the goal, achieving a rich, continuous cloud of sound. Hear an improvisation example in appendix 4.

Appendix 3 - Song-writing example: ‘Off the Map’

In a simplified manner, the process of writing a song in your workshop will follow this order: (1) Have a general topic - (2) discussion and brainstorming on that topic in small groups - (3) sharing of ideas with the whole group - (4) highlighting the core / recurrent themes - (5) choosing the suitable type of music - (6) working on the lyrics.

(1) For ‘Off the Map’, our topic was ‘our journeys around the world’; (2) in small groups, we discussed the participants favourite holidays, most beautiful places they visited and why they enjoyed them; (3) then, we shared those reflections within the whole group and (4) we discussed the general topic of travelling, creating key expressions related to exploring and adventures, such as “top of the world”, “off the map” (these ‘catchy’ expressions are great for choruses!). Every idea was written in big paper sheets and on the computer; (5) we agreed that the type of music was contemplative, wondering, not too fast paced; (6) we started by writing our chorus focusing on the theme of exploring the world and the freedom it creates, and then we wrote the verses using specific participants’ stories and journeys.

<p>‘Off The Map’ Turtle Oxford 2020, music by Jon Petter</p>	<p>Comments on the song-writing process</p>
<p>(Chorus) Travelling, just travelling, Walking free as the crow flies, Soaring high, Who knows where? The top of the world, the moon and back, Deep in the blue, Off the map!</p> <p>(Verse 1) Big open spaces, Fresh air out-doors, The plants and trees, and Uncle's bees, Where peace is yours. Murmurations of starlings, Walking through the dew, Strip'd fields of tulips, Making our way through this world, Through this life.</p> <p>(Verse 2) The Northern Lights in Iceland, The street food of Hong Kong, The pyramids of Egypt, The Maltese Blue Lagoon, The Great Wall of China, Niagara Falls, The Leaning Tower of Pisa, Making our way through this world, Through this life.</p> <p>(Repeat Chorus) (Then verses 3 and 4 here hidden but written following the same principle as the other verses)</p>	<p>(Chorus) For the chorus, present the main theme. Our theme here is travelling, exploring and the freedom it gives - so opening the song with the word “travelling” makes our theme clear right from the start. Then we discussed key expressions and images associated with exploring, freedom, adventure. We used these to decorated the chorus, such as “free as a crow”, “top of the world”, “moon and back”, “off the map”</p> <p>(Verse 1) The verses are based on participants’ adventures, journeys, holidays and what they love the most about travelling and discovering new places, shared during brainstorming. <u>Nature</u> was a recurrent theme, so we used the whole first verse to discuss that, as so many participants mentioned it; we reflected on the best aspects of nature, resulting in key words such as “big open spaces”, “fresh air”, “peace”, “fields of tulips” and even a passion for bees!</p> <p>(Verse 2) The second verse focused on the most <u>impressive places</u> that participants visited throughout the world.</p> <p>You will also notice that both verses finish with the same line: ‘Making our way through this world, Through this life.’ This gives the song a sense of roundness and it is a great way of reminding us of the song’s main theme: journeys around the world.</p>

Appendix 4 - Audio-recordings as examples

1. Sing together as a canon (in rounds)

This is a recording from a TS session where we sang “Hey Ho, Nobody Home” together. The words are:

*“Hey, oh, nobody home
Meat nor drink nor money have I none
Yet, will I be merry”*

After teaching the song to participants, divide them in three groups: group 1 starts, group 2 joins at the end of group 1’s first line, and group 3 at the end of group 2’s first line, as heard in the recording.

Further to this, if you think your participants will cope well with more information (if they seem like they are singing easily in canon and enjoying it), you can incorporate gestures and movement to encourage physical activity and extra engagement. For example, while singing, one group does body percussion; another group can do gestures to the words (such as imitating eating and drinking as in our song meat and drink were mentioned); and the third group can march around the room. In this recording, we were all walking around the room while singing and mimicking. Here is how the final result sounds:

The sample recording can be found in the following link: <https://soundcloud.com/ines-delgado-966312222/appendix-4-1-hey-oh/s-MBXho4agcp6?in=ines-delgado-966312222/sets/how-can-musicians-make-music-with-people-with-dementia-appendix-4-audio-samples/s-MCxb30XAWXN>

2. Vocal improvisation

In this recording you can hear how each participant individually chooses different vowels and pitches (often inspired by the ones they heard other people in the room sing). They sing it for the duration of their exhalation, then move to a different vowel and pitch on the next breath, and so on. You will hear that, at the beginning, the whole group is singing together the same vowel and pitch, led by one of the workshop leaders. He then explains that people will choose their own pitch and vowel and the improvisation starts.

The sample recording can be found in the following link: <https://soundcloud.com/ines-delgado-966312222/appendix-4-2-improvisation/s-0aW4Poe2226?in=ines-delgado-966312222/sets/how-can-musicians-make-music-with-people-with-dementia-appendix-4-audio-samples/s-MCxb30XAWXN>