

# Benefits, Challenges and Solutions for Implementing Personalised Music Playlist Programs in Residential Aged Care in Australia

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**Introduction:** Residential aged care facilities face the immense challenge of adapting to the increasingly high needs of their residents, while delivering personalised, holistic care. There is considerable evidence that music can provide an affordable, accessible way to reduce changes in behaviour associated with dementia, in order to meet these standards of care. However, a number of barriers exist to the effective implementation of music programs in long-term aged care facilities.

**Methods:** This study involved focus groups with 17 participants including staff in residential aged care facilities and family caregivers to investigate the benefits of music programs, as well as the challenges and possible solutions to them. A general inductive approach was taken to data analysis.

**Results:** A number of benefits of music programs were identified, including improvements to the wellbeing of both residents of aged care facilities and their caregivers. However, an ingrained culture within residential aged care of focusing on physical care rather than thinking holistically about wellbeing was identified as a significant barrier.

**Discussion:** These findings revealed that education is a key component of changing ingrained cultures of task-driven care at both a managerial level and in care staff, so that attention can be given to psychological and emotional needs as well as the physical.

**Keywords:** music, dementia, aged care, models of care

## Introduction

Aged care facilities around the world are increasingly being challenged to adopt consumer-directed care models and home-like environments in which they cater to individuals from a diverse range of cultural backgrounds and lifestyles.<sup>1,2</sup> In addition, due to the range of co-morbidities experienced by older adults, and particularly those with dementia, the potential for side-effects from polypharmacy is of significant concern.<sup>3,4</sup> Therefore, residential aged care homes are also searching for ways to reduce reliance on pharmacological treatments for managing the behavioural and psychological symptoms of dementia,<sup>5,6</sup> while coping with intense pressures on staff time and resources.<sup>7</sup>

Music is a highly individual resource that has the potential to form an intrinsic part of personalised care models. Music therapy with the involvement of a trained therapist provides an effective alternative to pharmacological approaches to managing the behavioural and psychological symptoms of dementia. Research shows that music therapy can affect significant improvements in depression, agitation and

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cognitive functioning in people with dementia.<sup>8</sup> Personalised playlist interventions - the creation of music playlists based on individual music preferences without the involvement of a registered music therapist - have also been shown to be effective ways to improve symptoms in people with dementia.<sup>9</sup> Evidence-based protocols exist which can help aged care providers develop individualized music listening programs according to standardized procedures.<sup>10,11</sup>

However, evidence suggests that residential aged care homes face significant challenges in implementing such programs and that music is not always utilized in the most effective ways.<sup>12</sup> One survey explored attitudes towards music interventions in 214 nursing staff in long-term aged care facilities, finding that insufficient staff training and education about the implementation of music was a significant problem in this regard.<sup>13</sup> Similarly, a mixed methods study involving 46 aged care workers in Australia demonstrated that a lack of funding, a lack of staff knowledge and buy-in, along with the immense time pressures faced by care staff are also among the challenges that facilities face in implementing music programs.<sup>12</sup> Similar challenges to staff time have proven to be barriers in relation to other issues in aged care such as transitioning to the use of electronic health records,<sup>14</sup> engaging in behaviours to reduce falls in residents,<sup>15</sup> and implementing other types of technology to enhance patient care.<sup>16</sup> Staff training has also been identified as a critical component of facilitating uptake of new models of care.<sup>17-19</sup>

Previous research has shown that in order to effect change in health contexts it is important to engage health-care workers in processes of barrier identification and design of programs to overcome those barriers.<sup>20</sup> Therefore, the current study used focus groups with aged care staff and people with lived experience of dementia to further explore the benefits and challenges to implementing music playlist programs in aged care, as well as to generate suggestions for solutions to these challenges.

# Methods

This research followed a general inductive approach as outlined by Thomas,<sup>21</sup> which allows understandings generated by the research to be informed by data rather than a priori hypotheses, although without the focus on theory development found in grounded theory. This approach follows a realist paradigm in that it acknowledges the importance both of individual perspectives and of defining some kind of reality on which problem-solving can be

based.<sup>22</sup> Such an approach was selected in the current research because of the focus on finding solutions to challenges in implementing music interventions in aged care contexts.

# Participants

The sample consisted of 17 participants, 4 males and 13 females, who were staff associated with 5 different providers of long-term residential aged care facilities in Australia in a variety of roles (n = 11), family caregivers of someone with dementia (n = 4), one person with dementia, and one volunteer musician with extensive experience in performing in aged care settings (Table 1). Inclusion criteria for care staff were that they had to have 2 years or more experience in their current role and have permission from their employer to be involved in the

**Table 1** Focus Group Participants

Participant No.	Gender	Role
Group 1		
1	Female	Diversional therapist
2	Female	Aged care educator
3	Female	Music therapist
4	Female	Dementia consultant
5	Female	Education coordinator
Group 2		
1	Female	Pastoral care coordinator
2	Female	Recreational activity officer, dementia specific
3	Female	Recreational activity officer, dementia specific
4	Female	Memory support
5	Female	Team coordinator
6	Male	Lifestyle manager
Group 3		
1	Female	Person with dementia
2	Male	Carer (husband)
3	Male	Carer (son)
4	Female	Carer (wife)
5	Female	Carer (wife)
6	Male	Musician in Aged Care

research and be able to understand and participate in conversations in English. All participants needed to be able to communicate in English and to understand the purpose of the study as assessed at the time of recruitment or as advised by family members. Two family members had experience with caring for a relative in a residential care facility, while the other two were home-based carers. Participants (or their employer if they participated during work time) received a gift voucher as compensation for their time.

## Procedures

Ethics approval was obtained from the Western Sydney University Human Ethics Committee (H13677) in accordance with the Declaration of Helsinki. Participants were recruited by utilising networks of the research team and calling on participants in previous studies who had agreed to be contacted about future research. An invitation email was sent and interested participants were screened for eligibility via phone or email. Eligible participants (or their legal guardian in the case of the participant with dementia) provided written consent to participate, including consent for publication of anonymous responses. Two focus groups consisted of staff associated with multiple aged care facilities and the third group consisted primarily of family carers. Focus groups took approximately two hours with a 10–15 minute break at the mid-point and were facilitated by two members of the research team. Due to restrictions on group gatherings due to COVID-19, all focus groups were conducted online using Zoom. Participants were asked to use only first names, to refrain from naming the organisation with which they were associated, and were given information on safe use of Zoom. Zoom sessions were recorded and uploaded to cloud storage at the conclusion of each session.

## Materials

A set of Powerpoint slides were developed to facilitate the conversations, which were based on a structured discussion guide. A member of the research team first discussed the purpose of the study and reminded participants of ethical considerations such as confidentiality. Topics that were considered included participant experiences with using music, perceptions of its helpfulness or otherwise, the barriers and challenges to implementing music programs and possible solutions to those challenges.

## Data Analysis

Focus group recordings were transcribed, and thematic analysis was used following an inductive approach.<sup>23</sup> In a first wave of analysis, two members of the research team conducted open coding independently. Consultation then took place between the members of the research team and axial coding was performed collaboratively to discern patterns and connections between data categories and codes using processes described by Charmaz.<sup>24</sup> Data were clustered into 3 overarching categories with associated themes and sub-themes relating to: (i) benefits, (ii) challenges, and (iii) solutions.

## Findings

### Benefits of Music Programs for People with Dementia

Participants had all witnessed the benefits that music could have for people with dementia (Table 2). Aged care staff reported that they used music both as a daily form of entertainment and as a way to manage changes in behaviour although there were often overlaps between these two uses. They described using music in relation to a number of daily challenges including wandering and agitation. A staff member of one care facility described how they would involve a music therapist in that process, saying:

If a resident is showing some challenging behaviors, we talk about it as one of the potential interventions as a team, and then we may bring in the music therapist to create a specific playlist. (P6 Group 2)

Participants also described the use of music to achieve certain affective states such as enjoyment, relaxation or increased energy, or just to create a more positive environment or atmosphere in a group. For example, one diversional therapist recounted the story of a female resident who experiences extreme agitation and worry and often yells as a result of this. She tried using music with this lady and described the results like this:

I've certainly noticed just even in her facial expressions she is not as anxious. She just seems more relaxed. Then when we finish with the music I've noticed that probably it would be a good two hours after that that she is not yelling out anymore. (P1 Group 1)

It was also reported that music could improve carer well-being, both in staff and in home-based carers. For example, the wife of one person with dementia described using music creatively to help her cope with repetitive vocalisations

**Table 2** Themes and Sub-Themes Relating to the Benefits of Music Programs

Theme	Sub-Theme	Quote
Behaviour management		For years we have been using music to engage residents not just when they have certain behaviours but as a normal daily engagement and we have found that very successful (P5 Group 1)
Engagement/entertainment		We do use music on a daily basis as a way of distraction or engagement, and also stimulation (P5 Group 2)
To achieve certain affective states	Enjoyment	Sometimes people will say they do not like music but then when you engage them in music their faces light up and they tap along or sing along or something. (P5 Group 1)
	Relaxation	We have found that music is very beneficial as far as, I suppose, keeping you in a more relaxed state (P1 Group 1)
	Energising	He just likes to watch it now, and listen, and the family loves it because R becomes much more vibrant when he hears it (P4 Group 3)
	Creating an atmosphere	I think sometimes it might not be as specific as to help with a challenging behavior so much as to help create a certain atmosphere in a cottage (P1 Group 1)
Carer wellbeing		I think it improves the staff wellbeing as well (P5 Group 1)
Make connections		It's an opportunity for care staff to get to know the resident and make the person real, make the person normal. Seeing the person and not the behaviour. Also it gives that perspective to the other residents because if the other residents share the same base with residents they will see the person having fun or enjoying life. Sometimes it makes them less afraid of that certain resident or they can find opportunities to relate as a lot of times they like the same music. It creates some space to be together to connect and I think that also reduces social isolation (P4 Group 1)
Effect on memory		I find it calms a lot of our residents, and reminiscence is wonderful. I have one lady who cannot put two words together. Her hand and eye coordination is not there, but you get her singing to a record. The words come out and the music is there fresh as anything. (P3 Group 2)
Palliative care		It had kept her going in palliative care for 9 months before that last 2 weeks, and it was largely through music (P3 Group 3)
Can have negative effects		Music can be like a Pandora's box. We do not exactly know what's going to emerge from it (P1 Group 2)

from her husband when they were in lock-down together during the COVID-19 pandemic. She said:

During COVID we were living in a unit and lost 30 hours a week of day support, which I found to be quite difficult to cope with because I couldn't leave. Anyway R likes to say the same thing over again and I thought let's celebrate the things that I like hearing from him. He says things like, 'look at the beautiful sky and the lovely flowers', and one of his favourite phrases is 'yes dear', which I speculate is just to make me laugh. I thought I am going to write these down and wrote a song for R. I did that in collaboration with a friend and gave it to R to hear and when he was listening to it he started using his vocal clicks and whistles. It was like vocal percussion, so I then recorded that

alongside the song, so he was part of the song not just his phrases. (P4 Group 3)

Music also provided a way for residents in a facility to make connections, both with staff and with each other. This was described as being particularly of importance due to the COVID-19 pandemic in which family members and other visitors were unable to visit:

As a group activity its incredible because when one resident starts singing then the rest are engaging too, so they're actually working together, specifically in those times with the COVID-19 where we face more difficulties in terms of residents going out or family visitors coming in. (P5 Group 2)

Memory could also be positively impacted with music, as the music would stimulate reminiscence and shared memories between residents. Some reported using music in palliative care situations, with one son describing how he used music regularly over a 9-month period in which his mother was in palliative care (P3 Group 3). However, there was also an acknowledgement that music could have some negative effects such as triggering negative memories, or nostalgia for the past, in one case even intensifying an individual's desire to go home.

## Challenges to Implementing Music Programs in Aged Care

One of the key challenges that was identified in both residential care and in home-care contexts was a lack of time (Table 3). In residential facilities, family members had noted that staff did not have time to use music with residents, and often found it simpler to just turn the television on. As one participant noted, music CDs required more frequent input from staff, whereas television could be put on for longer blocks of time (P5 Group 3). Other family members agreed with this:

They would turn the TV set on in the room in the morning ... They just didn't have the staff number to really carry on music therapy, just even playing CDs for my mum. (P3 Group 3)

Time was also a factor for family members, who noted that they were often trying to multitask in their role as a carer (P4 Group 3).

Despite the general agreement that lack of time was a fundamental issue and that staff were often highly overworked, in a residential care context the problem was identified as running more deeply than that. Discussions revealed that if used effectively, music could even reduce the amount of time staff spent managing difficult behaviours and that therefore it was worth the investment in time. However, a deep-seated challenge beyond a lack of time was the culture of care that often exists in residential aged care which did not necessarily originate with care staff themselves. Several participants stated that there was a mindset that staff are too busy. For example, one dementia consultant said:

It seems that time is always a concern as well for staff because they see it as an extra task to be done. I think that's the result of not understanding how music can benefit them, the resident, and how they can use it. (P4 Group 1)

A family member had a similar perspective, saying:

They're doing what they have to do in order to make sure they don't get sued instead of 'let's do this to make this person's life as wonderful as it can be'. It's a time factor and a culture factor. (P4 Group 3)

Lifestyle staff similarly noted that care staff generally had a wash and feed mindset, viewing the physical care of the individual as their only responsibility rather than thinking holistically about the wellbeing of the individual including their emotional needs.

Even when staff did use music there was a tendency to have a "set and forget" attitude, using the music as an entertainment device that could enable them to go and do other things rather than as an opportunity for interaction with the resident. As one lifestyle manager put it:

It's something to interact with. When you're interacting with the resident not just putting headphones on and walking away, we found that that does not work nearly as well as when you are interacting with the music. (P6 Group 2)

There was also a tendency for staff to have background music on without thinking about the effect this might have on residents. As one participant stated:

I've had situations where there's just music on in the background and a lot of our carers, they're not conscious of it. They're not thinking of 'how is music being effective or not effective in this situation', because for them they can shut it out. It's just background noise. Whereas it might be really important for the resident. There needs to be something built into the cycle around monitoring it so it really brings it into the consciousness. (P3 Group 1)

Participants were highly aware, however, that staff were often not at fault here, since these perceptions were propagated at a managerial level. An education consultant noted in relation to care staff:

They've got to have that permission as well and I guess that comes from the management down, that 'this is just as important for these people or that person as anything else you are doing for them, and we want you to get to know them and improve their wellbeing'. (P5 Group 1)

A music therapist observed that this again could be due to not seeing the value of music. There was also a tendency to view even music therapists as entertainers rather than therapists. This was compounded by a lack of standardised tools for evaluating music programs and the fact that such evaluations took time. She stated:

**Table 3** Themes and Sub-Themes Relating to Challenges to Implementing Music Programs

Time	In facilities	They just did not have the time to do it for him. He struggled to press the buzzer to get staff, so he was just in a room by himself. They would turn the TV on in the morning because that could be left, and it would be on all day, whereas the music, I just had CD's, so you know they only lasted for so long before they needed to be turned over, so it was just me having to go in and turn it on for him to give him some sort of stimulation (P5 Group 3)
	In home-based care	[referring to music programs]: We do not have the time to devote to that kind of stuff (P2 Group 3).
Staff Perceptions	Mindset that they just wash & feed	I think it's the mindset of care staff, that they are here to do the washing and drying and the feeding and that type of thing. (P2 Group 1)
	Mindset of busyness	I think it's a time factor that everyone sometimes thinks they are too busy, which can be a problem too ... (P2 Group 1)
	"Set & forget" attitude	They would put the iPod headphones on and think of it as "well I can do this while I go and care for other residents and just leave this person alone". That was not as beneficial and there are a few occasions where it caused distress in residents (P6 Group 2)
Family perceptions		Sometimes families do not see the value because they focus more on "I want mum to go to a big social activity" or "make sure she's had a shower and her hair done". They tend to focus on different things as well and their expectation is "oh mum's never liked music so I don't see the value" (P5 Group 1)
Managerial Support	Seeing value	This is something that I have to deal with every single day, constantly being asked those questions by the leadership team "why is it worth it? What's your pre-post assessment? Show us your validated tools to show that this is working". (P3 Group 1)
	Culture of care	[Referring to care practices]: It can just easily veer over into the medicalised care system. It just seems to bloom as the most important thing when it's when it's not theoretically and really (P1 Group 2)
	Accountability	[Making sure that] staff feel responsible for the implementation of music, not just one care staff but different care staff at different times of day (P4 Group 1)
	Engage all staff	That kind of problem could happen with an individual playlist unless everybody's owning it and there's a facility for everybody, for it to be clear in the care plan. Otherwise it could get lost. (P1 Group 2)
Equipment	Appropriateness of equipment:	Equipment is preeminent. You need to have headphones that are comfortable, that sit on the ears and do not get sweaty and people do not feel that that is adding to the problem rather than relieving it (P2 Group 3)
	Care of equipment	I think another big challenge is getting the equipment ready and making sure that it's available (P4 Group 1)
	Cost	You have to buy the technology and there's not really any way of getting around it (P3 Group 1)
Music Selections	Getting the music right	Giving them the right music is so important. I think every step is really important, but we could throw the whole thing backwards if we put the wrong music on (P2 Group 1)
	Individualising	For a resident that has no input at all, and then to get movement and expression and body language [in response to music], and I believe it's because it was an individualised program for that person (P2 Group 2)
	Finding out preferences	The individual that you are making the playlists for will actually have an emotional connection to that song as well and you will not have that direct knowledge, because we are relying on somebody else to provide that (P2 Group 2)
	Duration of listening session	People do not have long attention spans and if you can make a shorter, concentrated and involved session, rather than this kind of preconceived idea of leaving somebody with headphones on listening to music, that certainly worked better in all of the studies that we did (P2 Group 3)



It's actually quite a challenging space to provide the evidence, because a lot of the time we're talking about qualitative perceptions and observations where staff are just saying 'Oh well Mr Smith seemed happier', or 'she was singing' and things like that ... Sometimes collecting that evidence then turns into a barrier. We used to ask people to fill in a little survey after they had listened to music with someone and then I found that people just stopped listening to the music because they couldn't be bothered to fill in the evaluation. (P3 Group 1)

Once managerial staff saw the value of music it was then up to them to set accountability for implementation of music programs and to engage all staff in embedding music into care. A music therapist with extensive experience in setting up personalised music listening programs in a residential aged care setting stated:

In my experience RN's [registered nurses] are kind of the hinge point. The idea of permission ... it's not just permission so much. It's also accountability. If this is on someone's care plan and you're not doing it then you need to be held accountable for that. If you just didn't shower someone one day there would be repercussions and as harsh as it sounds, we need to start holding people accountable for these music related actions. (P3 Group 1)

At times the perceptions of family could also be a challenge to overcome, since participants stated that sometimes they did not appreciate the value of music programs or think that the individual would enjoy listening to music despite observations from staff that they had responded to music in the past.

In addition to the attitudes and perceptions of those caring for people with dementia, a number of practical challenges were identified as well. One such challenge was to find the right equipment. For some residents, mP3 players were too small and difficult to use on their own. Headphones were found to be useful for some people in order to help isolate them from environmental noise, while others found them difficult to tolerate or found that the music was more tiring when heard in that immersive environment. Some family members reported that they had struggled to find equipment that enabled them to either listen along with the person they were caring for, or to at least be able to identify what the individual was listening to, particularly if they had a strong response to the music.

Both caring for equipment and its cost were further challenges. Care staff reported that devices such as iPods or headphones frequently got lost or damaged or had not

been charged up when needed. As one participant stated: "We had a challenge trying to figure out how best to store them safely while also providing good access to everybody" (P6 Group 2). Costs were a further challenge in terms of justifying expenditure on music programs to executives and managerial staff.

Other practical challenges related to music selections. For example, getting the music right was considered very important by both care staff and family members, since playing the wrong music could have negative effects. Part of finding appropriate music was individualising the selections. As one participant stated, "It's not just a case of having music. It's being able to hear the type of music that that person can relate to" (P2 Group 3). One family member reported that even selecting the right version of a certain song could be pivotal in getting the desired response. Individualisation of music choices was revealed to be even more important as cognitive decline progressed. A family member who had been deeply involved in developing a music program for his mother with Lewy Bodies dementia, observed:

I could not get mum to enjoy really anything new or something she wasn't familiar with ... It didn't matter how beautiful the music was, how closely related it was to something else that she really liked. If it didn't strike that familiarity .... (P3 Group 3)

Obtaining accurate information about individual preferences was particularly challenging in the residential aged care setting where staff might rely on family members to provide information. Family members did not always have accurate information, especially as response to music could change as dementia progressed. Family members also noted that this could be a challenge. One participant who prepared a personalised music listening program for her husband stated:

I found it difficult. I had to rely on the music that he had in his CD collection. Communication was thumbs up or thumbs down a lot of the time and he also showed no emotion so it was difficult to know whether he was enjoying it or not enjoying it. (P5 Group 3)

Others noted in relation to music playlists that it was important to consider the duration of the listening session, as shorter doses could sometimes be more effective.

## Solutions to the Challenges

Participants in the study also gave suggestions about possible solutions to the above-named challenges. These

proposed solutions primarily revolved around education (Table 4). It was argued that management staff first needed to be provided with information to help them understand the value of music programs not just to residents but to the facility as a whole. As one aged care educator suggested, this information should have “explicit links to the new age care quality standards around dignity, choice, nurturing the whole person, consumer based decisions, person centered care” (P1 Group 2) so that the facility can demonstrate how they are meeting those standards of care. Managerial staff should also understand the need to engage all staff in the program and that music programs should be embedded in daily care plans for individuals. One participant put it this way:

Having care staff managers and things like that, it kind of keeps everyone in check. It keeps everyone being able to make sure that they are using that kind of tool across the whole facility. It's not just relying on one individual to carry out that kind of experience.

One of the key issues identified in relation to educating staff, was the need to help care staff understand that music is an integral part of being human and therefore an important element in caring for the whole person. As one participant stated:

If it's on the care plan then it should be part of their normal care that they're giving the resident and it's just as important as the shower or the assistance with the meals or whatever else they're doing for the person, but it's changing that whole mindset that it's not just about task. It's about living life and promoting wellbeing for these people in whatever way is best for them. Music is definitely a very positive way. (P5 Group 1)

Care staff could also benefit from education about how music could benefit them in their role as carer, and how it is much more than entertainment. As one participant stated:

It improves the staff wellbeing as well. I think they feel satisfied in what they're doing when they see that enjoyment for the resident. I think if we can kind of focus on that that's helpful. (P5 Group 1)

Similarly, another said:

I talk about the benefits for the carers so ‘how this is going to make your job easier and your day more enjoyable.’ I find that that actually has much more of an impact in terms of long-term and embedded music. (P3 Group 1)

The point was made that it was important to start from a place of common understanding, embedding within current practices rather than trying to introduce programs that operate in a completely new way. Since the focus of many staff is on physical care, music programs could perhaps build on these daily care routines, introducing an element of individualisation. However, it was further noted that often care staff needed to personally observe how music programs can enhance care routines and improve the experience for both residents and care staff. As one participant described it:

It's that point of connection I find is the most helpful for carers when they go, ‘oh all of a sudden this person is smiling and they're being nice to me and they are happy to get in the shower’. All of a sudden it's just this sort of light bulb moment of ‘oh maybe I should do this more often’ or ‘maybe this might work for this other person that I have similar issues with’. (P3 Group 1)

In addition staff need to develop an understanding that since music tastes are so individual, music programs need to be personalised. Furthermore, it was suggested that staff should be educated in the need to monitor and review music programs rather than having a “set and forget” approach. As noted by a music therapist, this process enhances the sustainability of music programs as well:

We do need to know if it's working. If we make a recommendation in someone's care plan, for example, that for 10 minutes prior to their shower they listen to music just to help get them in that that calm mood and provide some familiarity which can bring a sense of comfort. If we are not monitoring it and documenting it, how do we know that it worked?. (P3 Group 1)

Related to this was the need for staff to have realistic expectations. Participants argued that staff need to be aware that there is the potential for negative responses, but that this does not mean that music is not effective or that it should be avoided altogether for individuals who have responded negatively. As described by one participant:

On a continuum of having no expectations because it didn't work last time, to having ‘this is going to be our answer every time’ ... The reality is that at any point any given day might fall somewhere in between. (P1 Group 2)

In addition to educating managers and staff, it was suggested that families of people with dementia could benefit



**Table 4** Solutions to the Challenges of Implementing Music Programs in Aged Care

Education of management	About value	Essentially, it's a new skill and we are trying to shift a mindset. To provide that scaffolding that is necessary for behaviour change there's a cost investment both in resources and technology. There needs to be a strong justification to decision makers, generally right at the top, that it's worth it (P3 Group 1)
	About need for engaging all staff	Trying to persuade facilities that this is something everybody should own, and everybody can be involved in would be the ideal, that would be the blue sky thinking (P1 Group 2)
Education of floor staff	Embed within current practice	To make changes, basically you have to look at what are the staff do as a matter of course, and realise, "yes they're going to do that", but how can we then adapt and innovate based on that ... We rely on what we know they are going to do, and we try to be very creative, so that we can then personalise. We use the impersonal things that they have to do to then build the individualised tailored platform so that each person's life can be much better (P4 Group 3)
	Personally observe the benefits	When a carer has that experience, that's the shifting point to overcome some of those barriers around "I don't have time for this" or "it's not part of my job, that's what the therapy assistant or the lifestyle person is responsible for" (P3 Group 1)
	Caring for the person as a whole	Something that I have learned across the years of working with carers in particular is to try and change that mind set and shift their thinking where music is part of who someone is. Part of the role of a carer is to support that person's whole identity and broader wellbeing (P3 Group 1)
	More than entertainment	If you can show how it benefits them in their normal task-oriented role that will help translate these things into practice a lot more than just saying "listen, it's great for the residents". If they see how it actually benefits them in their role, they will be much more likely to engage with it, use it, which then has a knock-on effect of being a benefit for the rest (P6 Group 2)
	Realistic expectations	I think we have got to talk about what are realistic and unrealistic expectations. It's not going to be a silver bullet. Something may not work every single time. And the reality is that people have good and bad days and some bad days, nothing is going to work. (P1 Group 2)
	The need for personalisation	I think the identification of personal tastes and preferences should be pretty well number one (P4 Group 3)
	The need to monitor and review	It's got that cycle where music is part of the care plan and then we are constantly monitoring, reassessing, adjusting the music as we need to (P3 Group 1)
Education of family	Understand the value	Sometimes you can overcome the financial barrier if the family is on board because they will actually be willing to purchase the equipment and even put the music on the equipment for the person (P5 Group 1)
	About music selection and how needs can change	Definitely monitoring, observing the reactions is a key step to maintain the programme because it's not just selecting the music and "now we have a device", but also "how can we implement these regularly according to the person's needs that are also changing"? (P4 Group 1).
	On appropriate technology	I would have very early on a discussion of equipment, about the comfort of headphones whether open or closed, how tightly they clasp ... Equipment is something I would concentrate a lot on (P3 Group 3)

(Continued)

Table 4 (Continued).

Develop appropriate standardised tools for evaluation		It would be really beneficial if there were some standardised outcomes that are measured outcomes. That could be provided as a justification for the financial spend on music therapists, on iPads, on equipment and all of these things. Right now it can be anecdotal and or it can be difficult to gather that evidence. But if there was some evidence available, it would be easier to make the case to bring these programs into the facility (P6 Group 2)
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from understanding the value of music as well. In fact, it was argued that this could sometimes provide a solution to financial barriers to implementing music programs, since families may be willing to purchase the necessary equipment if they understood the benefits. Family members also need to understand how responses to music can change in people with dementia as needs change. Participants who were family caregivers noted that when they were implementing music programs for their relative with dementia it could be difficult to find appropriate equipment and that this could also be an area in which they could benefit from additional education and information.

In addition to education, one further suggested solution was the development of standardised tools for measuring the impact of music programs, particularly over the long term.

Discussion

This study aimed to discover how care staff and family members view the benefits, challenges and solutions to implementing music programs in aged care contexts. While the benefits of music programs included improving the wellbeing of both residents of aged care facilities and their caregivers, a number of significant barriers were identified. Among the most significant of these was an ingrained culture within residential aged care in Australia of focusing on physical care rather than thinking holistically about wellbeing.

It is well established that holistic and integrated models of care are essential in improving quality of life and wellbeing in residential aged care.<sup>25</sup> However, Australia has tended to be somewhat behind other countries in providing such care.<sup>26</sup> A recent Royal Commission into Aged Care Quality and Safety in Australia reported that the aged care system in the country has struggled to adapt to the increasingly high level of need of individuals that enter residential aged care, and that staff are a workforce under intense pressure and “task-driven regimes”.<sup>27</sup> These circumstances certainly create a context in which person-centred models of care, which might include music programs, are challenging to

implement, requiring change at a grass-roots level. Research has demonstrated that key elements to providing person-centred care include the capacity for staff to spend time with residents and a shared philosophy of care.<sup>28</sup> This has to come from the top down, with leadership playing a central role in developing vision and inspiring a readiness to embrace change in aged care contexts.<sup>19</sup>

While there are many factors involved in developing the cultural shifts necessary to change such approaches to aged care including financial considerations, education plays a key role.<sup>29</sup> The current study identified the need to educate at all levels including managers and daily care staff, as well as family members who often advocate for people with dementia in a residential aged care context. The capacity for music to improve the caregiving experience and to ease some of the time pressures on care staff by reducing changes in behavior due to dementia, such as resistance to care, is an important part in that education. Both music therapy and personalized playlist interventions without the involvement of a trained music therapist are particularly effective in reducing agitation in people with dementia across a range of different situations.<sup>9</sup> This can have a flow-on effect, since agitation is closely linked to high rates of falls,<sup>30</sup> poor nutrition,<sup>31</sup> poor relationships with carers,<sup>32</sup> and low quality of life.<sup>33</sup> Understanding the potential for music to reduce demands on caregivers can increase the incentive of staff at all levels to incorporate personalized music programs into individual care plans.

Nevertheless, the current study also illuminated the need to have a realistic viewpoint of the value of music. It is worth noting that music should be viewed as a valuable component within multi-modal non-pharmacological approaches to managing changes in behavior due to dementia, rather than as a “cure-all”. Agitation, for example, can have multiple causes including biological causes such as the dementia itself,<sup>34</sup> physical causes such as pain,<sup>35</sup> unmet needs such as hunger, dehydration or personal hygiene, or environmental factors such as overstimulation, boredom or excess noise.<sup>36</sup>

Thus, there is a need to comprehensively assess the possible reasons for an individual's agitation before deciding on a treatment plan, rather than simply focusing on suppressing the resultant behaviour. Knowledge of the underlying causes behind the behaviour changes often associated with dementia is a key to using music effectively.

The current study further identified the need for the development of standardized measurement tools for evaluating the benefits of music programs in order to justify the dedication of resources to their implementation. Several validated tools exist which can help identify the short-term effects of music listening on people with dementia such as the Music In Dementia Assessment Scale (MiDAS;<sup>37</sup>) or the Observed Emotion Scale.<sup>38</sup> These scales focus on individual sessions of musical engagement and their effects on outcomes such as mood, alertness, and engagement with the environment. However, there is a dearth of standardised measures for evaluating the long-term benefits of music programs.<sup>10</sup> Future research could therefore benefit from the development of validated tools for looking at the effects on long-term indicators of wellbeing such as the use of antipsychotics, incidence of falls, nutritional intake, and relationships with caregivers among others. In addition, design of future studies could benefit from a focus on long-term assessment periods. The current study is also further limited by the fact that no direct care staff were recruited to the focus groups. Future study could expand the research reported herein by considering similar topics from the point of view of staff involved in the day-to-day care of individuals with dementia in residential aged care homes.

## Disclosure

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