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# THE RELATIONSHIP BETWEEN MUSIC AND DEMENTIA: AN OVERVIEW

'Dementia' is an umbrella term that covers a number of degenerative neurological disorders that typically effect memory, language and reasoning abilities. In 2021 it was estimated that more than 472,000 Australians were living with dementia, a figure that is likely to grow to approximately 1.1 million people by the year 2058 (Dementia Australia, 2021) This growth is already placing increasing demand on the aged care industry.

Alongside cognitive challenges, people living with dementia can also experience personality, mood and behavioural difficulties such as depression and agitation. However, antidepressants, anxiolytics and antipsychotics often used to treat depression and agitation in dementia are not always effective in reducing symptoms and can be associated with severe side effects (Sacchetti, Turrina, & Valsecchi, 2010). Thus, there is a great need for carers of people with dementia to have access to non-drug interventions that can increase the quality of life of the individual and the caregiver.

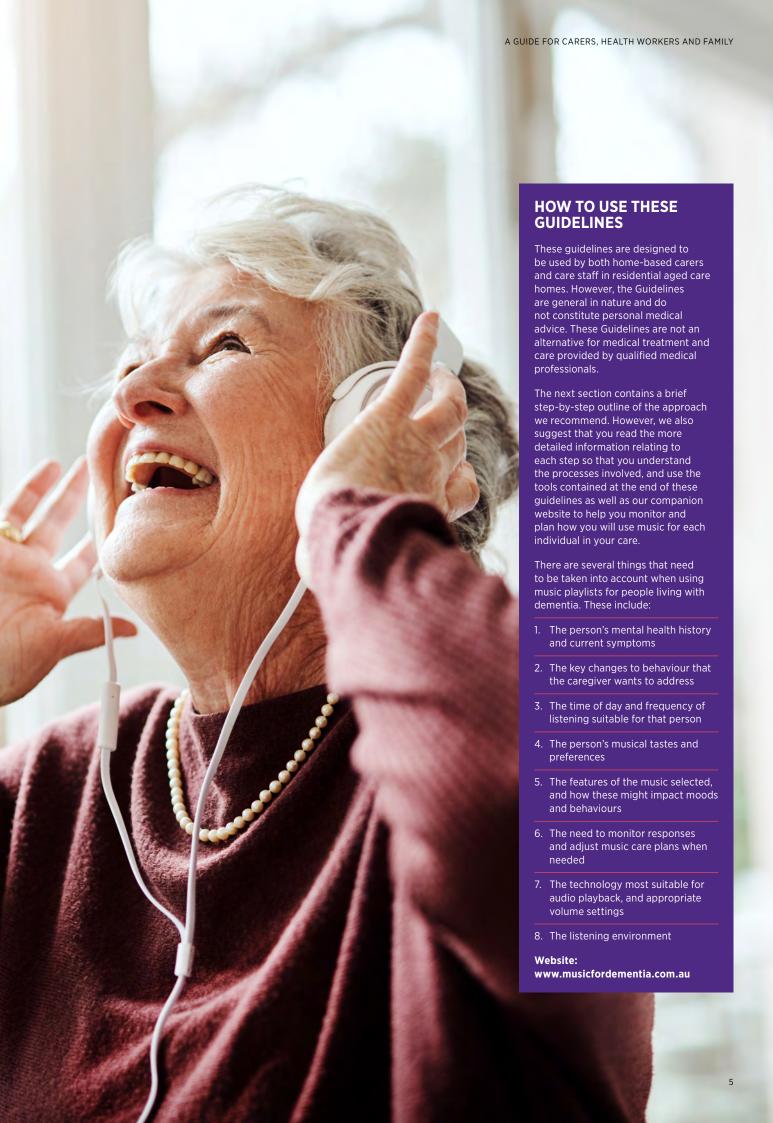
Music is one of the most widely used nondrug interventions for people with dementia. Research has demonstrated that music can be a highly effective way to manage the symptoms of dementia when facilitated by a trained music therapist (Raglio et al., 2015). More recently, research has shifted to give greater emphasis to musical interventions that are not therapist led such as individual music listening with headphones.

While sessions with a trained music therapist or active forms of musical engagement such as singing offer additional therapeutic benefits to merely listening to music, the advantage of using pre-recorded music is that it can be used as frequently as needed, in a variety of settings, and is relatively low cost. Research shows that listening to pre-recorded music can improve a range of psychological symptoms including agitation, anxiety and depression. However, music does not have a universally positive effect, and needs to be selected carefully to obtain the greatest therapeutic benefits (Garrido, Dunne, Chang, Stevens, & Haertsch, 2017).

The aim of this guide is to help caregivers who are not trained music therapists to understand how to use pre-recorded music in targeted ways to manage changes in behaviour in people with dementia. It also helps carers to identify and manage music use for individuals who are prone to negative responses. This guide accompanies the Music for Dementia website (www. musicfordementia.com.au), which outlines a Five Step process for creating a music care plan for a person living with dementia (steps one to three). The final two steps of the process show you how to track their responses to these playlists over time, and edit the playlists as needed.

There is evidence that using pre-recorded music can help improve agitation, anxiety and depression in people with dementia.





# QUICK REFERENCE GUIDE TO MUSIC SELECTION FOR PEOPLE WITH DEMENTIA

Follow the steps in the boxes below to develop a music plan for each person in your care, referring to the specific chapters and appendices listed on the right for more information.

#### STEP 1: TAKE THE QUESTIONNAIRE See Chapters 1, 2 and 3 Complete the questionnaire on the Music For Dementia website, or by printing the templates, to: **Useful Tools:** ≥ Appendix 1 - Vulnerability Scale Template i) assess vulnerability; ≥ Appendix 3 - Changes in Behaviour Template ii) identify key changes to behaviour; ≥ Appendix 4 - Music Preferences Template iii) find out music preferences See Chapters 4 and 5 **STEP 2: MAKE PLAYLISTS Useful Tools:** Use Spotify or another music streaming service or ≥ Appendix 5 – sample of suggested songs. If you player to create playlists based on recommendations & use the Music For Dementia website, example examples provided in Step 1. Spotify playlists will be provided based on your responses **STEP 3: OBSERVATIONS AND TRIALS** Trial your created playlists and record your observations using the provided post-assessment tools.

**STEP 4: REFINE & REVISE PLAYLISTS** 

Based on your observations, revise and refine your playlists over time for maximum suitability and effect.

#### **STEP 5: MUSIC USAGE PLAN**

Use the provided templates to develop a music usage plan, so you know the best songs or playlists to use for specific situations.

#### See Chapter 6

#### **Useful Tools:**

- ≥ Appendix 6 template for Rating the Strength of Response to Music and a Listening Diary
- ≥ Appendix 7 template for creating a Music Usage Plan

# ASSESSMENT OF VULNERABILITY TO NEGATIVE RESPONSES

While music has been identified as a valuable tool for improving mood and reducing behavioural disturbances, it is important to recognise that not everyone will respond positively to music.

In some instances, people may even become distressed or upset during music listening. Emotions such as sadness can provide useful opportunities for people to release or process negative emotions (Garrido, 2017).

However, research has shown that people with a history of depression may find it more difficult to recover from negative emotions, and so these people may be vulnerable to undesirable after-effects from listening to music (Garrido, Bangert, & Schubert, 2016).

In addition to this, studies have found that some people with dementia may experience increased agitation as a result of listening to music (Nair et al., 2011; Park & Specht, 2009). Negative reactions are substantially more common within groups that have been identified as being vulnerable. A person's individual history, the stage of their cognitive decline, or their struggles with mental health can increase susceptibility to undesirable reactions. People with a history of or currently diagnosed depression are more prone to experiencing negative mood shifts when listening to music (Garrido & Schubert, 2015).

Similarly, people in the middle stages of cognitive decline (Stages 5-6 of dementia) are more prone to experiencing negative reactions. People with a history of trauma or abuse are also particularly susceptible to the triggering of distressing memories if music is not carefully selected.

If someone is within one of these vulnerable groups, this does not suggest that they cannot be involved in a music program. However, it is an indication that appropriate measures need to be taken to minimise or manage undesirable reactions.

This section will discuss identification of such individuals (but also see Chapter 5 for specific information regarding the monitoring and management of adverse responses)

People with a history or current symptoms of depression can be more vulnerable to undesirable outcomes from listening to music.

## MENTAL HEALTH HISTORY & CURRENT SYMPTOMS

In order to determine a person's vulnerability to negative responses to music, it is important to find out about their mental health history and/or their current symptoms.

This can be done by use of a screening tool called the Vulnerability Scale which can be accessed via the *Music For Dementia website* (www.musicfordementia.com.au) or printed out from Appendix 1. The screening tool can be used in one of two forms: the first is intended for use with the person with dementia themselves, and the second is intended for use by family and friends on behalf of the person living with dementia.

We suggest that if the person scores a maximum of 1 item above neutral this would indicate they have Low vulnerability; if they score 2 items above neutral they may have Some vulnerability; if they score 3 or more items above neutral this would indicate that they have Significant vulnerabilities (see Table 1).

It is also possible to conduct a less formal assessment by speaking to the family of the person with dementia to ascertain whether they have a history of depression, trauma, anxiety, or agitation. Any of these factors, along with the presence of Stage 5 or 6 dementia, can be an indication of vulnerability to negative responses to music, which suggests that additional care needs to be taken in the development and implementation of their music care plan (see Appendix 2 for more information about the stages of dementia).

#### TABLE 1 - RISK CATEGORIES BASED ON SCORES FROM THE VULNERABILITY SCALE.

CATEGORY	VNADS SCORE RANGE
Low vulnerability	1 item selected above neutral
Some vulnerability	2 items selected above neutral
Significant vulnerabilities	≥ 3 items selected above neutral

N.B. an item selected 'above neutral' in the Vulnerability Scale refers to a response of either 'Agree' or 'Strongly agree', as shown in Appendix 1

Screening tools can be used to determine whether persons with dementia are at risk for negative responses to music.

#### **CHAPTER 1 SUMMARY**

Responses to music are personal, so it is important to assess a person's vulnerability to having a negative response to music.

A history of depression, anxiety, agitation and trauma, as well as being in Stages 5-6 dementia can be indicators of vulnerability, suggesting that additional care needs to be taken in the development and implementation of the individual's music care plan

The Vulnerability Scale (Appendix 1) can assist with assessing an individual's vulnerability

The information in this chapter relates to the first part of 'Step 1' on the *Music for Dementia* website.

# IDENTIFYING KEY CHANGES TO BEHAVIOUR

Music can be used for more than just entertainment for people with dementia. It can also provide a useful first-line treatment for some of the key changes to behaviour that people with dementia may experience.

There are four main ways that music can provide therapeutic benefits to people with dementia:

- **1.** By reducing or increasing arousal or alertness levels
- **2.** By distracting individuals during challenging activities or times of the day
- **3.** By helping them reconnect with personal memories
- **4.** By providing mental stimulation

Some of the key changes to behaviour that music can help to manage include:

- ≥ Agitation or anxiety
- ≥ Withdrawal or apathy
- ≥ Reduced verbal or social engagement
- Agitation in care situations such as showering, dressing, or eating
- ≥ Restlessness, wandering, or falls
- ≥ Sleep disturbances

Appendix 3 can be used as a template for determining the key changes to behaviour that music might be used to help with for each person with dementia in your care, and the type of music that might be most helpful for them.

Importantly, it is recommended that several playlists be created for each person, depending on the key changes in behaviour that you have identified. For example, some people with dementia may feel withdrawn and unmotivated to get out of bed in the morning, and need music that will help them to feel energised. At other times of the day they may be agitated and anxious and need music that will help them to feel calmer.

Different playlists would be used for these different situations, depending on the symptoms of the person.

It can also be possible to reduce restlessness, wandering and even falls by using music at times of the day when the person often become restless.

Similarly, if the person tends to become agitated during particular care routines such as showering, dressing or at mealtimes, music can provide a useful distraction at this time. Where individuals are becoming less verbal and are engaging in social interaction less frequently, music can help to reconnect them with personal memories that stimulate increased sharing with the caregiver.

More details about how to select appropriate music depending on the changes in behaviour you want to address are contained in Chapter 4.

Different playlists may be needed to manage different symptoms at different times of day. Individuals should be monitored to determine the most useful 'dosage'.

#### **CHAPTER 2 SUMMARY**

- ≥ Six key areas for Changes to Behaviour are listed, which music can be helpful to manage. It is recommended to have several playlists for each person living with dementia with different music depending on the specific changes to behaviour you want to address
- ≥ The score produced in the Changes to Behaviour Survey (Appendix 3) will be an indication of how many music playlists you should create, and the priority level of each playlist. See Appendix 3 for scoring details.
- ≥ The information in this chapter relates to the second part of 'Step 1' on the Music for Dementia website.

# PERSONAL TASTE AND PREFERENCES

#### Research has demonstrated that music playlists are most effective when the selected music is personally significant to the individual.

For example, playing relaxing classical music to people who don't like this type of music can in fact increase their agitation (Nair et al., 2011). On the other hand, personalised playlists are more effective in helping people become calmer (Ragneskog, Asplund, Kihlgren, & Norberg, 2001).

This is likely so because the music activates memories that take the person back to a meaningful time in their life. Furthermore, if the person is reminded of a point in time when they were more easily able to interpret, understand and interact with their environment, this can override aspects of the present environment that they might currently interpret as confusing, frustrating, or meaningless.

There are several ways that the preferences of each person can be determined:

- ≥ By asking the person themselves
- ≥ By asking family, friends and carers
- By playing music to the person and carefully observing their reactions, including at different times of day

It is generally best to try to gather information that is as specific as possible, i.e. about particular songs that are meaningful to the individual (Figure 1). When possible, the person with dementia who the playlist is intended for should be the first point of call for this information. Initially, it is recommended to ask the person what their favourite songs are or who their favourite musicians are. It is also useful to find out particular albums or artists they may like (see Appendix 4 for a useful questionnaire for gathering this information).

Family and friends may be able to supplement this information, and in many cases may be the primary source of information where the person with dementia is no longer able to communicate verbally or is unable to remember specific songs or artists.

Family members can be asked whether they have access to any CDs, cassette tapes or records that the person owns, as these could be incorporated into the playlist.

This is also an opportunity to ask the family member whether they are aware of any music that the person has reacted negatively to in the past, or perhaps any music that would be associated with any negative or emotionally intense memories for that person.

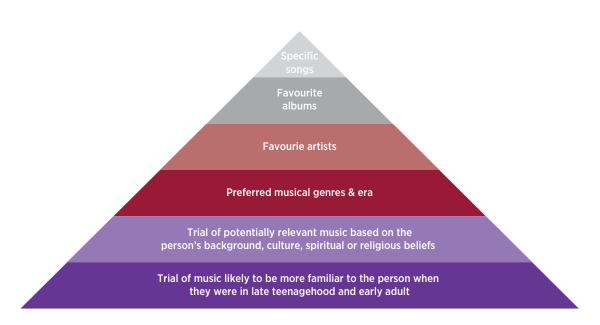


FIGURE 1 - MUSIC SELECTION PYRAMID (FIGURE IS COURTESY OF HOLLY MARKWELL, THE DEMENTIA CENTRE).

Where it is difficult to get information either from the person themselves or from family and friends, it is possible to simply play music to the person and observe their reaction. Music covering a wide range of genres could be played to the individual to see what they respond best to. A good place to start can be trying music that was popular during the person's 'reminiscence bump', which is the period of adolescence and early adulthood from approximately 12 to 30 years old, and in which our most meaningful and strongest memories tend to be formed.

Appendix 5 contains a list of songs from the 1940's through 1970's that covers a wide range of genres. People not from an English-speaking background may particularly benefit from the use of music specific to the region in which they grew up.

If the person with dementia is limited in their ability to speak or communicate verbally, a positive reaction can also be gauged through body language, such as tapping foot/hand in time with the music, heading nodding, singing, humming, smiling, and the like. Negative reactions may be evident from crying, distressed vocalisations or facial expressions, restlessness, and shallow breathing.

The strength of memories associated with particular songs can also be rated to determine which songs are most meaningful to the individual (see Appendix 6).

Music that is personally significant to an individual or from a preferred genre will be more effective for managing moods and behaviour in people with dementia

#### **CHAPTER 3 SUMMARY**

- ≥ Music is most effective when it is personally significant to the listener. E.g., a song they positively associate with a person or memory.
- ≥ Where possible, try to ask the person with dementia to think of personally significant music. Alternatively, when necessary, you can ask their family, friends, or carers
- ≥ Where specific information is not available, another approach is to carefully observe how they respond to different songs, genres, starting with music from that person's 'reminiscence bump' (music that was popular when they were aged approximately 12 to 30 years old). Appendix 5 contains suggested songs and genres.
- ≥ The information in this chapter relates to the third part of 'Step 1' on the *Music for Dementia* website

# SELECTING MUSIC FOR PLAYLISTS - HOW MUSIC FEATURES INTERACT WITH PARTICULAR SYMPTOMS

One of the primary ways in which music influences our mood is by its effect on arousal levels, or how sleepy or alert a person feels. Emotions and moods are often categorised according to two dimensions: (i) arousal (activation or energy), and (ii) pleasantness.

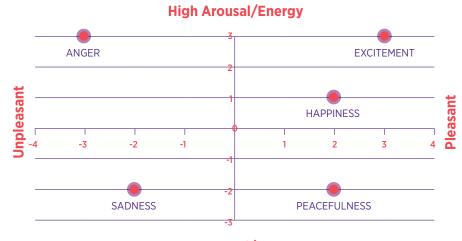
Figure 2 shows how several common emotions are understood on the basis of this model. For example, happiness is generally a relatively highenergy, pleasant emotion.

Excitement is also a pleasant emotion but is higher in energy or arousal, while peacefulness is similarly pleasant but is low energy.

Negative emotions can be high or low energy as well, with sadness being a low energy emotion and anger being a high energy emotion.

In general, most people function best when they are at a moderate level of arousal - neither under-stimulated or over-stimulated - and are experiencing positive emotions. This is sometimes referred to as a 'Goldilocks effect', in which moderate levels of arousal tend to be 'just right'. Therefore, it is helpful to think about the symptoms that the person with dementia is experiencing and where they sit in this model, so that you can determine in which direction you would like to change their current state. Two particular musical features can help achieve changes in arousal levels and make a person's state feel more pleasant:

- ≥ **Tempo** the speed of the music
- ≥ **Mode** the key or tonality (groups of notes on which the music is based)



Low Arousal/Energy

FIGURE 2 - TWO-DIMENSIONAL MODEL OF MOODS AND EMOTIONS

**Tempo** refers to the speed or the pace of music and is typically measured by the number of beats per minute (BPM). Research has demonstrated (Garrido, Stevens, Chang, Dunne, & Perz, 2019) that when music is played to older adults at a slow to moderate tempo (e.g., Louis Armstrong's What A Wonderful World), it will result in greater interest than fast music (e.g., Connie Francis singing Everybody's Somebody's Fool).

While some people may respond well to any music that is familiar and liked regardless of tempo, music that is too fast can increase arousal in a way that is unpleasant and overwhelming, particularly for people who are already agitated.

Therefore, for many it may be preferable to pick something with a slow to moderate tempo to ensure the listener remains engaged without becoming overwhelmed. Based on this, our suggested songs in Appendix 5 are all below 120 BPM.

While it is possible to simply estimate whether or not a piece of music is slow, fast or moderate in speed without determining the exact BPM, in rough terms, a tempo can be regarded as slow if it is less than about 80 BPM, fast if it is greater than about 120 BPM, and moderate if it falls in between. If unsure, there are several ways that you can determine the BPM of a piece of music:

- Count the beats in the music per minute as you would when taking a pulse. Many metronome apps or websites have in-built 'tap tempo' functionality that allows you to tap along (or click along with a mouse) in time with the music, and see the BPM reading.
- Clap along with the music for one minute and count how many claps you do during this time.
- ≥ Find a listed tempo for that song, as provided in Appendix 5.

**Mode** refers to the *tonality* of the music — the *key*, or groups of notes on which the music is based. A lot of music in Western cultures is in either a *major or minor mode*. Songs in a major mode tend to sound happy and positive (e.g., *Ode to Joy*) whereas songs in a minor mode tend to sound sad (e.g., *The Sound of Silence*)<sup>1</sup>.

Research has found that music that is sad-sounding (in a minor mode) tends to increase experiences of negative emotions such as sadness in people with dementia (Garrido et al., 2019). While feeling sad or even crying while listening to music may not necessarily be a bad thing for most people, it may be best avoided for those with experiences of depression who may have more difficulty recovering from experiences of negative emotions, and more vulnerable individuals (see Chapter 1).

Determining the mode of a piece of music is not always easy, even for the musically trained. It is possible to search online for information about the 'key' the music is usually played in or to find the 'sheet music' or 'score' online. However, often the simplest option is to use your own best judgement on the general 'feel' or emotion conveyed by a song. The songs in Appendix 5 are mostly happy sounding (in major keys).

# TIME OF DAY, DOSAGE AND LISTENING ENVIRONMENT

As noted previously, people may have different needs at different times of the day. Many people living with dementia experience restlessness, fearfulness or agitation in the late afternoon or early evening, which can have a number of contributing factors. It is important to ensure that any physical issues such as pain or discomfort are addressed first.

However, with regular instances of restlessness and agitation that seem to have a predictable time of onset, it can be helpful to introduce music listening prior to the typical onset time of these symptoms. If for example, someone was to usually become agitated at 4pm, music listening could occur from 3:30pm with the intention of offsetting the agitation. For other people, mealtimes can be the time when music is particularly useful for reducing unsettled behaviour.

Music in slow to moderate tempos and in major keys tend to have more positive effects on the mood of people with dementia. It is also important to consider how often the person will benefit from listening to music and for how long. Research indicates that enjoyment of music tends to follow an inverted U-shape (Figure 3) – enjoyment increases according to how familiar it is to the listener. However, when the music becomes over-familiar, liking for the music decreases.

This is another example of a 'Goldilocks effect', in which moderate levels of familiarity tend to be 'just right'. How often each person will be able to listen to particular music without becoming bored with it will depend on several variables including their current memory functioning.

People with significantly impaired short-term memory are less likely to become over-familiar with a particular song even with regular listening.

It can be beneficial therefore to monitor and record responses in a music-listening diary for a period of 1-2 weeks (Appendices 6 and 7) in order to determine what that particular person's over-saturation point is for certain music.

<sup>1.</sup> You can hear a demonstration of major versus minor modes on the *Music for Dementia* website (within the Five-Step process). www.musicfordementia.com.au

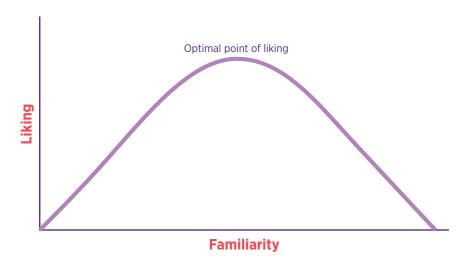


FIGURE 3 – INVERTED U-SHAPE RELATIONSHIP BETWEEN FAMILIARITY AND LIKING OF MUSIC.

Music that is moderately familiar is often preferred to music that is unfamiliar, or music that has been repeated too many times (and so is extremely familiar). Older adults in general, and people with dementia in particular, can be sensitive to noisy environments. Due to this it is important to always ensure that your audio device is not too loud when you begin playback. The listening situation can also be an important factor in whether or not the music listening experience will be a positive one for the individual.

Some individuals may find that listening to music with headphones helps to block out noises from the environment that may be disturbing. For others, it may be more useful to listen to music in a quiet place such as their own room.

Diary templates are included in Appendices 6 and 7 which can be used to monitor responses and record information that can help to determine the time of day, duration and frequency of listening sessions that works best for each person.

Ideally for those who tend to become bored with listening to the same music rather quickly it may be best to have several playlists for each situation in which the music might be used. These can then be rotated as needed so that over-familiarity with the music is less likely to occur.

#### **CHAPTER 4 SUMMARY**

- Emotions and moods can be understood in terms of both a) their arousal (or energy) levels, and b) their pleasantness or unpleasantness. This can be useful to keep in mind when trying to help someone reach a target emotional state.
- ≥ The tempo (speed) of the music, usually measured in beats per minute (BPM), can have a significant effect on arousal levels. Generally a moderate tempo (80-120 BPM) is ideal. You can find the approximate BPM of many songs listed on the *Music For Dementia* website and in Appendix 5.
- ≥ The mode or key of the music (e.g., major versus minor) can also have a significant effect on what response people have to music. Sad sounding songs (in minor keys) are more likely to have a negative effect on people identified as having Significant Vulnerabilities.
- ≥ Other aspects such as time of day, how often they hear the music and their familiarity with it, and the sound/noise level are also important to track and consider.
- ≥ The Diary Templates in Appendices 6 and 7 may be useful to help you track these aspects. By better understanding how the person responds to each of these aspects, you can make effective changes to their individual music care plan.



Using the information from Chapters 1 to 4, you can now create playlists for the person living with dementia under your care.

There are a number of options available to you for creating these playlists including:

- ≥ Using streaming services such as *Spotify* or *YouTube*
- Downloading music files to a storage or playback device
- Using music files that are already available to you such as from compact discs

Which option you choose depends on factors such as:

- ≥ the equipment you intend to use
- whether or not you will have internet access during music listening sessions
- ≥ your technical know-how, and
- whether or not you will use a free or paid source.

We will outline more information about each of these options below as well as considering issues surrounding the choice of playback devices, headphones and speakers.

#### **STREAMING SERVICES**

Streaming services include *Spotify, Apple Music*, and *YouTube/YouTube Music*.

These services all play music over the internet and do not require files to be downloaded.

A wide variety of music is available on these services, and most songs can be found quickly and easily. Playlists can be created directly within the streaming platform.

In general most streaming services require a paid monthly or annual subscription, but they are often reasonably priced and can be cheaper than purchasing multiple individual songs. Free versions are often available but usually include advertisements which may be distracting and confusing for people with dementia.

Some streaming services may also require that you have access to the internet while listening to the music, although some have options for accessing playlists when not connected to the internet. Two streaming platforms, *Spotify* and *YouTube*, will be discussed in more detail.

**Spotify.** The *Music for Dementia* website contains detailed information on how to use *Spotify* to create playlists, save music for offline use, and more. If you follow the Five Step process on the website, you will also receive some tailored playlists for you to use as a starting point. *Spotify* has both free and paid subscription options. The paid subscription provides advantages such as no advertisements during listening, flexibility in organising the order of songs in a playlist, and the ability to save songs to a device for offline playback.

Family accounts are also available which enable playlists to be created for multiple individuals. These are generally available to residential aged care facilities as well.

A free account will require continuous internet access to play music, is limited to having 15 playlists, and will play advertisements approximately every fifteen minutes. *Spotify* has a diverse range of songs, artists, and styles to choose from, is available on both handheld devices and computers, and is relatively intuitive to use.

**YouTube**. YouTube has the benefit of being relatively easy to use, and is available on both handheld devices and computers. However, unless you pay for a subscription you will receive advertisements before each song, and for longer songs you may encounter ads during songs.

This can be distracting and confusing for people living with dementia, and so is not ideal. Also, *YouTube* has both audio and video playback and so will use much more internet data than a strictly audio streaming service like *Spotify*, although settings can be adjusted so that only audio is used (see also, *YouTube Music*).

For *YouTube* members with a paid subscription you can also save and download songs, playlists, and albums for offline use.



#### **DOWNLOADING MUSIC FILES**

It is also possible to download songs for later playback from stores such as *Apple Music* or *Seven Digital*. For offline use, the songs have to be individually purchased, downloaded and then organised into playlists on a computer. They can then be loaded onto a storage device (such as an SD card or a USB thumb drive), or directly onto a playback device (such as a smartphone, an iPad, tablet, or MP3 player).

The advantages to downloading files is that there will be no need to worry about advertisements while playing, and that no internet connection is required during music listening sessions (although it is required when downloading songs). Songs are purchased individually for a reasonable price (usually around \$1-2 AUD).

However, it can be more time-consuming to set up playlists using this method, and in some circumstances can be more expensive, particularly where a large number of songs are required. Furthermore, the downloading of digital files is becoming less popular than the use of streaming services and therefore equipment for playing music files may become obsolete in the future and options for downloading music may become more limited.

# USING MUSIC YOU ALREADY HAVE

If the person with dementia who you care for has an extensive music collection of CDs, you may want to take advantage of this to create their playlists. It is seldom useful (for the purposes discussed in this Guide) to simply use the CDs in their current form. Most albums tend to include a mixture of music including some that is calming and some that is energising.

Some songs may be particularly meaningful to the individual with dementia and others they may not like at all. Therefore it is best to use a computer to extract songs that are most important to the individual and organise these into playlists according to the features discussed in previous chapters.

If your computer has a CD drive you will be able to copy song files from the CD and organise them into playlists that can then be loaded onto a storage or playback device as discussed in the previous sub-heading.

External disc drives can also be purchased to be plugged into computers that do not have disc drives. More information about how to do this can be found online (https://www.classical-music.com/features/articles/how-to-digitise-your-cd-and-

record-collections/)

There are also individuals and companies who can digitise music collections for you for a fee. Using the music you already have has the advantage of being cheap. A current music collection is also a great way to assess personal preferences. However, as noted above, devices and technology which allows this are slowly becoming obsolete and may be less readily available in the future.

It is also worth noting that for copyright purposes, you should only copy music tracks from CDs for the use of the individual to whom the CDs belong.

# HEADPHONES AND SPEAKERS

For some people living with dementia, unfamiliar music can be an unwelcome addition to the background noise of a residential care facility, and add to their confusion and distress (Joosse, 2012). Therefore, ideally, music playlists should be developed specifically for an individual and listened to by that person alone using good quality headphones.

This can be a useful way to block out distressing noise in the environment and allow the listener to focus on the music. Some headphones have enhanced noise-cancelling qualities if environmental noise is particularly problematic.

Some people with dementia may want to move around while listening to the music and wireless headphones can be ideal for this. Bluetooth headphones which connect wirelessly to the music playback device are commonly available, relatively inexpensive, and are reliable, as well as providing the advantage of not providing trip hazards or potentially distressing the listener if they become tangled in the cable. However, bluetooth devices have the disadvantage of needing to be regularly charged, and can be inconvenient for this reason.

Brands such as *JBL*, *Sony* or *Edifier* can be an affordable option for headphones that have good sound quality, are reliable, well-priced, and are relatively easy to use. It is generally best to choose on-ear headphones. These can often be used even when the individual uses a hearing aid and tend to be more comfortable and safer than ear buds. Ensure that the model you choose is padded both in the earcup and the headband for optimal comfort, and that the sizing is adjustable. If headphones are being shared it will be important to sterilise headphones between users with an appropriate antibacterial wipe.

When using headphones, it is important to be careful of the volume of the music. Music above a comfortable listening level can not only irreversibly damage hearing, but can also evoke a negative response to music. Be sure to check the sound level of every device before playback begins. A good rule of thumb is to begin with the music softer than you would expect, and then slowly bring it up to the desired level once you confirm the volume level is comfortable for the listener.

If you are using downloaded music files is also possible that different songs in a playlist will have different loudness levels; for example a pop/rock song may be substantially louder than a classical song that was recorded many decades earlier. Spotify automatically matches loudness levels of songs in a playlist, providing an additional advantage in using this platform. The loudness levels of YouTube clips are dependent on the person who uploaded it, and so this platform may have a lot of variation in loudness.

Many playback devices have a 'sound check' option that automatically lowers the level of a song that has been produced louder than normal. This can be helpful, although it may not fix issues such as a piece that contains dramatically louder and softer sections. Due to this, it is recommended to check all songs thoroughly before they are included in a playlist. Some long pieces of classical music may be quite changeable, starting softly and then increasing in loudness in the middle. Care should therefore especially be taken when selecting long classical pieces; if in doubt, try to choose shorter classical examples and check the sound levels all the way through.

There may be occasions when another person may wish to join in to the music listening. For example a carer, fellow resident, or family member may want to listen to the same music for the purposes of sharing memories, or observing the individual's response to the music. In this case, a splitter can be purchased which allows two sets of headphones to connect via cables to the playback device. Bluetooth wireless splitters can connect two sets of wireless headphones to the same device.

Another option in this situation is to use a speaker rather than headphones. For some people with dementia wearing headphones is too uncomfortable or unfamiliar and can cause some distress, particularly if they are connected by cable to a device. When that is the case, a small wireless or cabled speaker can be a good option.

For bluetooth loudspeakers the JBL 'Charge' series or the Ultimate Ears 'Boom' are suitable and affordable options. The Apple 'Homepod' will also work, although it must be controlled entirely via the listening device and so may be less intuitive for some users.

#### **PLAYBACK DEVICES**

Given the importance of monitoring listener responses to music, one of the key considerations in selecting a music playing device is the degree to which the device allows the carer to see which song is being played at any given time. Some people with mild dementia may also like to have the option of controlling the music player themselves. For this reason a playback device that has large, clear buttons often works best.

An iPad or tablet with wireless capacity has the advantage of being able to be connected to the internet to enable both use of streaming services such as *Spotify*, or the download of music files which can be organised into playlists directly on the device.

The songs being played are easily visible to both the listener and the carer, and can be easily accessed and played. iPads also have timer options which can allow the music to be switched off automatically after a certain period of time.

A smartphone is also a suitable option, but the smaller size can make it more difficult for older adults to use. Some Smart TVs also have the capacity to play music using streaming services such as *Spotify*, or for SD cards (data cards) or USB devices containing music files to be inserted. These can also be relatively easy for many older adults to learn to operate themselves.

Other options such as smart speakers can be programmed via the Google Home app (for example) to turn the music on at particular times of day. However, such automatic programming of music use would only be recommended after a trial period in which the response of the individual to the music has been closely monitored.

Smaller devices designed specifically for playing music such as iPods or MP3 players are becoming less commonly available for purchase and tend to have small screens and buttons that are difficult to operate. These also offer less ease of visibility for the person monitoring the playlist use.

Headphones with built in players are also generally not recommended since they typically do not allow the carer to see which songs are being played, and need a separate SD card (a data card) changed over for each new playlist.

#### **CHAPTER 5 SUMMARY**

- ≥ There are many methods you can use to play music and create music playlists. Choose an option that works best for you depending on the equipment you have, your internet access, technical know-how, and budget. You can also see additional information to how to use platforms like *Spotify* on the *Music for Dementia* website.
- Use of wireless headphones connected to a tablet or iPad is a good choice of equipment, but there are many other options available if this is not suitable.
- ≥ The information in this chapter relates to 'Step 2' on the *Music for Dementia* website.



# MONITORING AND MANAGING ADVERSE REACTIONS

# MANAGING NEGATIVE RESPONSES TO MUSIC

- Identify individuals with significant vulnerability.
- Have monitoring, support, and strategies for counteracting a negative response in place before the music listening begins.
- **3.** If a negative reaction occurs stop playing the music.
- Keep a record of the music that was being played, the time of day, listening situation and the response of the person.
- 5. Try some different music or apply strategies that have previously been found to distract or cheer up the person to counteract the immediate response.
- 6. Working from the records that have been taken, modify the playlists, listening situation or time of day the music is played based on observations, and try again.

As noted in Chapter 1, people in Stages 5-6 of dementia and those who are experiencing or have a history of depression or trauma, are more likely to experience a negative response to music. This can occur for various reasons, such as the triggering of memories.

Of course, it is not always detrimental for someone to cry when listening to music; people cry for many reasons, including when enjoying nostalgic memories, or as part of a natural and healthy grief response. However, at times a negative emotional reaction to music can be less helpful.

For example, some women who have a history of traumatic or abusive relationships may experience distress when listening to songs featuring intimate sounding male voices (such as the 'crooners' like Bing Crosby or Dean Martin). Others with clinical levels of depression may also become more depressed after listening to such music. However, these groups of people are still able to experience the benefits of music if appropriate strategies are put into place.

Firstly, extra care should be taken during the music selection phase to ensure that playlists do not contain music likely to trigger distressing memories, or contain features such as minor modes that may be more likely to create a negative response (see Chapter 4).

Additionally, it is also important that these individuals are closely monitored during music listening. This will allow adverse reactions to be quickly identified and appropriate support offered, and for playlists to be adjusted so that more helpful music is used in future. Where possible a trained psychologist, geriatric psychiatrist, pastoral care worker, or a nurse or caregiver familiar to the person with dementia should be on hand to offer support to those identified as more vulnerable, in the case of an adverse reaction. Alternatively, caregivers may keep on hand something that has been known to soothe the person with dementia in the past, such as a favourite object or activity.

The process of monitoring and adjusting playlists should be followed for all people with dementia involved in a music playlist program. However, this is particularly crucial for those identified as having Significant Vulnerabilities. The process can be thought of as a circular one in which playlists are monitored and updated as individual needs change or become clearer (Steps 3 to 5 on the *Music for Dementia* website).

Keeping a written record of response can help with identifying particular pieces of music that trigger negative responses, as well as music that is enjoyable and effective for the listener. Evidence suggests that as cognitive functioning declines the number of songs that will have a positive effect on that individual may narrow.

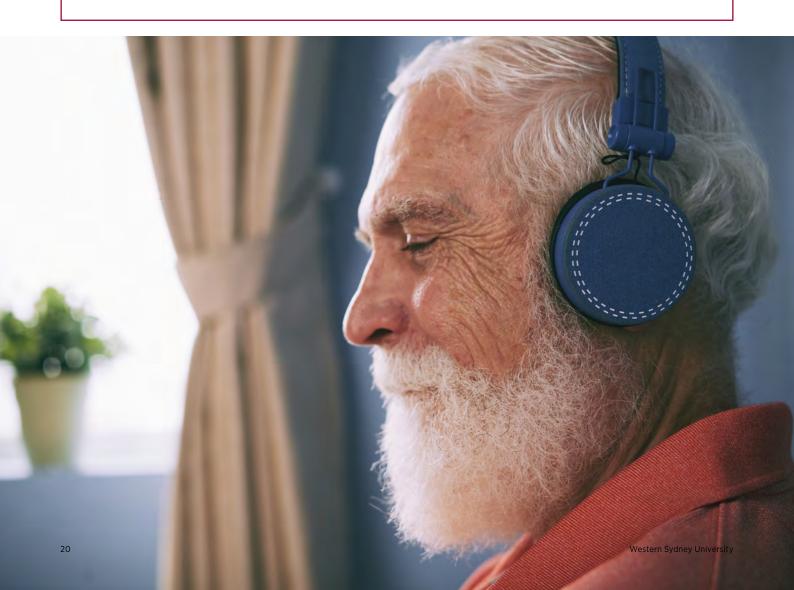
In the early to mid stages of dementia the individual may respond to a wide variety of music, yet as the condition progresses, they may begin to respond to only one or two key songs. Due to this, noting the songs that induce a particularly positive response for the listener is also helpful (see Appendices 6 and 7 for listening diary templates).

If a negative response does occur, it is best to stop the music immediately (if this is what the individual wants) and offer the person something else to listen to, or another form of support. It may be that the same music will be invoke a different response on another occasion. Or, with some slight adjustments to the time of day, the listening situation or the music selections, the experience may be more positive on subsequent occasions.

While the benefits of music listening are experienced by many, if a person continues to have a negative response with these measures in place, then it is possible that music may not be the right thing for that person. Regardless, it is always important to have a support system in place for the person, such as ensuring that a familiar person is nearby.

#### **CHAPTER 6 SUMMARY**

- While negative emotional responses to music are not always detrimental, particular care needs to be taken in the case of people identified as being especially vulnerable.
- Of key importance is the need to monitor the responses of vulnerable individuals when listening to music and to have pre-planned strategies in place for support should a negative reaction occur.
- Playlists should not be thought of as 'fixed' once created; instead they can be updated over time as individual needs and preferences become clearer or change over time.
- A listening diary such as the Music Care Plan (Appendix 7) can assist in monitoring responses and identifying songs or playlists that are effective in specific scenarios. As with playlists, the Music Care Plan should not be considered 'fixed', and can be changed over time.
- ≥ The information in this chapter relates to 'Steps 3 to 5' on the *Music for Dementia* website.



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# VULNERABILITY TO NEGATIVE AFFECT IN DEMENTIA SCALE (VNADS):

**QUESTIONS AND SCORING METHOD** 

#### **VERSION FOR THE PERSON WITH DEMENTIA**

Please tick the box in each row which shows the degree to which the individual agrees with these statements.

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE (NEUTRAL)	AGREE	STRONGLY AGREE
In the last 2 weeks I have had little interest or pleasure in doing things					
In the last 2 weeks I have felt down, depressed or hopeless					
Often throughout my life I have felt down, depressed or hopeless					
In the past 2 weeks I have felt so restless it is hard to sit still					
I have often had periods in my life where I felt so restless it was hard to sit still					
Sometimes I feel so upset that I want to hit or kick something					
Sometimes I feel so stirred up inside I want to scream					
Listening to music can sometimes bring back distressing memories					
Sometimes I get so stirred up by music that my emotions feel overwhelming					

See next page for notes on scoring

#### **FAMILY VERSION**

Please tick the box in each row which shows the degree to which you think these statements apply to the individual.

	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE (NEUTRAL)	AGREE	STRONGLY AGREE
In the last 2 weeks he/she has had little interest or pleasure in doing things					
In the last 2 weeks he/she has felt down, depressed or hopeless					
Often throughout his/her life he/she has felt down, depressed or hopeless					
In the past 2 weeks he/she has found it hard to sit still					
He/she has often had periods where he/she felt so restless it was hard to sit still					
Sometimes he/she feels so upset that he/she hits or kicks something					
Sometimes he/she feels so stirred up that he/ she screams					
Sometimes listening to music can bring back distressing memories to him/her					
Sometimes he/she experiences overwhelming emotions in response to music					

#### **SCORING METHOD:**

This scale is based on the Vulnerability to Negative Affect in Dementia Scale (VNADS: Moustafa, Garrido, & Jaroudi, 2021). In the Vulnerability Scale, all scores of either 'Agree' or 'Strongly agree' are considered 'above neutral'. To create the Vulnerability Scale score, add up how many responses (if any) fall into the 'above neutral' category.

No responses above neutral indicates No Vulnerability to negative affect. If 1 response is above neutral, this indicates Low Vulnerability.

If 2 responses are above neutral, this indicates Some Vulnerability. If 3 or more responses are above neutral, this indicates this person as having Significant Vulnerabilities.

# GLOBAL DETERIORATION SCALE, AND THE SEVEN STAGES OF DEMENTIA

The Seven Stages of Dementia and their characteristics are listed below, as reported in the Global Deterioration Scale (Reisberg, Ferris, de Leon, & Crook, 1982).

If a person with dementia is in Stage 5 or higher, much care should be taken with their music selection and their responses should be carefully monitored, as they can be considered Significantly Vulnerable.

#### Stage 1 (No Cognitive Decline)

These people appear normally clinical; they have no complaints of memory deficit and a detailed conversation does not elicit any evidence of memory deficit.

#### Stage 2 (Very Mild Cognitive Decline)

- The phase of forgetfulness, such as misplacing common objects and forgetting names.
- The person may often complain of these, although a detailed conversation does not elicit any evidence of memory deficit.

#### Stage 3 (Mild Cognitive Decline)

- The earliest clear-cut clinical deficits appear at this stage, although these may only appear in detailed conversation.
- Decreased ability in remembering names of people they have just been introduced to; they also may read a passage of a book and retain relatively little information.
- This decrease in performance may also appear in demanding employment and social situations. Difficulty in finding words and names, misplacing objects of value. Frequently, for the first time the person may become seriously lost when traveling to an unfamiliar location.
- ≥ Mild to moderate anxiety and denial may also accompany this stage.

#### Stage 4 (Moderate Cognitive Decline)

- Known as the "late confusional stage", there will be clear-cut clinical deficits in detailed conversation. These deficits will be in many areas, such as in serial subtractions. In particular, complex tasks will see reduced performance, although certain characteristics may remain preserved.
- The person will display decreased knowledge in recent events of their own life and current events around them. Detailed conversation will also show deficits in memory of their personal history. Difficulties in traveling alone and managing personal finances may become apparent.
- Familiar people can still be distinguished from strangers. Denial may become stronger here, and a flattening of affect (mood) and withdrawal from previously challenging situations may occur.

### Stage 5 (Moderately Severe Cognitive Decline)

- ≥ This is the phase of early dementia. People in this stage will typically require some assistance in daily life. Some serial tasks such as counting backwards from 40 by 4s may prove difficult.
- ≥ They are often unable to recall a major relevant aspect of their life, and may have difficulty in remembering details such as their address or telephone number, the names of family members and friends, or their high school/college. People in this stage are often somewhat unaware of time (date, day of the week, year, season) and place. People at this stage still retain knowledge of many important facts about themselves and others around them.

#### Stage 6 (Severe Cognitive Decline)

- This is the middle phase of dementia. People in this stage may sometimes forget the names of their spouse, immediate carer, and so on. They are largely unaware of recent events and experiences in their life, and their surroundings (the season, year, and outside events). They retain some knowledge of their past but this is incomplete.
- People in this stage will require substantial assistance with daily life. Frequently they will be able to continue distinguishing familiar from unfamiliar persons in their environment.
- ≥ Personality and emotional changes occur at this stage, although they are quite variable. These include confused behaviour such as believing a spouse is an imposter, or talking to imaginary figures or their reflections; obsessive repetitive acts; anxiety symptoms and agitation; cognitive abulia (i.e., loss of willpower that occurs because they cannot carry a thought long enough to determine a purposeful course of action).

#### Stage 7 (Very Severe Cognitive Decline)

This is the late dementia phase. All verbal abilities are lost, as are most or all psychomotor skills such as the ability to walk.

# **CHANGES TO BEHAVIOUR TEMPLATE**

Select how frequently the person living with dementia experiences the following changes to behaviour, and enter this score into the table below:

- 0 Never experiences
- 1 Experiences sometimes
- 2 Experiences semi-regularly
- 3 Experiences frequently

CHALLENGE TO CARE	SCORE
Agitation or anxiety	
Withdrawal or apathy	
Reduced verbal or social engagement	
Resistance to care situations such as showering, dressing or eating	
Restlessness, wandering or falls	
Problems sleeping	

#### Notes for scoring.

You should consider making a music playlist for each Change to Behaviour that receives a score greater than 0. The appropriate playlist can then be used when that Change to Behaviour is encountered. The score will indicate the priority level of this playlist. For example, if a Change to Behaviour receives a score of 3, we recommend you give this extra priority over a Change to Behaviour that receives a lower score.

#### Recommendations for Playlist Creation and Use for Specific Challenges to Care.

CHALLENGE TO CARE	PLAYLIST RECOMMENDATIONS*	RECOMMENDED PLAYLIST USE
Agitation or anxiety	Tempos less than 80 BPM	Use prior to known times of agitation; or as symptoms first arise
Withdrawal or apathy	Tempos between 80 and 120 BPM	Use prior to activities which you would like to motivate the individual to engage in, or in the mornings
Reduced verbal or social engagement	Ensure music is personally relevant; tempos less than 120 BPM	Use prior to opportunities for social engagement
Resistance to care situations such as showering, dressing or eating	Tempos less than 120 BPM	Use prior or during situations that cause resistance or agitation
Restlessness, wandering or falls	Tempos less than 80 BPM	Use prior to known times of day the behaviours typically occur, or as behaviours first arise
Problems sleeping	Tempos less than 60 BPM	Use after getting into bed or if they wake during the night

<sup>\*</sup>Note: All music should be selected with personal tastes and preferences in mind as detailed in Chapter 3. Music in major modes may be preferable for many individuals, particularly those identified as at high risk of negative responses (see Chapter 1).

# DETERMINING MUSIC PREFERENCES TEMPLATE

#### **VERSION FOR THE PERSON WITH DEMENTIA**

Adapted from Gerdner, Hartsock, & Buckwalter (2000). These responses can be useful when selecting music.

HOW IMPORTANT HAS MUSIC BEE	N TO YOU IN YOUR LIFE?		
O Very important	O Moderately important	O Slightly important	O Not important
DO/DID YOU PLAY A MUSICAL INS	TRUMENT? IF YES, PLEASE SPECIFY (	(E.G., PIANO, GUITAR)	
IF YES, HOW LONG HAVE YOU BEE	N PLAYING THIS INSTRUMENT?		
DO/DID YOU ENJOY SINGING? IF Y	YES, PLEASE SPECIFY (E.G., AROUND	-THE HOUSE, IN CHOIR ETC.)	
DO /DID VOLLEN LOV DANSINGO JE	VEC DI EASE SDESIEV (E.S. ATTEND	ED DANGE LEGGONG COCIALCY	
DO/DID YOU ENJOY DANCING? IF	YES, PLEASE SPECIFY (E.G., ATTEND	ED DANCE LESSONS, SOCIALS)	
	FERENT TYPES OF MUSIC. PLEASE IN VOURITE, AND 3 AS THE THIRD FAVO		URITE TYPES WITH 1 BEING THE
Country and Western musi	с	Folk and Traditional mus	sic
Classical music		Popular music (including	g Rock and Roll)
Hymns and Religious music	С	Jazz and Blues	
Other (write down genre/s	)		
DO YOU PREFER:		0.5.11	
O Vocal music	O Instrumental music	O Both	
PLEASE IDENTIFY AS MANY SONG	S AS YOU CAN THINK OF THAT MAKE	YOU FEEL HAPPY:	

# APPENDIX 4 (CONTINUED)

PLEASE IDENTIFY ANY SPECIFIC SONGS THAT YOU CAN THINK OF WHICH YOU FIND SAD OR DISTRESSING TO LISTEN TO.
PLEASE IDENTIFY SPECIFIC ARTISTS OR PERFORMERS THAT YOU ENJOY LISTENING TO THE MOST.
NAME COME ALBUMS THAT YOU HAVE IN YOUR REDCONAL MUCIC LIBRARY
NAME SOME ALBUMS THAT YOU HAVE IN YOUR PERSONAL MUSIC LIBRARY.

# DETERMINING MUSIC PREFERENCES TEMPLATE

#### **FAMILY QUESTIONNAIRE**

Adapted from Gerdner, Hartsock, & Buckwalter (2000). Please complete this questionnaire based on your knowledge of the music preferences of the person living with dementia. These responses can be useful when selecting music.

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# APPENDIX 4 (CONTINUED)

PLEASE IDENTIFY ANY SPECIFIC SONGS THAT YOU CAN THINK OF WHICH MIGHT MAKE THE INDIVIDUAL FEEL SAD OR THAT COULD BE ASSOCIATED WITH DISTRESSING MEMORIES.
PLEASE IDENTIFY SPECIFIC ARTISTS OR PERFORMERS THAT THE INDIVIDUAL MOST ENJOYS LISTENING TO.
NAME SOME ALBUMS THAT THE INDIVIDUAL HAS IN HIS/HER PERSONAL MUSIC LIBRARY.

# **EXAMPLES OF SONGS**BY GENRE AND DECADE

Listed here are some example songs to consider, sorted by Genre and listed by increasing BPM.

Note that for all songs the tempo (BPM) is an approximation, and can vary by the specific recorded version being used. Additionally, many classical pieces have variations in tempo and dynamics throughout the performance. This is particularly the case for longer works (e.g., when a complete work is used, rather than just a single movement/section).

#### **CLASSICAL MUSIC**

TITLE	ARTIST/COMPOSER	APPROX. DURATION	APPROX. BPM	DECADE
Gymnopedie No. 1	Satie	3:26	40	N/A
Canon in D	Pachelbel	6:16	40	N/A
Arioso, from Cantata BWV 156	Bach	4:03	44	N/A
Nimrod, from Enigma Variations	Elgar	4:20	52	N/A
Meditation, from Thais	Massenet	6:22	52	N/A
Adagio in G Minor	Albinoni	8:56	53	N/A
Trumpet Concerto in D	Telemann	1:59	58	N/A
Sheep May Safely Graze	Bach	5:35	60	N/A
Nessun Dorma	Puccini	3:00	60	N/A
Piano Concerto No. 21 , Andante	Mozart	7:43	60	N/A
Jesu, Joy of Man's Desiring	Bach	3:43	65	N/A
Clarinet Concerto, Adagio	Mozart	6:40	67	N/A
Ave Verum Corpus, K618	Mozart	3:03	70	N/A
String Quartet in F	Hoffstetter	8:59	72	N/A
Ave Maria	Caccini	6:02	74	N/A
Nocturne in E flat major, Opus 9, No. 2	Chopin	3:21	74	N/A
Claire de Lune	Debussy	2:04	74	N/A
Air on the G string	Bach	3:48	78	N/A
Mio Babbino Caro	Puccini	2:07	80	N/A
Magnificat, Gloria Patri	Bach	2:19	80	N/A
Cello Suite No. 1, 1st movement	Bach	2:32	80	N/A
Be Thou But Near	Bach	2:34	84	N/A
Minuet, from Quintet in E major	Boccherini	4:11	88	N/A
On the Beautiful Blue Danube	Strauss	11:59	96	N/A
Peer Gynt Suite No 1., Morning Mood	Grieg	3:53	100	N/A
Dance of the Swans	Tchaikovsky	17:50	100	N/A

#### **COUNTRY AND WESTERN MUSIC**

TITLE	ARTIST/COMPOSER	APPROX. DURATION	APPROX. BPM	DECADE
Blueberry Hill	Gene Autry	2:12	43	1940
My Favorite Memory	Merle Haggard	3:05	50	1970
Kern River	Merle Haggard	3:22	50	1970
Honey Come Back	Glen Campbell	2:58	51	1970
You Could Be Coming To Me	The Statler Brothers	2:53	51	1970
She Believes In Me	Kenny Rogers	4:18	67	1970
Bouquet of Roses	Eddy Arnold	2:32	68	1940
You Were Always On My Mind	Willie Nelson	3:32	72	1970
Lay Lady Lay	Bob Dylan	3:17	78	1960
Are The Good Times Really Over	Merle Haggard	4:13	78	1970
When My Blue Moon Turns to Gold Again	Walker & Sullivan	2:35	79	1940
The Song from Moulin Rouge	Andy Williams	2:23	82	1950
Country Roads	John Denver	3:17	84	1970
Tennessee Waltz	Patti Page	3:05	87	1950
You Are My Sunshine	Elizabeth Mitchell	2:48	92	1960
Southern Nights	Glen Campbell	3:00	96	1970
Ramblin' Fever	Merle Haggard	3:09	98	1970
Satin Sheets	Jeanne Pruett	3:03	100	1970
Fire On the Mountain	Marshall Tucker Band	3:56	102	1970
Hello Mary Lou	The Statler Brothers	2:17	104	1970
We'll Sing in the Sunshine	Gale Garnett	2:59	107	1960
Mexicali Rose	Johnny Bond	2:47	110	1940
Smoke On the Water	Red Foley	2:43	111	1940
Wild Side of Life	Hank Thompson	2:44	116	1940
The Rains Came	Freddy Fender	2:16	116	1960

#### **FOLK AND TRADITIONAL MUSIC**

TITLE	ARTIST/COMPOSER	APPROX. DURATION	APPROX. BPM	DECADE
Scarborough Fair	N/A	3:13	45	N/A
Winterlude	Bob Dylan	2:22	51	1970
Nottamun Town	N/A	2:29	55	N/A
Johnny Has Gone For A Solider	N/A	2:50	55	N/A
Boll Weevil Holler	Vera Holler	2:03	58	1960
Ailein Duinn	N/A	4:47	58	N/A
Proud Maisie	Davy Graham & Shirley Collins	1:45	70	1960
Waly (The Water Is Wide)	N/A	3:36	72	N/A
Tom Bowling	N/A	4:32	76	N/A
The Carnival is Over	The Seekers	3:13	76	1960
Bridge Over Troubled Water	Simon & Garfunkel	4:52	79	1960
Sweet Polly Oliver	Britten	2:19	82	N/A
Marble Halls	Balfe	4:28	90	N/A
Dress Rehearsal Rag	Leonard Cohen	6:06	94	1960
All Kinds of Everything	Dana Scallon	3:05	100	1970
The Minstrel Boy	Moore	3:24	107	N/A
We'll Sing in the Sunshine	Gale Garnett	2:59	107	1960
The Foggy, Foggy Dew	N/A	3:27	112	N/A
The Lincolnshire Poacher	N/A	2:52	120	N/A

#### **HYMNS AND RELIGIOUS MUSIC**

TITLE	ARTIST/COMPOSER	APPROX. DURATION	APPROX. BPM	DECADE
Deep River	N/A	3:58	40	N/A
It Is Well Within My Soul	N/A	4:11	46	N/A
Swing Low, Sweet Chariot	N/A	2:22	55	N/A
How Great Thou Art	N/A	4:54	56	N/A
Nearer to God, To Thee	N/A	3:27	59	N/A
Let All Mortal Flesh Keep Silent	N/A	3:55	65	N/A
Great Is Thy Faithfulness	N/A	4:31	73	N/A
A Mighty Fortress is Our God	N/A	3:44	77	N/A
Onward Christian Soldiers	N/A	4:27	78	N/A
Give Me Jesus	N/A	4:11	85	N/A
Amazing Grace	N/A	4:08	88	N/A
Jerusalem	N/A	2:50	95	N/A
All Things Bright and Beautiful	N/A	4:21	98	N/A
Just A Closer Walk With Thee	N/A	2:51	103	N/A
Come You Not From Newcastle	N/A	1:13	108	N/A

#### **JAZZ AND BLUES MUSIC**

TITLE	ARTIST/COMPOSER	APPROX. DURATION	APPROX. BPM	DECADE
The Nearness Of You	Al Jarreau	3:43	48	1930
Can't Help Lovin' Dat Man	Ava Gardner	3:23	56	1960
Blue in Green	Miles Davis	5:38	58	1950
Body and Soul	Frank Sinatra	4:19	58	1940
Strange Fruit	Billie Holliday	3:12	58	1930
When I Fall In Love	Nat King Cole	3:10	60	1950
I'll Be Seeing You	Billie Holiday	3:31	64	1940
My Funny Valentine	Chet Baker	2:21	65	1950
Summertime	Ella Fitzgerald & Louis Armstrong	4:58	66	1950
Blues in the Night	Ella Fitzgerald	7:11	72	1940
Gee Baby, Ain't I Good To You	Kenny Burrell	4:25	73	1960
Georgia On My Mind	Hoagy Carmichael	3:58	76	1930
Ev'ry Time We Say Goodbye	Ella Fitzgerald	3:34	80	1950
A Tisket A Tasket	Ella Fitzgerald	2:37	81	1940
Non Je Ne Regrette Rien	Edith Piaf	2:22	88	1960
Dream A Little Dream	Louis Armstrong	3:14	92	1960
Memories of You	Benny Goodman	3:21	100	1940
Ain't Misbehavin'	Fats Waller	3:58	102	1940
I Get Along Without You Very Well	Chet Baker	3:01	103	1950
St Thomas	Sonny Rollins	6:46	106	1950
Bop Look and Listen	George Shearing Quintet	2:57	114	1950
The Girl From Ipanema	Carlos Jobim	5:22	118	1960
Thunder Walk	George Benson	4:42	120	1960
Fly Me To The Moon	Frank Sinatra	2:27	120	1960

#### POPULAR MUSIC (INCLUDING ROCK AND ROLL)

TITLE	ARTIST/COMPOSER	APPROX. DURATION	APPROX. BPM	DECADE
The Way You Look Tonight	Tony Bennett	3:18	50	1950
Vincent	Don Maclean	3:58	54	1970
Danny Boy	Various	4:48	55	1940
Because You're Mine	Mario Lanzo	3:30	58	1950
Can't Help Falling In Love With	Elvis Presley	3:02	58	1960
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In the Wee Small Hours of the Morning	Frank Sinatra	2:59	59	1940
Que Sera	Doris Day	2:32	62	1950
Don't Worry 'Bout Me	Billie Holiday	3:11	64	1940
Secret Love	Doris Day	3:37	64	1950
Unchained Melody	Righteous Brothers	3:37	67	1950
Donna	Ritchie Valens	2:58	68	1950
Juliet	The Four Pennies	2:23	68	1960
I Will Always Love You	Dolly Parton	3:19	68	1970
Blue Moon	Dean Martin	3:04	70	1950
Bring It On Home To Me	Sam Cooke	2:42	71	1960
You Belong to Me	Jo Stafford	3:18	72	1950
I'll Be Home	Pat Boone	2:54	72	1950
Hey Jude	The Beatles	8:10	72	1960
Puppy Love	Paul Anka	2:43	72	1970
We Belong Together	Ritchie Valens	1:56	73	1950
Hello Young Lovers	Frank Sinatra	3:32	76	1950
Save the Last Dance for Me	The Drifters	2:29	76	1960
I Honestly Love You	Olivia Newton John	3:40	76	1970
You'll Never Walk Alone	Gerry and the Pacemakers	2:48	76	1960
Let It Be	The Beatles	4:03	77	1960
White Cliffs of Dover	Vera Lynn	3:03	78	1940
Son Of A Preacher Man	Aretha Franklin	3:19	78	1960
Help Me Make it Through the Night	Kris Kristofferson	4:05	78	1970
Let's Do It (Let's Fall In Love)	Ella Fitzgerald	3:35	79	1950
These Arms of Mine	Otis Redding	2:33	79	1960
Hi-Heel Sneakers	Tommy Tucker	4:03	81	1960
If You Were the Only Girl in the World	Dick Haymes	2:53	85	1940
I Can't Tell You Why	The Eagles	4:55	85	1970
It's Only Make Believe	Conway Twitty	2:35	86	1960
Unforgettable	Nat King Cole	2:31	90	1950
Moon River	Andy Williams	2:44	90	1960
You Made Me Love You	Dean Martin	3:21	91	1950
You're a Lady	Peter Skellern	4:35	92	1970
Natural Woman	Aretha Franklin	2:44	95	1960
Lily Marlene	Marlene Dietrich	3:24	97	1940
The Look Of Love	Dusty Springfield	3:30	97	1960
Silver Bells	Dean Martin	2:24	98	1950
Edelweiss	Rogers & Hammerstein	1:43	99	1950
White Christmas	Bing Crosby	2:57	100	1940
Try Me	James Brown	2:33	102	1960

Magic Moments	Perry Como	2:39	104	1950
Sitting On The Dock At The Bay	Otis Redding	2:43	104	1960
Something Stupid	Frank Sinatra & Nancy Sinatra	2:38	105	1960
Perhaps	Doris Day	2:43	105	1950
Stand By Your Man	Tammy Wynette	2:13	106	1970
Roses are Red	Bobby Vinton	2:38	108	1960
Wishin' and Hopin'	Dusty Springfield	2:57	108	1960
How Deep Is Your Love	Bee Gees	3:58	108	1970
When I Grow Too Old to Dream	Foster & Allen	2:21	110	1940
Just An Old Fashioned Girl	Eartha Kitt	2:51	110	1950
Penny Lane	The Beatles	3:00	114	1960
And I Love Her	The Beatles	2:29	114	1960
Suspicious Minds	Elvis Presley	4:32	114	1960
Tell Laura I Love Her	Ricky Valance	2:40	116	1960
Walking the Dog	Rufus Thomas	2:38	118	1960
Catch a Falling Star	Perry Como	2:30	120	1950
Day-O (Banana Boat Song)	Harry Belafonte	3:06	120	1950
Little Egypt	Elvis Presley	2:18	120	1960
Your Love Has Lifted Me Higher and Higher	Rita Coolidge	4:26	120	1970
At Seventeen	Janis lan	4:59	120	1970
Cupid	Sam Cooke	2:38	120	1960

# TEMPLATE FOR RATING STRENGTH OF RESPONSE TO MUSIC

Adapted from Samson, Dellacherie, & Platel (2009).

Score each piece of music played using the following rating scale:

1. Lack of recognition or interest

Name:

- 2. No sign of recognition, slight interest
- 3. Weak familiarity (e.g., facial expressions or humming)
- 4. Moderate familiarity verbalised (e.g., 'I may have heard this before')
- 5. Stronger familiarity verbalised (e.g., 'I have known this song for a long time')
- 6. Remembering specific memories (e.g., 'I heard this when...')

SONG NAME	RATING

Date:

<sup>\*</sup>Note - Playlists should be comprised of the songs with the highest ratings since these are the most strongly connected with personal memories.

# LISTENING DIARY & MUSIC USAGE PLAN TEMPLATE

#### **LISTENING DIARY**

Keep a record of music listening and the person's response over a 2-week period in the template below.

Name	Date:
Name:	Date:

DAY & TIME	MOOD PRIOR TO LISTENING	LISTENING SITUATION (HEADPHONES; PRIVATE AREA)	SONGS PLAYED	REACTION	COMMENTS

#### **DEVELOPING THE MUSIC USAGE PLAN**

To develop a plan for future music use with each person with dementia consider the following questions based on the data recorded in the Listening Diary:

- 1. Which particular songs were useful for reducing agitation?
- 2. Which particular songs were useful for increasing alertness?
- 3. Which songs were useful for distracting the person or managing difficult behaviour?
- 4. Which songs were useful for cheering the person up?
- 5. Which songs were useful for helping the person to sleep?
- 6. Which songs resulted in negative reactions? Have these been deleted from the playlists?

TIME OF DAY TO BE USED

(E.G., A.M., BEFORE

- 7. Which times of day was it most useful to play music to this person and which playlist was used at these times?
- 8. Which listening situation was most comfortable for the person? (E.g., did they prefer to listen without headphones, and in a solitary place?)

SYMPTOMS FOR WHICH

IT IS USEFUL

Date:

**HOW OFTEN TO BE USED** 

(E.G., ONCE PER DAY)

**HOW LONG TO BE USED** 

(E.G., 30 MINS)

9. On average, how long did the person listen before losing interest?

10. How often during a 1-week period was this person able to listen to the same playlist before it lost its effect?

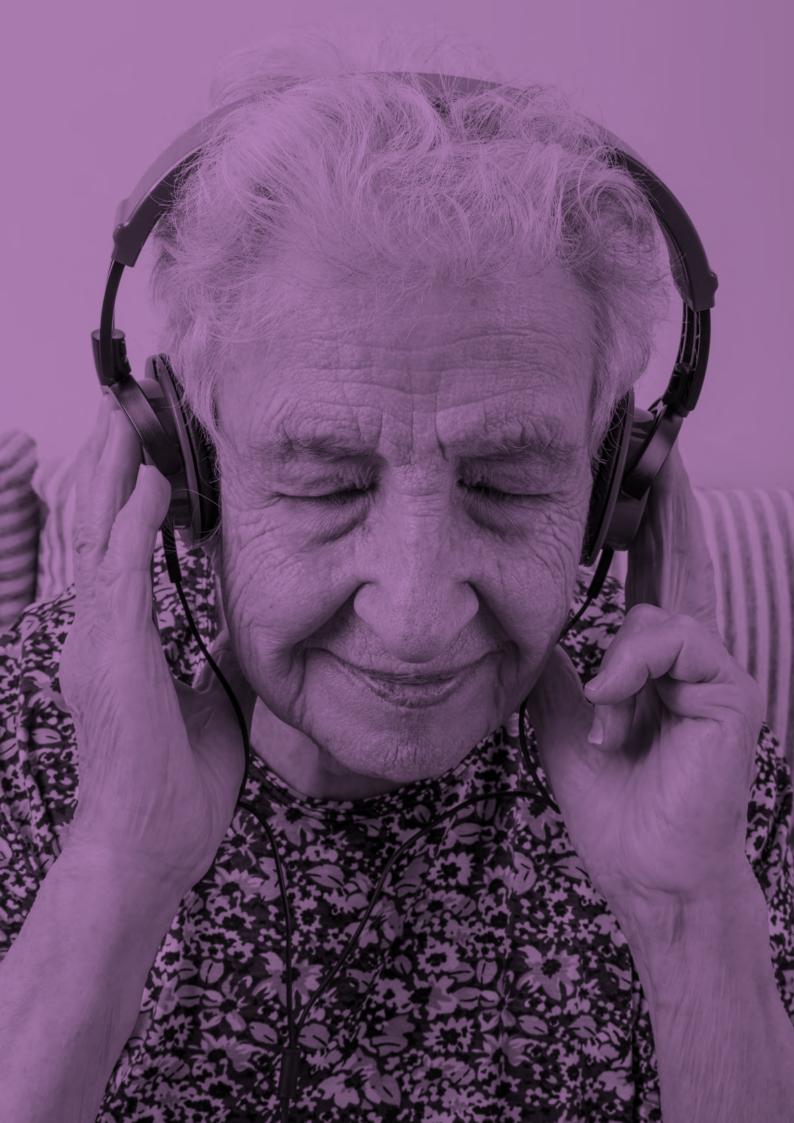
Next, use the template on the following page to create a specific usage plan for each music playlist that has been created

Template for Music Usage Plan

Name:

**PLAYLIST NAME** 

SLEEP)	(E.G., WHEN AGITATED)	



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