



# Music for Mood & Memory

The Benefits of Music for People with Alzheimer's Disease and Dementia

# Music for Mood and Memory: The Benefits of Music for People with Alzheimer's Disease and Dementia

Listening to and playing music is an activity that enriches us throughout our lives, from birth to death and it is a medium which has been proven time and time again to promote happiness in your life and in the lives of those around you.

Music is not just for the purposes of art, entertainment and pleasure but is also medicine for the body and soul. It is intrinsic to all cultures and playing music is one of the few activities that involve using the whole brain. Playing music has surprising benefits not only for learning language, improving memory and focusing attention, but also for physical coordination and development.

For these reasons music should play an active part in everyone's life, even when it might appear that there is no benefit at all.

## The Benefits of Music for Seniors

The benefits of music for seniors are very well known and have been the subject of numerous studies like the one conducted by Suzanne Hanser, chair of the music therapy department at the Berklee College of Music in Boston. Hanser's study identified the following specific health benefits of music-making for older adults:

- Lowers blood pressure
- Decreases heart rate
- Reduces stress
- Lessens anxiety and depression
- Enhances immunological response, which enables us to fight viruses

Outdoor musical instruments for seniors such as those made by Percussion Play are designed to encourage people of all ages to participate in making music and to enjoy the health benefits that Hanser and others identify. By encouraging seniors to use rhythm instruments, music-making also doubles up as physiotherapy because outdoor musical instruments require the use of a variety of different grips and hand positions in order to produce a sound. This means that when seniors play the instruments they are not only working to maintain their coordination and balance, but improving their mobility and posture, increasing their energy levels, developing the use of their fine and gross motor skills, and perhaps even more importantly, they are having fun and living in the moment!

The fact that music enhances mood and increases feel-good feelings in seniors is supported by evidence from a Stanford study that conducted research into 30 depressed people over 80 years of age.

The study concluded that participants in a weekly music therapy group were less anxious, less distressed, and had higher self-esteem than those who did not (1)

The instruments made by Percussion Play are specially designed so that whichever order the notes are played in, the sound is always harmonic. This means that feelings of frustration in the musician are eliminated because anything and everything they play sounds right. This inspires self-confidence and reduces stress and anxiety which is important in senior care. Because the musical instruments made by Percussion Play produce pleasing harmonies regardless of how they are played, there are no rules or limitations, and the person playing the instrument does not feel restricted in any way. This encourages freedom of expression and satisfaction, aspects of life that are often sadly lacking in the elderly.

## Alzheimer's and Dementia

The restorative power of music to heal us is even more noticeable in the lives of seniors who are suffering from Alzheimer's disease and dementia. According to the Alzheimer's Society, there are currently over 5.5 million Americans living with dementia and more than 520,000 in the UK.(2) The disease is so prevalent that the American Society for Consultant Pharmacists has stated that Alzheimer's disease and dementia are among the most common chronic diseases afflicting seniors today. (3)

Alzheimer's disease is a degenerative and progressive form of dementia that occurs when proteins build up in the brain. This leads to damage and loss of connectivity between nerve cells and then, as the disease progresses, to the eventual death of nerve cells and the loss of brain tissue. Because Alzheimer's is a progressive disease, over time more and more parts of the brain

become damaged and the symptoms of the disease become more severe. The later stages of dementia can involve problems with:

- memory loss
- communication
- reasoning
- orientation

## The Benefits of Music for Alzheimer's and Dementia

The results of a recent Stanford University study<sup>1</sup> shows that music engages areas of the brain which are involved with paying attention, making predictions and updating events in our memory, meaning that listening to and playing music is particularly beneficial for people with Alzheimer's Disease and dementia because the music targets the areas of the brain that are most affected by the disease.

Whilst there is still no cure for dementia, there is evidence that playing an instrument can significantly lower the risk of contracting the disease in the first place. One study into brain plasticity concluded that seniors over the age of 75 who frequently played a musical instrument were less likely to have developed dementia when compared to those who rarely played a musical instrument.<sup>2</sup>

It should be no surprise then that research has also shown that playing instruments also benefits those who are living with dementia, regardless of whether they have previously played an instrument. One of the reasons why music therapy in general, and playing musical instruments, is so good at helping people living with dementia is because individuals in the later stages of the disease are often non-verbal and can become agitated and frustrated by sensory overload.

Engaging people living with dementia in singing, rhythm playing, dancing, physical exercise, and other structured musical activities can alleviate this behavior and offer a powerful distraction from the agitation and frustration that the individual usually feels. Outdoor musical instruments in senior living, care homes, and nursing homes, such as those produced by Percussion Play, are particularly beneficial for patients as they encourage the dementia patient to exercise and to play music at the same time.

Researchers at the University of Miami have recently revealed that music therapy with Alzheimer's patients leads to increased levels of melatonin, serotonin, norepinephrine, epinephrine and prolactin. The study concluded that the *increased levels of melatonin in particular may have contributed to the patients' relaxed and calm mood.*<sup>3</sup>

The increase of these feel good chemicals in the brain can result in the following:

- mood is boosted
- stress is reduced
- agitation is reduced
- coordination is improved and
- cognition is improved

The Miami study also concluded that even when the Alzheimer's disease progresses and the cognitive function of the brain begins to decline, the human brain still naturally responds to music and these benefits continue even after the music stops playing.<sup>4</sup>

For this reason, outdoor musical instruments such as the ones designed and produced by Percussion Play have a really important place in the therapy for people living with dementia. Even a short session making music and playing with the instruments can have a long-lasting impact on the person's mood and on their brain function.

Dementia is a disease which in the early stages causes the person living with it to become anxious, irritable and depressed with many becoming withdrawn and losing interest in activities and hobbies. Music has been proven time and time again to be a

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<sup>1</sup> EurekAlert Website

<sup>2</sup> Wan Y and Schlaug G, 'Music Making as a Tool for Promoting Brain Plasticity across the Life Span'

<sup>3</sup> Kumar AM, Tims F et al 'Music Therapy Increases Serum Melatonin Levels in Patients with Alzheimer's Disease', 1999

<sup>4</sup> ibid

medium which continues to inspire and connect the individual even when interest in other pursuits has diminished. Indeed, the response to playing music of many individuals suffering from dementia has been significant and unexpected. For example, even when an individual is in the end stages of dementia and experiencing more pronounced problems with thinking, reasoning, perception and communication, they are still able to engage in music on some level, particularly rhythm playing and singing. This is because these activities do not require cognitive functioning for success.

## The Benefits of Music for Memory

One of the most powerful properties of music is that it has an amazing ability to reach parts of the damaged brain in a way that other forms of communication cannot. Therefore, music therapy for dementia patients- especially therapy involving outdoor musical instruments is so effective.

Outdoor music-making is particularly beneficial to seniors and to those living with dementia because it provides exercise and stimulation outside of the four walls of their living accommodation. Being outside in the fresh air has a hugely positive impact on a person's mental and physical health because it breaks up the monotony of the daily routine and enables the senior to access fresh air and sunlight - all of which are proven to improve mood and well-being. Being outside also means that the vitamin D which we need for healthy bones is naturally available. The fact that outdoor musical instruments are so engaging, pleasing to play, and suitable for all weathers means that people stay outside for much longer than they would perhaps do normally, therefore maximizing the health benefits that being outside provides.

Although memory loss is usually one of the earliest symptoms of Alzheimer's, it is common for someone with the disease to then go on to develop problems with other aspects of their thinking, reasoning, perception or communication. For example, it is not unusual for someone with Alzheimer's disease to experience difficulties with:

- language – they may repeat themselves or struggle to follow a conversation
- concentrating, planning or organizing. For example, they may not be able to make decisions, carry out tasks or solve problems.
- visiospatial problems. For example, judging distances and navigating stairs or other obstacles becomes much harder
- orientation – becoming confused or losing track of the day or date.

Listening to music can help to alleviate the symptoms of all the above but actively participating in making music on instruments like those produced by Percussion Play has even better results because the whole body is engaged both physically and mentally in creating, rather than just responding passively to, the sounds. Concetta Tomaino, the executive director and co-founder of the Institute for Music and Neurologic Function, states that:

*"We now know from clinical case studies that music can affect – in very specific ways – human neurological, psychological and physical functioning in areas such as learning, processing language, expressing emotion, memory and physiological and motor responses."*<sup>5</sup>

It would seem then that any opportunity to engage those experiencing loss of memory in active music making should be embraced, and music therapy is indeed becoming a regular activity in senior living communities across the globe. In America, some forms of music therapy are even covered by medical insurance, proof indeed of that the benefits of music making are now considered to be self-evident and irrefutable.

## The Benefits of Music for Communication

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<sup>5</sup> Altman, R 'The Powerful Effects of Music in Memory Care' 2013

Even in the later stages of dementia when all human interactions fail, patients can still connect with music and playing instruments together creates critical opportunities for connection between caregivers and patients alike because music functions to initiate and facilitate:

- sensory arousal
- sensory awareness
- familiarity
- comfort
- community
- success

Therefore, music therapy has been used for centuries to relieve stress and promote a sense of well-being in the individual. By incorporating music into the life of someone living with Alzheimer's or dementia, you can help him or her to experience its many profound benefits. Percussion Play understand this and create robust, tactile and aesthetically pleasing outdoor instruments that can be played easily by anyone, regardless of age or of their physical, mental or emotional state. Both carers and patients alike can experience the benefits that playing outdoor instruments presents and by doing so together can improve communication and bond over shared experience.

## The Benefits of Drumming

The use of drums for people living with dementia has proven health and social benefits. Drumming is a great social activity for older adults and supports social integration whilst reducing feelings of loneliness, anxiety and isolation. This is because drumming allows for non-verbal 'conversation' to take place as one drummer listens to and responds to the pattern of the other person's drumming. For people living with dementia and finding that their ability to communicate is reduced and their language skills compromised by the disease, the feeling of being able to communicate can be overwhelming and witnessing the change in the demeanour of their loved one as they rediscover their ability to communicate can be very moving for onlookers.

The outdoor drums made by Percussion Play can be played by more than one person at a time and so foster social interaction and a sense of community, aspects of life that are often missing for the dementia patient.

Among the other benefits of playing the drums are:

- improved musical coordination and brain activity
- physical therapy
- stress relief
- improved social skills such as team work
- Improved self-esteem
- Better self discipline
- improved abstract thought processes
- Improved ability for creative expression
- a balance for internal energy
- life-long enrichment
- a great mood lifter
- physical fitness
- responsibility
- fun alternative to other less productive activities.<sup>6</sup>

## The Power of Percussion Play

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<sup>6</sup> <https://www.newswiretoday.com/view.php?id=13547>

The outdoor musical instruments created by Percussion Play are diverse and accessible to everyone and make perfect additions to any setting, particularly gardens and social spaces in senior living communities, care homes, nursing homes, hospices, and hospitals, where they can be used and enjoyed by both residents and their carers. Anyone and everyone can access the health benefits that playing these wonderful instruments provides and Percussion Play instruments are currently being installed in these types of setting all over the world.

## References

Altman, R 'The Powerful Effects of Music in Memory Care' 2013

The Alzheimer's Society Website- Accessed 20<sup>th</sup> November 2017  
[https://www.alzheimers.org.uk/info/20007/types\\_of\\_dementia/2/alzheimers\\_disease/2](https://www.alzheimers.org.uk/info/20007/types_of_dementia/2/alzheimers_disease/2)

EurekaAlert! Website- Accessed 29/11/2017  
[https://www.eurekaalert.org/pub\\_releases/2007-08/sumc-mmb073007.php](https://www.eurekaalert.org/pub_releases/2007-08/sumc-mmb073007.php)

Friedman, 'Healing Power of the Drum', 1994

Hanser, Suzanne 'Effects of Music Therapy Strategy on Depressed Older Adults' 1994

Kumar AM, Tims F et al 'Music Therapy Increases Serum Melatonin Levels in Patients with Alzheimer's Disease', 1999

Newswire Today Website – Accessed 21<sup>st</sup> November 2017  
<https://www.newswiretoday.com/view.php?id=13547>

Parent Giving Website – Accessed 29<sup>th</sup> November 2017  
<https://www.parentgiving.com/elder-care/common-chronic-conditions-and-aging-at-home//>

Salveson, M 'The Benefits of Music for Seniors with Alzheimer's and Dementia' 2015

Wan Y and Schlaug G, 'Music Making as a Tool for Promoting Brain Plasticity across the Life Span' 2010