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# TakeNote(s): Living Well Through Music

*By Reed Engel, MA, FAWHP, Director of Wellness Strategies*

*& Brittany Wright, Wellness Intern*

*Mather LifeWays Institute on Aging*

## Take Note(s): Living Well Through Music

Living well is easier than you think when you make small changes or additions to your daily routine. And sometimes seeing dramatic, positive results can happen with just the push of a button.

In today's tech-saturated era, everything continues to get smaller, more compact, and more portable, and music has obviously followed suit. Gone are the days of record players and 8-track tapes; the mp3-loving generation is in full swing now, and people just cannot seem to get enough of their pocket-sized music libraries. From reading, exercising, and traveling, to dining out and shopping, people everywhere can be seen donning headphones.

For centuries, humankind has gravitated toward handmade as well as engineered instruments, memorable melodies, and catchy choruses...but why? What is it about songs that captivate mass audiences? How does a vintage album become so valuable? Why do people today continue to jump on the iPod bandwagon? All in all, why is music such a big deal? The answers to these questions are important, especially in regard to cultivating health and well-being.

Music may appear to be nothing more than notes, words, and rhythms, but this art form is far more than the sum of its parts. This paper describes the various methods through which music can significantly influence one's well-being and illustrates the notion that incorporating music into daily life is impactful in many ways.

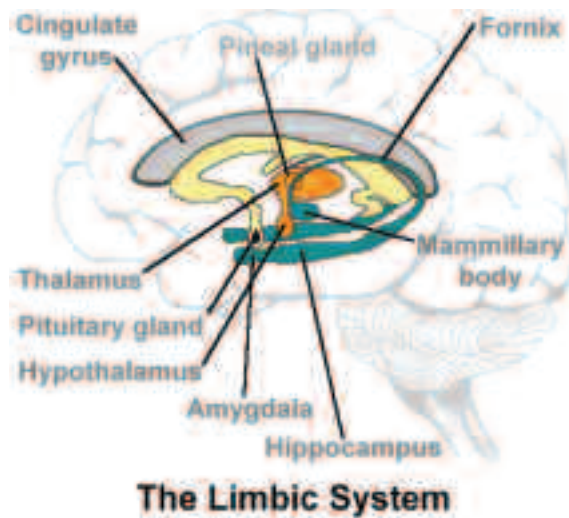
### MUSIC'S INFLUENCE ON THE HUMAN MIND

Aside from the frequent head-bobs and toe-taps that result from enjoying a good song, music touches people on a much deeper level. Evidence exists to suggest that even prehistoric cultures acknowledged the apparent powers of music (Clark 2005). For example, Egyptians once considered music to be the word of the gods, and the culture treated it as such. The philosopher Confucius believed that the state of society was directly reflected in and impacted by the state of music. Alexander the Great employed differing styles of music to inspire, motivate, and relax his troops. Finally, to this day, Chinese culture values the idea that music is vital to achieve perfect harmony.

All of these examples highlight the far-reaching and even historic acceptance of music's effective capabilities. For centuries, this art has been implemented and valued around the world for countless purposes. Presently, compositions continue to be used in diversified fashions to relay the benefits that come from taking pleasure in the oldies, the chart-toppers, and every tune in between.

A very interesting and applicable effect of music is how listening to songs can shift an individual's mood. As previously described, several historic cultures accepted that music had impact, but they did not have the technology or resources to discern why this was true. Today, scientists and researchers can determine a physiological reason for why and how music affects people. One of the most influential factors in the process of physiological change through music is the limbic system (Image 1).

## Take Note(s): Living Well Through Music



Located in the middle of the brain, the limbic system is one of its most ancient, primal portions. This means that instead of dealing with higher thought processes and functioning, this system runs on and influences instinct, mood/emotions, and sensations. How exactly is music associated with this region? When a person listens to a tune, the vibrations of the song travel into the brain via nerves, and when these vibrations reach the limbic system, it becomes activated. In turn, this activation stimulates the autonomic nervous system (ANS), which controls the body's cardiovascular, neuroendocrine, and immune systems. The stimulation of these systems results in many other physical elements being affected as well, including heart rate and endorphin levels (Clark 2005); however, the physiological impact of music does not stop there. In addition to arousing the ANS, tunes also touch the right hemisphere of the brain, the side of the brain associated with creativity and imagination. It is this portion of the cerebellum that allows for elaborative and outside-the-box thinking. It also governs the ability to be wrapped up in a good song. Through the accumulation of these physiological changes, music is capable of greatly influencing a person's inner-workings.

In addition to the direct physical influences that come from listening to music, songs also impact people as the brain processes them. There are two levels of processing involved in listening to music: unconscious and conscious. The conscious, and more obvious, processing level involves comprehending melody. People are fully aware of their appreciation of a song's melody as they sing, hum, or whistle along. This is often the most recognized part of any piece, and it works to activate one's intelligence and imagination. Processing the melody of a song is very conscious, and it allows people to knowingly acknowledge what songs or genres they do or do not like. In contrast, on an unconscious level, people identify with music through rhythm. The vibrations from the bass line, back beat, or percussion excite the ANS and therefore initiate the aforementioned domino effect of physiological systems.

## Take Note(s): Living Well Through Music

The combination of these physical changes and the conscious and unconscious levels of processing make music fully capable of shifting a person's mood. The technical term for this is the iso principle (Clark 2005), which describes when a person's mood is matched with a style of music and then his/her mood changes as the style of music changes. For example, if an individual feels very relaxed or tired, a slow, soothing song can be played, and if the song changes to a fast, upbeat song, the person will feel more energized and aroused as a result. People frequently use the iso principle perhaps without knowing it; oftentimes motivating, fast-paced songs pump up athletes for sporting events, or people might play relaxing melodies to unwind after a stressful day. In this way, it can be seen clearly just how powerful the iso principle is and how easily this technique can be implemented into everyday life.

### MUSIC THERAPY

Music therapy is a form of alternative medicine that is becoming increasingly popular even though it has been around for quite a long time. In fact, in Old English the word “heal” means to make a sound, and the word “sound” means health and wholeness (Clark 2005). These historic word derivations demonstrate just how long these concepts have been considered interrelated and interconnected. In the 1700s, doctors used music to treat depression, and Florence Nightingale employed music to ease soldiers' pain during the Crimean War. These examples illustrate how long music's healing abilities have been understood, and this knowledge still holds true today as many physicians and therapists turn to music therapy to help their patients.

Music therapy for pain management has been proven highly effective in many studies, and interestingly enough, just listening to music—any style of music—on a daily basis results in a drastic decrease in pain reported by patients. This form of therapy is effective for all age ranges, but it has been proven most successful for the older adult population.

Music therapy can also ease depression. When implementing the mood-shifting capabilities of music into a patient's treatment and usual routine, uplifting songs can have an elevating effect on mood (Hanser 1994). In numerous studies, patients consistently reported feeling less depressed and experienced fewer symptoms of depression overall.

A third and very interesting type of music therapy is called Rhythmic Auditory Stimulation (RAS), a technique designed to improve the movement and walking abilities of older adults, especially stroke victims or those suffering from Parkinson's (Thaut 1996). For these individuals, walking and other forms of movement can often be very difficult. RAS works by having such individuals listen to music with very steady, distinct beats as they participate in physical therapy exercises. Therapists encourage the individuals to make their movements to the beat, and

## Take Note(s): Living Well Through Music

this actually helps them to work longer, have smoother movements, move more quickly, and walk longer distances. Simply listening to music helps to further all of these great steps toward recovery and improvement for people who could otherwise be suffering.

In all cases, music therapy is an inexpensive, non-invasive, and safe form of therapy that can benefit people of all ages.

### MUSIC MEMORY

As countless individuals have certainly experienced, it can be a challenge to recall certain facts or pieces of information, but the lyrics of a song learned decades ago can be perfectly stated at the drop of a hat. This recollection phenomenon is known as music memory, which begins to form most fully between the ages of 15 to 25. At this time, its initiation brings about a person's ability to associate music or a specific song with memories of time, place, emotional state, and even a sense of identity; all the elements of where, when, and with whom an individual learned a song can potentially stay with him/her forever.

Music memory is so powerful in fact that some physicians have started to use it to treat Alzheimer's disease. While it is not a cure, tapping into music memory can help alleviate some of the most devastating symptoms, including memory loss (Cuddy 2004). Playing favorite or familiar songs for those suffering from Alzheimer's has been known to allow some to become vocal when they were otherwise mute, to get up and dance or just move after being stationary, and to express and detail memories that were thought to be lost forever. Truly, music's powers in this case are remarkable.

### INTEGRATING MUSIC ON A DAILY BASIS

There are multiple ways music can be positively implemented into one's daily life and routine. Even with a busy schedule, people can easily incorporate music into their hectic lifestyles and reap the many benefits. The first way is to utilize its relaxing qualities. Listening to soothing, calming melodies can ease stress, relieving physical and mental tensions and anxiety. Also, soft music is great when used as part of a cool down after exercising or as a way to drift off to sleep. A second way to use music daily is while exercising. Making music a part of any sweat routine is a great idea as this simple act can improve any workout. Studies comparing a control (no music) group with an experimental (music) group show that those in the experimental group were more diligent in their workouts, more persistent, returned to the gym more often, worked out for longer periods of time, and in the long run (literally!), remained more committed to their exercise plans (Edworthy 2006). With all of these factors combined, those who incorporated music into their workouts saw more long-term benefits than the control group, allowing for their health and wellness to be greatly impacted. So, whether you're exercising for fun, to lose weight, to gain muscle, or to become healthier, listening to music can help you improve your workouts and reach your goals.

## Take Note(s): Living Well Through Music

Third, individuals can further enjoy music by listening to it while at work. Numerous studies conducted in a wide spectrum of workplaces, from factories to offices, conclude that listening to music while working is very beneficial for employees, and resolutely, for companies (Lesiuk 2005). Employees who get some grooves going are more productive, efficient, diligent, and even report enjoying their job more than those who do not listen to music (Blood 1993). Tuning in to favorite tunes in the workplace also helps to break up the monotony of repetitive tasks or a boring, unpredictable schedule. Plus, listening to music at work has never been easier. With pocket-sized mp3 players and Websites like Pandora.com or Grooveshark.com offering access to millions of songs for free, there really is no excuse not to put in headphones and get to work.

### TURN ON SOME TUNES TODAY

From its therapeutic aspects and ability to boost physical activity, to helping with relaxation and stress management, music is one major and easy path to living well. So go ahead...live better—all with just the push of a play button.



Another Orange Paper  
from Mather LifeWays

## Take Note(s): Living Well Through Music

### **Reed Engel, MA, FAWHP, Director of Wellness Strategies**

Mr. Engel is responsible for development, training, and evaluation of Mather LifeWays' wellness initiatives for older adults, professionals that serve older adults, employees, and the public. Mr. Engel's prior experience included work in the United State Peace Corps as a health volunteer in the Republic of Kiribati where he was responsible for writing national food safety legislation, building the country's first youth wellness center, and assisting the Red Cross with strategic planning and fund-raising. Prior to that, he was the Director of Corporate Fitness Management for the National Institute for Fitness and Sport. In this position, he was responsible for corporate consulting, design and implementation, staffing, and evaluation of worksite health promotion facilities and programs. He also worked as Program Manager for Saint Francis Hospital overseeing the corporate and community-based fitness center and programs.

### **About Mather LifeWays**

Based in Evanston, Illinois, Mather LifeWays enhances the lives of older adults by creating Ways to Age Well<sup>SM</sup>. Founded in 1941 by entrepreneur and humanitarian Alonzo Mather, Mather LifeWays is a unique non-denominational, not-for-profit organization dedicated to providing a continuum of living and care; making neighborhoods better places for older adults to live, work, learn, contribute, and play; and identifying, implementing, and sharing best practices for wellness, workforce issues, memory care support, and empowering caregivers. To learn more about our senior residences, Community Initiatives, and Mather LifeWays Institute on Aging, call (847) 492.7500 or find your way to [www.matherlifeways.com](http://www.matherlifeways.com)

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