



## WHAT ARE FREENOTES INSTRUMENTS?

Freenotes Harmony Park Instruments are real pentatonic scale instruments designed for improvisational play to encourage learning music, rhythms and patterns in a way that allows success for every player. They can ignite a spark in a person that facilitates an interest in taking music lessons through assured success in a spontaneous atmosphere. Our instruments are ACCESSIBLE, AFFORDABLE and ENGAGING. They give all people access to music in a way they can't get anywhere else.

"Music expresses that which cannot be put into words and that which cannot remain silent." - Victor Hugo

Our instruments engage the **WHOLE PERSON**: the desire for language, the body's urge to move, the brain's attention to patterns, the ear's lead in initiating communication, the voice's response to sounds, as well as the eye-hand coordination associated with playing musical instruments. ([www.musikgarten.org](http://www.musikgarten.org))

## WHY MUSIC IS IMPORTANT FOR SENIORS/THE AGING POPULATION

William R. Klemm Ph.D. (Memory Medic and writer for Psychology Today) wrote: As my 80-year-old jazz trumpeter friend, Richard Phelps, recently said at his birthday party, "Where there is life there is music. Where there is music, there is life."

### **10 Benefits of Playing a Musical Instrument at ALL ages:**

1. Increases the capacity of your memory and sharpens concentration.
2. Stimulates brain activity: Music keeps your ears young. Older musicians don't experience typical aging in the part of the brain (the auditory cortex) that often leads to hearing troubles.
3. Creates a sense of achievement building self-esteem: Drumming is used by music therapists to help patients appropriately vent anger and other emotions.
4. Enhances coordination
5. Improves reading and comprehension
6. Enhances respiratory system: Playing music "significantly" lowered the heart rates and calmed and regulated the blood pressures and respiration rates of patients who had undergone surgery.
7. Fosters self-expression and relieves stress: Playing a musical instrument can reverse stress at the molecular level, according to studies conducted by **Loma Linda University School of Medicine and Applied Biosystems**.
8. Promotes social skills: Music can also be a great social activity for older adults, facilitating social bonding and decreasing feelings of loneliness or isolation.
9. Boosts listening skills: Another use of drumming can be a non-verbal conversation on drums where the ability to listen to the other person's drumming is needed to "converse" on the drums.
10. Promotes happiness in your life and those around you: **Stanford University School of Medicine** conducted a study with 30 depressed people over 80 years of age and found that participants in a weekly music therapy group were less anxious, less distressed and had higher self-esteem.



A Stanford study shows that music engages areas of the brain which are involved with paying attention, making predictions and updating events in our memory. The relationship between the motor and auditory parts of the brain is strengthened when physically playing music. Music programs are linked to improvements measured in markers of the body's immune system such as the presence of antibodies and vital signs (heart rate/blood pressure). It's suggested that this is a consequence of decreases in stress that can happen when taking part in musical activities. Blood samples from participants of an hour-long drumming session revealed a reversal of the hormonal stress response.

**VA Hospitals:** Studies show that music can trigger the brain to release chemicals that distract the body from pain. When music reaches the brain's auditory cortex, there's communication between the cortex and the brain's areas that control emotion, memory, and motor control. For these reasons approximately 50 qualified music therapists work in VA hospitals throughout the U.S., according to Al Bumanis, director of communications at the **American Music Therapy Association** and since 2005, the VA has more than doubled the number of music therapists at its clinics.

**Nursing Homes** are utilizing music strategically as well. Margaret Rivers of **Coler-Goldwater Specialty Hospital & Nursing Facility in New York City** told **Music & Memory** (an individualized music program) that: "One of the more positive results we're seeing [through music] is a reduction in the need for psychotropic medication. Music soothes the residents to the point where they actually may not need all of the medications that they needed prior..."

**Residential Care/Assisted Living Facilities** are experiencing spectacular benefits from music. Music therapy is often informally used in residential care units to enhance communication, emotional, cognitive and behavioral skill in elderly patients. Other positive findings also include increased communication and smiling. Active music interventions may enhance life force through bio-physiological responses and through self-discovery, awareness, increased self-esteem and pleasure. Success playing instruments and moving to music may help to meet a person's unmet needs for self-expression, achievement and meaning in life.

**Music Benefits Individuals with medical challenges such as:**

**Brain Injury:** The fact that the adult brain can undergo, continual modifications highlights the potential of rehabilitation treatments that are designed to induce plastic changes to overcome impairments due to brain injury. For this purpose, music may be a suitable medium because it transmits visual, auditory, and motor information to a specialized brain network consisting of frontotemporoparietal regions.

- **Cancer: The Greater Poland Cancer Centre** cited many benefits of music therapy for cancer patients- interactive music therapy techniques (instrumental improvisation, singing) as well as receptive music therapy techniques can be used to improve mood, decrease stress, pain, anxiety level and enhance relaxation.

- **Dementia:** Music has been shown to promote communication between carers and patients with dementia with evidence highlighting positive effects on agitated patient behavior, reducing anxiety and aggressive behavior, restoring cognitive and motor function and overall improving patient's quality of life. Music functions to provide islands of arousal, awareness, familiarity, comfort, community and success like nothing else can, even into the late stages of dementia when responses to other stimuli are non-existent. Increasing frequency of cognitive activities predicted a delay in the onset of accelerated memory decline. Participants of a study regarding brain plasticity across the life span aged over 75 years were followed for 5 years. Those participants who frequently played a musical instrument were less likely to have developed dementia compared to those who rarely played a musical instrument. One activity that has the potential to stimulate and preserve cognition is music making.
- **Alzheimer's:** For Alzheimer's when used appropriately, music can shift mood, manage stress-induced agitation, stimulate positive interactions, facilitate cognitive function, and coordinate motor movements. A person's ability to engage in music, particularly rhythm playing and singing, remains intact late into the disease process because, again, these activities do not mandate cognitive functioning for success. Outdoor Musical Instruments can be agitation management for Alzheimer's. Non-verbal individuals in late dementia often become agitated out of frustration and sensory overload from the inability to process environmental stimuli. Engaging them in singing, rhythm playing, dancing, physical exercise, and other structured music activities can diffuse this behavior and redirect their attention.
- **Parkinson's disease and Stroke:** Rhythmic cues can help retrain the brain after a stroke or other neurological impairment, according to Michael Thaurt, director of **Colorado State University's Center of Biomedical Research in Music**. Brain areas that control movement are affected by music. Slowness, tremor, stiffness and impaired balance are common in Parkinson's patients, but emerging research suggests music may be an effective non-drug intervention. A variety of neurological disorders have shown improvement from music-based interventions, including not only Parkinson's disease but also multiple sclerosis and stroke. In fact, music-based interventions had similar or greater effects than conventional rehabilitation on upper limb function, mobility and cognition among people with neurological disorders.

## **BENEFITS FOR SENIORS OF PLAYING INSTRUMENTS IN AN OUTDOOR SETTING**

Marie Hartwell-Walker, Ed. D. wrote *The Benefits of Play* and sites that play into adulthood helps the brain develop more connectivity, especially in the frontal lobe which is the center for planning and making good decisions. (Freenotes taps into brain development at ALL ages.) She also states that play develops the brain's executive function. Executive function refers to the mental skills that allow us to manage time and attention, to plan and organize, to remember details, and to decide what is and isn't appropriate to say and do in a given situation. These are the skills that are central to self-control and self-discipline.

Naturelearning.org wrote an article called ***Why Focus on Outdoor Learning Environments?*** It affirms why Freenotes Instruments should be in every outdoor learning environments by sighting the following benefits:

- Supports creativity and problem solving.
- Enhances cognitive abilities. (Wells, 2000).
- Increases physical activity.
- Improves eyesight. More time spent outdoors is related to reduced rates of nearsightedness, also known as myopia, in children and adolescents (**American Academy of Ophthalmology, 2011**).
- Improves social relations. (Burdette and Whitaker, 2005).
- Improves self-discipline.
- Reduces stress.

## WHY PLAYFULLNESS THROUGH FREENOTES IS IMPORTANT FOR SENIORS

Play can add joy to life, relieve stress, supercharge learning, and connect one to others and the world around them. It is important for the elderly to engage in fun activities as it has many physiological and psychological benefits. Music therapists and patients often participate in spontaneous playing of instruments. Improvisation can improve communication and self-expression. Playing the instruments can facilitate a sense of control, as patients play an active role in creating the sounds and in setting the rhythm and mood.

Playing Freenotes instruments, in particular, removes the frustration often felt when trying to play a musical instrument. Because all notes are harmonic regardless of the order you play them in, there are no rules or limitations, just the freedom to make beautiful musical sounds and enjoy. This is a truly satisfying experience.

### **5 Benefits of Playfulness for Seniors:**

1) **Physiological Benefits** — Being playful exercises muscles, sends more oxygen to and stimulates blood flow to the brain and circulation and thereby aids muscle relaxation. It also builds a healthier immune system.

2) **Cognitive Benefits** — Playfulness optimizes learning, boosts flexible thinking and in turn imagination and creativity, and makes new connections in meaning, which is also known as critical thinking. Fun activities (such as playing Freenotes Outdoor Instruments) that challenge the brain can help prevent memory problems and improve brain function.

3) **Emotional Benefits** — Play is fun and can trigger release of endorphins, the body's natural feel-good chemical. Endorphins promote an overall sense of well-being and can even temporarily relieve pain. It also increases empathy in seniors, combats depression, builds self-esteem and self-efficacy. Play can heal emotional wounds. If an emotionally-insecure individual plays with a secure partner, for example, it can help replace negative beliefs and behaviors with positive assumptions and actions. Play can also heal resentments, disagreements, and hurt.

4) **Social Benefits** — Playfulness connects people and helps make new friends, makes it easier to express ideas and share perspectives based on positive experiences, and uses laughter to increase other healthy coping mechanisms. Sharing, laughter and fun can foster empathy, compassion, trust, and intimacy with others.

5) **Boost creativity** — Young children often learn best when they are playing—and that principle applies to seniors, as well. One learns a new task better when it's fun and in a relaxed and playful mood. Play can also stimulate the imagination, helping individuals adapt and problem solve.

Josefa Lieberman the creator of the Childhood Playfulness Scale is adamant that observable joy IS in fact an enduring component across time and age. This hypothesis confirms our mission, to bring joy through outdoor musical instruments that are accessible at any time for any age.

## WHY COLLECTIONS OF FREENOTES INSTRUMENTS ARE IMPORTANT

*"Music brings people together. Group music-making releases energy which can be channeled in creative, productive directions."* Judi Bosco, Board Certified Music Therapist

A significant, social aspect of music therapy is that it facilitates interpersonal processes, such as interaction and verbalization. Participation in a group music therapy brings people out of isolation, creates powerful social and emotional bonds and generates an overall good feeling. Movement (spontaneous or rhythmical) with music is a therapeutic tool that creates positive thinking and feeling of wellness.