Playing Tchaikovsky's 'Nutcracker' and other Music as Determinants of Kids Brain Improvement

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ABSTRACT

Music serves as an imperative aspect of human life. It is useful to live with joy and wellbeing. Music is very useful to brain development of children. Childhood is all about learning and so the development of the brain and the learning connections within the brain are at the heart of learning for young children. On the basis of this research the importance of music and the brain development of children has been established. In this research article the endeavor is made to juxtapose varied research studies with the subject and tried to derive its implications. Infants are born with a limited amount of neurological wiring. Their vision is rudimentarily wired, as are their hearing and other senses. Nothing is wired in the higher region of the brain, known as the cerebellum. The hardware is in place and ready to wire but requires 'earthly' experiences and human interactions for the cells to forge the neurological networks that will become the foundation for thinking and reasoning, language, physical movement, and social and emotional behaviors. During the first three years of life, a child builds an estimated 1,000 trillion synapses through the experiences she encounters. The study concluded that music skills have positive impact on early child education in regards to provoking good ear listening and personal narratives. Hence, music education is believed to deserve the status as an equally significant core subject. One of the recommendations made was that every human being should not underrate any discipline. Parents and care givers should create an enable environment including music for kid brain learning improvement.

KEYWORDS: Music, Brain Improvement, Kids,

Introduction

There's no straightforward recipe for what a good-quality home-learning environment looks like. However, research shows that it should provide both the kinds of experiences and the environment that a child needs for the development of their brains and their language skills. This could include plenty of books, and opportunities to be read to and to read, to learn rhymes and to sing songs. Studies have shown that these early activities continue to show positive benefits for children's education throughout their lives (Sylva et al 2004). According the National Scientific Council on the Developing Child (2008), children experience the world through their relationships with care givers and

parents. These relationships affect virtually all aspects of their development. When children start school, they have a facility for rote memory, and simple facts have been imprinted in their minds through songs and musical games.

Thinking is associated with a child's experience; for the young child, to think means to recall experiences or knowledge from the mind. Piaget defines the cognitive or mental structures by which individuals intellectually adapt to the environment as schemata (plural of schema) (Wardsworth, 2004). Music has the potential to activate a child's schemata, which can jump-start the child's comprehension and creative writing. In the context of literacy, visualisation is the process in which a reader forms mental images to build understanding while reading or listening to a text (Massie et al., 2008). When first- and second grade students were asked to draw or write what they pictured in their minds as they listened to A Whole New World soundtrack, each child separately drew and wrote about a peaceful world. Pre-service teachers attributed the similarities to coincidence, but for Piaget (in Wardsworth, 2004), the children's drawings about a peaceful world were constructions from the stimuli which fit their own perspectives, experiences and previous schemata. Music invites children to revisit what they know, stimulates their curiosity and promotes thinking. Miché's research (2002) showed that music training helps children to read and write. This idea was explored with the adult participants, who were invited to create a story from a set of sounds and soundtracks downloaded from the Internet.

Concept and Origin of Tchaikovsky's Nutcracker Music

The Nutcracker has become the most popular ballet of our times. It was first presented in 1892 at the Maryinsky Theater in St. Petersburg, Russia. The ballet was an adaptation of the 1816 story by E. T. A. Hoffman, The Nutcracker and the Mouse King. The Nutcracker was choreographed by Lev Ivanov with music by Peter Ilyich Tchaikovsky. Marius Petipa, the reigning choreographer at the Maryinsky, fell ill, so the job passed to Ivanov. Tchaikovsky only reluctantly accepted the commission to compose the score which, when completed, he considered "infinitely worse than 'Sleeping Beauty'." At the premiere, the ballet was deemed a complete failure.

Peter Illyich Tchaikovsky was born in Kamsko -Votinsk, Russia on May 7, 1840. He was a very bright child who could read Russian, French and German by the time he was six years old. He also hated physical exercise, did not like to wash and didn't care about how he looked or what he wore. He showed an interest in music that was so strong for a young child that his governess worried about him. If he could not find a piano to try out the music he made up, he would use his fingers to tap out his tunes on the windowpanes of his house. One time while he was doing this he tapped so hard that he broke the glass of the window, and cut himself very badly.

Peter began taking piano lessons when he was six years old. After attending a boarding school, he studied law and mathematics and got a job as a clerk working in the Ministry of Justice. After just four years he quit his job to go to music school full time in order to study composition. He was soon invited to teach classes. Tchaikovsky was a nervous, unhappy man all his life, yet his beautiful music made him the most popular of all Russian

composers. He wrote the music for the three most famous ballets of all time, The Nutcracker, Swan Lake, and The Sleeping Beauty. In his lifetime he also wrote nine operas, six symphonies, four concertos, three string quartets, and numerous songs, suites, and overtures. One of his most famous pieces is the 1812 Overture, which uses cannons and church bells; because it sounds so grand it is often chose to accompany fireworks at 4th of July celebrations. Tchaikovsky was only 53 when he died in St. Petersburg in 1893. He had just completed his sixth symphony, which he felt was the best piece of music he ever created.

The **Nutcracker** choreography was begun by the redoubtable Marius Petipa. The balance of the work was taken up by his assistant Leon Ivanov when Petipa fell ill. According to historical accounts, when the ballet was finally produced, Petipa refused to have his name linked with it, feeling his own part in its creation was insufficient to be publicly announced. Dance historians have, however, recognized his contribution, and the original choreography is generally credited to both Petipa and Ivanov.

The **Nutcracke**r has two major ensemble dances: the *Dance of the Snowflakes* and the *Dance of the Flowers*. One of the strengths of the Seiskaya Company has always been ensemble segments. Nowhere is this more evident than in these dances. Flowing lines, exact patterns and intricate interplay between corps and soloists are the hallmark of the choreography.

The basic libretto of the **Nutcracker** has as many interpretations as there are staged versions. The characters' names often change and plot twists are added. The only constant is the music. Tchaikovsky's musical genius created one of the most recognizable and enduring scores ever written. An abbreviated version, the **Nutcracker Suite**, is one of the most recorded selections in classical repertoire. In the final analysis, it is the music that has truly given the **Nutcracker** a life of its own.

First presented in Western Europe by the Sadler's Wells Ballet at the Sadler's Wells Theatre, London, January 30, 1934, the production was staged by Nicholas Sergeyev after the original Petipa-Ivanov version. The first full-length American **Nutcracker** was produced by the San Francisco Ballet in 1944 with choreography by William Christensen.

Concept of Music

Music according to (Baycrest, 2002) is a human universal. In order to determine if a certain human trait is part of the brain's hardwiring, scientists submit it to a set of criteria. Some of the questions concerning the biological evidence of music's hardwiring include 1) whether or not it is present in all cultures; 2) if the ability to process music appears early in life, i.e., it is found in infants; 3) if examples of music are found in the animal world; and 4) if there are specialized areas of the brain dedicated to it. Music fulfills all of these criteria, and is definitely hard-wired in the human brain. Music is an aged means of passing information to the society that comes in various forms such as symbols, signs, rhythm etc. Base on human believe, it also means different things to different individuals in the society. According to recent neurological research, "the ability to perceive and enjoy music is an inborn human

trait" (Sousa, 2011, p. 221). If music is an inborn and biological component, it should be found in infants, as well as in other animal species. Musical ability is indeed found in infants, who at only a few months old can manipulate an object in response to hearing certain songs. Infants can also differentiate between sounds as well as recognize different melodies. They are well aware of their mother's voice and will turn their heads towards it when she speaks.

Concept of Kids Brian Improvement

In the first two years of life, a child starts to develop a wide range of skills and abilities. During this time a child will start to explore and learn about the world around them through developing communication skills, behaviours and emotional attachments like playing with toys, watching cartoon etc. At this stage, they also try to test any object or material that comes across them in their mouth. A child's brain begins developing in the womb. According to Herculano-Houzel 2009, Goswami (2015) A fully - grown adult brain has an estimated 86 billion neurons – the information processing cells in the brain. But the majority of them are actually formed in the womb. Then, during infancy, the connections between neurons become stronger and more extensive, with new connections forming. These connections form the networks that underlie children's development (Stiles & Jernigan 2010). Pam Schiller (2010) stated that there are fertile times when the brain is able to wire specific skills at an optimum level. These fertile times are called 'windows of opportunity.' The windows are scientific; they are open from birth to puberty. The open windows of opportunity are the same for all children, no matter where on the planet they are born.

According to Brotherson (2009), at age three a child's brain is estimated to be about twice as active as an adult's brain. While at age five a child's brain uses almost twice as much energy as an adult's brain to support brain development (Kuzawa et al 2013)

Advantages of Music on Kids Brain Improvement

A 2016 study at the University of Southern California's Brain and Creativity Institute found that musical experiences in childhood can actually accelerate brain development, particularly in the areas of language acquisition and reading skills. Yoon, (2000) stated that the power of music exceeds mere pleasure for it has strong biological roots, helps the brain to grow and integrate the two hemispheres, and plays a crucial role in the neurological development of the child. Today music can be used to help facilitate child knowledge about the physical environment, the world and others (Davies, 2000). The basic functions of music on early child improvement and development can be elaborated below:

For Personal Narratives: Because music is connected to children's lives, it enriches personal narratives that promote language experiences. Gallas (1994) saw narrative as a complex of signs and texts that make children's thinking visible. Music mentally and emotionally engages children into thinking processes that help them build stories that can be expressed through the modalities of talk, dance, music and art into writing. This article aims to create in the reader an awareness of music's power to engage children in thinking

activities. The purpose is to encourage efforts to incorporate musical elements in the early childhood environment that will help children establish connections with the world. Roskos and Neuman (2003) defined environment as behaviour settings where daily life happens. Certainly, those daily life experiences do not occur in silence; rather, that environment is characterised by music and soundscapes or sounds (Ceppi & Zini, 1998).

Intellectual Competence: Music promotes thinking in children and they often translate thinking into reading and writing. A natural connection exists between thinking, music and language. One can only understand how children develop language by relating language to thought. According to Gardner (2006), musical intelligence is the first intelligence to develop, and the use of music, soundtracks or sounds capes to learn is attributed to the individual's musical intelligence. Musical intelligence is ascribed not only to those who are proficient at playing an instrument or singing, but also to those who prefer to use sounds and music for understanding or expressing themselves. Musical intelligence interacts with other human intellectual competencies; Gardner's (2006) claim is that the intelligences work in concert. Human beings have a repertoire of skills for solving different problems, and music is one of these.

Having a Good Ear: Having a 'good ear' means being able to hear sounds in your head, knowing how notes and chords sound in relation to one another and being able to identify when something is wrong. It also encompasses rhythmic awareness and the ability to repeat aural patterns or sequence. This ability to internalize and imagine sound is often called 'inner hearing'. Beethoven, for example, was someone with an excellent aural sense, despite being completely deaf. He 'heard' the music internally and then represented this as written music.

Others Benefits Include:

- To enable the child to explore, clarify and express ideas, feelings and experiences through a range of arts activities
- To provide for aesthetic experiences and to develop aesthetic awareness in the visual arts, in music, in drama, in dance and in literature
- To develop the child's awareness of, sensitivity to and enjoyment of visual, aural, tactile and spatial environments
- To enable the child to develop natural abilities and potential, to acquire techniques, and to practice the skills necessary for creative expression and for joyful participation in different art forms
- To enable the child to see and to solve problems creatively through imaginative thinking and so encourage individuality and enterprise
- To value the child's confidence and self-esteem through valuing self-expression
- To foster a sense of excellence in and appreciation of the arts in local, regional, national and global contexts, both past and present
- To foster a critical appreciation of the arts for personal fulfillment and enjoyment.

Types of Music that Improve Kids Brains

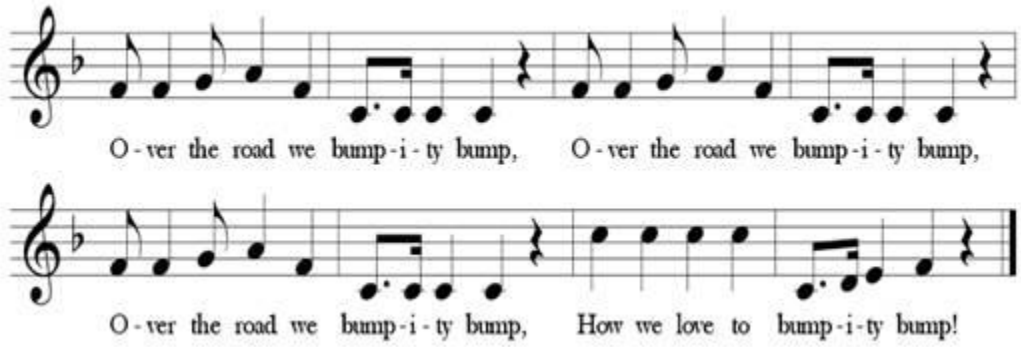
Music is an art form deeply rooted in human nature. It is a discrete body of knowledge, a unique form of communication and a means by which feelings and interests are organised and expressed. Although we are used to hearing and singing pop music, a child's voice and brain is not yet ready to sing songs either with such a wide vocal range or with the sophisticated lyrics, vocal stylings or timbre that he or she might try to imitate from pop singers. As children's voices are very light, they should not be pushed out of their vocal ranges too soon. According to James Hudziak (2014) a violin might help a child battle psychological disorder even better than a bottle of pills. "We treat things that result from negative things, but we never try to use positive things as treatment," he says.

Below are a few of the rhymes and songs particularly good for newborns and toddlers. They include some very familiar nursery rhymes and action games appropriate for this age group. Keep in mind that almost any nursery rhyme can be used for these activities, as long as they have a steady beat, which luckily most of them do.

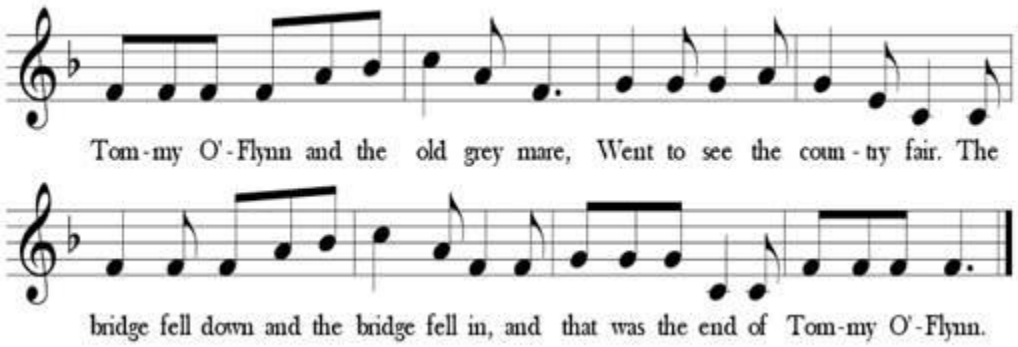
Bounces

For newborns to three-year-olds, having them feel the beat in their bodies, aided by adults, are called "bounces," based on the experience of bouncing a child up and down on a knee or lap.

Bumpity Bump:



Tommy O'Flynn



Wiggles

Wiggles are those activities involving the wiggling of fingers or toes. "This Little Piggy Went to Market" is another wiggle with which you may be familiar.

The first little pig danced a merry, merry jig

The second little pig ate candy

The third little pig wore a blue and yellow wig

The fourth little pig was a dandy

The fifth little pig never grew to be big

So they called him Tiny Little Andy

Tickles

Tickles involve exactly that—tickling the child either all over or just in the stomach, usually ending in lots of giggles!

Slowly, slowly, very slowly up the garden trail (*crawl hands up baby starting from feet)*

Slowly, slowly, very slowly creeps the garden snail (*continue crawling)*

Quickly, quickly, very quickly all around the house (*tickle all over)*

Quickly, quickly, very quickly runs the little mouse (*continue tickling)*

My father was a butcher (*make chopping motions on child's body)*

My mother cuts the meat (*make cutting motions on child's body)*

And I'm a little hot dog

That runs around the street (*tickle all over)*

Clapping (Nine+ Months)

As children develop physically, they can clap their hands either together or against those of another. The well-known "Patty Cake" is a good example.

Patty Cake

Patty cake, patty cake, baker's man

Bake me a cake as fast as you can

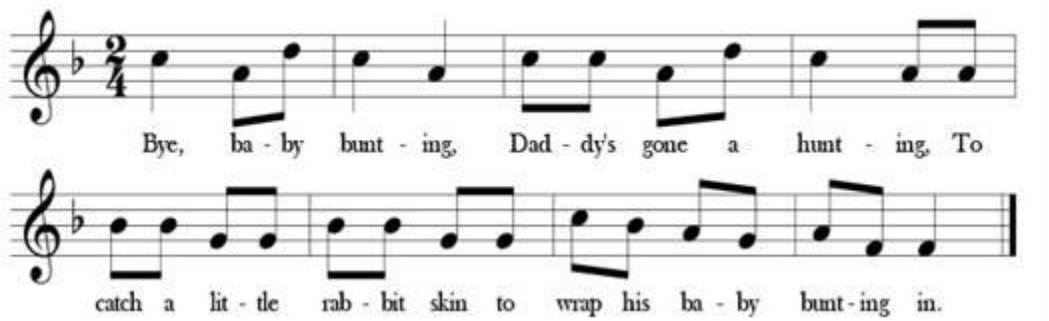
Roll it and pat it and mark it with a "B"

And put it in the oven for baby and me!

Lullabies

Bye Baby Bunting

English lullaby, 1784



For slightly older children, Feierabend (2001) identifies activities that help children develop spontaneous ability and original music thinking under his "Arioso" category, as well as a detailed array of vocal- and motor-based experiences with music. In addition, exposing young children to music also help to build and increase kids' vocabulary.

Conclusion

The study shows how a good quality learning skill and experience improves kids' brain development. Therefore, the study concluded that music skills have positive impact on early child education in regards to provoking good ear listening and personal narratives. Hence, music education is believed to deserve the status as an equally significant core subject. The study also exposes and reveals the proper ways in which music activate kids' brain improvement just as in the case of Tchaikovsky's nutcracker ballet.

Recommendations

1. Every human being should not underrate any discipline. Parents and care givers should create an enable environment including music for kid brain learning improvement.
2. Since music is an inborn and biological component, kids should not be deprived the opportunity of getting in touch with music that will accelerate cognitive improvement.
3. Nongovernmental organization should help in creating more awareness on the positive impact of music for kid brain improvement.

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