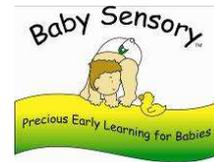


Music for Babies and Children



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It is impossible to define exactly what music is, although most people accept that it might be sound through singing or active music-making. What is certain is that music helps us to communicate thoughts, ideas and emotions in ways that no other stimulus can. It offers a whole range of other benefits too, from pain and stress management to improved motor and rhythmic coordination. It also contributes unequivocally to the positive development of the human brain.

The development of music presumably took place in prehistoric times against the backdrop of natural sounds such as running water, ocean waves and bird and animal sounds. However, the earliest evidence for musical expression comes from India and is thought to be 4,000 years old. As far back as ancient Greek times, music was used to treat emotional and physical disorders, but it was only after the horrifying experiences of the First World War, that music therapy became a subject in its own right. Since then, music in all its forms has been used to address a wide range of health problems ranging from physical, emotional and mental disorders to behavioural, social and learning disabilities. It has also been used to improve growth rates in premature babies and milk production in nursing mothers.

In the home or nursery, music can set the tone for a relaxed, warm and inviting atmosphere. It can help parents and practitioners address the emotional, creative, language and social needs of infants and it can be used to support movement activities. Music can also meet the needs of babies and children from different cultures. The effect of music on children with sensory impairments, disabilities, illnesses and special learning needs can also be far-reaching.

Music Therapies

Singing

Singing is a natural combination of sounds and rhythm. Songs and rhymes provide a powerful stimulus in terms of language development and it is never too early to introduce them. Even if babies cannot understand the words, they will pay attention to sounds, actions and facial gestures. Babies will listen to familiar songs over and over again, and they will show pleasure whenever they hear them. Songs with a repetitive theme such as *'Round and Round the Garden'* and *'Pat-a-cake'* help babies learn new words in an enjoyable way. They also encourage participation and turn-taking through clapping and body actions.

Listening to and interacting in songs and rhymes encourages babies and children to:

- Learn new words.
- Develop listening skills.
- Feel the rhythm of a particular song.
- Recognise differences in melody, such as verse and chorus.
- Discover how sounds can be changed.
- Recognise repeated sound patterns.
- Improve memory.
- Release stress and tension.
- Develop manipulative skills.
- Match movements to music.
- Maintain attention and concentration.
- Develop social skills

Songs and action rhymes help children understand the culture in which they live. They also give them a sense of belonging, which is important for their self-esteem. If the tunes and words are kept simple, children will enjoy the feeling of mastery as they come to learn them by heart. Singing their way through the alphabet and encouraging them to make the different animal noises in '*Old MacDonald had a Farm*' helps them to listen out for different sounds. It also establishes a sense of order (mathematical reasoning) and a sense of security. Allowing children to choose their own songs and sing their own versions heightens the fun and encourages participation.

Most children will join in if the setting is cosy and intimate and the singing emotionally warm, inviting and fun. Very often, the child who seems to be paying no attention will sing the songs at home. Babies also absorb the sounds that they hear. Later on, they may surprise their parents by singing a song or lullaby from beginning to end that they regularly heard in early infancy!

Playing music

It is well known that babies are soothed by familiar lullabies and songs and classical music of a slow pace. The sound of the washing machine or vacuum cleaner can also soothe and calm a baby because these sounds are similar to the noises heard in the womb. However, the rhythmic sound of the human heartbeat has the most positive effect on babies. Children with autism, attention deficient disorders, learning disabilities and dyslexia also benefit from its comforting sound.

There is no limit to the different types of music, songs and styles that parents and practitioners can use to stimulate a strong interest in music. Giving babies and children the opportunity to listen to a wide range of music enables them to:

- Feel the rhythm of a piece of music.
- Match movements to music.
- Identify different sounds, rhythms and tempos.
- Develop listening and concentration skills.
- Develop a natural response to music.
- Relieve frustration and tension.
- Discriminate differences in frequency.
- Learn about different cultures.

From about seven months of age, most babies will move rhythmically to music with a strong rhythm or repeat. Towards the end of the first year, they may clap their hands and stamp their feet in time to the music and mood expressed. If music is introduced early on, children will naturally integrate the sounds and vibrations into their body movements.

Research shows that playing soft instrumental music to children with learning disabilities can bring about a marked improvement in mathematics, reading and reasoning skills. Music with a moderate tempo can improve concentration and listening skills and a strong rhythm or fast beat can increase attention and interest.

Listening skills in children can be developed by drawing attention to sounds and asking questions about them. For example, 'Is the sound of an alarm clock loud or soft?' 'Is the ping of the microwave high or low?' Encouraging them to listen out for 'raps' in food words (e.g. saus-a-ges), nursery rhymes, poems and their own names also enhances listening skills. Attention can also be drawn to the sounds and rhythms of words in books. *'Going on a bear hunt'* by Michael Rosen and Helen Oxenbury provides a great example of a rhythmic story with plenty of sound patterns. Sound boxes filled with dried rice, lentils, pasta or barley can also improve listening ability. Children can be shown how to shake each one and

then find the matching sound. The sounds can be graded from high to low and more sounds added as these are recognised.

Musical instruments

Providing opportunities for babies and children to make their own music can provide a great outlet for frustration, tension and stress and even anger. If they are allowed to improvise freely with an instrument, the parent or practitioner gains an insight into their emotions and feelings. For example, a child might hit an instrument with force if he is feeling angry or frustrated. Playing an instrument also enhances fine finger movements, improves eyesight, hearing, concentration and memory. It also promotes the production of antibodies, which leads to improved health and well-being.

To encourage participation, musical instruments should be appropriate to the age and stage of the infant's development. For example, a very young baby will be able to shake a rattle or a bell to make a noise. However, it takes more hand-eye coordination to beat a drum or two wooden spoons together. Older children may be able to hit a triangle or the notes on a xylophone. They will also enjoy making their own instruments from yoghurt pots, plastic milk containers and margarine tubs.

Instruments such as xylophones, pianos, keyboards, guitars, bells, maracas and drums provide an ideal opportunity for discussion and exploration. Some instruments are named after the sound they make (e.g. '*maracas*'), but others have interesting and beautiful names taken from the language of their country of origin. As well as helping children to explore notes, chords and tones, handling instruments enables them to:

- Match sounds to different instruments.
- Make quiet and loud sounds.

- Change sounds.
- Control volume, tempo (speed) and rhythm.
- Develop confidence in using different instruments and everyday objects.
- Develop manipulative skills.
- Express their thoughts, ideas and feelings.
- Look at, handle and play instruments from other cultures.

Some babies and children will find the sound of a particular instrument pleasing, while others may find it threatening. This is why it is so important to provide a varied selection. Having a range of instruments also enables the practitioner to ask questions about them. For example:

- What kind of sound does this instrument make?
- Does it make the same sound as this one?
- Can you find an instrument that makes a loud sound?
- Which instrument makes a rattling sound?
- What could you use to make a pinging sound?
- What instrument makes a sound like an elephant?
- Can you guess what instrument is making this sound?

Music and brain development

Media interest has renewed interest in early musical experiences and their effect on brain development. This is partly due to the manner in which the phrase 'The Mozart Effect' has been bandied about to describe any situation in which music has a positive effect on learning, behaviour and intelligence. However, the Mozart Effect refers to a study that only lasted for a few minutes on 36 college students. It was found that spatial temporal reasoning increased in students that listened to Mozart's sonata compared to those that listened in silence. The media report that "Mozart makes you smarter" was a huge over-simplification of the original results.

Recent findings have shown that playing an instrument strengthens connections between brain cells and enhances certain types of mathematical reasoning. Magnetic resonance images (about 50,000 active neurons are needed to detect a signal) have also shown that early music experiences enlarge part of the left brain hemisphere associated with auditory processing and language development, and the right side of the brain associated with emotion and memory. The nerve fibre bundle, that connects the two hemispheres of the brain, is also thicker. The sounds, vibrations and rhythms of music also stimulate the brain to be more active in sending electrical signals to the muscles and limbs.

Summary

Musical experiences make a huge difference to all areas of learning and development. Songs and action rhymes develop language skills and help children to socialise and make friends. Playing an instrument encourages children to show their emotions, to release stress and frustration and to experiment with and explore sound patterns. Fine motor movements and finger co-ordination are also enhanced as a result. Listening to music boosts attention, mood, memory and motivation. Movement to music improves physical endurance, muscle strength, posture and creativity. Music in all its forms can give children a sense of security, a sense of belonging and a sense of importance.

Music has such a significant effect on brain development and the learning process that it simply has to be incorporated from birth. Some researchers would even say that musical experiences are vital for the total development of the brain. We now know that the optimal time to introduce music is from birth to the age of three years. After that, the window of opportunity gradually begins to close.