

Using Nursery Rhymes, Singing and Music: the affects in connection with communication and brain development

Up until the birth of my first child in the mid eighties, I had not given nursery rhymes any thought since well before my tenth birthday. But, as if by magic when my son came along I felt the need to sooth him, jolly him up, or have fun with him through the medium of song. The nursery rhymes that I had been sung as a small child by my mother and had read, when older, in a much loved nursery rhyme book I had, came somewhere from the recesses of my mind, just when I needed them.. This rather took me by surprise – I had not thought about this whilst I was pregnant. I had not made the conscientious decision to learn as many nursery rhymes as possible so that I could sing to him – it just sort of happened - naturally.

What I did not do, however, was sing in public. My nursery rhyme singing was confined to within the walls of my home and only to my son and subsequently my daughters that followed him. I did not even sing in the presence of my husband. Why you may ask. Because I have always assumed that I have a tuneless, 'flat as a pancake' voice and did not want to inflict on anyone around me (or more to the point anyone who I felt would judge me on my awful singing voice!).

When I first became an infant massage teacher I tended to overcome the problem of singing, by suggesting at certain stages of the massage sequence that when the parents were at home they could sing this or that particular nursery rhyme to their baby. This worked to an extent – until I started to work with parents who were not fortunate enough to actually know any nursery rhymes. They, themselves, had never had any sung to them, or ever received a book with them in. The tacit knowledge I assumed everyone had concerning nursery rhymes was not so wide spread after all. So, I overcame my 'fear' of singing in the company of others, took the bull by the horns and started to lead the nursery rhyme singing in my classes, and no one has complained of my voice yet!

If I evaluate why I felt the need to sing to my children I realise that it was borne from a need to communicate with them. I was also delighted in the response that singing these songs produced. My babies could be soothed by some, amused by others; sometimes they were jolly and bouncy or quiet and thoughtful. The non verbal messages were great. I really felt like I was communicating with my babies and getting so much back. As they got older, they joined in with the songs and although my elder three (now teenagers) and even the eight year old, no longer sing along with me and their four year old sister, I am sure when their children come along they will suddenly find that they remember them all just as well as I did.

What I have more recently discovered is that nursery rhymes are far more than just a communication tool that parents can enjoy with their babies and growing children. In addition, research shows that they are also a wonderful learning tool. Sally Goddard Blythe ('Music and Movement' 2001) argues that singing to our babies and children and encouraging them to join in with us, when they are able to, is actually having a beneficial affect on the development of the brain, as the singing or chanting seems to help the cerebellum in the automatisations of particular skills and oral repetition assists transfer to memory. Beaulieu (cited in Hannaford, 'Awakening the

Child Heart, 2002) postulates that this type of harmonic toning actually greatly enhances overall brain function because it increases the respiratory rate and encourages a greater flow of cerebral spinal fluid around the brain. As Goddard Blythe argues

'The process of vocalising sounds to music builds up a storehouse of vocabulary, or lexicon, which may be called upon at any time. The process of putting words to music, naturally breaks words down into separate syllables by giving one or several notes for each unit of sound within a word, placing emphasis on key consonants and slowing down the sounds of speech, so that every phoneme within a word is articulated. In this way, not only is the voice trained, but also the ear, the eye and the memory.' (Goddard Blythe 2001, *Music and Movement*. Page 11)

American psychologist, Frances Rauscher (cited in Kotulak, 'Inside the Brain' 1997 & referred to by Goddard Blythe, 2001) studied a group of pre-school children over an eight month period. Some of the group took music or singing lessons regularly during the study time, whilst the rest of the group did not. Rauscher found that those in the music lesson group performed far better in spatial reasoning tests than the group who had not taken music lessons. The music group children were able to achieve tremendous results when solving puzzles, which is a measure of spatial intelligence. They scored, on average, 80% higher than the children in the study who had not taken the music lessons. As Goddard Blythe (2001) points out, *'spatial intelligence later translates into maths ability'* (Page 11). Hannaford (2002) found that the reading age of choirboys advanced by 12 months within six months of them becoming active members of the choir. Their learning ability was improved due to the process of them having to listen, vocalise and develop the ability to hear pitch and rhythm, coupled with having to read music.

During the infant massage classes the instructor has the opportunity to encourage the parents to sing nursery rhymes. If a parent continues to massage their baby up to and (hopefully) beyond crawling they will have many opportunities to sing the same songs and in time have their child join in with them. It is clear from the research (above), all is not lost if the child has not experienced this at a pre-school stage, as there are an ever increasing number of schools (particularly infant schools) that now implement a Massage in Education Programme (which in the main incorporate the use of rhymes during the sessions). So, hopefully all children will have the opportunity to improve their learning ability through the use of these age old songs at some point during their childhood. As Goddard Blyth (2001) argues:

'We know that the optimum for laying the foundations for speech are the first three years of life..... Music has its greatest time of early opportunity between 3 and 10 years of age, and Wisbey says that the optimum time for the development of pitch discrimination is the first 6 years. One system supports, overlaps and integrates with the next. Music and movement it would seem may

be the lost keys to early learning.' (Goddard Blythe, 2001. Page 12)

Also, it is important to consider the use of music alone, without the need for vocalisation. Consider Rauscher's research – the children studied were involved with either singing or music (playing an instrument) lessons. But, what about those that do not play music or sing? It would appear that it is also beneficial to encourage young children to listen to music. Cherie Ross (soon to speak at the GICM forum this coming September) spent five years researching into the effects of music before producing 'Music for Dreaming' (on CD and cassette tape). Ross argues that there are three main methods a parent can use to calm their baby. There is physical contact, rhythmic motion and soothing sounds. We, as positive touch teachers are all aware of the importance of physical contact, Ross argues that music can help bring together these three methods. The aim of Ross' research was to recreate the nurturing rhythmical sounds that the baby experiences in utero. A great deal of thought was put into the instruments used as well as the rhythm, lullabies, melody, tempo and keys. Ross' foresight and diligence resulted in the production of a very soothing, calming, wonderful piece of music that many positive touch teachers now use as background music during their teaching sessions; which has proved to have a physiological beneficial effect on the body. Furthermore, Rauscher also studied students who listened to classical music regularly and found that their learning capacity notably improved.

In this world of ever increasing expectations, as our children work their way through the education system, it is hard to find a reason not to give every child a step in the right direction. By using music and singing to enhance their learning abilities a parent is not pushing their child unreasonably: no, they are helping them to reach their full potential. I do hope that if you struggle, as I did, to overcome the difficulty of singing in front of an audience above the age of three years old, that this article will encourage you to bite the bullet and have a go, or at least invest in a portable CD player!

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Bibliography

Kotulak, R. (1997) '**Inside the Brain: Revolutionary Discoveries of How the Mind Works**'. Andrew McMeel Publishing. Kansas City

Goddard Blythe, S. (2001) '**Music and Movement: Are these the Lost Keys to Early Learning?**' – A paper presented at the 10th European Conference of Neuro-Developmental Delay in Children with Specific Learning Difficulties. Chester 6 – 8 March 1998. Article printed by The Institute for Neuro-Physiological Psychology (2001)

Hannaford, C. (2002) '**Awakening the Child Heart: Handbook for Global Parenting**'. Jamilla Nur Publishing. USA.

Ross, C '**Music as a Complementary Therapy to Mother Baby Care**' (Information taken from Cherie Ross's preview to her lecture for the GICM forum)

Useful Books and CDs

Dunn, O & Lambert S. A. (1999) '**Hippety Hop, Hippety Hay: Growing with Rhymes from Birth to Age Three**'. Frances Lincoln. Hong Kong.

Roberts, A. & Featherstone, S. '**The Little Book of Nursery Rhymes**'. Featherstone Education Ltd. United Kingdom.

Carousel Nursery Rhymes and Children's Songs <http://carouselmusicworkshops.co.uk/>