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A Sound Start in Life

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In a research project which is still being carried out at Rochford Hospital Southend-on-Sea Essex¹, it has been established that unborn babies not only hear music, but that their rate of heartbeat is affected by the music they hear; fast music elicits an accelerated heartbeat; while slow, quiet music gets a more relaxed heartbeat. It has also been established that it is possible to correctly predict the personality of the baby fifteen weeks before birth, with the help of a printout of the fetal heartbeat, when music is played to the fetus. The evidence is that the personality is already established, the researcher simply uses music to ascertain what the personality is. London Doctor Michelle Clemens² found that the kicking of the fetus at sixteen weeks gestation can be influenced by playing music to it.

The staff in the nursery and the Special Care Baby Unit at Rochford Hospital complained that they were having very troubled nights with restless babies, and asked if it was possible to devise a way of quieting these neonates. A number of individual sounds and combination of sounds were tried, and it was found that the combination of womb sounds and music was most effective.

Doctor Hajime Murooka³ found that playing womb sounds to the new born baby had a quieting effect but ceased to have any effect after about three weeks. In Southend, there are families who have been using the combination of womb sounds and music for a year, and they are still being effective; these tapes are also effective when played to older children for the first time, e.g. there is a family in Israel who had triplets, but two children unfortunately died, and the remaining baby, who has some brain damage, was very troubled and unhappy. He was six months old when the combination tape was first played to him, and, for the first time, he and his parents had an unbroken nights sleep.

A baby, who I shall call Thomas, was born at Rochford Hospital, and he was very ill. When he was five days old, his heartbeat, pulse, blood pressure, and the oxygen content of his bloodstream were all irregular. None of the technology available was of any help, so a recording of womb sounds and music was played to him. According to the nursing sister and Thomas's parents, within thirty seconds of the recording being

switched on all his readings had become normal, supporting the findings of Max Scheon⁴ that music does effect the rate of heartbeat, pulse, blood pressure, breathing, and supply of oxygen and blood to the brain.

It was noticed that when the baby tapes were played, adults within earshot became calmer, and so it was decided to try to make similar tapes for adults.

Initially, the aim was to combine music with a heartbeat, but as it was not possible to obtain a recording of a heartbeat at that time, a recording of the main artery as recorded from inside the womb, with a beat of 80 to the minute, was used. Initially the sound of the main artery was made very audible, but several people found the sound rather off putting, so it was put onto the tape at the subliminal level; that is, it was recorded at a level below that of music, and there it proved to be much more effective. Then the writer wondered if it was the beat which was relaxing, or whether the listener, at a subconscious level, remembered the sounds which he or she had heard while they themselves were in the womb, and that this sound was relaxing.

So the womb sound was substituted for the sound of the main artery, again at a subliminal level, and the results were even better. The tapes which have been found to be most effective are of the music, womb sound at subliminal level, and the verbal instruction "Your mind is at peace. You feel happy, calm, and relaxed", also recorded at subliminal level.

The theory about success of these tapes is that all of us, subconsciously, remember the sounds which we heard while we were in utero; when we were happy, safe, and secure.

This theory was supported by the fact that only two people have found these tapes disturbing. One, a man, has always hated his mother; and the other, a young woman, was adopted. When she heard the tape for the first time, she burst into tears, but could not say why. Now, after trying the tapes several times, she finds it comforting when her own three very noisy sons are playing at full volume.

The principle behind the verbal message is similar to hypnosis; while the conscious mind is concentrating on the music, the subconscious mind hears the womb sound, which is relaxing, and the instruction to become relaxed.

The study that has been carried out at Rochford Hospital indicates that the fetus knows the sound of the mothers voice, and Anthony deCasper⁵ has carried out research that indicates that after birth, the baby shows a preference for the mother reading stories that she had read aloud while the baby was still in the womb.

The writer persuaded several people to read bedtime stories to their babies before they were born, just before going to bed at night. They then recorded these same stories, to which the womb sound was added,

and now, when the, when the resulting recording is played to their babies just before bedtime, they go straight to bed and go straight to sleep, sleeping through the night.

It has also been remarked by various people in the family, including Verny⁶ that some babies are born with a dislike of various people in the family, including the mother, and cases are actually quoted to support this theory.

One young mother who came to see the writer told of the unwanted, troublesome pregnancy followed by a caesarian delivery, with the result that she could not get on with her baby. A recording was made of her voice and that of her husband, and womb sounds were added to them, and these have now been played back to the baby. In addition, she was persuaded to remove all her baby's clothes except his nappy, and to tuck him inside her blouse, skin to skin with her, with his head nestling between her breasts.

The idea is that we tried to take them both back as far as possible to the days before he was born. As the mother is no longer physically ill, she experiences her baby without having the experience of nausea and illness that accompanied the pregnancy. In addition, as she feels him moving about and feels the warmth of his body against hers, she begins to feel friendly towards him. This is having a remarkable effect upon him. The result is that he is becoming much less distressed, much less fractious, much more placid, while her feelings toward him are now becoming very warm, loving, and caring.

Some results have shown that great caution should be exercised when selecting music for tapes. It has been found that music in the minor key can have a depressing effect; this can be disastrous when played to someone who is already suffering from deep depression. For example, one young woman found Bach's "Tocatta and Fugue in D minor" very distressing, and, the following day, she made a suicide attempt. At the opposite end of the scale, loud rock music can cause unborn babies to kick aggressively, as one young woman found to her cost. She went to a rock concert while pregnant, and her baby kicked so hard, he broke one of her ribs.⁶

This article is by way of being an interim report, as there is a tremendous amount of work yet to be done. The results obtained, thus far, are extremely encouraging and suggest that the work must continue. They also suggest that the subject of the therapeutic use of sounds and music is a huge one, full of exciting possibilities.

At present the great weakness in the research results is the fact that the effectiveness of the tapes is judged subjectively by parents, nurses, and psychiatrists. No doubt all these people are honest, but this approach is still a poor substitute for actually measuring the results in a scien-

tific fashion. It is hoped that a research grant can be obtained in the near future so that bio-feedback equipment can be brought and used in order to measure the results..

Finally, there is no suggestion that these tapes should be used instead of accepted medical methods of treatment, but rather that they are a tool which can be used alongside existing, proven treatments.

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