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## EMDR and Right-Left Brain Stimulation

There are two hemispheres in our brain, the right and the left. They are highly specialized regions that serve differing functions.

The left hemisphere governs our ability to express ourselves in language. In over 95% of right-handed people the left hemisphere is dominant for speech. The figure is somewhat lower for left-handers, approximately 70%, but still highly significant. The left hemisphere is better then the right at recognizing sequences of words and letters. It controls our logic, our reasoning, and our analytical thought processes. It can focus on details, however it has difficulty comprehending the whole picture.

The perceptual functions of the right hemisphere are more specialized for the analysis of space and geometrical shapes and forms, elements that are all present at the same time (not so sequential like language). The right hemisphere is the creative half; it can "see" the whole out of parts, thus allowing us to connect puzzle parts together. The right hemisphere also plays an important role in the comprehension of emotion. In an experiment where subjects were shown pictures of faces with strong facial expression, the right hemisphere was able to discern the expression more accurately then the left hemisphere. In addition, an experiment was done where subjects listened to verbal messages said with different emotions. The messages were presented to each ear separately. When presented to the left hemisphere, the subject was more accurate with regards to the verbal content of the message. However the right hemisphere was more accurate at identifying the emotional tone of the voice.

Ehrenwald (1984: 16) has classified important differences between the hemispheres as follows:

Table 1: General Left-right brain attributes

Hemisphere	Left	Right
Thinking	Abstract, linear, analytic	Concrete, holistic
Cognitive style	Rational, logical	Intuitive, artistic
Language	Rich vocabulary, good grammar and syntax; pose	no grammar, syntax; prosody, poor vocabulary metaphoric, verse
Executive capacity	Introspection, will, initiative, sense of self, focus on trees	Low sense of self, low initiative, focus on forest
Specialized functions	Reading, writing, arithmetic, sensory-motor skills; inhibits psi	Three i's, music, rich dream imagery, good face and gestalt recognition, open to psi
Time experience	Sequentially ordered, measured	"Lived" time, primitive time sense
Spatial orientation	Relatively poor	Superior, also for shapes, wire figures
Psychoanalytic aspects	Secondary process, ego functions, consciousness; superego?	Primary process, dream-work, free assoc. hallucinations?
Ideal prototype	Aristotle, Apollonian mode, Marx, Freud, Koestler's Commissar	Plato, Dionysian mode, Nietzsche, Jung, Koestler's Yogi

In my work with EMDR, over the past 10 years, I have observed that clients while talking or working on their issues will sometimes lean their heads toward the right or the left shoulder. In the inquiry stage, when asking what came up, the people with their heads to the left, will tend to report that thoughts came up, while those with their heads to the right will tend to report images. This phenomenon has been observed in both adults, and children above the age of seven. It also has been observed in right and left handed individuals.

This observation tends to correlate with the above quoted research, that the left hemisphere of the brain is related to cognition while the right hemisphere is related to imagery and imagination.

In therapy, when clients have leaned their heads to one side, I have tended to utilize eye movements in a diagonal direction, corresponding to the direction the head was leaning. That is, if the person leaned their head to the left, I would move my hand from their upper left side to their lower right side, and opposite if their heads leaned to the right.

The outcome of these diagonal eye movements was that it evoked cognitions with the head to the left, or reinforced images with the head to the right.

From my experience, clients who come to therapy requesting help concerning fears, tend to lean their heads to the right, corresponding with imagery and imagination of the right hemisphere. When they are requested to lean their heads to

the left and utilizing corresponding diagonal eye movements (from upper left to lower right) the clients initially report that, "nothing came up". In the past when nothing came up, I would give up working on the left side, believing it would not help. I have now discovered that the opposite is true. People with fears tend to have vivid imagery and imagination (right hemisphere) and lack the cognitive, logical thinking skills (left hemisphere) to counter their fears. Therefore by requesting the client to lean their heads to the left and working over and over with sets of corresponding diagonal eye movements, eventually the left hemisphere of the brain is stimulated and logical thinking (PC) is enhanced, countering and balancing out the negative images. At this point the fear decreases. When working in this manner, and stimulating the left hemisphere one client summarized what was happening to him, by quoting a line from a David Bowie song, "I'm drowning in the quicksand of my thoughts."

Following the stimulation of the left hemisphere, I then tend to reinforce integration of the right and left hemispheres with horizontal eye movements with the head in the center position.

I have also found that similar results can be obtained utilizing tapping, although not as dramatically as with eye movements, while having the person lean their heads to the left.

## Two case studies:

A 20-year-old woman came to therapy fearing she would die as a result of fainting. She was a third generation of holocaust survivors. She has had many fears since she can remember and her mother has many fears. Prior to coming to therapy she had fainted three times in various situations. She then began to fear that she would faint when alone and would die. She thus was afraid to stay alone and began staying at home with one of her parents or younger 18-year-old brother. Therapy was done for her fears, using tapping and eye movements, and many images of the past, other fears and many emotions were emitted, but the SUDS never dropped below 4/10. The client tended to hold her head to the right side when talking or working on her fears. Therapy continued for three months with little progress. One day while working on the NC "I'm afraid to stay alone - I will die", I requested that she lean her head to the left and did corresponding diagonal eye movements. After the first set of eye movements the client reported that nothing came up. After the second set of eye movements the client reported that she feels darkness – blackness in her brain. After the third set of eye movements and with following sets, logical thoughts appeared along with memories of past successes staying alone in difficult circumstances. Eventually the client reported that she thought she could stay alone and this PC was reinforced with horizontal eye movements. In the ensuing week the client stayed home alone with no panic or fear.

A 54-year-old woman, married with four children came to therapy. Her mother had continually physically and emotionally abused her since birth. Her father on the other hand was kind and had been her main supporter in her life. Her father died of a heart attack 16 years ago and shortly after that the client cut off all contact with the mother, who had continued to be abusive. Since the funeral of her father, the client has not revisited the grave and fears to do so. She said visiting the grave would be too painful, since it would confirm that her father was dead and she was alone. While relating this fear the client tended to lean her head to the right. When doing corresponding diagonal eye movements with the head to the right, the woman

reported imagining herself talking to her Father, feeling his support and feeling sad. The client was then requested to lean her head to the left and corresponding sets of diagonal eye movements were done. At first the woman reported that nothing came up. In following sets the cognitions began to change and the following thoughts were reported: I'm not alone. I have my family. I have to accept that my father is dead and move on into the future. At the end of the 45 minutes the client reported that she was now ready to go visit the gravesite with her family and proceeded to plan the visit two weeks later.

Thus it appears that by leaning one's head to the left or to the right one may be increasing the stimulation to the corresponding left or right hemispheres of the brain. Utilizing corresponding diagonal eye movements as reported above may assist in further reinforcing stimulation of the hemispheres.

I invite you all to experiment with corresponding diagonal eye movements and would appreciate receiving you comments.

## References:

- 1.) Ehrenwald, J., 1984, *Anatomy of genius: split brains and global minds*, Human Sciences Press, ISBN 0898851483.
- 2.) <a href="http://www.macalester.edu/~psych/whathap/UBNRP/Split\_Brain/References.html">http://www.macalester.edu/~psych/whathap/UBNRP/Split\_Brain/References.html</a>