



ANXIETY SOLUTIONS: USING BI - LATERAL STIMULATION TO REDUCE ANXIETY

A brain scan of a person experiencing anxiety would show that one side of the brain – usually the left side is very active when compared to the brain of a relaxed person. So anxiety involves using one half of the brain much more than the other half.

When we engage in a task that uses large areas of both sides of the brain equally that activation in itself is incompatible with a state of anxiety.

What is Bilateral Stimulation?

Bilateral stimulation involves stimulating both sides of the brain in a **rhythmic left-right pattern**. For example:

- **visual bilateral stimulation** could involve watching a hand or moving light alternating from left to right and back again.
- **auditory bilateral stimulation** could involve listening to tones that alternate between the left and right sides of the head.
- **tactile bilateral stimulation** could involve passing an object from left to right and back again. A large part of the brain is allocated to our hands. If you can control your hands with precision you are controlling a large area of your brain, and when you use both hands you are using large areas of your brain equally.

What does bilateral stimulation do?

Bilateral stimulation produces four main effects:

1. A relaxation effect including decreased physiological arousal.
2. Increased attentional flexibility (meaning that your thoughts become less 'stuck' on whatever was bothering you).
3. Distancing effect (meaning that the problem seems smaller and further away).
4. Reduced anxiety.

These effects are experienced as a 'bottom-up' cascade of changes meaning that they are experienced in the lower areas of the brain first, as a physiological response (i.e. decreased tension) then travel 'up' the brain leading to mental changes (e.g. decreased worry). Because this order works with how the brain normally processes information, the effects are often experienced more quickly and easily than with say top-down strategies such as insight and conscious introspection.

How does bilateral stimulation work?

The brain has two halves, left and right hemispheres. Lateralization refers to those behaviours and cognitive abilities that each hemisphere specializes in. For example, language ability is primarily localized in the left hemisphere. The right hemisphere is primarily involved in the processing of nonverbal processes.

Bilateral Stimulation through eye movement, hand movement or sound movement stimulates the movement of information through the corpus callosum (the brain structure that connects the left and right hemispheres of the brain).



ANXIETY SOLUTIONS: USING BI - LATERAL STIMULATION TO REDUCE ANXIETY

Despite being in use for close to 30 years there is still no definite answer as to how Bilateral Stimulation works. There are a number of theories.

One theory involves the **orienting reflex**. The orienting reflex is simply the natural tendency for your nervous system to orient itself to new stimuli. The evolutionary implications of this are obvious – *is that rustling sound a sabre-toothed tiger or just the wind in the grass?* So when your nervous system is subject to bilateral stimulation, your attention is naturally diverted to that, and whatever was in your mind before gets shunted to one side. Normally after a few moments, once your brain realizes you're not facing a sabre-toothed tiger, your attention returns to the previous subject. This also known as habituation – habituation is when we cease responding to a stimuli.

Habituation does not occur with bilateral stimulation – your brain just can't turn away from it. As a result of your attention being held captive by the bilateral stimulation, two things happen:

- 1) You can't think of the problem and
- 2) You start to feel relaxed.

This leads to changes in the way the memory of the problem is stored through what's known as **non-associative learning**. Non-associative learning is a change in a response to a stimulus that does not involve associating the presented stimulus with another stimulus or event such as reward or punishment. (Examples of associative learning include classical conditioning and operant conditioning).

According to the **working memory theory**, benefits occur when the limited capacity of the working memory is taxed by the dual attention task - recalling the anxiety triggering memory whilst keeping 'one foot in the present' assisted by Bilateral Stimulation. Because of the limited resources, the memory becomes less vivid, less complete and less emotional. This theory is supported by numerous randomized studies that have all shown that lateral eye movements reduce the self-rated vividness or emotional effect of unpleasant autobiographical memories. Although the event and what has been learned can be verbalised, the inappropriate emotions and physical sensations have been discarded and can no longer be felt.

Bilateral Stimulation with a therapist

Bilateral Stimulation is a core element of eye movement desensitization and reprocessing (EMDR) therapy. EMDR is recognised by the National Institute for Health and Clinical Excellence (NICE) and the World Health Organization as a treatment of choice for treating post-traumatic stress disorder.

In the main form of the EMDR treatment, the therapist asks you to focus on memory that is connected to your anxiety. While you do this, the therapist will move their finger in front of your face, and you follow the movement of their fingers with your eyes. These simultaneous tasks (recall of the memory and following the finger movement) allows your brain to reprocess the memory and consolidate it, without the emotional energy it used to have.



ANXIETY SOLUTIONS: USING BI - LATERAL STIMULATION TO REDUCE ANXIETY

Bilateral Stimulation – do it yourself

I explain how to perform Bilateral Stimulation without the aid of a therapist in my book – ***7 Ways to Reduce Anxiety in 7 Minutes or Less***. It's ***Technique £ 6 – Passing a Ball From Hand to Hand***.

In this exercise you simply pass an object e.g. a ball from side to side across the centre of your body. The hand without the ball remains stationary/static while the other hand moves. You want to aim for a nice smooth movement.

1. Once you have mastered the movement, think about the anxiety invoking situation and arouse the feeling of anxiety. Sense that feeling as strong as you can inside your body. Generate the feeling as intensely as possible and then increase it intentionally as much as you can.
2. Once it's as high as you can get it, give that feeling a score of 10 where 10 is unbearable and 1 is barely noticeable.
3. Now keep thinking about the anxiety provoking situation and start passing the object across the centre line of your body whilst continuing to think about the anxiety invoking situation. Do this for two minutes. Keep the hand without the ball in front of you as the other hand swings out to the side. At some point during the two minutes, for most people the anxiety level begins to fall.
4. Reassess the level of anxiety now after 2 minutes of passing the object. If it's still greater than 3, keep doing the exercise until your subjective assessment of your anxiety level is that it's down to a 3 or lower.
5. After two minutes, stop and concentrate on the anxiety invoking situation again and try and bring the anxiety feeling up to the highest level you can. If it's greater than 3 start passing the object from hand to hand again.
6. After two minutes, stop and concentrate on the anxiety invoking situation again and try and bring the anxiety feeling up to the highest level you can. Now, start passing the object from hand to hand. Once you sense the anxiety level is down to 3 or less, stop.

Most people when anxious start thinking more anxious thoughts. They might hold their breath, get tense and have more thoughts, the thoughts get faster and faster and the feelings escalate.

With this exercise, you are inducing anxiety, intentionally heightening it and consciously doing something else. You are effectively training your brain to do something else when it feels anxious. You are taking control of the anxiety and, by passing the object and activating both sides of the brain you are doing something with your brain that you wouldn't normally do when experiencing anxiety.

For most people each time they get the anxiety level down to 3 or less it takes longer to re-access it and increase it. They find that each time they can't get it as high as the first time. After five or six repetitions it becomes difficult to get the anxiety level above 3.



ANXIETY SOLUTIONS: USING BI - LATERAL STIMULATION TO REDUCE ANXIETY

NB. Bi-lateral stimulation is not a cure for anxiety, but it does help to train your brain to do something else with anxiety invoking thoughts.

The effect is only temporary – it may last for up to two hours after doing the exercise. However, when you practice for five minutes a day, every day for a month you will have trained your brain to respond differently in future so that you are less likely to experience high levels of anxiety in relation to the same or similar situations.

VIDEO DEMONSTRATION OF THE TECHNIQUE

See this technique demonstrated by Hypnotherapist Melissa Tiers - <https://www.youtube.com/watch?v=3Sy9YGeNjCI>

Other ways to rebalance your brain

1. Juggle
2. Put on some music and dance around the room. This creative activity exercises the right side of the brain.
3. Write a few lines with your other hand.

Is Bilateral Stimulation safe?

For most people bilateral stimulation is distracting and relaxing and perfectly safe. However, because it involves direct sensory stimulation of the nervous system, bilateral stimulation can trigger unexpected responses in people with conditions which involve hypersensitivity to sensory stimuli, E.g. people with acquired brain injury (where the condition involves sensitivity to complex visual or auditory stimuli), migraine sufferers (usually when they have the migraine), people with complex PTSD, people with Dissociative Identity Disorder (where different ego states may be activated by sensory changes). People with these kinds of conditions are not advised to use this process without the guidance of a trained therapist.

References:

www.anxietyreleaseapp.com/what-is-bilateral-stimulation/

www.thepsychologist.bps.org.uk/volume-27/edition-7/emdr-more-just-therapy-ptsd