# BRAIN WORKING RECURSIVE THERAPY **BWRT**



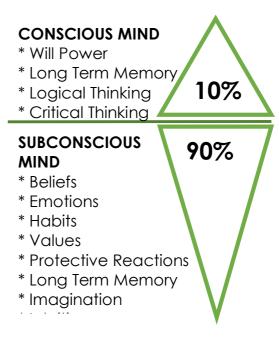
DR SUSAN KRIEGLER

# BRAIN WORKING RECURSIVE THERAPY - BWRT

Created by Terence Watts, refined by Rafiq Lockhat

Our brain is getting loads of messages for every single split second of our lives and what it does all the time is look for stuff that is similar to things we've experienced before. Now, if what we did that time worked, it tries to do the same thing again and if it didn't, then it will try to avoid it, and most of the time that system works really well.

The problem is though, that part of the brain is immensely fast and not very logical so it doesn't give you time to think – in fact, all that stuff happens without you even knowing about it at first. The physical brain is so fast that we cannot hope to keep up with it with our conscious mind. The fast system in the brain - called the preconscious, subconscious or unconscious mind - is a pattern recognition matrix that incomina matches data with behaviour patterns that have been employed previously for the same data. In some ways, it operates like a lightning-fast bio-robot programmable and reprogrammable. We can get that bio-robot to work in a way that is more closely in harmony with our wishes by reorganizing the way the brain reacts to the world and the influences within it.



So, if the fast, automatic unconscious mind finds something that was once a threat, it will use anxiety to try to steer you right away from that. For instance, if you once went to a party where something really upset you, it might create uncomfortable feelings every time you tried to go to a social gathering. That's Social Phobia, of course. And you know what? It wouldn't matter how much you wished you could do it, that speedy process would have you imagining all sorts of uncomfortable things. Eventually it becomes a kind of habit to think you just can't do it.

We don't even have to find out what that original uncomfortable event was – you've probably forgotten that long ago and it's not particularly important anyway. All we have to do is sort of hack into the operating system and teach that speedy part of your brain that it's ok for you to do what you want to do. We can do that using BWRT.

#### Chronological Time versus 'Brain Time'

It would probably seem that the further back through the chain of events we can find a way to intercept a destructive reaction pattern – that is, one that results in behaviour or an emotional response that isn't wanted – the more successful we are likely to be. To an extent, and with certain kinds of problems, this is true, but it is not the chronological time we want; it is the earliest time in the neural network involved. Generally speaking, we can get there by having you find the worst or the strongest recall you can of an event that precipitates your unwanted behaviour or symptom. The brain stores memory in accordance with the strength of the emotion (positive or negative) associated with it. This means the memory we are looking for can be from last week, or twenty years previously – it's not important because that memory is never more than 1/10th of a second old when you feel the unwanted reaction pattern.

Just in case you're finding this a bit puzzling, ALL memories begin as neural response patterns that have been encountered before you are consciously aware of them; by the time you have identified an automatic reaction, it has been in your brain for 1/10th of a second or longer. This is the speed of your reflexes.

As a matter of interest, this automatic brain response pattern explains why something that happened many years ago is still able to elicit a powerful emotional response. As far as the physical brain is concerned, if something was dangerous once, it is still dangerous now. What we are looking for, and what needs to be changed by inserting a new pattern, is the neural thread that, when fired up, creates the most distress.

BWRT is different from many other kinds of therapy in the sense that we don't need to discharge fear, anger, guilt or any other form of arousal because, as unlikely as it seems, we re-route the neural pathways that would have found the emotional response, and the emotion is simply no longer engendered or encountered. This is especially noticeable when working with grief, the aftermath of sexual abuse, or other 'life changing' trauma.

If we make changes in the relevant thread in the information stream, it will feel so natural to you that you might feel as if nothing has happened. You won't feel any different... until you encounter the situation which normally triggers your distressing feelings, and you will discover, to your great surprise, that these unwanted feelings have disappeared.

#### **How Does BWRT Work?**

You know how a TV satellite dish picks up signals and feeds them down a cable to the TV set, which then changes the whole string of signals into a picture. Well, odd as it might seem, that's a bit like the way your brain works. The nerve cells pick up the signals from the world and send them to the receiver.

At this point, though, the brain does something different. It tests the whole stream to see if there's anything familiar there and if it finds a similarity, it reacts.

The problem is that when the brain does that, it's so fast that we haven't even become aware of it yet. It's much faster than we can think consciously. That's why we can do so many things sort of automatically without really having to think about them, like tying your shoelaces, writing your name, running upstairs, or driving a car. All those things are completely automatic and something the brain has somehow learned it should do, even if it doesn't know why. That's why it's so difficult to change a bad emotional or behavioural pattern on your own.

### Some Examples of Automatic Neural Response

The body corrections needed to maintain balance while riding a bike need to be learnt, but after that they happen before conscious awareness. A competent typist thinks of the word they want to type, not the keys they want to press. The word they want to type becomes part of a neural feedback loop and the relevant muscles are activated at about the speed of conscious awareness. A pianist thinks of the tune they want to play, or reads the notes on the staff – they don't think of the keys they want to press. Again, a neural stream activates the relevant muscles and also incorporates emotional 'colour' to govern the energy fed to the muscles in order to moderate the loudness of the note. Other instruments have similar relevant loops, some including blowing and / or mouth shape.

#### "I Just Couldn't Stop Myself"

Problems arise because reactions are not always logical, and often the executive centres are accessed in conscious awareness after a motor action has been initiated. For what it's worth, parts of the brain that are responsible for the "I just couldn't seem to stop myself" reaction are the parietal cortex, the thalamus, the hypothalamus, the hippocampus, and the brain's panic button, the amygdala.

A simple example is when somebody pretends to lob something in your direction and you try to catch it so automatically that you don't even think about it. Or if somebody throws something straight at you and you automatically try to dodge, even if there's actually nothing in their hand. Spectators at a pleasure garden ride will duck and even scream as the vehicle sends a wave of water crashing towards the glass screen, even though they are aware the water will not reach them. After two or three 'retraining' events they might simply flinch and even that will cease as new neural pathways are brought into play.

Another example is the braking response while driving. This has to be learnt at first, but becomes so ingrained that the neural paths are activated without conscious thought. It is possible for this particular response, though, to be consciously modified, but to do this, we must feed further visual information into the neural loop. Burst a balloon behind somebody's back and they are likely to 'jump'. The event is completed before they are aware of the response and this one is much more difficult to recondition. Under some circumstances, though, the neural assessment is that this sound is not out of place and the startle response doesn't happen. Training of soldiers not to flinch in the battlefield situation is a good example.

#### Bad Emotional Habits Are Hard Not to Do

Your brain's neural networks can be imagined as a kind of cap with lots of crisscrossing threads all over it, from back to front and side to side. Can you imagine a hairnet inside your head? Can you imagine a very closely woven hairnet that has five layers? Now, can you imagine a very closely woven hairnet that has zillions of layers, all of them sparkling with tiny spots of light whizzing about all over the place and sometimes jumping between the layers?

This image represents what your brain is doing every split second of every day of your life. Those little spots of light are the electrical energy that it picks up from the world around you. Its information from the world and the brain channels it and tests it to see where it seems as if it should go. The problem is, that it sometimes sends the data to the wrong place because of something it learnt somehow, and your low self-worth, or your fear of flying is the result. Now, that's where BWRT can come in. Between us, we can discover where the mistake happens and do a bit of retraining of your brain.

Once the brain has created an automatic response pattern, it can become so automatic that it would be really difficult not to do them. Although the idea might seem a bit odd at first, when we suffer from something like temper problems, unresolved grief, social or other phobias, anxiety, panic attacks, sexual problems, even depression, it works the same way. Something is happening that makes us do something that we'd rather not, or that stops us doing something we'd like to do. Using BWRT, we can help you break that loop so that you can start to do the thing you want to do, instead of what you don't want to do, but can't help doing or feeling.

#### It's All About Speed

Unwanted or problematic reactions are all about the speed of the nerve paths in the brain, and they work much, much faster than we can consciously think, which is why a name for the process is 'preconscious,' 'subconscious' or 'unconscious'. That's how instincts or reflexes work – the brain works out in a split second what action to take and starts it off.

Now when you have panic attacks, or suffer from a fear of public speaking, or road rage, or a violent temper, what's actually happening is that the brain is doing something that it has somehow learnt fits with whatever is going on. It doesn't matter what you consciously want, because by the time you actually start to think about that, the speedy part of your brain has already made its mind up. And that's why it's so difficult to deal with these kinds of problems on your own.

The problem is that when you try to fix it on your own, you automatically think of the problem, which creates a kind of loop of thoughts that keeps the same thing happening. Even if you try to think of what you want to happen instead, it doesn't work, because the brain has already started doing something different. And that's where speed comes in. Using BWRT we over-write the bad old memory and then narrow the recursive loop in your brain by repeating the process a few times very quickly, thus we are consolidating a new conditioned response in your brain. Speed is essential for the best possible result, because it kind of overloads your central nervous system so that nothing else can be processed; no other processes can interrupt the installation of the new software. It's like if you imagine a ring road that is completely full of high speed traffic driving nose-to-nose, and no other vehicle will be able to enter the stream.

To change unwanted automatic reactions, all we have to do is get as far back along that signal path as possible so that we can persuade your brain that a new behaviour is more suitable than the old one. The term neuroplasticity refers to the lifelong ability of the brain to reorganize neural pathways based on new experience. As we learn, we acquire new knowledge and skills though instruction or experience. However, in order to learn a new behaviour pattern, there must be persistent functional changes in the brain represent the new learning.

#### The Wait Sate – AKA 'The Freeze'

Now we come the 'freeze the memory' concept which is probably the most important aspect of BWRT. This 'Freeze' is a totally natural response for the human animal under duress, part of the well-known 'Fight, Flight or Freeze' response. In BWRT we recreate this completely natural response as an essential part of the therapeutic process. We recreate what often happens during a moment of trauma that is 'Freeze' while waiting for further information. This is why it has been dubbed a 'Wait State', a pause, waiting for new information to arrive. It is as if the brain says, "OK, I've stopped; what have you given me that's new? The new response pattern is inserted into the brain in the 'Freeze' moment of a traumatic memory. If no new information is given, the old software will just start running again.

In BWRT the memory of the original traumatic event is frozen again, creating a specific set of important circumstances in the limbic system. It allows conscious awareness to contain the same information as the limbic system in what is effectively a very tight recursive 'closed loop' to keep other data out, while we change the relevant neural pathways. We have a fixed point that we can link forward to the present and thence to a fixed future point. This allows us to create a huge recursive loop that spans only 1/5th of a second in 'Brain Time' but several weeks, months, or even years in chronological time.

What we are essentially doing, is storing new software in the pattern recognition matrix. We're uploading a new preferred response in the preconscious part of the brain. In essence, we're over-writing the bad software with better software. This part of the brain doesn't really 'care' what's in the software; if there's new software, it will lead to a new reaction.

#### The Now Delusion

BWRT depends on your brain's ability to react according to the 'as if' principle. Anxiety is your brain reacting to a present situation as if your worst anticipation during a past situation has already happened. With BWRT we sort of hack your mind and imagine and install a preferred memory – a better version of the past – and, provided that this better memory is plugged into the brain as a recursive loop in such a way that it over-writes your previous bad memory, your brain reacts to that preferred memory as if it has indeed happened. Strange as it may seem, we also imagine and install a better future memory. Using particular techniques to lock it into place, we create a memory of something that hasn't happened yet, but you will remember it as if it has already happened. This is possible because your brain creates new nerve pathways every time you think of something. Indeed, the brain is a river, not a rock. As much as 70% of your synaptic connections change each day. BWRT zooms in on and changes those synaptic connections that you want to change.

An interesting article appeared in the New Scientist, November 2, 2013. Its called: "The Now Delusion" and has the strap line: "Do past, present and future only exist inside our heads?" The article says: "Our current theories of space and time teach us that past, present and future are all equally real – and fundamentally undistinguishable", and: "We live on the edge of the universe, on a surface we call the present that shimmers into existence one moment at a time". This, of course, is a purely philosophical concept but it pretty much explains why BWRT is so powerful and we can get the brain to accept what we do during therapy.

This booklet on BWRT is also available electronically on my website. To download this booklet as well as a collection of other booklets and CD's, please visit my website – **www.susankriegler.com** - or scan the QR Code below. If you would like to schedule an appointment, please contact my reception.

-Susan-

# **Dr Susan Kriegler**

# **Educational Psychologist**

181 Beckett Street Arcadia Pretoria 0083

Tel: 060 6215 398

Email: reception.smk@yebo.co.za

www.susankriegler.com www.facebook.com/DrSusanKriegler www.cribnotesSA.co.za

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