

AN INTEGRATED RAPID MEMORY RECONSOLIDATION APPROACH:

# *Rapid Resolution Therapy*

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PART 2



## NEUROPSYCHOTHERAPEUTIC FRAMEWORK

Neuropsychotherapy teaches us, through consistency theory, that human beings have five major brain needs. These are survival-brain needs that must be met before the limbic system will defer back to the thriving brain (Grawe, 2007; Rossouw, 2014, 2016). Establishing the needs of the survival brain before trying to enhance a thriving state is a bottom-up before a top-down approach. There must be an understanding in psychotherapy that we cannot think our way out of our survival brains; we have to feel our way out. My job as a therapist is to ensure survival needs are met before trying to enhance a client's thriving state. The neuropsychotherapeutic framework requires that therapists help to enrich every client's senses of motivation, safety, connection, control, and self.

### MOTIVATION

Motivation requires the production of dopamine. Dopamine, a neurotransmitter, has many functions, including involvement in such things as movement, memory, and attention (Schultz, 2007). Another important role for dopamine is in the human reward system. Dopamine production occurs with satisfying experiences and when predictions based on earlier learning experiences, both conscious and unconscious, are satisfied. When a prediction is satisfied, dopamine molecules get excited and people feel forms of motivation as they turn on the thriving brain—an approach state—or to the survival brain—an avoidant state (Rossouw, 2014, 2016). As in the case of coping through meditation versus coping through the use of alcohol, motivation occurs whether the outcome will be effective or ineffective. One's past memories predict future dopamine production regardless. If one learns such coping has been useful, the brain may lean toward using that coping technique again. Human brains are motivated toward certainty and predictability because the amygdala retains high level emotional memories that might affect survival. This is also why humans gravitate toward certainty and predictability, even in chaos. Even chaos can be predictable and offers

certainty, thus it can be dopamine producing.

I mentioned conscious and unconscious learning, so it is also necessary to explain a way to discuss and understand unconscious and conscious brain activity with clients. A metaphor that works well for adults is to remember one's vehicle driver training. When people begin learning how to drive, they must actively consider which pedal to use, which way to move the indicator, look left, look right, use the mirrors, and to know the traffic signs and signals. Subsequently, people drive from one town to another and never think about the pedals or the indicator. When you see a sign to slow down, your foot comes off the pedal without thought. The brain works in automatic ways even when you are not consciously aware it is working.

### SAFETY

For survival, humans need safety. Without safety, the thriving brain does not work to its full potential. Consider you are swimming in a tank of perfect water and I say to you, "Please do this simple math:  $3 + 1 + 2 + 4$ ". In a tank of water, this would typically not be an issue if one has learned addition. Now consider, you are in a shark tank and I say to you, "Please do this simple

math: 3 + 1 + 2 + 4.” In a shark tank it is unlikely that you will hear the numbers, let alone be able to put them together. Brains do not learn to have a thriving brain (approach state) from a survival brain (avoid state) experience. In a shark tank, brains react. The survival brain reacts to ensure survival and works 10 times faster than the thriving brain (Rossouw, 2016). This is why hitting a child as punishment teaches him or her to avoid that response, not to approach an understanding of the problem.

The survival brain requires physical as well as emotional safety before it will defer energy to the thriving brain (Rossouw, 2014, 2016). Safety is also consciously and unconsciously inferred with comfort. As I discussed previously (Part 1), human perceptions of threat to safety can activate a fight, flee, or freeze response regardless of whether that response is useful (an actual threat) or not (a perceived threat). For instance, because our brains are designed to fight, flee, or freeze in response to aggression, when someone yells, others near the yeller often experience a fight, flee, or freeze response. Yelling can often eliminate a sense of emotional safety. While yelling is not an actual threat, but rather an indicator of a potential threat, the

brain may nevertheless perceive it as a threat, and the body will become activated to fight, flee, or freeze. Even if the person does not act, the sensation is still present (an avoid state).

## CONNECTION

Connection (attachment) is another need. Humans need to establish connection at the neural level, as well as connection with other humans. Human beings are social animals, and without connection with others they cannot further their species and are at greater risk. Consider another social animal, a deer say, separated from its herd. Because he is alone, the deer is at greater risk of being attacked. In a herd, a deer must only be faster than one other deer, and there are many other deer scanning the environment for signs of threat. So, when isolated from a group, a deer's brain and



body produce electrochemical signals that increase the deer's hypervigilance to an attack. Human beings respond similarly. When isolated from one's group, an individual's brain and body heighten his/her stress state. It is a biological response. While humans seldom have to flee a lion in the bush, as in hunter-gatherer days, one still had only to be faster than one other hunter-gatherer. So, without connection, our brains cannot achieve their highest potential thriving state.

Connection is also crucial for social bonding. Touch and eye contact produce oxytocin, which encourages bonding, but oxytocin is also thought to protect against mental and physical illness (Grippe, Trahanas, Zimmerman, Porges, & Carter, 2009). Oxytocin also reduces activation in the HPA (hypothalamus-pituitary-adrenal) axis (Smith & Wang, 2014).

## CONTROL

Humans have a need for control over their own lives. Control is not about the ability to control everything in one's environment, but instead to influence one's environment to reduce chaos and rigidity—what Dan Siegel (2010, 2012a, 2012b, 2015, 2016, 2018) calls integration, a state of being differentiated, but linked. A great example Siegel uses to describe differentiation and linking is as in a choir: "With each singer's voice both differentiated from the other singers' voices but also linked, harmony emerges with integration" (Siegel, 2018, p. 10). As humans we are linked, but we are also differentiated, or different from one another. We must promote and support integration for self and others in order to thrive as a collective whole. Integration is important in every aspect of one's neuropsychological needs. What one person perceives as safety, connection, motivation/satisfaction, and control may not be perceived the same by someone else.

## SELF

As Rossouw (2016) noted, one's sense of self is supported by the previous four needs of safety, connection, control, and motivation. When our environment is not enriched to support such needs, our perception of self is often poor, and our individual mental and physical health may also be at risk. I believe Siegel (2018) explains neuropsychological needs quite well when he says:

When we differentiate and link, we integrate. We become balanced and coordinated in life when we create integration. Various scientific disciplines may use other terminology, but the concept is the same. Integration—the balancing of differentiation and linkage—is the basis for optimal regulation that enables us to flow between chaos and rigidity, the core process that helps us flourish and thrive. Health comes from integration. It's that simple, and that important. (p. 10)

## UNDERSTANDING RAPID RESOLUTION THERAPY

More than meeting the necessary steps for successful memory reconsolidation, rapid resolution therapy (RRT) has a number of useful components. RRT uses story-telling (by the clinician, not the client), metaphor, education, laughter, and hypnosis when needed. Much like meditation, hypnosis down-regulates the brain. Rossouw (2014) observed that hypnosis has been found effective for managing the perception of pain as it interferes with the brain's typical communication patterns. Likewise, Siegel (2013, pp. 1–2) has this to say about meditation:

With repetition, an intentionally created state can become an enduring trait of the individual as reflected in long-term changes in brain function and structure. This is a fundamental property of



neuroplasticity—how the brain changes in response to experience. . . . This electrical change in brain function is thought to reflect the cultivation of an ‘approach state’, in which we move toward, rather than away from, a challenging external situation or internal mental function such as a thought, feeling, or memory. Naturally, such an approach state can be seen as the neural basis for resilience.

Siegel is also well-known for the aphorism: *Where attention goes, neural firing flows, and neural connection grows* (Siegel, 2018).

Hindsight bias is the tendency to look back (knowing what happened) and falsely think that the outcome was more accurately predictable than it actually was when the decision was made (Kubany & Manke, 1995; Popiel, 2014; Williams, 1993). Hindsight bias contributes to creating a mismatch between prior and subsequent beliefs.

This may be a surprise for many—except RRT therapists: validation is not a mismatch or prediction error; validation is an agreement. Validation helps us connect to one another, but it does not help the hippocampus into action. And why, as a therapist, would I validate a belief I am working to help a client change? A RRT therapist does not say to a client such things as: “That must have been very difficult for you.” Both the therapist and the client know the answer is yes. RRT therapists will offer a new experience instead, thus activating the hippocampus to apply a different context. For example, I might say, “Let’s clear that up” with the goal of keeping them present and not hijacked by the amygdala (Siegel & Bryson, 2012).

Dr. Connelly offers a useful example of changed context when he talks about “putting your pants on”. I prefer to use the word “shoes” instead as I explain, “You can remember putting your shoes on today (because it is stored in your short-term memory, the hippocampus), but if I ask you to tell me about putting your shoes on

yesterday, you will usually draw a blank. Your brain has discharged the memory as useless information because there is no emotion attached to the memory. You know you put your shoes on yesterday, but your brain knows there’s nothing that needs to be done about what’s not happening.” When this new learning is applied to the context of a traumatic memory, a client often experiences the awareness and felt sense that, indeed, no action needs to be taken toward or away from an experience that is no longer happening.

An RRT therapist would not validate a client struggling with earlier choices they wished they had not made. An RRT therapist would offer the argument that it is not possible to have done any better. I support such an argument by explaining the triune brain and how in a fight, flee, or freeze response, the effective problem-solving part of the brain is not even active and that humans do not see glaringly better options and choose the bad one. If those options were available and truly better at the time, one of those options would have been chosen. Connelly also teaches us to ask the question: “Can you do what doesn’t occur to you?” The answer is always no. These statements are not reasoning with the client, rather they are eliciting more satisfying emotions.

During each of my memory reconsolidation presentations I am asked the question: “If you don’t validate, how do you connect with your clients?” My answer is a reminder that I have connected from the very beginning with proof that humans are all normal within the context of their own lives. I remind them that our brains store a hundred trillion different experiences, and with 7.5 billion people on the planet, the mathematical likelihood that any two people are the same is zero. We are all normal, but we are not always effective. My goal is to help clients stop trying to be normal and just focus on being more effective. In our often amygdala-driven culture, I believe human beings

do not hear that enough. I want only to enrich their environments and ensure that one person's meaning does not offer proof of another's intent.

Another explanation that clarifies how unspoken meaning is often interpreted in our culture is the unspoken belief that the level of our love equals the level of our grief when someone dies. If you were to attend a loved one's funeral and immediately after want to attend a comedy show, what might members of your culture say? That you are disrespectful? That you are inconsiderate or rude? That you didn't love or care about that family member? Likely, yes. However, because neurons that fire together, wire together (Hebb, 1949), you could be doing the very best thing for your brain by avoiding living for an extended period of time in frozen grief. But because others whom you care for and who fear losing connections to you might look disapprovingly upon you, you might be motivated instead to avoid the possibly healthier response to grief and agree to a less effective response—that going out

would be rude. Thus, you accept their meaning. Or you might go to the comedy show but try not to get caught, which could result in guilt or anxiety. In actuality, going to a comedy show would not mean you don't care. That is only what your culture might say it means. When you don't agree with that cultural meaning, because you know yourself, you might just do what would be more effective for your brain and attend the comedy show. Such a response is a hard prospect for someone who is not well differentiated.

Our culture indirectly teaches that guilt will make you a better person. A mother may snidely remark, "Am I the only person who does dishes around here?" Rather than directly asking her child to wash the dishes she applies guilt. Perhaps my favorite storied-metaphor for treating guilt, shame, and embarrassment is my adapted "guilty surgeon" script (Connelly, 2016). Consider you have a clone and this clone is a surgeon. This surgeon is thinking about all his/her experiences with guilt, shame, and/or embarrassment. He/she,



while stressing about those experiences, is going into surgery one day and it is your loved one's day to be on the table. Do you want them to be on the table? Do you want to be on the table? The answer is most likely no.

Guilt, shame, and embarrassment don't make anyone a better person. Those emotions motivate you to make someone else more comfortable. They benefit someone else, so that person's behavior serves a purpose in the relationship. But it's not intentional, it's just what others have culturally learned over time is effective and your responding to their emotion-laden request is quite rewarding (dopamine producing). Meeting their need is more likely to encourage them to use such ineffective behaviors again. After all, even rats learn to respond by pushing a lever repeatedly when rewarded. If you always provide a reward, you are teaching others you always will, rats and humans alike. When you learn that guilt does not make you a better person, you learn to respond more effectively to other's applications of guilt, for instance. Others will learn because the reward is not followed by the request. When more satisfying predictability exists

in a different belief, dopamine levels increase to encourage motivation to the new belief. This elicits the effortless permanence Ecker, Ticic, and Hulley (2012, 2013) describe. A person knows it because they feel different, immediately: no thought process is necessary to maintain the different way of feeling.

Often surprisingly, laughter is another component of RRT. Many are surprised by the frequency of laughter in an RRT therapist's office! After all, neurons that fire together, wire together, so why would we not apply humor to an experience that is no longer happening? Laughter in the face of trauma does not mean the trauma had no effect on you, but it does help your brain "get it" that the traumatic event is no longer happening so nothing needs to be done about it. One cannot be in an approach state and an avoidant state at the same time. When we can laugh, our survival brain knows there's no threat. Have you ever seen or heard of a person being chased by a tiger while laughing? Our true survival response does not allow that. Smiling and laughter activate the hippocampus, which down-regulates the brain toward



a thriving state and enhances dopamine and serotonin release (Rossouw, 2013, 2014, 2016). Laughing when a stored traumatic or stressful memory is active also encourages memory reconsolidation because of the mismatch experience. Thus, new emotional learning that no fight, flee, or freeze response is necessary can be stored with the reconsolidated memory.

Also surprising in RRT is the lowered risk of vicarious trauma for the clinician. Few details need to be shared as new emotional learning can happen with the activation of reasonably tolerable details. These emotional learnings can then be applied to less tolerable details of an event. In fact, RRT therapists are generally looking for meaning, not details. As the new emotions provide a sense of safety the client demonstrates little reluctance. And when reluctance is present, the clinician will help clear that associated detail through memory reconsolidation. In RRT, when reactivating a memory, it is usually unnecessary and counterproductive to ask for more information about a trauma history than one would write in a newspaper headline. My previously disclosed interrogation experience came to my awareness through the RRT technique Connelly calls “ghostbusting”, when I was asked to recall when I had experienced a similar response to my fear of public speaking (Connelly, 2016). I was not asked to provide details. A brain-based therapist should be cautious to never strengthen a traumatic memory by asking for too many details about the event, or to activate it without changing it. Instead, clinicians should redirect to a thriving brain state when they recognize signs of the fight, flee, or freeze response. Such an approach can be easily accomplished with hypnosis, guided meditation, or redirection of attention toward an imagined positive experience to interrupt activation of the survival brain.

As an RRT therapist I advocate for treatments

that reduce the need for medication. Medication can encourage an individual to approach new experiences so networks can be transformed, but medication only changes the neurochemical signals being transmitted across synaptic connections, not the synaptic connections themselves. I have concerns that medication may also suppress a client’s ability to experience new emotions to a capacity useful for new emotional learning experiences. Additionally, I advocate for treatments that minimize pathologizing clients.

I encourage clients to seek out clinicians educated in neuroscience, and likewise I encourage clinicians to seek out neuroscience. RRT can change the stigma attached to mental health and requires a clinician to demonstrate his or her credibility with every client. It holds clinicians accountable for offering their clients tools, as opposed to having to come up with their own skills through therapy. RRT opposes psychopathologizing. Cultural stigma teaches that mental health issues are something to be avoided, so pathologizing activates an avoidant state. One’s senses of motivation, safety, connection, control, and self are not enhanced but inhibited with a diagnosis. RRT may, as yet, be a little-known model for treating mental health issues, but it is no less revered in the hearts of its rapidly growing successfully treated client and trained clinician population.

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## BIOGRAPHY



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