In this Edition

Neuropsychotherapy in clinical practice:

• Treating childhood trauma, depression and anxiety using a neuropsychotherapeutic approach: Warren’s experience
• The external world is not safe until my internal world is satisfied
Welcome to this special edition of Neuropsychotherapy. With this edition we celebrate our seventh anniversary! Over these years Neuropsychotherapy has matured as a fully-fledged therapeutic modality with an estimated 20,000 clinicians worldwide trained in the theoretical underpinnings and practical applications of applied brain-based therapies. The focus on the therapeutic alliance, safety, attachment, control and the development of an integrated social self, are some of the key principles of this modality.

IN THIS EDITION
In this edition we present two outstanding essays by certified Neuropsychotherapy Practitioners applying the principles of neuroscience in clinical practice.

CONFERENCE 2017
Our conference, The International Conference of Neuropsychotherapy is coming closer! The Program is fully booked with over 50 speakers from around the world. There will be exciting topics, pre-conference workshops on the neuroscience of eating disorders and pain, as well as mini workshops at the conference.

Please visit the conference website www.neuroconference.net for more information and registration options. The early bird rate still applies up until Friday 24 March 2017.

RESILIENCE COACH TRAINING (PR-6)
Our first training course for clinicians to gain proficiency using the Predictive 6-Factor Resilience Scale (PR-6) and to become Certified Resilience Coaches (CReC) was a great success. It ran in Sydney on 17 January and was fully booked out. Another PR-6 training is scheduled for 22 August in Melbourne. More information is provided in this month’s edition of Neuropsychotherapy.

CERTIFICATE TRAINING
The certificate trainings in 2017 to become a Certified Neuropsychotherapy Practitioner commence in Auckland (1-4 March) and Brisbane (7-10 March) and are almost booked out. Trainings in Melbourne (19-22 Sept.), Sydney (2-5 Oct.), and Hawaii (16-19 Oct.) later this year have some spots available – see our website www.mediros.com.au

Enjoy the read!

Pieter Rossouw
Referral

Warren was referred by his weight loss specialist in order to deal with the “psychological issues hindering his ability to lose weight”. Warren had been consulting a weight loss specialist for six months with no successful outcome to date. In fact he reported having gained further weight during that time. The specialist reported that Warren was typically non-compliant with instructions he was given. Warren’s GP also wrote a referral letter requesting counselling assistance for nightmares, depression and anxiety indicating these problems were related to a traumatic experience in childhood. Warren had not received any prior psychological assistance.

PRESENTING INFORMATION
Warren is a 51 year old morbidly obese male who required the aid of a walking stick to assist with movement to walk, sit and stand. Warren is a recipient of a disability pension and lives with his wife of 20 years. They have a 19 year old son who has moved out of the house due to conflict with his mother. Warren reported smoking up to 50 cigarettes per day, drank up to four alcoholic drinks socially and did not disclose any other substance use other than 20 mg of fluoxetine (an SSRI) daily which he is tolerating well.

Warren presented with symptoms consistent with trauma, depression and anxiety as a result of his physical limitations and childhood trauma. Symptoms included low mood, amotivation, anergia, anhedonia, frustration, feeling overwhelmed, intense fear of being negatively evaluated, a reduction in memory, attention and concentration, associated with physiological symptoms of increase in heart rate, sweaty palms, and shaking. Warren reported avoidance of social interaction due to his intense fear of being negatively evaluated and feeling unsafe when he left the safety of his unit.

Current stressors include regular nightmares of the abuse (without flashbacks), being attacked in his front yard and difficulty dealing with a large growth on the inside of his right leg, hindering his ability to move. While Warren stated that his wife is diagnosed with schizophrenia, he reported her to be compliant with medication and described her as supportive.

HISTORY
Warren is the fifth in a sibship of seven children. Warren reported witnessing regular domestic violence (DV) towards his mother and there appeared to be a strong genetic vulnerability to depression and anxiety via both parents. His mother suffered anxiety and depression and his father, while not formerly diagnosed, self-medicated daily with alcohol to cope with his own mental health issues. Warren described an incident when he was ten years old, when his father attempted to burn the house down while his wife and children were sleeping. His older brother managed to extinguish the fire although was badly beaten by his father in the process. Consequently, Warren’s mother left the family home with only four of his siblings, leaving him and his two younger brothers in the care of a boys’ home. Warren reported extensive physical abuse while he was a resident in the boys’ home stating he was disciplined several times a day, typically with a strap. Warren and his brothers were in the care of the boys’ home for the next two years before his mother eventually applied to care for them.

FORMULATION
Predisposing Factors

Other than a strong genetic vulnerability to mental illness, Warren reported disruption to his attachment with his mother due to her depression and experiences of family domestic violence.
Precipitating Factors
Using the brain development timeline, Warren’s neural development is likely to have been compromised through pre-natal and post-natal months due to his mother’s experience of domestic violence and depression. While Warren reported receiving regular “floggings” with a whip from his father, he was also subjected to daily beatings in the boys’ home which often occurred while he was showering.

Perpetuating Factors and social support system
Warren lives in a suburb well known for crime and violence which he reported experiencing most days when he leaves the safety of his unit. Warren reported a number of incidents over a short period of time including being punched and kicked outside his unit and an intruder attempting to break in with a brick through their living room sliding glass door.

Warren is socially isolated, apart from his relationship with his wife, and prefers to stay at home whenever possible. The only visitors they receive is their son who visits weekly. They have no close friends or acquaintances and live in housing commission accommodation.

Protective Factors
Warren’s son and wife are very supportive and he is in a better financial position after receiving a payout as compensation for his experiences in the boys’ home.

THE NEUROSCIENCE OF SAFETY
The theoretical model of Neuropsychotherapy takes a “bottom up” approach with our genetic pool providing us with potential strengths and vulnerabilities and our experiences influencing our gene expression. If our environment is enriched with a secure attachment to care givers and we have experienced safety with our basic needs being met, strong neural growth and proliferation in the cortical area results. In contrast, if our environment is compromised via negative early life experiences, motivational schemata will activate protective patterns of avoidance, effectively inhibiting neural thriving (Rossouw, 2014). These factors must be taken into account when formulating a treatment plan for Warren.

Warren has never experienced a safe, healthy, supportive or enriched environment as he was growing up and this also appears to be the case currently while he lives in a high crime suburb. Warren’s pre and postnatal experience, lack of adequate nurturing and his history of early adverse experiences are important risk factors for adult psychopathology.

Indeed, significant correlations are found between the development of a child and the treatment they receive from parents (Bowlby, 1988). Warren’s mother had been experiencing DV soon after they married, which continued throughout each pregnancy. As Warren is the fifth child, his depressed and anxious mother had little motivation or time to spare Warren, and his father preferred to “whip first and ask questions later”. This early life adversity is associated with epigenetic alterations in the hippocampal neurons (Labonté et al., 2012). Warren was also prenatally exposed to his mother’s distress and physical abuse possibly leading to epigenetic modifications creating significant changes in neurochemical and neurostructural levels, even before his birth.

The limbic area is fully developed at birth however requires environmental interaction for the activation process to occur (Rossouw, 2013a). Due to the violation of Warren’s basic needs, his limbic system (thalamus, hypothalamus, amygdala and hippocampus) was in a constant state of activation (an up regulation of the hypothalamus-pituitary-adrenal (HPA) axis) due to his early childhood experiences with family violence as well as violence against him in the boys’ home. This disproportionate and upregulated limbic system activity continues without any precipitating stimuli predisposing Warren to more extreme responses to benign stimuli. Warren’s avoidant behaviour indicates he is stuck in patterns of disconnection from his environment and is trapped in default neural pathways wherein he is “comfortable in his discomfort” (easier to stay at home and be safe despite knowing that social isolation is not good for him).

THERAPY PROCESS
Warren’s neural system was wired in order for him to survive in his compromised environment as a child and this compromised childhood has created an avoidance response to his world view (the world and people in it are dangerous). It is highly likely that changes in the functioning of the hypothalamic-pituitary-adrenal (HPA) axis and stress sensitivity occurred as well as inhibition of frontal cortical growth and healthy development (Rossouw, 2013a). The activation of the HPA system from prolonged exposure to threat, leads to an over production of stress hormones. Chronically elevated and excessive secretion of stress hormones can result in metabolic disturbances including but not limited to; increased appetite, accelerated muscle breakdown, enhanced fat storage and memory and concentration problems (Rossouw, 2012) likely contributing to Warren’s weight issues.

“It is only when survival is secured, that higher order connections can flourish (neural thriving)” (Rossouw, 2014). Using the premise that a brain exposed to an enriched healthy environment will flourish and develop strong neural networks (Rossouw, 2013a), the treatment plan for Warren included neuropsychotherapy principals aimed at enriching his environment to facilitate stronger neural connections, specifically activation of the prefrontal cortex to enable a thriving rather than surviving response. Thus, establishment of a safe environment for Warren was of paramount importance and to facilitate change to fulfil his need for safety and control.

Constans (2005) suggests that a change in information-processing bias is required to remediate pathological emotional responses to benign stimuli. The concept of controllable congruence as opposed to uncontrollable congruence (trauma) was highlighted frequently throughout Warren’s consultations (Grawe, 2007).

The extinction of Warren’s conditioned fear response would commence in the safety of the therapy room with gradual exposure to the “outside world”. A strong therapeutic alliance was required to down regulate Warren’s typical survival response and to activate
strong neural connections to the frontal cortex (Allison & Rossouw, 2013).

Because body movement increases serotonin and dopamine levels (and decrease cortisol levels), Warren was encouraged to move more with regular exercise (swimming/walking). To enhance the chance of exercise compliance, Warren was provided with positive motivation (rather than negative) by explaining the neurochemical benefits of movement and exercise (increase of serotonin and dopamine levels/ decrease in cortisol levels). This also served as exposure to a safe environment that was in Warren’s control.

In my attempt to enrich Warren’s environment (enhance pleasure maximisation and distress avoidance), efforts were made to encourage the re-establishment of relationships with his friends and extended family (brothers and sisters) as well as engagement in daily pleasurable activities.

Warren lamented often of poor memory, sleep and weight gain, thus development of good nutrition, exercise and sleep hygiene practices were achieved which are crucial in enhancing BDNF production. Contributing factors that decrease BDNF production and neural plasticity as well as enhance neural rigidity include the consumption of high fat/refined sugar diets (Rossouw, 2013). Without effective hippocampal discharge from good nutrition, quality sleep and regular exercise to burn cortisol, Warren is at risk of strengthening unhelpful neural patterns rather than activating new ones.

CONCLUSIONS
Post-Traumatic Stress Disorder (PTSD) is a complex condition with many complicating factors (Rossouw, 2013c). Warren’s progress has been slow but positive as he is highly motivated to change. Rather than stay indoors, Warren has been successful in leaving the house to drive himself to a safer area where he was able to walk around a park (taking frequent breaks). While Warren was initially reluctant to commence swimming due to an intense fear of negative evaluation (due to his size), he has been able to swim at the pool several times while I have supervised and ensured a safe non-judgemental environment. Warren reported enjoying his walks around the park immensely and as a result he has met a couple of people who he believes may lead to potential friendships. Warren and his wife have applied (and been successful) in moving to a safer environment as a result of the attacks on him while he was in his front yard. Warren was also referred back to the dietician to assist him change his eating habits. Warren reported being more open to suggestions with regard to his diet (albeit believing it will still be difficult to change his diet after years of unhealthy eating).

REFLECTION
Addressing complex PTSD symptomology is a challenging task with any client. Nonetheless, as Warren’s memory was compromised it took several psychoeducational consultations with neuropsychological and neuropsychotherapeutic content for Warren to understand the principles. For me this was very frustrating and I was left with the impression I was ineffective. I may require further practice with conveying these principles in simpler ways. Alternatively, I could possibly have tried to address his poor diet and sleep hygiene first to enhance BDNF production which may have improved Warren’s memory.

Since commencing exercise Warren has damaged his knee after a fall in the bathroom and will require surgery to repair it. Despite this, Warren reported being less anxious about surgery which will necessitate exposure to many unknown people. Warren remains optimistic he will be able to continue exercise (albeit at the pool only for the time being) once his knee has healed. Warren has been successful with changing the type of food he consumes and is now eating healthier foods. While Warren is choosing much healthier options, he reported at his last consultation with me, continued difficulty with reducing portion sizes.

REFERENCES


Rossouw, P.J. (2012). Neurobiological markers of childhood trauma: Implications for therapeutic interventions. Neuropsychotherapy, July/August 16:4


Steve came to psychology later in life, completing a First Class Honours degree at the University of Southern Queensland in 2006 before embarking on a busy two-year internship.

Steve worked for a decade in Queensland’s as a school-based special needs teacher-aide and a district behaviour team youth worker, and now works at a regional level in Queensland’s education system. Key among his duties is complex case management and providing support for students, carers and schools. Steve has an interest in all young people who struggling with difficulties but especially those who have fractured attachments or experiences of childhood trauma or neglect. Steven sees his ability to work across frameworks as enhancing his capacity to provide psycho-education and professional development for individual teachers and school administrators. He favours a mix of neuropsychotherapy, cognitive behavioural therapy and motivational interviewing techniques. Neuropsychotherapy highlights that a sense of internal student safety must be established prior to seeking to introduce classroom interventions, no matter how benign or proactive they may appear to be.

THE EXTERNAL WORLD IS NOT SAFE UNTIL MY INTERNAL WORLD IS SATISFIED

Client Demographics

Vicky is an 11 year old girl who resides in an inner suburb of a major city. She shares a small apartment with her father and his current partner. Her mother resides in a nearby regional town and Vicky visits her fortnightly and during school holidays. Whilst Vicky's relationship with her father’s partner is cordial, Vicky does not see her as part of her support system. Vicky has a younger paternal half-brother who resides interstate with his maternal grandparents. They have never met.

Vicky was born two weeks prematurely and was removed from her mother’s care at three months due to her mother’s ongoing drug use and neglectful care. Whilst there has never been evidence of physical abuse, Vicky’s basic needs as an infant such as feeding, changing and emotional support were severely compromised and following short-term foster placements, Vicky was finally placed in the care of her father.

Parenting such a young child was not an easy task for Vicky’s father and little is known of her developmental milestones. Vicky has always been in the 5th percentile for size and there was an extended history of Department of Communities mediated paediatric and psychiatric interventions up until four years ago. During this time, Vicky’s father was subject to a Department of Communities intervention following Vicky presenting herself at school with substantial bruising to her upper legs and posterior.

Over time Vicky has attended three schools and is due to commence secondary education in 2017.

PRESENTING INFORMATION

A tertiary support service referral was made by Vicky’s school due to ongoing peer difficulties, removing herself to the classroom of a favoured teacher who taught Vicky in Year 3. She showed a severe reluctance to engage in non-preferred activities. The school was also keen to provide Vicky with the best opportunity to be successful at high school as they consider her at risk of disengagement or school disciplinary absences and exclusion. Parental contact with the school is minimal.

Previous psychiatric and paediatric consultations resulted in comorbid diagnoses of reactive attachment disorder and attention deficit hyperactivity disorder (World Health Organisation, 1993; American Psychiatric Society, 2013). Initially, Vicky was prescribed methylphenidate and risperidone to manage her presenting symptoms. Risperidone was discontinued at age seven but as her motor movement, inattention and hyperactivity were still of some concern a continuation of methylphenidate was recommended. One year later, this too was discontinued.
after Vicky and her father reported concerns over facial tics, weight loss and poor sleep hygiene.

Formulation

Vicky’s life experiences have been difficult and have led her to a position of underlying mistrust for those who were responsible for her care. With her fractured attachment history Vicky sees her lack of safety within her physical environments and relationships as the dominant aspect of her development. When these criteria are not met, Vicky will either avoid or escape the situation. Well-practiced, these patterns of behaviours have led Vicky to become extremely self-reliant and have over time have become entrenched into other aspects of her life. Vicky has a sense of internal safety when engaging in what she already knows or perceives she is capable of teaching herself. However, when presented with challenging learning tasks or social interaction she is more than likely to engage in patterns of behaviour that have served her well previously (patterns of avoidance). Vicky’s school records indicate that compared to the majority of her peers, she experiences greater difficulty in understanding, engaging and completing curriculum tasks.

Understanding how these patterns of avoidance and control have developed and the purpose they serve would be essential in assisting Vicky to develop new ways of interacting with her environment and in her relationships. Communicating this to Vicky would most likely be through a mix of expressive based and talking therapies. Prior to commencing therapy, Vicky would need to feel safe within the therapeutic process.

NEUROPSYCHOTHERAPEUTIC ASPECTS TO PRESENTATION

Vicky experiences difficulty in managing three distinct areas of her life: the general environment; her relationships; and the curriculum. Whilst there is insufficient space in this essay to explore all three in detail, each are predicated upon Vicky’s need to experience a sense of safety.

A perception of safety and security is one of the key underpinnings of human development and is evident both explicitly and by implication in a wide range of literature. Bowlby (1973) indicated that humankind tend to be repelled by those environmental contexts that highlight “one or more of the natural clues to potential danger”. Rossouw (2014) suggests that psychological health is reliant upon a sense of safety. Bowlby (1988) again in “A Secure Base” makes the insightful observation that adversity in childhood not only puts that individual at risk of experiencing future adversity but through their own actions they are far more likely to find themselves in situations of adversity. A violation of basic needs in early life experiences compromises the ability to meet basic needs (Grawe, 2007).

In her work on trauma and recovery, Judith Herman (1992) posed the question that if “no other therapeutic work can possibly succeed if safety has not been adequately secured … how is that safety assured?” (p. 159). Utilising Grawe’s (2007) Consistency-theoretical model of mental functioning as a conceptual base and the work of others including Eric Kandel and Seymour Epstein, Rossouw (2014) developed an integrated theoretical model of neuropsychotherapy that provides a framework through which Herman’s question may be answered.

In the bottom-up approach of this model, environmental safety is the key to neural development. Enriched environments lead to approach motivational behaviours in order to meet the three basic needs of connection (attach-
ment), control and motivation (avoidance of pain and the maximisation of pleasure). On the other hand, compromised environments are more likely to lead to avoidance motivational behaviours. As a person meets their basic needs, an overall sense of self is developed.

In Vicky’s case her developmental history indicates a compromised environment at a very early age where a number of basic needs of were not met.

Vicky has developed patterns of approach to develop connection with those she considers to be “safe” as well as patterns of avoidance for persons/situations that are not considered safe. Through the lens of attachment, Vicky can be seen to have a disorganised attachment style (Main & Solomon, 1986). Despite the familial difficulties described previously, Vicky has the greatest feeling of safety when with her father. At school, her current class teacher and previous Year 3 teacher are seen as key protective figures. Unfortunately, her class teacher’s decision to take on another position within the school for three days each week has triggered memories and long established neural response patterns of uncertainty and loss. As a result Vicky has found the class transition to a “teaching partnership” difficult. Recent incidents in the classroom have exacerbated this and triggered a limbic system neural loop (Rosouw, 2014) where Vicky can see no resolution other than either herself or the new teacher her leaving (i.e. avoidance behaviour). As the school has reported increased instances of Vicky leaving the classroom and taking herself to the Year 3 classroom, drawing on own sense of safety and general hypervigilance, the change in teachers can be seen as the latest precipitating event.

Her connection with her school-aged peers is unsubstantial with only one close female friend. She often prefers the company of either younger children or other children who receive specialised support.

Life experiences have taught Vicky that it is best to remain on guard in order to maintain her safety. As a result, her thalamus, which receives sensory input, has strong neural links to her amygdala and she has developed an overactive Hypothalamus Pituitary Adrenal (HPA) axis. Grawe (2007) suggests that the amygdala be considered as the “anxiety centre.” It is likely that for Vicky, a certain degree of conditioning has occurred in relation to certain facial expressions especially those related to irritation, frustration and anger (Breiter et al., 1996). When the HPA axis is triggered it is responsible for a cascade of hormones such as adrenalin and cortisol in order to prepare the body for a fight/flight or freeze response. Repetitive firing of associated developmental neural patterns in Vicky’s brain has followed the Hebbian Principle, which is popularised by the statement “neurons that fire together, wire together” (Henson & Rosouw, 2013). With so much cortical blood flow to the limbic areas of the brain and the enhanced neural pathways referred to above, the problem solving/learning brain (the left prefrontal cortex) remains underpowered and unable to be activated during times of stress. At these times, Vicky is more likely to be unresponsive to the directions of others and far more likely to leave the immediate area and seek out her safe base - the Year 3 classroom.

Overall, when Vicky considers herself not to be “safe” in terms of both context and attachment figures, she is most likely to display independence in addressing what is happening around her and this will be reflected by flight or flight behaviours. In the context of the school setting, this would be seen as not following directions, or being disobedient.

THE THERAPEUTIC PROCESS

Whilst the circumstances surrounding the development of reactive attachment disorder (RAD) are reasonably clear, the causes of ADHD are less well substantiated (State of Victoria, undated). Differences in brain anatomy, electrical activity and metabolism are postulated with norepinephrine, dopamine and Brain-Derived Neurotrophic Factor (BDNF) production (Shim et al., 2008); (Smith et al., 2013) among a host of areas of investigation. A lack of early healthy attachment is also another of a number of contributing factors identified by researchers. What is known is that with both RAD and ADHD, children have a sense that they are different and lonely but do not know why, and this has a significant impact on their ability to socialise and engage in day-to-day activities at school (e.g. Greene et al.,2001; Hinshaw, 2002). Suffice to say that both of these disorders are known to impair social interaction.

Of utmost importance was that in order for Vicky to engage in therapy, she would have to consider herself safe within the “therapeutic alliance”. Not until down-regulation (reduction) of Vicky’s potential stress response and associated patterns of avoidance were addressed, would she be able to relax and contribute in an open and hopefully healing way (Allison & Rosouw, 2013).

An advantage of “in house” third party referrals, is that the history of the client is “laid out” before the therapist, often before they have met. Some clinical settings ask clients to complete questionnaires on demographic and health backgrounds prior to entering the “therapeutic room”. The principles of psychotherapy suggest whilst not a disadvantage, the notion of “safety” within the therapeutic alliance demands that the clinician treat this knowledge with caution. In Vicky’s, case, history taking was treated as an ongoing exercise and one in which Vicky would have control over. Given her known history and medical diagnoses, to do otherwise would risk triggering Vicky’s neu-

“Her connection with her school-aged peers is unsubstantial with only one close female friend.”
As the therapeutic relationship developed it was the aim of the author to use the word “safe” or its derivatives as many times as possible...

...rational patterns of avoidance and subsequent resistance to the therapeutic process. Thus, down-regulation of this survival response was required prior to bringing about a capacity for change through the activation of new neural connections.

The aim of each session was to greet Vicky with a smile and immediately tap into those activities or events that she had identified as providing her with pleasure (drawing, riding skateboard, visiting relatives) as these can be seen as “existing motivational potentials” (Grawe, 2007). Incidentally, Vicky’s motivation to draw would form an essential component of each session both as a learning tool and an expressive therapy. For instance, in the second session Vicky was very willing to explore the “triune brain” (Maclean, 1990) through drawing and subsequently has been able to ascribe basic brain activation to a number of her behavioural patterns both at home and school. The concept of cortical blood flow was analogised through each section of the brain having a motor that had to share its derivatives as many times as possible when describing not only Vicky’s interactions with the environment and it’s actors, but also those of her parents and teachers. This was an attempt to subliminally convey a sense of safety within these relationships. Even with safety established within each session, it was demonstrated that if Vicky experienced uncontrollable incongruence, this would be sufficient for her to retreat into patterns of avoidance. Grawe’s (2007) consistency theory introduced the notion of controllable versus uncontrollable incongruence. Grawe differentiates between inconsistancy – discrepant or competing mental processes and incongruence – discrepancies between perceptions of reality and goals/expectations/beliefs.

These concepts were amply illustrated during the fourth session when discussing a recent weekend Vicky spent with her mother. Because Vicky’s father was contemplating a move interstate, Vicky’s mother (her own need for connection activated) had stated future weekend visits (with her father) to be out of the question and therefore Vicky would have to choose which parent to live with. Vicky offered the following observation, “So I have to choose between living with the person who doesn’t feed me and the one who hits me”, before retreating in both a psychological and physical sense. As this statement was known to be historical rather than contemporary it can be hypothesised that the uncontrollable incongruence emerges from her goal of connection with both of her parents and the realisation that this may not be possible. This up-regulated (enhanced) her stress response and activated the dominant pathway to avoid pain and to re-establish a sense of control.

Controllable incongruence on the other hand, is seen to increase performance and begin the building of new neural pathways (Rossouw, 2016). An example of this occurred with provision of the following homework questions: “How did you become good at drawing/skateboarding? (Motivation), What happened when you fell off or used the wrong colour? (Control), Did anyone help you? (Connection), How do you think you could get better at (school task)?, “Who do you think could help you with this?”

When Vicky felt safe and incongruence was controllable, her answers demonstrated that her stress response had been successfully held in check and she had been able to activate her pre-frontal cortex or in her words “my feeling brain let my problem-solving brain do some work”. Thus, the pace of each session and the therapeutic process in overall was of some importance.

DISCUSSION

Vicky’s therapeutic journey is in its embryonic stages, yet there indications of progress. Over time Vicky has provided an accurate, and to a certain degree, enriched personal history. Above all, Vicky understands that feeling safe physically, emotionally and educationally is very important to her and why this is so. She has been able to:

• Identify two “safe” teachers and what they provide in order for her to feel safe at school

• Identify that when her feeling brain is overwhelmed she seeks out the safety of her Year 3 teacher who she knows will provide the “problem solving brain” that will assist her to regulate herself

• Understand that she has a long-established pattern of avoiding her peers at break times and seeking out the “safety” of either younger students or others she identifies as also having special needs and that this is due to previous stressful social encounters

• Identify that when “stressed” she would draw on herself or her chair/desk and that since commencing our work this had ceased.

• Undertake small “behavioural experiments” to test out situations of controllable incongruence (e.g. repairing a fractured teacher relationship)

• Sit still for a period of five minutes and control her excessive motor movements

• Complete school assessments

FUTURE DIRECTIONS FOR THERAPY

In addition to the work outlined above the following matters need to be considered and introduced at appropriate times:
1. Vicky self-identifies an issue with “anger management” and may benefit from integrating the principles of neuropsychotherapy with the activities of “A Volcano in my Tummy” (Whitehouse & Pudney, 1998).

2. Disturbance of sleep, in particular Rapid Eye Movement (REM) sleep is associated with ADHD (Cohen-Zion & Ancoli-Israel, 2004). As productive REM sleep is also linked to hippocampal wellbeing and general stress reduction (Grawe, 2007), further exploration of Vicky’s sleep patterns and hygiene is required.

3. As Vicky demonstrates an appropriate cognitive capacity, the use of psycho-education and App based delivery of The Zones of Regulation (Kuypers, 2011) may also be beneficial.

4. Develop a graduated approach for lessening Vicky’s need to retreat to the Year 3 classroom, by developing other “safe” areas in the school environment.

5. Development and implementation of a transition to high school program.

As a behaviour consultant to schools and as a therapist, I believe that the greatest impact in this case has been that using a neuropsychotherapeutic framework has enabled both Vicky and her educators to view her presentation in a new light and one that offers a way forward when the use of medical interventions have been discounted in the past. There is now a shared understanding of Vicky’s needs to be safe and that her leaving the classroom and indeed not engaging in some learning tasks is not simply work avoidance or disobedient behaviour. The incongruence that surrounded her entry into secondary education in 2017 has reduced to point where Vicky now perceives this as controllable and something she is able to discuss.

Vicky’s brain is still in an early development phase and there is potential to not only develop new neuronal pathways by exploiting the Hebbian principle but also to extinguish less helpful neuronal pathways through its corollary principle proposed by Michael Merzenich that “neurons that fire apart, wire apart” (Rossouw, 2013). Eventually there is potential for Vicky to change the way in which thinks about and interacts with her world.

Lastly, the author will continue to build a greater neuropsychotherapeutic understanding of Vicky’s presenting behaviours.

**ADDENDUM**

Save for sleep hygiene, interventions and skill building continued as outlined above and Vicky has become increasingly able to engage with a core group of peers and most break times are spent in their company. Despite increasing adult connections within the school, her relationships with adults remain subject to Vicky’s internal dichotomy of either trusted or untrusted.

Just how tenuous new neuronal connections can be and the power that well-practiced neuronal connections exert, was borne out as Vicky and her peers neared the end of their primary education. At this time, not only did Vicky’s presenting behaviours escalate but she also chose to withdraw from therapy sessions. Vicky resolved this period of withdrawal after a period of three weeks and sought to include me in her class’s graduation celebrations, suggesting that even relatively weak neuronal pathways can be re-activated once a feeling of emotional safety provides “space” for them to be accessed.

The matter of her Vicky’s secondary placement remained unresolved at the conclusion of the school year.
REFERENCES


Herman, J.L. (1992). Trauma and recovery: The aftermath of violence - from domestic abuse to political terror. NY: Basic Books.


FROM THE IACN SECRETARY,
Jonathan Wills

A HIGH PROFILE IACN MEMBER

We are very impressed with the achievement of Clinical Member Dr Trisha Stratford who is an expert consultant on the Channel 9 TV programme “Married at First Sight”.

Trisha is a clinical psychotherapist in private practice in Sydney, who specialises in relationship, anxiety and trauma issues. Trisha explains that neuroscience helps us to understand how the neural networks of the brain shape our world and, if not functioning in an optimal way, can impact on our development and experience of the world. Trisha works with developing neural integration and self-awareness so we can move beyond fear and faulty relating into creating a new understanding of self and how we relate to others.

Trisha also specialises in the neuroscience of leadership. Her background is in developmental psychology, neuroscience and corporate training. She runs workshops in resilience, conflict transformation and visionary leadership. Trisha has conducted doctoral and post-doctoral research in neuroscience and has presented at many international conferences. She lectures in neuroscience at University of Technology Sydney and Notre Dame University, and is a member Psychotherapy and Counselling Federation of Australia.

She is a published author of two books and has produced and directed 20 prime-time documentaries on social justice issues.

Trisha also has experience in hostage negotiation and has worked in Africa, New Zealand and the Middle East.

You can use this link: [https://www.9now.com.au/married-at-first-sight/season-3/extras/experts/latest/dr-trisha-stratford](https://www.9now.com.au/married-at-first-sight/season-3/extras/experts/latest/dr-trisha-stratford) to find out more about the Channel 9 programme and you can contact Trisha at patrishastratford@bigpond.com

NEW ASSOCIATE MEMBERS

2017 got off to a flying start with the IACN welcoming a group of about twenty new Associate Members who completed the one day Predictive 6 Factor Certified Resilience Coach Training in Sydney in the middle of January. Unfortunately, I couldn’t attend by was assured by Prof Rossouw and his co-presenter Jurie Rossouw, (CEO of RForce) that the training went very well and was thoroughly enjoyed by the participants. Mediros has received some interest already from those participants who were not already IACN Members, in registering for the next full 3.5 day Neuropsychotherapy Practitioner Training, which automatically upgrades Associates to Full Members. The IACN hopes to work closely with RForce and Mediros to offer future Predictive 6 Factor Certified Resilience Coach Training in Brisbane and hopefully Melbourne in the not too distant future. And we hope that many of those Certified Resilience Coaches (CReC) will eventually register as Full IACN Members in the future.

CREATING YOUR IACN ONLINE PROFILE

If you haven’t already done so, IACN Members may now create their own profile via the IACN website. It’s a very simple process – just go to the My Account menu button select “Register As A Member” – then you fill in your email and a password (keep a note of it separately). You will then receive an email to let you know your registration is awaiting approval. Once approved you’ll receive a second email letting you know you can login with your nominated email and password and may then complete your profile. Unless to check the privacy box, your contact details will available to search by other IACN members when they are logged in. We hope you use this function because it is a way for other IACN Members to find and recommend practitioners in each State.

I’ll talk about the upcoming Brisbane Conference of Neuropsychotherapy (24-26 May) next time and give you an indication about what to expect at the IACN Annual General Meeting.

Until the next issue – keep safe and warm regards!

Jonathan
Hello everyone!

As we enter the new year and get even closer to the conference I would like to give you a little bit more insight into what we have coming up by talking more about some of our topics. The topic of this month; creative therapies and neuropsychotherapy.

**NEUROPSYCHOTHERAPY AND THE CREATIVE THERAPIES**

Neuropsychotherapy is a framework through which we are able to understand the processes underpinning pathology and the processes underpinning wellness which can be used to guide therapy and facilitate change. It is a way of working towards growth and wellness through the knowledge of how the specific techniques we use in the therapy room influence a person’s neural activation patterns, and creating behaviour change through a bottom up process. Creative therapies such as music or art therapy are shown to contribute many positive benefits for clients and neuroscience has been able to show us how these methods influence underlying brain processes. By combining this knowledge with specific therapeutic techniques we get neuropsychotherapy. Previous research has indicated that creative therapies have the ability to create safety, reduce anxiety and other symptoms of pathology, regulate mood, allow for the expression of emotions, promote healing, and much more! Additionally, these methods can be applied to a wide range of clinical settings and are effective both within and outside of the therapy room.

We have several presentations and a workshop dedicated to creative therapies. They will be highlighting the connections between the creative therapies and neuropsychotherapy and demonstrating how we as clinicians can apply these techniques in our practice as an alternative method of helping our clients.

Lisa Stevens

Lisa has a Masters in Applied Psychology (sport) and is on the committee of the College of Sport and Exercise Psychology. She is the principal consultant and founder of Racing Mind®, a high performance consulting company. Lisa, a former Australian Women’s Champion Show-jumping rider and NCAS coach (Equestrian) has been the sport psychologist for a number of elite sporting clubs, institutes, and organisations. These include: Racing Victoria (RV); Victorian Jockey Association (VJA); Australian Jockey Association (AJA); Victoria Institute of Sport (VIS); Swimming Australia Ltd (SAL); Paralympic Equestrian Team; Women’s Artistic Gymnastic - National Centre for Excellence (WAG NCE); Geelong Football Club; Carlton Football Club and the Western Bulldogs Football Club.

Using the latest neuroscience information, Lisa’s role includes training athletes in all areas of high performance and wellness, including: skill acquisition; attentional control; concentration; cognitive and behavioural change; performance under pressure; leadership; and high performance self-management.

In her role as senior critical incident consultant for Racing Victoria, Lisa used the principles of neuroscience to develop national critical incident protocols for the Australian Jockey Association and all State and Territory Principal Racing Authorities.

Dirk Geldenhuys

Dirk Geldenhuys holds a BA, BD and a PGD from the University of Pretoria and a DAdmin in industrial and organisational psychology from the University of South Africa. He is registered as an industrial psychologist with the Health Professions Council of South Africa (HPCSA) and as a master practitioner with the South African Board of People Practices (SABPP). He is a member of the Society of Industrial and Organisational Psychology of South Africa (SIOPSA) and was awarded with lifelong honorary membership of SIOPSA for distinguished and meritorious service to Industrial and organisational psychology. He was also responsible for the establishment of an interest group in
applied neuroscience for SIOPSA.

Currently, Dirk is a full Professor at the university of South Africa and chaired the department of industrial and organisational psychology from 2009-2014. He is teaching organisation development, change management and executive coaching. He has published a number of scientific articles and presented papers at local and international conferences. He supervised a number of master and doctoral students and is also co-author of textbooks and published chapters in books on organisation development.

Dirk is also working as a freelance consultant and is mainly involved in leadership assessment and development, executive coaching, interpersonal relations and group dynamic interventions. As a science practitioner, his major fields of interest include organisational neuroscience, systems psychodynamics, appreciative inquiry, social constructionism and the use of relational practices as approaches to study and facilitate change. He is also interested in interdisciplinary studies in the applied fields of economic and management sciences such as risk management.

Kobie Allison

Kobie is a compassionate, warm and dedicated psychologist who has experience working with children and families, adolescents, and adults. The services she provides are evidence-based, and she maintains her expertise and professionalism through ongoing peer and clinical supervision, and continuing professional development.

Generally her counselling approach moves through three inter-related stages; hearing and responding to the client's story, mapping the possibilities and goal setting, action planning and closure. Her approach to counselling is gentle, compassionate, curious, gently challenging and attuned to what is happening for the client in the present moment. Kobie's experiences in the field of psychology have allowed her to observe clients develop a much stronger understanding of themselves and of others.

Kobie has worked as a counsellor in a variety of settings, including as a therapist for children and parents who have experienced grief and loss and anxiety related difficulties, and for children and adult survivors who have been abused physically, emotionally and/or sexually. Kobie has a special interest in working with children and families, and complex trauma. Kobie finds therapeutic work invigorating and is inspired by the bravery of clients to engage in the work.

Preferred Therapeutic Approach Kobie's therapeutic approach is predominantly psychodynamic, influenced by a therapeutic approach known as Self Psychology, or ‘the Psychology of the Self’. This approach is a means of understanding how people develop a clear and cohesive sense of self, exploring their own ambitions and ideals, enabling them to grow to fulfill their potential. Disruptions to the development of the self are thought to be the foundation of many emotional, psychological, and interpersonal difficulties.
REGISTRATION AND PAYMENT FORM

Neuropsychotherapy Training – Certificate of Practice – 2017
Prof Pieter J Rossouw - Workshop attendance – 21 hours (3½ days). Certificate of attendance provided for 21 CPD points

NAME: ________________________________________ Title: ___________________

ADDRESS: ___________________________________________________________________

PH/MOBILE: ____________________________________________________________________

E-MAIL: ________________________________________________________________________

VENUE AND DATE Mark with X

Auckland NZ 1 – 4 March 2017 Waipuna Conference Centre, Auckland, New Zealand

Brisbane 7 – 10 March 2017 RBW Hospital, Herston Road, Herston, Brisbane

Melbourne 19 – 22 September 2017 Royal Melbourne Hospital, Grattan Street, Parkville

Sydney 2 – 5 October 2017 Portside Centre, Level 5, 207 Kent Street, Sydney

Hawaii 16 – 19 October 2017 Sheraton Princess Kaiulani, Honolulu, Hawaii

PRICING FOR ALL VENUES IS THE SAME INCLUDING THE HAWAII VENUE.
Fees below exclude travel and accommodation costs which are the responsibility of the registrant

Please Circle

Early Bird rate (60 days prior) $ 1 395.00
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Student rate (copy of student card) $ 1 350.00
Groups (4+ attendees per group, one payment) $ 1 350.00 Please contact admin@mediros.com.au for details

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International Conference of Neuropsychotherapy

Conference Centre – Royal Brisbane and Women’s Hospital, Herston

Brisbane 23-26 May 2017

From Neuroscience Research to Applied Practice

www.neuroconference.net

23 May 2017  Pre-Conference skills-based Workshops (7 CPD)
- The Neuroscience of Eating Disorders (½ day with Dr Roger Mysliwiec)
- The Neuroscience of Pain (½ day with Prof Pieter Rossouw)

24-26 May 2017  3 day Conference (24 CPD)
- 50+ speakers; 4 Mini-Workshops
- Covering 4 specialist applied Neuroscience Streams
- Peer-to-peer networking and forum
- International Association of Clinical Neuropsychotherapy Annual General Meeting

Applied Neuroscience Streams:
Psychopathology
Sport and Performance
Expressive Therapies
Organisational Neuroscience

Applied Neuroscience Mini-Workshops:
Neuroscience in Organisational Settings
Expressive Therapies – Experiential
Neurobiology of Domestic Violence
Neurobiology of Resilience

KEYNOTE SPEAKERS

Pieter Rossouw
Prof Brain-Based Education, CQU
Director Mediros
President IACN
Brisbane, Australia

Roger Mysliwiec
Dr Psychosomatic Medicine
Auckland, New Zealand

Lisa Stevens
Sport Psychologist
Melbourne, Australia

Rita Princi
Clinical Psychologist
Adelaide, Australia

Judith Murray
Prof School of Psychology
University of Old Brisbane, Australia

Dirk Geldenhuys
Prof Industrial Psychology
UNISA, Rep of South Africa
Online registration also available at www.neuroconference.net

International Conference of Neuropsychotherapy

Brisbane 23-26 May 2017 - Conference Centre, Royal Brisbane & Women’s Hospital, Herston

23 May 2017 Pre-Conference skills-based Workshops - ¾ CPD’s per workshop
The Neuroscience of Pain (½ day with Prof Pieter Rossouw) 9am–12.30pm
The Neuroscience of Eating Disorders (½ day with Dr Roger Mysliwiec) 1.30pm–5pm

24-26 May 2017 Three-day Conference - 24 CPD

Title, Name and Surname: _______________________________________________________________
Mobile Phone: _______________________________________________________________________
Address: ___________________________________________________________________________
______________________________________________________Postal Code___________
Email address: _______________________________________________________________________

Pricing is in Australian Dollars

Full Payment Required at time of Registration

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Easily apply the PR6 with your clients using ResiCoach, our digital platform. With ResiCoach you can send PR6 resilience measurement invitations, receive results, review reports, and remeasure to check progress.

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- **Accessibility** - Participants can access and complete the PR6 on any device, anywhere
- **Interactive training modules** are provided to each client, accelerating improvement
- **Conduct remeasurement** - Measure progress and prioritise treatment
- **Group reporting** to measure team resilience and facilitate effective group sessions
- **Set the context** - Adjust the course language to suit the audience, from professionals, to school students, to athletes
- **Stay ahead** - Benefit from improvements to the platform and a highly responsive support team that is there to help

A neuroscience-based resilience measurement psychometric & training program, delivered through our ground-breaking digital clinical platform called ResiCoach.

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