Neuropsychotherapy in clinical practice:
- Working with young people with complex challenges
- Neuropsychotherapy in relationships
We are very excited that the Conference Program is now fully allocated. There will be 51 speakers from Australia, New Zealand, Indonesia, United States of America, New Zealand and South Africa. Please bookmark this event and we encourage you to register because places to attend are quickly filling up.

**Training in China**

I presented a series of trainings at the Annual Chinese CCCC Conference. The presentations ran over four days and were very well received. This was my third visit to China and I will certainly continue as there are more invitations for 2017/8. I also gave a number of lectures at the Medical School at Shanghai’s Tongji University and I will return in 2018 for further lecturing at Tongji.

I do hope you’ve all had a joyful and relaxing holiday period and I wish you all the very best for the coming year.

*Enjoy the read!*

*Pieter Rossouw*

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**WELCOME TO THE FIRST EDITION OF 2017!**

**Neuropsychotherapy reflective essays**

In this edition, we are delighted to publish two neuropsychotherapy reflective essays.

The first is a case of a young person with complex challenges. Kelly Callaghan skilfully presents the case with theoretical links and strategies that would be very helpful for clinicians.

The second is a case described by Michelle Dorazio. Michelle worked with a female with significant relationship difficulties and provided an excellent overview of the case as well as applied neuropsychotherapeutic strategies to address her client’s challenges.

**International Conference of Neuropsychotherapy, 2017**

The inaugural International Conference of Neuropsychotherapy at the Conference Centre, Royal Brisbane and Women’s Hospital, Herston, is only a few months away.
Presenting Referral
Laura is an eight-year-old girl who lives with her foster family. She was referred by her GP for assistance with Selective Mutism (APA, 2013), sleep difficulties, night time enuresis, a fear of toilets, high levels of anxiety and delayed learning.

Developmental History
Laura was born into a family where there was known domestic violence and she was removed from her biological family at two days old. Laura was placed in care with a family at age two weeks and remained there until she was two-years-old. Records and photographs indicated that the first foster family was highly protective and loving and that Laura thrived under their care. The Department of Child Safety decided to return two-year-old Laura to her biological family who had another child and were then caring for him appropriately.

At age three years, three months, Laura was again removed from her biological family due to extreme neglect over the previous 15 months. At that time she weighed only 8.5 kg and was hospitalised due to malnutrition. Laura was highly passive and compliant with hospital staff, did not speak and had not reached a number of her developmental milestones. She was then placed with her current foster family.

Laura has a loving and close relationship with her two foster siblings and parents and a particularly strong bond with her older female foster sibling who helped her to speak. Due to the delayed milestones, she spent two years in Prep School and her academic skills were delayed.

Laura presented as a dark haired, petite and frightened child. She displayed a number of anxiety symptoms such as chewing her hair and finger nails and sitting wide-eyed but unable to speak.

Formulation
GENETIC POOL
Laura’s prenatal development was likely compromised by high levels of domestic violence. Prenatal stress is thought to impact upon HPA function (Hypothalamic-Pituitary-Adrenal Axis), cause changes to cerebral lateralization and neurotransmitter levels in the brain of the foetus (Cozolino, 2006). The paleo -mammalian complex comprising the limbic system, thalamus, amygdala, hypothalamus and hippocampus is fully developed in the third trimester but only partially functioning at birth (Rossouw, 2016), as such, it is hypothesised that Laura was born with a highly upregulated limbic system that predisposed her to difficulties with affect regulation, learning, memory and the approach-avoidance response (Patterson & Schmidt, 2003).

Cell birth and cell migration proliferates in the first 40 weeks of life (Rossouw, 2016) which underlines the importance of prenatal health in the child’s later ability to form new neural networks associated with learning and memory necessary for normal development in childhood.

THRIVING
Early removal to a safe and enriched environment in the first two years of life, provided Laura’s developing brain with opportunity for greater integration of neural networks and biochemical stimulation through positive attachment and social interactions that increased serotonin and dopamine levels (Cozolino, 2006) which limits the effects of the HPA axis on cortisol regulation.
Serotonin, dopamine and oxytocin are associated with 'smart brain' development (Kandel 2007 in Rossouw, 2016) in the neo cortex (Rossouw, 2014) and can be highly protective in maintaining brain plasticity. Enriched environments have been shown to promote neural plasticity which is the ability to form new synaptic connections as well as new neurons (neurogenesis) that enhance thriving.

Secure attachment as described by Bowlby (1973) promotes neurogenesis and helps the child understand and interact with the world in an approach driven manner. The consistency theory (Grawe, 2007) proposes that approach schema represent cortical or 'smart brain' processes while avoidant schema stems from over activation of the limbic system and HPA axis. In the first ten months of life, if the child lives in a safe and enriched environment, then controllable incongruence (Grawe, 2007) is experienced when the basic needs for orientation/control, pain avoidance/pleasure and attachment form into schemas of approach.

In the first 36 months of life, the developing brain focuses on axonal and dendritic outgrowth (Rossouw, 2016) which allows neurons to connect according to the Hebbian principal. Neural connectivity is related to wellness and thriving and was evidenced by Laura’s early development and growth prior to the trauma.

Rossouw’s (2016) model of neural development is based on a ‘bottom-up’ approach from genetic background, to foundations of safety, the need for attachment/connection, control and motivation (pain vs pleasure) which leads to thriving and self-actualization. While her genetics may have been compromised, the first two years of life were, by and large, spent in an enriched and secure environment that would have orientated Laura towards approach schemas.

SURVIVING
At two years Laura was returned to her biological parents where she was left in a room on her own for long periods of time, physically neglected and malnourished. This period of intense neglect by her biological parents occurred over a prolonged period of 15 months and at a critical stage of brain development that involved synaptic production, myelination and synaptic pruning (Rossouw, 2016). The result was regressed development whereby, Laura was assessed at age three years, three months as having the size and development of a nine-month old baby.

Laura had lost the secure attachment with her first foster parents and was placed in a compromised environment that would have upregulated her HPA axis responses. Repeated activation of the HPA system has been shown to impact upon the proteins that build the immune system and cause cell destruction in the hippocampus that can lead to memory problems (Cozolino, 2006) and reduce the production of Brain Derived Neurotrophic Factor (BDNF).

Research indicates that attachment styles remain highly stable over a 20-year period (Waters, et al. 2000) and that the person may become trapped into patterns of avoidance based on continual activation of the survival system.

The uncontrollable incongruence of trauma activates the survival systems that inhibit new neural connections (apoptosis) due to the damaging effects of cortisol. In systems of distress, the brain can be rapidly wired by repeated activation of glial cells and the release of dopamine to reinforce the default pattern of fear and avoidance. Glial cells are the ‘glue’ that strengthen neural connections with repetition of firing strengthening the connections and patterns of protection or avoidance (Grawe, 2007; Rossouw, 2014).

Research has demonstrated neuropathology in the adult brain where childhood abuse occurred (Arden & Linford, 2009). This included diminished left hemisphere and left hippocampal volume, elevated cortisol levels and diminished corpus callosum size. This underlines the impact of fear which promotes patterns of avoidance and may lead to psychopathology.

THRIVING IN SAFETY
After surviving 15 months of trauma, Laura was placed in a safe and enriched environment with her second foster family. Records indicate that she presented with an insecure attachment (Ainsworth, 1973) which was characterised by avoidant behaviour with no signs of distress when separated from carers. Laura appeared indifferent to adults and was highly compliant.

Secure attachment promotes self-regulation, prosocial behaviour, empathy, a positive sense of emotional well-being and self-esteem as well as a coherent life narrative (Siegel, 2013). The ability to experience empathy and perceive emotional states in others appears to depend on the development of the mirror neuron system (Siegel, 2013) which relies on one to one attuned communication in the young child and is the basis for social interaction. In the years of safety, (zero-two years and post three years) Laura experienced attuned communication in the family systems. However, seven-year-old Laura presented with entrenched neural networks around avoidance related to social communication and new situations.
Unlearning neural patterns may be more challenging than learning new patterns but with repetition of new patterns, glial cells migrate and promote neural change if there is controllable incongruence (Grawe, 2007) that activates the pathway to the ‘smart brain’ and down regulates the stress response. It is neural proliferation that leads to thriving.

**THERAPY – LEARNING TO BE BRAVE**

The therapeutic challenge was in how to talk to a child who had not spoken to another adult outside her foster family. Her teachers had been unable to gauge the level of Laura’s learning or capacity. Her foster mum, also a teacher, worked extensively with Laura at home but reported significant learning problems and high reluctance to read, however, language skills in the home environment were said to be age appropriate with Laura happy and boisterous with her siblings.

Laura attended with her foster mother but sat quietly in a chair and did not speak to me but would signal through her eyes. Her understanding of therapy was that she was coming to learn how to be ‘brave’.

Initial therapy focused on skills to down regulate the anxious brain. Laura undertook the breathing techniques and relaxation games with enthusiasm and asked mum to send me photos of her practising ‘milkshake breathing’ and ‘rag dolls’.

Laura began speaking in a very quiet voice at her third session when playing a psychotherapeutic game (Faces and Feelings) where she was able to identify the feeling of being ‘scared’ at school. Teachers were asked not to pressure Laura to speak and when they spoke to her, to try and sit side by side using a quiet voice. If Laura was heard to speak to another child, teachers were to treat this as normal behaviour.

Laura’s family were introduced to neuropsychotherapy and the concept of the smart and impulsive brain, ‘juices’ of the brain and video education from the MiBrain neuroscience animation series (Rossouw, 2015), drawings about brain processes and how the ‘scared’ brain can take control. The family engaged in a home based programme where they talked about when the ‘scared’ brain was in control and how to get the ‘smart brain’ to be the ‘boss’. Slowly, Laura began to test her ‘smart’ brain by whispering ‘hello’ to her teacher.

Cognitive behaviour therapy and therapeutic stories about children and trauma were introduced to help Laura to develop coping skills and a narrative around her own history.

Laura’s skills were tested when a fire occurred at her school and destroyed her classroom. This represented another trauma for Laura and prompted her to bring to therapy her baby photo albums and to speak about the ‘bad daddy’ and being ‘skinny and sick’ in hospital. As the fire was a shared experience with classmates it provided a supportive and enriched environment where Laura was able to learn about how other children and adults coped with distress. It was useful in helping Laura to develop a story of survival and coping with distress and unexpected change.

After 12 months of therapy, Laura was challenged by the classroom task of a verbal presentation. She talked about wanting to do the task, but her ‘scared’ brain was taking over. This represented a situation of ‘uncontrollable incongruence’ (Grawe, 2007) for Laura and the option of reverting to an avoidance default pathway. By using a step plan and support from her family, Laura decided to engage in the task where she showed pictures to the class without speaking. Surprisingly, Laura was able to speak in front of the class by managing her anxiety and shifting from the impulsive brain to the smart brain system, Laura experienced the situation as one of ‘controllable’ incongruence. This is an indicator of the breaking down of neural loops in the survival and impulsive brain.

**OUTCOMES**

Laura has become increasingly talkative and confident with adults that she knows well. She will now speak to teachers at her school and friends of her family and in the last six months has made significant gains with learning to read. The process of breaking down neural loops has enabled Laura to move quickly through a number of developmental stages and develop more open memory systems as shown by Laura asking questions about death, heaven, adoption and family relationships. Her foster parents have remarked on this change in Laura who was previously passive and rarely asked questions. A developing approach style is evident in her willingness to take risks with previously avoided activities such as; roller skating, riding a bike and sleeping in her own bed.

Despite the previous selective mutism, Laura presents with age appropriate speech and language skills and displays a delightful sense of humour and positive facial expression.

The night time enuresis has not changed but given that this may have a genetic component and/or biological basis, it has not been a focus of treatment to date.
CONCLUSIONS
The need to create safety was paramount in treatment. Laura’s trauma background and avoidant attachment style predisposed her to activation of the survival stress response in therapy. The use of videos, drawings, therapeutic games and stories without the demand of speaking, helped Laura to feel safe in therapy and down regulate the HPA axis and opening pathways for new neural connections.

Underpinning therapy was the very safe and enriched family relationships that allowed Laura to develop an inner working model around safe attachment.

While the research on attachment styles (Waters et al., 2000) suggests that the prognosis for change is poor, an alternative way of thinking using the neuropsychotherapy model (Rossouw, 2016) is that Laura has the capacity to develop new neural pathways and in doing this in a safe and controllable environment, the old pathways will be less activated and detach, according to the Merzenich principle – neurons that fire apart wire apart (cited in Rossouw, 2014).

By forming and strengthening new pathways (neurogenesis), neural proliferation is possible as has been evidenced by the improvements in Laura’s learning at school and her increasing patterns of approach. While each developmental stage will bring challenges, Laura can develop a more cohesive sense of self and learn to cope with situations that trigger default patterns of avoidance. It is anticipated that therapy will be a long-term need but most importantly, it is understood that genetics are not destiny and neuroplasticity is the pathway to change.

REFERENCES


WORKING WITH JANE TO COPE WITH MARRIAGE BREAKDOWN AND EMOTIONAL INSTABILITY

Michelle Dorazio
BSc Psych (Hons), MAPS, MIACN(Cert)

Michelle is a registered psychologist practicing since 2006. She has experience working within government and non-government organisations and private practice for the past six years with individuals, couples and facilitating groups. Michelle works with people experiencing difficulties with relationships, depression, anxiety, grief and trauma. She is interested in the process of change and supporting clients facilitate change in their lives to enhance their general wellbeing, resilience and overall functioning. Recently Michelle was influenced by neuropsychotherapy, developing her skills and application of this treatment modality with a strong client centered approach. Neuropsychotherapy and cognitive behavioural therapy are Michelle’s preferred treatment modalities.

INTRODUCTION

Jane, a female 48 years of age married to John for ten years with no children. She described interpersonal difficulties with her husband in the past however the difficulties were worse in the past six months prior to their separation. John is a veteran affected by post traumatic stress disorder (PTSD), comorbid depression and has engaged in treatment in the past.

Jane is the only child in her family of origin. She was born and raised in the United Kingdom (UK). Her father worked in finance in the merchant navy. Jane described her father as “a little blunt . . . and old school . . . due to his upbringing he has found it difficult to show emotions”. Jane gave an example of this as when she decided to move to Australia her dad would not discuss this with Jane or her mother who was distressed. Jane identified her father as “not holding grudges” and would help in any way if he could. Her father had health problems including atrial fibrillation and chronic obstructive pulmonary disease. Jane’s mother also has cardiomyopathy and lost both her parents to heart disease before they were 50 years of age. Jane described her mother as “very caring . . . wears her heart on her sleeve . . . and is quiet in comparison to Dad . . . however over the years she has become louder to ensure her opinion is heard”. Jane’s mother had various jobs including accounts clerk, school assistant chef, chef at a private school and courier driver.

Jane migrated to Australia with her husband four years ago “with dreams and expectations” regarding employment. Jane struggled to gain employment and undertook a course in human resources and then found employment. Jane reported a high level of professionalism at work and was reluctant to discuss her marriage breakdown with her manager or trusted colleagues, as she thought this was not appropriate. Her main supports including friends and family remained in the UK. While Jane identified some colleagues and mutual friends of her husband as supports, she was not accessing these supports. Jane described her parents as supportive however identified being “independent and looking after myself” as early schema impacting on her accessing support from her parents and interpersonal interactions with her husband and in past relationships.

Jane had two previous long term relationships and she identified a pattern in her choice of previous partners as “needy” whereas she described herself as “practical and capable”. Jane had initiated the end of these past relationships and had initiated the recent separation with her husband. Jane identified a pattern of compartmentalising emotions in her interpersonal interactions, however her ability to do this since the separation from her husband was not effective and her current level of emotional distress was not manageable. Jane disclosed no past history of mental health difficulties prior to her presentation at counselling and was not taking any medication.

Jane presented as neatly dressed and groomed. She was consistently 10-15 minutes late for the six sessions which she attended, as she was “held up at work”. Initially she was emotionally labile when discussing her relationship and at times spoke rapidly when seeking to understand her emotional state and was motivated to understand her emotional responding. As the sessions progressed she engaged actively by reflecting on information provided, asked questions and maintained regular eye contact. Jane was oriented to time, place and person with no evidence of perceptual disturbances.

Jane self-referred through Veterans and Veterans Family Counselling Service (VVCS) due to experiencing fluctuating moods, excessive worry, difficulty sleeping (initiating and maintaining), loss of appetite, weight loss and anger regarding her relationship breakdown and her husband’s past emotional infidelities. Jane was aware of her ability to attend sessions through VVCS through her husband’s work.
Formulation

Jane’s presenting symptoms appeared to have been trig-
ggered by her recent marriage breakdown and separation. While she has no past history of mental health difficulties, schema of “independence and looking after myself” were possibly related to an avoidance motivation in relation to her marriage breakdown. Jane is not accessing social support, geographic social isolation, sleep, nutrition and exercise were identified as areas for increasing wellness.

Jane was administered the Depression, Anxiety and Stress Scale (DASS) at intake and all scores were within the normal range. While Jane was not depressed or anxious, she experienced difficulty coping with the loss of her marriage and subsequent loss of emotional control. Treatment initially focussed on normalising the grief/loss response and creating safety for the client by listening, empathising and taking a client-centred approach (Rog-
ers, 1942; Allison & Rossouw, 2013). Providing Jane with psychoeducational information regarding sleep hygiene (stages of sleep, hippocampal discharge and memory consolidation), nutrition, exercise to increase the release of serotonin and social connection was provided to max-
imise outcomes.

Explanation from a neuropsychotherapeutic perspective of the regions of the brain, brain function and development of these areas, changing cortical blood flow, neu-
rions, neurochemicals, neural pathways (strengthening and changing, ability to change) and principles of neu-
roplasticity were introduced to Jane as a basis for under-
standing the rationale of therapy.

NEUROPSYCHOTHERAPEUTIC ASPECTS
Rossouw (2014) identifies the distinctive aspect of neuro-
psychotherapy as a therapeutic approach that considers both pathology and wellness based on neural processes and the creation of a model for assessment and treat-
ment “the integrated model of the base elements of the theory of Neuropsychotherapy” (p. 57). The model is bot-
tom up, starting from genetic expression which considers the interaction between genes and the environment in the development of safety which is necessary for survival. Depending on the provision of safety through the environ-
ment, either enriched or compromised, different motiva-
tional schema are developed. The motivational schema can be either approach, as a result of enriched environ-
ments, or avoidant as a consequence of compromised environments. Moving up this model are basic needs in-
cluding pain avoidance and pleasure maximisation, con-
rol and orientation and attachment. Within the interaction of these basic needs is the higher order construct of self. This model is used to identify the neuropsychotherapeutic aspects of Jane’s case.

The interaction of genetics and environment and epi-
genetics is linked to survival. Neural plasticity or the ability for neurons to change due to the environment are important when considering the concept of safety. Early childhood experiences (with caregivers) provide the environment for these interactions. Linford and Arden (2009) propose the ultimate survival of a brain is depend-
ent on relationships with other brains, highlighting the importance of interpersonal interactions (p. 20). Cozolino (2006) suggests that as humans, the environment (partic-
ularly in during early childhood) is created by other peo-
ple, namely our primary caregivers. Jane appeared to have developed avoidance motivational schema around conflict which could mean that she experienced some vi-
olation of safety within her family of origin.

Continuing up the model and as a consequence of gene expression and safety, are motivational schema. Jane identified her ability to compartmentalise her emotions as a feature of both her relationship with her husband and previous relationships. This was also evident when there was conflict with her father. Being practical and problem focussed when there were difficulties with her relation-
ship with John combined with compartmentalising were patterns of avoidance/protection. Jane used pragmatism as a way of coping with emotions in relation to her mar-
riage breakdown which was also identified as a pattern of protection.

Avoidance and approach motivational schema impact on basic needs and how these needs are met. An avoidant motivational schema suggests activation of the limbic re-

“Jane identified her ability to compartmentalise her emotions as a feature of both her relationship with her husband and previous relationships.”
gion of the brain. This activates the fight, flight or freeze physiological response (sympathetic nervous system) moving cortical blood flow to the ventral right prefrontal area of the brain which may promote emotional dysregulation (Wang et al., 2005). Whereas an approach motivational schema is created when the environment is safe meaning the absence of threat or danger, perceived or real. This allows for cortical blood flow to remain in the left hemisphere resulting in the ability to utilise the prefrontal cortex (PFC) to integrate information. Jane had resilience in her ability to generally adapt to new situations for example moving to Australia and making a career change due to not being able to find work easily upon her arrival in Australia. Her pragmatism and problem solving abilities were also strengths in general, however were not as effective in her interpersonal interactions with her husband.

Attachment is about how the brain organises itself at a young age, based on patterns of interacting with the environment. We need to feel connected to others and are only well when we are connected to others. While Jane recalled generally positive experiences in her childhood she identified a pattern of emotional responding within interpersonal relationships which suggested an ambivalent attachment style. This attachment style includes elements of emotional disconnection or a reluctance to become close to partners and high levels of distress when relationships end. This was evident for Jane when she separated from her husband and in past relationships.

Jane’s need for control affected her wellness during her separation. She created options including purchasing her own home and moving out of her marital home. However, she continued to experience difficulty managing her emotions associated with loss, and showed evidence of uncontrollable incongruence. Uncontrollable incongruence occurs when the need for control is violated with the associated stress responses. This activates shifts in cortical blood flow to the limbic region which becomes active, resulting in an activated survival response, limited options and a diminished ability to manage the challenges in life. Whereas uncontrollable incongruence is the ability to manage some stress with maximum options and the capacity to effectively manage life challenges.

Pain avoidance and pleasure maximisation refers to the appraisal of physical, emotional or social conditions as positive or negative (Rossouw, 2014). Depending on the appraisal, good or bad an approach or avoidant pattern will be activated. This is a protective mechanism for survival and is linked to motivation and release of dopamine. Jane had an avoidant response when her marriage ended. Pain avoidance included compartmentalising emotions which resulted in a lack of enjoyment or pleasure in previously enjoyable activities. This is a pattern of protection. Re-engagement in previously enjoyable activities was discussed in terms of activating the release of dopamine and enhancing wellness.

The self is not necessarily a basic need but a higher order construct. If basic needs are met development of self will occur. If basic needs are not met self-protection in the form of patterns of avoidance occur (Rossouw, 2014). When there is safety, basic needs are met and there is controllable incongruence as a result of enriched environments, there is integration of the sense of self and resilience or thriving (Cozolino, 2006; Rossouw, 2014). While Jane did not have low self-regard, she experienced loss which activated patterns of avoidance. This was assessed as appropriate to the situation. Further her thriving upon completion of treatment suggested resilience and an enhanced sense of self.

**THERAPY PROCESS**

The treatment plan for Jane involved a neuropsychotherapeutic approach. This approach was bottom up and based on principals of neuropsychotherapy. Initially the neuropsychotherapeutic model of safety (Allison & Rossouw, 2013) was used to create an environment of safety and build the therapeutic alliance with the client. This was achieved by taking a client centred approach (Rogers, 1942). This allowed the client to decide on the direction and content to be discussed during sessions, pacing the sessions according to the client, practising as per the Code of Ethics and discussing confidentiality and exceptions to confidentiality. Using a bottom up approach allows for the facilitation of safety for clients, which down regulates the stress response, enhancing opportunities for safety and up regulation of activity in the pre-frontal cortex (PFC) (Allison & Rossouw, 2013).

Normalising Jane’s emotional responding in the context of her marriage breakdown (as a major life stress) and providing explanations of this responding being indicative of certain processes occurring in her brain, was reassuring for the client. When Jane was calm and less emotionally distressed, information was provided regarding the relevant areas of the brain and processes occurring in the brain. I used a picture of the brain (on a whiteboard) to identify the brain stem, limbic region and PFC and detailed the development, interaction and function of each region. Further describing development of the brain as “bottom up” or from “the inside out”.

The “survival brain” consists of the brain stem, pons and medulla. This is the area of the brain that develops first in utero. This area is both fully developed and functional at birth (Rossouw, 2016). It has a protective function and is responsible for the regulation of our reflexes and ultimately our physiological survival.

The limbic region or “emotional brain” consists of the thalamus (relay station for sensory information), amygdala (detection of fear, attachment, emotional memory), hypothalamus (activation of the stress response) and hippocampus (memory and learning processes) and is
located deep inside the brain. This area of the brain is fully developed at birth however only partially functional and dependant on the environment, namely interactions with others to become fully functional (Rossouw, 2016). The purpose of the amygdala is to scan our environment for threats and danger by attending to sensory information from our body. When the amygdala is triggered there is increased cortical blood flow in this region compared to the PFC and physiologically the fight, flight or freeze response is activated.

The PFC is described as the “smart brain” and is the outer frontal region of the brain which is partially developed and underdeveloped at birth. It is the area that takes the longest to develop, maturing fully at 24 years of age. It is responsible for our higher order functioning for example judgement, planning, decision making and sense of self. Stressful experiences cause the PFC to shut down which can result in anxiety, depression and an increase in stress related diseases.

It was explained to Jane how we can get trapped in certain areas of our brain when we are trying to protect ourselves and how this translates into unhelpful physical (isolation and disconnection or engagement) emotional (distress or calm) and psychological (avoidant or approach patterns) behaviours. Information regarding the role of cortical blood flow in the right and left hemispheres of the brain and strategies to shift cortical blood flow from the right to left hemispheres when distressed, was provided to Jane. Deep diaphragmatic breathing was practiced in addition to orientation/grounding techniques, writing, exercise as a way of altering cortical blood flow when emotionally distressed and experiencing fight, flight or freeze physiological symptoms.

CONCLUSIONS
Through the effective establishment of a safe therapeutic alliance Jane was afforded the opportunity of psychological safety evidenced by her progress during treatment. This resulted in enhanced outcomes in several areas including socially, emotionally and psychologically. Emotionally Jane reported improvement. Jane felt happier with less sadness and confusion regarding her decision to end her marriage. She also described feeling calmer within herself with an improved ability to concentrate.

Jane also reported no longer compartmentalising her emotions, rather discussing her emotions with trusted friends, identifying and managing her emotional distress by practising strategies to change cortical blood flow and maintaining regular contact with her friends in the UK via Skype. Her sense of connectedness improved considerably since intake.

She also described improved interpersonal interactions with work colleagues by being “less guarded”. By this she identified previously not sharing any personal information with work colleagues as she thought it would be unprofessional. Jane had recently discussed her separation with a colleague and discovered he experienced something similar. Instead of shying away from this discussion she was able to engage and provide some support for her colleague. Jane identified that these discussions were markedly different compared to how she would have responded in the past. Jane is working on maintaining a friendship with her ex-husband as she viewed him as an important part in her life story and valued him as a person.

REFLECTION
Neuropsychotherapy in this case proved effective. Factors contributing to a successful outcome were Jane’s willingness to identify times of emotional upregulation and practice strategies for effective down regulation. In the final session with Jane she was asked to reflect on what had been the most important part of our work together. She reported the diagram of the brain on the whiteboard had been the most important. It helped her to understand why she was feeling distressed and what she could do to shift cortical blood flow and experience relief from her symptoms and overall improved her connectedness with others and engagement in life.

From a therapist’s perspective collecting family of origin information is important in terms of neurobiological markers for assessment. The foundation of the environment or person to person interactions which forms patterns of future interactions, informs therapy. I could have collected more of this information in this case. Overall, I was pleased with the outcome and believe that neuropsychotherapy is an effective approach I will continue to use with clients.

REFERENCES


Dear IACN Members

Originally I had hoped to be addressing you in December to wish you all a happy festive season, but as with many plans at this time of year we all had so many things to complete, unfortunately this slipped by and now its all over!

In any case I hope you all had a wonderful festive season and for those of you still on leave (half your luck!), continue to enjoy your break.

2017, TIME TO FILL IN YOUR ONLINE IACN MEMBER PROFILE

I want to let you all know you may now log in to the IACN website and complete your member profile. Just go to the IACN home page, (iacn.com.au) and on the top page banner go to ‘My Account’ and click on ‘Register As A Member’, if you haven’t done so already. You will then input your name, email and a password. A short time later you should receive a welcome email and you may then complete your profile. Remember to leave the box unchecked in the ‘Privacy Disclaimer’ if you want other clinicians with like interests to find you on the search function.

CHRISTMAS?...STRESS?...WHAT STRESS?

Well it almost seems too late now to be talking about the frequent increase in stress some of us experience at Christmas time, none-the-less, I thought of some ways to alleviate stress at this time of year. Although Christmas is a time to celebrate and take time off to relax, it can also be a stressful time for many. Families traditionally get together at this time and sometimes this leads to old conflicts re-emerging. Here are 10 things you can do to lessen family stress, if your ‘family feud’ becomes more than the TV game show:

1. Remember that Christmas is an opportunity to express your love for each other. Take time to think of all the good times throughout the year, and reflect on what are the best things about being with your family that really make you happy.

2. Life is short, though for youngsters it may seem like an eternity! As we get older we start to realise that a life spent bearing grudges and reliving old arguments and conflicts very soon becomes tiring and pointless. So make the most of your time together as a family by sharing and...

3. Forgiving. I saw a great reminder on Facebook recently which went along these lines: Forgive, not because they deserve your forgiveness, but because you desire peace. When we deeply and genuinely forgive others, we gain peace for ourselves by letting go of negative and hurtful feelings.

4. Be bigger than those who seek to hurt you. Take the wind out of their sails by remaining calm and disengaged from any argument. They’ll soon lose interest in a fight if you won’t fight back. And you should seek help if anyone is trying to hurt you physically.

5. In the hustle and bustle of family life we sometimes forget to take time for ourselves. Plan to spend a bit of ‘you’ time, however works best for you, so you can remain fully charged for more demanding time with loved ones.

6. Take a walk outdoors. If you can, either on your own or with the whole family, take a break from those Christmas duties to spend an hour or two at the local park, walking though a nature reserve or anywhere outdoors. The fresh air and light exercise will do you good and being outdoors reminds us the world is a beautiful place and helps us to be less self-absorbed.

7. Sing a song. This may sound a bit cheesy, but you’ll be surprised how good it can make you feel (even if you reckon you’re a hopeless singer) to sing along to a favourite tune and get your lungs moving!

8. Laugh...humour is such a healing thing. Laughing produces endorphins (endogenous morphines - that’s feel-good hormones produced in our own bodies), which help us to relax and feel good. Who needs a truck load of booze when you can feel great just by having a good laugh!

9. Play a game. Especially if you have children, grand-children or youngsters, a good board game, game of charades, card game or any number of other family games will get the fun level up and increase our engagement with the ones we love. Whatever you do, play for fun, winning is good but shouldn’t be your main aim. Enjoy the game and also learn to lose gracefully!

10. Be loving. When we are loving and caring for others, there is little room for anger or conflict. Hug your family, kiss your family, tell them how much they matter to you and how good they make you feel.

If you practise any one or all of these simple things over the holiday period, your time will be that little bit less stressed and you’ll be that little bit better prepared to enjoy the festive season with your loved ones.

I’m very much looking forward to 2017 – the IACN has a lot coming up (together with Mediros). I’l tell you more in the next eJournal – until then keep SAFE!
As the spiders come out and travel injections are booked in for Summer, Sydney Phobia Clinic is using Virtual Reality to effectively address specific phobias.

Sydney, NSW: Sydney Phobia Clinic, a specialist psychology clinic aimed at treating specific fears and phobias through virtual reality (VR), has opened its doors today. The new clinic brings the latest research in VR exposure therapy to Australia, and will help the 6-12% of the population who suffer from a phobia for the first time.

On being the first dedicated and comprehensively resourced phobia clinic to open in Australia, Clinic Manager Mr Pieter Rossouw said, “It’s a common misconception that phobias are something that you just have to put up with. This is because the most effective way to treat them - ‘exposure therapy,’ in layman’s terms - has until now been impractical to undertake and difficult to control due to the requirement of very specific situations; say, a well-trained spider or a beeping MRI machine.

“It’s important that people know phobias can be treated, because while they are relatively common, in some cases they can be particularly severe and interfere significantly with people’s lives. Think of medical or dental phobias: anxiety about a medical procedure will often stand in the way of an individual getting important treatment, with severe long-term repercussions.”

- It is estimated that 6-12% of people will suffer from anxiety related to a specific phobia at some point in their lives, making it one of the most undertreated mental health issues in the world.
- Effective treatment for phobias is available. A clinical psychologist can guide individuals through their phobias and effectively treat the associated anxiety through a method called Cognitive-Behavioural Therapy (CBT) – colloquially, exposure therapy.
- Sydney Phobia Clinic’s manualised treatment programmes incorporate neuropsychotherapeutic principles, ensuring clients are taught strategies to down-regulate the survival brain prior to application of higher-order structure-dependent strategies; all within the safety of in-session exposure.
- We’re heading into a season of phobia-related anxiety. The spiders are coming back out to play, and people will need to get travel shots before travelling over the Summer break.
- Virtual Reality is proven to be an effective and safe method by which to deliver CBT.

**Sydney Phobia Clinic** is a specialist psychology clinic aimed at treating specific fears and phobias using the latest treatment technology available. The clinic recently opened in the heart of Sydney’s CBD.

Corrie Ackland, M.Psych(Clin)
Sydney Phobia Clinic
0434 879 440
corrie@sydneyphobiaclinic.com.au

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Sydney’s premier psychology clinic
dedicated to the treatment of specific phobias.

We combine the latest in VR technology, neuropsychotherapy, and CBT to provide a one-of-a-kind, comprehensive treatment programme with a strong focus on exposure therapy.

About specific phobias
Phobias are excessive and irrational fears that have come to impact one’s life, often as a result of avoidance behaviours that have become limiting to an individual.

Treating specific phobias
Phobias are one of the most common mental health difficulties. Many people who seek treatment do so mainly due to their symptoms disrupting their work, relationships, or leisure activities. If our fears are limiting our enjoyment of life, treatment may be worthwhile.

Treatment efficacy
Phobias, like other anxiety disorders, respond well to Cognitive-Behavioural Therapy (CBT). Exposure therapy is a particular aspect of CBT, where the client will learn to face your fears in a relaxed, safe, and controlled manner.

About the programmes
Programmes are developed and delivered by clinical psychologists, therapists, and specialist technicians. Following a brief initial assessment, the programme is delivered over 5 sessions. The client will be expected to practise the strategies they learn in the sessions to get the most out of treatment.

Clients learn what happens in our brain when we feel anxious, what we can do to manage it, and how to change it long-term. They will get a unique opportunity to practise these strategies in the complete safety and security of Virtual Reality, before graduating to real-life situations.

Our programmes
- Dental phobia
- Medical phobias including blood, injury, and injection phobias
- Claustrophobia
- Fear of MRI machines
- Emetophobia (vomit phobia)
- Public speaking / Social performance
- Fear of flying
- Fear of heights
- Fear of animals
- Fear of spiders and insects
- ...and more being developed everyday!

Join our team!
We’ve had an overwhelming response from the public. We are frequently asked to open clinics in major cities across Australia.

We are actively looking for talented psychologists to bring our unique programmes to the rest of Australia. If you are interested in joining our fast-growing team, please contact us today!

Contact Us
For more information, please contact us:

Phone: (02) 8540 8739
Email: info@sydneyphobiACLinic.com.au
Or visit: www.sydneyphobiACLinic.com.au

Suite 501
379-383 Pitt St,
Sydney, NSW 2000

www.sydneyphobiACLinic.com.au info@sydneyphobiACLinic.com.au
Neuropsychotherapy is relatively new but rapidly growing, exciting, approach to therapy. It is the merging of neuroscience and psychotherapy and considers the effect of an individual’s experiences and various environmental triggers on the neural development of their brain and how this subsequently impacts their thoughts, feelings, and behaviours and how this leads to wellness or psychopathology.

As part of my job as conference coordinator I get to work closely with Pieter Rossouw, who in his capacity as President of the IACN, has overseen the conference. Additionally, I get the chance to liaise with all the presenters that have been invited to present their work, giving me a sneak peek into what to expect next year. With so many mental health professionals getting ready to present on a variety of topics I am very pleased to say there are some really exciting ideas being brought to the conference. As a mental health professional myself I can confidently say that this conference is a fantastic opportunity not to be missed and I, personally, can’t wait! Stay tuned, Irene

Pieter is the Director of Mediros Clinical Solutions, The BRAINGro Institute and The Neuropsychotherapy Institute – companies that provide training and conduct research in Neurobiology and Neuropsychotherapy. Pieter is also a Professor in Brain Based Education at Central Queensland University (CQU) and the President of The International Association of Clinical Neuropsychotherapy (IACN). Currently he focuses on teaching and research in the fields of neurobiology and neuropsychotherapy as well as clinical training for clinicians, psychologists and general practitioners.

Pieter has been in private practice for the past 30 years. Pieter holds Honours Degrees in Philosophy and Psychology, a Master Degree in Clinical Psychology and a PhD. Pieter is a member of the Queensland Counselling Association, The Australian Psychological Society and the APS College of Clinical Psychologists. Pieter was a Professor in Clinical Psychology in South Africa (University of the Free State). He also taught at Universities in Canada, the USA, New Zealand and Holland. Prior to his role as professor in Education at CQU Pieter was the Director of the Master of Counselling Program in the School of Psychology at the University of Queensland.

Pieter specialises in Neuropsychotherapy and is an expert in trauma, anxiety and mood disorders. He has published 7 Scientific Books and 75 scientific articles. He has been involved in research in extensive clinical trials and presented keynote research papers at 60 International Conferences worldwide. Pieter’s latest books – The Predictive 6 Factor Resilience Scale – Clinical Guidelines and Applications with Jurie Rossouw and Bullying – Taking Control with Melissa Kaya were published in 2016. His other major works in applied Neuroscience are Neuropsychotherapy Theoretical underpinnings and clinical applications (2014) and BrainWise Leadership (co-authored with Connie Henson – 2013).

Pieter has worked with education systems nationally and internationally. He provided consultation and training for Dept Education in Victoria, NSW and is the Chief Consultant for the ACT Department of education on Brain-based learning. He also provides ongoing development for Catholic Education Queensland and Victoria and it the principal consultant on Brain-based education for a number of Independent Schools in Melbourne and Sydney. He also consulted for the Ministry of Education New Zealand and is currently collaborating with educators in China.

He is a member of the Global Association for Interpersonal Neurobiology Studies, He is the Chief Editor of the International Journal for Neuropsychotherapy and member of the editorial boards of the Journal of Psychiatry; the Journal of Psychology and Clinical Psychiatry and of The Neuropsychotherapist. Judith is an Associate Pro-
Introducing: One of the conference Keynote speakers:

Associate Professor
Judith Murray
BA(Hons I Psych); BEdSt; PhD BNurs

Professor in Counselling and Counselling Psychology at The University of Queensland Australia. Judith is the Director of the Master of Counselling Program and involved within the Master of Psychology program. Judith has worked professionally as a qualified secondary school teacher, psychologist, and nurse. She is the author of numerous papers, and resource packages and books. Judith has worked consistently to further the use of loss as an integrative concept within the health, welfare and education sectors which is articulated in the book “Understanding Loss: A Guide for Caring for Those Facing Adversity” (Routledge).
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
Registration Form

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 - 3½ 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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<th>Pre-Conf Workshop Neuroscience of Pain 23 May ‘17 - (P)</th>
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CREDIT CARD (Visa or Master Card only)

Card Number: ___________________________________________    Expiry Date: ______________

Three digits on back of card _____________   Amount: _AUD $____________________

Name of Card: __________________________________  Signed: __________________________

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PO Box 6460, St Lucia, 4067, QLD, Australia            Fax +61 (0) 7 3294 3220
# 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

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<tr>
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<td>1 – 4 March 2017</td>
<td>Waipuna Conference Centre, Auckland, New Zealand</td>
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<tr>
<td>Brisbane</td>
<td>7 – 10 March 2017</td>
<td>RBW Hospital, Herston Road, Herston, Brisbane</td>
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<td>Melbourne</td>
<td>19 – 22 September 2017</td>
<td>Royal Melbourne Hospital, Grattan Street, Parkville</td>
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<td>Sydney</td>
<td>2 – 5 October 2017</td>
<td>Portside Centre, Level 5, 207 Kent Street, Sydney</td>
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<td>Hawaii</td>
<td>16 – 19 October 2017</td>
<td>Sheraton Princess Kaiulani, Honolulu, Hawaii</td>
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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

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Please contact admin@mediros.com.au for details

## PAYMENT OPTION – Credit Card ONLY – FULL PAYMENT REQUIRED AT TIME OF REGISTRATION

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