

Editorial

The collective endeavour of interpreting neuroscience—A collection of Australian based trauma informed research and practice

Joe Tucci and Janise Mitchell

In his latest book, *Touch - The Science of Hand, Heart and Mind*, respected neuroscientist David Linden (2015) elegantly dives into the complexity of the circuitry that connects the body and the brain in integrative processes of experience. Detailing different types of fibres which conduct information from the sensors in our skin to the brain, he describes how the speed of information flow is critical to the way we can discern various forms of touch.

“...Fast A-fibres are necessary to transmit rapidly changing, highly nuanced signals about object shape, texture, vibration... C-fibres, in contrast, are not built to inform the parts of the brain involved in discriminative, factual aspects of touch sensation, but rather function to integrate information slowly and to discern the emotional tone of the particular touch involved... recently it has become clear that some C-fibres convey a special kind of tactile information: they appear to be tuned for interpersonal touch... C-tactile fibres are caress sensors... (p.78)”

Amazingly, the human body has evolved so that it has sensors that are sensitive only to the experience of a caress. For children and families, the questions that arise from this insight are numerous and possibly far reaching. How do these fibres develop? Are they involved in embedding a sense of safety into our bodies? Are there circumstances in which they might be damaged? How does stress impact on their development in infants and children?

For practitioners working to support vulnerable children, young people and their families, a task is allocated to our collective endeavours whenever new evidence surfaces that has the potential to deepen our understanding of children's needs and their experience of relationships. We are required to make sense of it, evaluate its relevance and ultimately, if helpful, make it count in our practice.

For at least a decade, the impact of knowledge emanating from the fields of neuroscience of child development, attachment and trauma has dramatically shaped and reshaped our approaches to child protection, child and family welfare and out of home care.

In the first Special Edition of *Children Australia* published in June 2015, we introduced a collection of articles written by the very thought leaders who have been at the forefront of such research and knowledge building. They were the faculty of international experts who presented at the Australian Childhood Foundation conference on trauma the previous year. There were papers by Cindy Blackstock, Allan Schore, Steve Porges, Pat Ogden, Ed Tronick, Dan Hughes, Kim Gouling and Dan Siegel. They are authors who have deeply and permanently influenced the practice of many disciplines across a number of fields of interpersonal care.

At the conference, in addition to the international speakers, we also dedicated a whole day to hearing from local researchers, policy makers and therapeutic practitioners. These were presenters who had taken on the task that such knowledge demands of all of us and had worked towards interpreting the knowledge base derived from neuroscience to offer children and adults innovative ways to support their recovery from the consequences of trauma and relational disruption.

This edition of *Children Australia* represents a small sample of the some of the best papers presented at the 2014 Childhood Trauma Conference in Melbourne. Each reflects the learning of the authors as they have tried to bend, mould and decipher the evidence so that it either highlights a more informed understanding of what individuals, made vulnerable by violation, actually need or how support can be offered to such individuals in an effective way that resources their experiences of transformation and hope.

The first two articles are examples of the need for research that continually describes the backgrounds, experiences and consequences of trauma in the lives of children and young people. Rebecca Reay and her colleagues have put together a comprehensive picture of the factors which contribute to and flow out of experiences of trauma for a sample of children and young people who had been referred to the ACT Child and Adolescent Mental Health Services. Felicity Quirk and Debra Rickwood delved into the emerging evidence base about the ways in which social support networks resource children and young people affected by trauma. Concerningly for them, the strength of these networks are less reliable for children and young people who had experienced serious levels of developmental trauma.

Our collective concern about the trauma experienced by asylum seeker children and young people are the topics of the next two articles. Jabrulla Shukoor highlights just how critical it is to engage refugee children and their families through holistic therapeutic approaches that recognise and integrate cultural ways of knowing and responding to trauma. Rosemary Signorelli and her colleagues examine the consideration in developing and implementing a culturally appropriate early childhood program with refugee families and communities building on trauma informed practices.

The next three articles all represent clever and effective translations of the neuroscience of trauma and attachment into therapeutic models of intervention. Tamara Wolan and Mary-Anne Delaney from the Australian Childhood Foundation set out the key elements of a sensorimotor oriented group program for children who have experienced abuse and their carers, illustrating eloquently how movement and shaping the physical responses of children's bodies are integral to supporting recovery.

Liz Antcliff and Cornelia Elbrecht discuss the benefits of engaging traumatised children in therapeutic strategies that build on the density and sensory experience of clay. Katy Batha explores the insights from her own practice of experimenting with a whole of family approach to integrating sensorimotor and narrative approaches to supporting children and carers to take time out and engage in attuned opportunities through play.

The final three articles focus on child sexual abuse - coming at it from three different angles. Russell Pratt and Cyra

Fernandes examine the ways in which the large scale availability of pornography affects the motivation and entrenchment of problem or harmful sexual behaviour by young people. Janice Paige explores the implications of contact between the victims of intra-familial child sexual abuse and the perpetrator after the abuse has stopped to determine if there is any element of these dynamics that might benefit or cause further risk to children. And finally, in the most challenging of the three papers, Karen Menzies and Lyn Stoker use a case study they know all too well to identify the means through which a perpetrator of child sexual abuse is able to sublimate and corrupt an organisation in order to facilitate access to children over a number of years.

All of these eleven articles grapple with what it means to be a practitioner with knowledge that is evolving in a way that facilitate the answering of questions that were once not even able to be asked. They take the smallest of ideas and turn them into tangible strategies and approaches that we can all share in and learn further from ourselves. This is the joy of consilience, as Dan Seigel pointed out in his article in the earlier special edition. It brings together wisdom derived from practice and integrates it with the knowledge from research. It is this process that pushes practice forward and allows us to refine and improve.

At the next Childhood Trauma Conference being organised now for June 2016, there will be another opportunity for local practitioners and researchers to contribute to the broader discussion of those of us interested in the evolving landscape of trauma informed practice. We look forward to seeing you there.

Reference

Linden, D. (2015). *Touch - The Science of Hand, Heart and Mind*. New York: Penguin Publishing Group.

About the authors Joe Tucci is CEO of the Australian Childhood Foundation. Janise Mitchel is the Deputy CEO of the Australian Childhood Foundation. They are the co-convenors of the Childhood Trauma Conference - Tracing new developments in relational, body-oriented and brain-based approaches to recovery and change to be held on 6–10 June, 2016 at the Melbourne Convention Centre. For more information, visit www.childtraumaconf.org