Introduction

This discussion paper is one in a series designed to stimulate discussion, and sharing of experience, amongst staff in educational settings working with children who may have experienced complex relational trauma.

The paper complements and extends training provided through the SMART program - an initiative of the South Australian Government Department of Education and Children's Services.

Although this paper specifically addresses pre-school aged children, staff working with older children will likely find information and strategies discussed here pertinent to their practice, as many of the challenging behaviours of much older children have their genesis in trauma experienced during infancy.

The aim of this paper (and of the SMART program in general), is to provide educators with an understanding of the long lasting neurobiological effects of trauma experienced early in a child’s life. Underpinned by that understanding, educators will then be able to add a trauma overlay to their current assessments of children, to view their challenging behaviours through a broader lens and consequently, to respond to those children more appropriately and effectively.
Do you ever find yourself saying of a 10 year old (or older) child, ‘He’s acting like a baby’? this is not an unreasonable assessment of the behaviour of many traumatized children. Their chronological age is not mirrored by their developmental age because of the impact of complex abuse related trauma in the early years. Older children with a history of trauma in their early years will benefit from age-appropriate strategies based on this model presented below.

The neurobiology of early trauma

In the first 3 years of life, brain development occurs at a faster rate than at any other stage of life. During the early years, although development is occurring in all areas of the brain, most activity is concentrated in the sub-cortical areas of the brain. Early brain development is experience-dependent, and occurs hierarchically from bottom up. The development of higher order systems building upon foundational development in lower order systems that are the developmental focus of the first years of life.

In the first 2 years of life, development is predominately focused in the right hemisphere of the brain, meaning that infants perceive and remember, the non-verbal aspects of communication: tone of voice, facial expression and gestures. With limited access to cortical processes, experiences in the first two years are laid down as implicit memory or memory which is stored and retrieved without conscious awareness.

Between the ages of 2-4 years, there is more left-brain dominance, as language and logical thought begin to develop. From 2 years of age, the hippocampus becomes operational, giving context to memories of experience. From this time on, children have the capacity for explicit memory, together with growing language skills.

Infants are totally dependent on adult carers to sustain life and to regulate their levels of arousal. The human brain can only develop in relationship with other human brains and young children’s learning about the world and themselves always occurs within the context of relationship. Relational trauma severely disrupts this life-giving attention for an infant, and sets up a trauma focused blueprint or template of his/her identity, relationships and regulatory capacity in particular. When an infant’s most significant carers are also the source of the trauma, this is a devastating experience for the very young child.

Manifestations of trauma-based responses in infants and pre-schoolers might include states of chronic hyperarousal or hypoarousal (incorporating dissociation), difficulties with affect regulation/soothability, developmental delay, feeding and/or sleeping problems, aggressive or defiant behaviours, language delay, self-harming or over-compliance.

The Early Years SMART PRACTICE model

SMART PRACTICE is an 8 point framework of intervention which was originally tailored for use in the school environment. The intervention provides school staff with a range of strategies which aim to support the transformation of trauma impacts for children.
This paper provides an adapted SMART PRACTICE framework, specifically designed to support children from 3 to 5 years of age, in early years settings. The early years model is framed around SMART PRACTICE principles which encourage educators and carers to provide relational environments for traumatised infants which are:

**Predictable-** Traumatised children perceive any change as a potential threat.

Continuity of care, regular routines, and extra support through transitional times, are particularly important for these children.

**Responsive-** Traumatised children have not experienced adults who respond contingently to their needs.

These children need adults who can offer them reparative experiences where relationship is separated from behaviour.

**Attuned-** Traumatised children have not experienced sensitive attunement to their needs from significant caregivers. Mis-reading of non-verbal cues is significant stress for a very young child and it influences the development of a poor sense of self.

These children need adults who sensitively read their cues and respond accordingly in understanding the child’s needs and providing an experience of relationship that meets those needs.

**Connecting-** Traumatised children have not had opportunities to experience trust of adults. For young children, this also means they have not necessarily built an understanding of their own emotions and emotional responses as they are not mirrored for them.

These children need repeated experiences of positive engagement with adults that incorporates a reflection of their emotions, physiology and self-regulation strategies modeled for them.

**Translating-** Traumatised children (even those with language skills), have limited capacity to ‘story’ their experience.

These children need help to give narrative to their everyday experiences. This might flow from the use of story books, life story work or using cartoons to build sequencing of experiences.

**Involving-** Traumatised children have difficulty forming friendships with peers.

These children need extra support to relate appropriately with other children. This might incorporate an understanding of the developmental stages of play- with a focus on the experience of parallel, rather than cooperative, play.
**Calming-** Traumatised children live in a constant state of elevated stress, without the capacity to regulate their levels of arousal.

These children need to be cared for by adults who are able to maintain a calm state themselves, and who can provide repeated experiences of activities which are rhythmical and synchronous with others.

**Engaging-** Traumatised children have limited experience of healthy, attuned relationships with adults.

These children need repeated experience of one-to-one interaction with trusted adults who can engage in, and model, healthier and safer ways of relating.

Responding to young children in this manner supports what we know about the effects of trauma on the developing brain.

**Interventions**

As outlined above in the final, foundational, elements of the SMART PRACTICE framework, all reparative interventions with infants need to occur in the context of contingent, responsive relationship with a calm, loving caregiver. Sensory experiences and repetitive, rhythmic, patterned activities, will best support recovery from developmental deficits of the sub-cortical areas of the brain. Some examples include:

1. Sensory experiences like rocking, patting, dancing, stroking and massage
2. Interactive dyadic activities such as shared action rhymes, songs and stories with distinctive rhyme, rhythm and repetition.

**Questions for consideration**

You may like to use the following questions as meeting topics, discussion starters, prompts for sharing of ideas/resources, or reflections, for staff working with children birth-5years.

1. What are the critical considerations which would need to be made at your site/organization, to ensure effective implementation of PRACTICE strategies for very young children in your care?

2. Share with your workplace colleagues, a strategy/technique which you have used with children in your care, and which relates to one of the PRACTICE principles.

3. How might you share knowledge of the SMART PRACTICE strategies with parents/caregivers?
4. As a staff, collectively review all that you understand about the neurobiology of trauma, its effects, and appropriate reparative strategies for children in the first 5 years of life. How could that knowledge be incorporated into the policy of your organization/site?

5. Identify an instance in which you have observed a dissociative response in an infant, and decide whether or not you believe that response to be normative or developmentally appropriate.