

Ideas and concepts for helping stressed children to calm down and emotionally regulate

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Synopsis of article

Most young children learn the valuable skill of emotional regulation through interactions with their parents or caregivers. Ideally, adults regulate the stress responses of children through soothing and comforting responses within the secure base of an attachment relationship. However, this is not always the case. Some children do not have the kind of positive experiences that help them to learn emotional regulation. Many children in care fit into this category and therefore foster carers may be asked to care for children who are highly stressed and who do not know how to process or manage their distress. Some children when stressed become emotionally over-heated (hyperaroused) and openly display anger and aggression, as well as high levels of dependence. Other children become emotionally withdrawn or dissociated. When children have experienced severe early trauma or neglect, they may display both hyperarousal and dissociation, oscillating between high levels of displayed emotion or emotional shut-down. Their behaviour and emotional responses are highly unstable. Situations that provide reminders of earlier traumatic experiences, such as access visits, often cause a child to react as if the original trauma was still happening in the present. Children who present in this way provide many challenges for foster carers. This paper explores the mind/body connection in terms of sensory development and attachment, provides an overview of the process of emotional regulation and offers some strategies designed to help children to manage stress.

Attachment and emotional regulation

Attachment is an in-built behavioural system that each child is born with. It is instinctive from birth and may be described as nature's child protection system. As infants do not have the capacity to regulate their own stress responses, they have an inbuilt expectation that parents/caregivers will help them to emotionally regulate when they are stressed. Through the experience of external emotional regulation, they gradually learn to internally regulate their own stress responses. It is the attachment system that motivates children to seek out physical and emotional proximity to caring adults,

especially in situations of fear and distress. This creates an enduring bond and shapes the child's capacity to emotionally regulate. Attachment is a lifelong process, but is most evident in early childhood when the templates for attachment are being formed through repeated interactions with caregivers that are mapped and held in memory as internal working models. The function of the attachment system is physical safety and emotional care. Parents/caregivers are older, wiser and stronger. They have the capacity to physically protect and to provide emotional support.

The attachment behavioural system improves the chances of the infant's survival and is a primary defence against trauma (Bowlby, 1969). The concept of the 'secure base' or 'safe haven' devised by Ainsworth (1978), is central to understanding the process of emotional regulation. It may be described as the physical and emotional space around a caregiving adult, which provides a place of refuge for a child in distress. It appears to be an inbuilt and pre-programmed template within the nervous system for the purpose of physical safety and emotional regulation. Internal working models or maps are initially formed in the right hemisphere of the brain but transfer to the left hemisphere around the age of two, when language develops. Internal models are reasonably-stable in childhood but can be modified or changed by experience (Schore, 2003). Previous internal models, often shaped by experiences of neglect or trauma so that they are highly charged with stress, strongly influence the behaviour of children coming into foster care.

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Emotional regulation has been defined as the ability to maintain flexible, organised behaviour in the face of high levels of arousal or tension (Sroufe, 1996). The infant's nervous system develops through interaction with a sensitive primary caregiver. Gradually the infant learns to attune to his or her own states and the states of the caregiver (Hart, 2011). Through the prism of this relationship, sensory experiences of touch, sound, smell and movement are absorbed. Most mothers instinctively know how to present sensory experiences to their infants so that they are soothed when they are distressed and stimulated when they are passive. 'Good enough parenting' ensures that the sensory experiences of the infant are not stressful or overwhelming. Early

interactions shape right-brain development and the ability to regulate emotions (Cozolino, 2006). Therefore, we first discern our own needs by getting those needs met by others, which in turn supports the capacity to explore independently. This basic rhythm of secure-base behaviour and exploration is the foundation of emotional, social and intellectual well-being. Without it we cannot learn, communicate, develop relationships or survive in our highly stimulating world (Greenspan et al, 1998).

Sensory-attachment experiences appear to have an aspect of co-regulation in that, when mothers are able to calm and regulate their infants, they themselves become calmer. Hofer (1999) has described this process as mutual co-regulation. Each partner in the attachment dyad, that is, mother and baby, has a part to play in this rhythmic dance. Mothers regulate their infants' stress responses. Infants allow themselves to be so regulated. Gradually they learn to self-soothe and develop independent strategies for managing stress. Emotional self-regulation in children is increased as they develop ego strength. The ego is strengthened through interaction with reality and the external world (Bronson, 2000).

Although infants tend to orient primarily to their mothers when stressed, fathers may also become primary attachment figures. Fathers and male caregivers tend to be more physical in their interactions, so that children are stimulated to engage in exciting games that involve play and exploration (Schore, 2014). Interactions with mothers appear to have a more calming effect (Hart, 2008). The early maternal attachment period is followed by a period, during the second year, when paternal attachment becomes primary, reflecting the end of the period of maternal imprinting (Schore, 1994). Father hunger has been observed in children who are deprived of paternal contact during their second and third years (Herzog, 1980).

Emotional dysregulation

Levels of arousal are not stable. They are subject to change according to the demands of the task and time of day. Children need to be very alert to engage in physical activity, play and learning, but arousal is lowered as night time approaches and the body prepares for sleep. A child who is hyperaroused and whose alertness levels are too high may present as hyperactive during the day, and may have difficulty engaging in quiet activities or getting to sleep at night. On the other hand, the child who is hypoaroused and has low alertness levels may be difficult to motivate, have little energy to engage in

physical activities and may prefer passive activities, such as watching television. When prevailing levels of arousal (too high/too low) do not match the demands of a particular task, the resulting internal conflict may manifest in the following behaviours:

- Vigilance
- Fright
- Flight
- Fight
- Dissociation

Hyperarousal is helpful in dangerous situations where flight and fight responses are necessary for survival. However, it is maladaptive in a classroom situation and may impede the child's ability to listen to the teacher, interact with peers and complete class work. Hypoarousal and dissociation may provide protection to the developing nervous system from being overwhelmed by traumatic memories (Wieland, 2011). On the other hand, they may significantly impede the capacity of a child to make new and secure attachments in the real world.

The brain/body connection

The sensory world takes shape before we are born (Van der Kolk, 2014). The sense of self is first and foremost a bodily sense. Primary sensations at the beginning of life are physiological and tactile (Ogden et al, 2006). Attachment needs are initially experienced and expressed primarily as body-based needs. The quality of the early attachment relationship is founded on the caregiver's consistent and accurate attunement and response to the infant's body through holding and movement, as well as the sensory experiences of smell, touch, sound and eye contact. The parent or primary caregiver acts as an external psycho-biological regulator of the experience-dependent growth of the infant's nervous system (Schoore, 2003). The mother introduces a baby to his or her own body and through this process the infant begins to inhabit the body (Winnicott, 1958). If this process is deficient a child may feel 'unreal' or depersonalised.

Attachment experiences are imprinted into the neurobiological structures that are maturing during the first two years. The right hemisphere of the brain mediates early attachment experiences, relationships and human stress. It also processes and stores sensory experiences, body sensations and the emotions they invoke (Van der Kolk, 2014). Images of the body, just like images in general, are the special domain of the right

side of the brain (Amman, 1991). Around the age of two the right hemisphere ends its growth phase and the left hemisphere comes on line around the time when toddlers begin to acquire language (Schoore, 2003). The left hemisphere of the brain is linguistic, sequential and analytical. It is also dominant for the processing of facts, logical analysis and maths. Another important attribute of the left brain is measurement of time, which is important in terms of the management of stress.

Sensory processing

In order to learn and develop, children must first form a sense of self. The first sense of self is both physical and relational. It has sometimes been referred to as body-ego or body-self (Neumann, 1973). Winnicott (1984) described the psyche as 'indwelling in the soma' and saw the early attachment relationship between mother and infant as intensely physical. Maternal care creates a sense of continuity in the infant and thus failures in maternal care can result in a lack of a sense of continuity in the infant (Winnicott, 1984).

For Hart (2006), the deep roots of self-consciousness are found in brain activities that maintain a relatively stable body state on an ongoing basis. Children need to feel that they inhabit their own body in a comfortable way. In order to become fully aware of where their bodies are in relation to the environment, children need to feel safe within a secure enough attachment relationship. Information about their own body and the world is gathered through the seven senses:

- Touch (tactile sense)
- Movement (vestibular)
- Body position (proprioception)
- Sight (vision)
- Sound (auditory sense)
- Smell (olfactory sense)
- Taste (gustatory sense).

Sensory information has to be sifted, processed accurately and organised so as to make an appropriate response without becoming overwhelmed. This process is called sensory integration, and has been defined by Ayres (2005) as 'the organisation of sensory input for use'. A child's ability to concentrate, listen, learn, behave appropriately and control impulses is influenced strongly by the capacity to emotionally regulate and maintain a

calm, yet alert state. As the capacity to emotionally regulate is shaped by experiences of attachment, especially in the first three years, it can be seen that attachment and sensory processing are strongly interrelated. When an optimal calm and alert state cannot be achieved or maintained, adjustments need to be made, either upwards or downwards. Through the operation of the secure base, parents and caregivers calm over-aroused states and activate under-aroused states (Wieland, 2011). However, many children have difficulty in processing, organising and responding to the volume, speed and intensity of the many sensory inputs they receive. This is especially the case when they have not experienced adequate early emotional regulation through the experience of secure attachment. They struggle to manage the complex tasks necessary for learning and participation in the world. When the flow of sensory and emotional information has become disorganised, life for the child may feel overwhelming (Ayres, 2005).

Emotional regulation and sensory processing continue to provide challenges for individuals throughout the lifespan. Various sensory strategies are utilised, mostly without conscious awareness, when people experience emotional or sensory dysregulation. For example, adults drink tea and coffee or use movement or stimulating music in order to up-regulate their nervous systems. On the other hand, alcohol, cigarettes, or calming music may be used to down-regulate and prepare for sleep. Each individual develops a unique set of strategies in order to achieve and maintain a state of arousal that allows him or her to work, play, learn, rest and participate in all aspects of life.

How the brain/body reacts to trauma

Children who experience trauma often present emotionally as either too high or too low. They tend towards rigidity or chaos (Siegel, 2013). They either escalate the display of distress, or emotionally withdraw (Van der Kolk, 2014). Trauma that takes place when a child is very young may impact on their sensory, motor, social and emotional development. The sense of self is often fragmented. As emotions are essentially signals from the body, responses to trauma often manifest in a physical way, such as shaking and trembling, clenched fists, dry mouth, digestive difficulties or heavy feelings in the chest (Ogden et al, 2006). Severe trauma also damages integration between the right and left hemispheres of the brain and disconnects other brain areas necessary for the storing and integration of incoming information. This may result in amnesia, an inability to find words for feelings, and a tendency to repeat traumatic experiences rather than

symbolise them through language or symbolic play. When an event or trigger reminds traumatised people of the past, their right brain may react as if it were happening in the present. Difficulty in integration between the left and right brain means that they are often unable to use the resources of the left brain to place current stressful experiences in the correct time sequence. The emotional and language sides of the brain are unable to communicate properly (Hart, 2006).

Some strategies for helping children to emotionally regulate

Sense of safety

Children who have experienced disruption and trauma need reassurance that they are safe. They may need support to help their body as well as their emotions and mind to become aware that they are no longer in a place of danger and that their needs will be met. New experiences of calming and alerting are needed and a predictable structure to the day can be very supportive (Degangi et al., 2008). The child should also be helped to name their internal states and feelings in order to help their body and brain to become more integrated.

Rebuilding damaged eye contact

Eye contact is a signal of trust. Children who are emotionally withdrawn often avoid it because of fear and anxiety. They should not be forced into eye contact before they are ready but can benefit from social games such as Ludo or Scrabble where they do not have to make direct eye contact. Resistant or clingy children may over use eye contact and need to be encouraged to look at interesting things in the outer world. Eye contact games, such as guessing silent words expressed by a caregiver, may help children to build a more secure pattern of eye contact.

Music and rhythm

Infants learn rhythm in the womb. Newborns are very easily soothed through rhythm using gentle, predictable movements. Music has been shown to be an excellent way to strengthen self-regulation and to achieve a sense of calm (Davis, 2010). It integrates the right brain (rhythm) with the left brain (maths). Listening to classical music, such as Mozart, appears to support organisation in the cerebral cortex (Campbell, 1997). Drumming and percussion have traditionally been used for alerting and energising. Singing nursery rhymes can help support emotional regulation in small children.

Right and left brain integration for calming

Integration between right and left brain is supported when children are helped to become more aware of their own body and to listen to sensations and emotions. They can also be helped to tell their personal story and name fearful experiences. Physical activities that are rhythmical using both sides of the body, such as marching, tapping the shoulders or knees in a rhythm, also promote integration. Activities that involve deep pressure are also helpful for regulation of stress (Biel et al., 2005).

Importance of stories

Bedtime is often a time of stress for children, especially if they are fearful. Picture books with words help to integrate both hemispheres of the brain. The right brain perceives the total picture, while the left brain processes words, and places each element of the picture in the right order. Stories give a child a sense that his or her problems are shared. Storytelling with a child on a regular basis helps to build secure attachments.

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Summary

The task of fostering a child who has experienced early developmental trauma and attachment disruption is challenging. High levels of unprocessed stress may not be revealed for some time after the placement commences. Children who externalise their stress appear to be more visible in the care system than those who internalise and present a false positive face to the world and to their foster carers. Understanding a child’s attachment and sensory profile can be helpful in determining what strategies for emotional regulation may support a child in each case. Stress is experienced by the child physically and emotionally. Therefore, physical, emotional and sensory strategies are helpful in supporting a child towards achieving emotional regulation.

About the authors

Helen is an attachment and play therapist specialising in the assessment and treatment of attachment and emotional disorders, and unresolved trauma. She has developed

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