DISSOCIATION IN INFANTS AND YOUNG CHILDREN: A SUMMARY OF THE RESEARCH ON ITS CAUSES AND RESULTS

The developmental dogma that most children are able to accommodate variations in the quality of early care without deviation from normal developmental progress, and that infants and children show great behavioral and developmental resilience in the face of adverse life experiences, overlooks documented dramatic increases in childhood psychopathology, including bipolar disorder, attention deficit hyperactivity disorder (ADHD), and autism. Each of these conditions show right brain deficits.

These epidemiological data, as well as current attachment and developmental neurobiological research, seriously challenge the concept of universal resilience as too simplistic, if not just wrong (Lanius et al., 2010; Schore, 2003 and 2012; Szajnberg, Goldenberg, & Hatari, 2010).

It is now accepted that early childhood abuse specifically alters limbic system maturation, producing neurobiological alterations that act as a biological substrate for a variety of psychiatric consequences. These include emotional instability, inefficient stress tolerance, memory impairment, psychosomatic disorders, and dissociative disturbances (Schore, 2001, 2002, 2012).

Dissociation is the psychological and biological response to human trauma. A traumatic event can involve a single experience, or enduring repeated events, that completely overwhelm the person's ability to cope or to integrate the sensations and emotions involved in that experience. Dissociation is an altered state of consciousness in reaction to overwhelming psychological trauma (Loewenstein, 1996, p. 312).

Dissociation is a consequence of a 'psychological shock' (Meares, 1999, p. 1853). When psychological shock and the predisposition to dissociation occur early in life, the pattern for pathological dissociation throughout life is created.

Longitudinal attachment studies have demonstrated an association between traumatic childhood events and proneness to dissociation in adolescence and adulthood (Ogawa et al., 1997). The most significant consequence of early relational trauma is the child's failure to develop the capacity for emotional self-regulation (Toth & Cicchetti, 1998). The child (maturing adolescent, and later adult) will not be able to regulate their own emotional expression, emotional intensity and the duration of it (Van der Kolk & Fisler, 1994).

Studies have contributed to our knowledge of the physiological impact of psychological trauma (DeBellis et al., 2000; Foote, 1999; Southall, Plunkett, Banks, Falkov, & Samuels, 1997). These clinical research studies have looked at the long-term consequences of traumatic experiences on the nervous system. The brain continues to develop throughout childhood, adolescence, and adulthood. During the first five years of life, a relationship exists between the quality of the relationship between the young child and the primary caregiver, and the youngster's physical

brain growth. Childhood trauma—for example, separation from the primary maternal caregiver—distorts the optimal growth of neurologic brain patterns. It especially interferes with the part of the frontal cortex that controls and regulates emotion throughout the life cycle. A secure attachment relationship between the child and the primary maternal caregiver is necessary for this growth and development. Tronick (2004) suggests that infants who have a history of frequent breaks of the emotional attachment bond with the primary caregiver exhibit an "extremely pathological state" of emotional apathy. Such infants ultimately adopt a communication style of "stay away, don't connect."

The child's dissociation involves numbing, avoidance, compliance, and restricted affect. The child becomes inhibited and strives to avoid attention in order to become "unseen" (Schore, 1994, 2001b). The stressed youngster passively disengages from the world in order "to conserve energies ... to foster survival by the risky posture of feigning death, to allow healing of wounds and restitution of depleted resources by immobility" (Powles, 1992). If early trauma is experienced by the child as "psychic catastrophe" (Bion, 1962), then dissociation is a "detachment from an unbearable situation" (Mollon, 1996), "the escape when there is no escape" (Putnam, 1997), "a last resort defensive strategy" (Dixon, 1998).

Dissociative response is significantly different from other infant and toddler behavior and misbehavior. Each of the following examples reflects an infant or toddler's lack of having a secure attachment with their primary caregiver. The behavior reflects an infant's or toddler's emotional shock at having a secure relationship with their primary caregiver broken. As a result, the child exhibits one or more dissociative behaviors. The purpose of the dissociation is to escape from intense emotional pain -- to escape from feeling the painful loss of one's primary attachment parent and the excruciating loss of the predictable, secure parent-child relationship.

Following are a few examples of early childhood behavioral manifestations of dissociation:

- > Loss of postural control
- > Self-comforting behavior (petting other children, needing a security toy)
- > Reduced curiosity and play
- > Avoidance of talking
- > Avoidance of interpersonal relationships and friendships with former adult friends
- Disengagement from the attachment figure, and angry at her, yet more needful of her
- > Conserves energy and becomes immobile
- > Has a frozen or an absent facial expression
- > Avoids eye contact and seems beyond reach
- Fails to demonstrate emotional self-regulation, intensity and duration (gets angry easily and cries easily, becomes frightened at familiar sounds, and cries out for attachment mother (began at overnight with father)).

Children who have lost a secure primary attachment or suffered breaks in their secure primary attachment relationship develop emotional apathy. To the child, social intimacy is deemed to be dangerous because the child fears such a relationship will unlock threatening and violent emotions (Allen et al, 1998).

During the first years of life when the right brain is growing (Trevarthen, 1996) and dominant (Chiron et al., 1997), adverse influences on brain development particularly impact the right brain (Allman et al., 2005). During this time, states of the infant brain become long-term traits (Perry et al., 1995). As a result, early relational trauma and dissociation will be imprinted and embedded into the core structure of the developing right brain. Evidence shows that early relational trauma is particularly expressed in right hemisphere deficits.

Childhood trauma also affects memory, learning, social development, and the ability to empathize (Schore, 1994, 1996, 1997, 2002). The right hemisphere is dominant not only for regulation of emotions, but also for attention (Raz, 2004) and pain processing (Symonds et al., 2006). Thus, the right brain strategy of dissociation represents the ultimate defense for blocking emotional pain. Trauma victims who lack the cognitive and emotional structures to immediately assimilate the experience use the state of consciousness known as dissociation to escape from the full psychological impact of the event (Schore, 1993).

The symptoms of dissociation reflect a structural impairment of the right brain's regulatory system and its accompanying deficiencies of emotional regulation. The clinical principle that dissociation is harmful to long-term functioning (Bremner & Brett, 1997) is directly observed in many research studies of developing young children. The development of psychiatric disorders in childhood, adolescence and adulthood, according to research, derives from enduring disorganized insecure attachment imposed upon the young child (Hesse & Main, 1999; Main, 1996). Emotional dysregulation and right hemisphere dysfunction play a prominent role in all psychiatric disorders (Cutting, 1992; Taylor et al., 1997).

In summary, developmental psychologists have demonstrated a strong link between early attachment trauma and dissociation (Ogawa et al., 1997; Carlson, Yates, & Sroufe; Dutra, Bianchi, Lyons-Ruth, & Siegel). The overwhelming stress of maltreatment in childhood is associated with adverse influences on brain development (De Bellis, 1999).

Early abuse and neglect have immediate impact on the developing right brain during a critical growth period. These traumas produce an immature right brain that has a limited capacity to regulate intense emotional states. Early trauma is the origin of an enduring predisposition to pathological dissociation and emotional disorders throughout life.

Basic research in neuroscience and neuropsychiatry firmly supports the following principles:

- ➤ "Early adverse developmental experiences leave behind a permanent physiological reactivity in limbic areas of the brain" (Post, Weiss, & Leverich, 1994).
- Emotional and social deprivation interfere with the normal development of the synaptic brain architecture and lead to "neurological scars" which underlie "subsequent behavioral and cognitive deficits" (Poeggel & Braun, 1996; Poeggel et al., 1999).
- ➤ "Early traumatic experiences result in an increased sensitivity to the effects of stress later in life and render an individual vulnerable to stress-related psychiatric disorders" (Graham et al., 1999).

DEFINITIONS

Epidemiology: The study of the incidence, prevalence and causes of disease.

Frontal Cortex: The largest of the brain's lobes, it is sensitive to incoming stimuli and the features of each one. Deficits in its function are associated with impairment in personality changes, schizophrenia, depression and obsessive – compulsive disorder (Buchsbaum, 2004). Limbic System: Brain structures associated with emotions.

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