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Journal Article Critique

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Perry, B., Pollard, R., Blakley, Baker, W., and Vigilante, D. (1995). Childhood trauma, the neurobiology of adaptation, and “use dependent” development of the brain: How “States” become “traits.” *Infant Mental Health Journal*, 16(4), 271-291.

Article Critique of “Childhood Trauma, the Neurobiology of Adaptation, and ‘Use-dependent’ Development of the Brain: How ‘States’ Become ‘Traits’ ”

Summary

This paper focuses on the relationships between neurodevelopment and traumatic experiences in infants and young children. The authors discuss various aspects of the impact of traumatic experiences on infants and young children, focusing on the neurodevelopmental conceptualization of childhood trauma and how persistent acute adaptive states can become maladaptive traits.

The authors reviewed the brain’s function, indicating that “the single most significant distinguishing feature of all nervous tissue – of neurons – is that they are designed to change in response to external signals. Those molecular changes permit the storage of information by neurons and neural systems” (Perry, et al, p. 274). Thus, by responding to both internal and external environmental factors the brain is responsible for the survival of the organism.

The human brain becomes sensitized to experiences to the point that even minor stressors can induce a state of hyperarousal or dissociation. During development a state such as internalization of the fear response can become a trait and “determine functional capacity of the human brain” (Perry, et al, p. 275). The authors also indicate that during early childhood the

brain is most receptive to environmental input. “Abnormal micro-environmental cues and atypical patterns of neural activity during critical and sensitive periods . . . can result in malorganization and compromised function in brain-mediated functions such as humor, empathy, attachment, and affect regulation” (Perry, et al, p. 276). Children are also susceptible to “vicarious traumatization” when their primary caregiver is in a persistent state of anxiety and unable to contain their hyperarousal state. The review of literature by this article’s authors shows that despite what some adults may believe children are not resilient when exposed to threat and do not receive appropriate intervention but rather they will fail to reach their full functional capacity of the mature adult.

Implications for Education

By helping adults to understand the implications maltreatment and/or traumatic events can have on the development of a young child’s brain and by encouraging them to obtain appropriate interventions for themselves and their children early on when a traumatic event takes place we can help individuals reach their full functional potential as mature adults. We can also use the insight that once sensitized to threats a person may respond adversely to even minor stressors and their brain will focus on responding to the threat, impairing the learning process. Thus, it is important to mediate the amount of arousal and to provide a learning environment that is consistently safe, familiar, structured, and predictable.