

Research News

Attachment Relationships and Stress

ATTACHMENT – having a secure, loving relationship with at least one parent or caregiver – is known to be very important for young children’s healthy emotional and social development. However, attachment also plays a crucial role in the development of young children’s ability to deal with and recover from stress.

Dr. Megan Gunnar, professor of child development at the University of Minnesota, has spent her career studying how young children respond to stressful situations. Here are some of her key findings on the connection between attachment and children’s developing stress response systems.

- *Social relationships with parents and other caregivers play a critical role in helping children regulate their physiological responses to stress:*

“Children’s development takes place within the close social relationships with adult caregivers. One of the functions of the caregiving system is to modulate and enable control of physiological and behavioral responses to stressors. In humans, social modulation of physiological stress responses may lay the foundation for the development of emotion regulation competencies.”¹

- *Sensitive caregivers can have a positive physiological impact on children by protecting them from the potentially harmful effects of hormones and other*

neuro-chemicals involved in the stress response:

“Responsive caregiving allows children to elicit help by expressing negative emotions, without triggering the endocrine component of the stress response... In the presence of the attachment figure, toddlers who are in secure attachment relationships do not show elevations in cortisol to distress-eliciting events, whereas toddlers in insecure attachment relationships do.” (Cortisol is considered to be the most important hormone for stress response. Chronically heightened levels of cortisol increase children’s risk for anxiety, depression and behaviour and emotional problems in school.)

- *Unfortunately, parent-child relationships can, in some cases, be one of the greatest sources of stress for young children:*

“When the parenting is inadequate and/or is the source of threat, relationships can be a major source of physiological stress for children... One of the most interesting findings emerging from the research on the psychobiology of stress is that in the absence of supportive care, stressors experienced during sensitive periods of development can in fact leave permanent imprints in the neural substrate of emotional and cognitive processes.”

1. All quotations in this article from: Gunnar, M., & Quevedo, K. (2007). The neurobiology of stress and development. *Annual Review of Psychology*, 58, 145-173.

These findings underscore the importance of supporting early parent-child relationships. The Psychology Foundation’s [**Make the Connection**](#) program puts researched information into down-to-earth messages and activities that parents and caregivers can use to strengthen their relationship with their child from birth to age three.