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Correspondence

## Effects of Separation on Children's Neurodevelopment

*To the Editor:*

I read the article by Dr. Mandelbaum with interest.[1] I commend both *Pediatric Neurology* and the author for exploring this important issue. The Child Neurology Society released a statement in opposition to separation of children at the border and endorsed that the adverse childhood experiences are closely connected to decreased physical health. I want to highlight some other landmark studies that addressed the serious neurodevelopmental consequences of separating children from their parents.

Harlow et al. showed that baby monkeys had permanent behavioral alteration if separated and placed in a separate cage from their mother.[2] They became uninterested, self-injurious, and hostile to others. Several of them developed indifferent staring and other automatic behaviors such as excessive rocking. Spitz et al. noticed similar devastating effects of isolation on social behavior in abandoned children.[3] Harlow subsequently conducted other experiments which showed that the social behavioral disorders induced by the period of isolation could be partially reversed if the baby monkeys were given artificial mothers made of wood covered with cloth.

Although the need for connection, love, and nurturance is most intense during infancy, the need for intimacy and attachment does not vanish in later childhood years. John Bowlby compared the childhood experiences and psychological profiles of 44 juvenile thieves with a control group of 44 healthy adolescents; he found that the thieves were more likely to have been separated from their mothers for more than six months before they had reached age five years and that they were also much more likely to exhibit lack of affection and detachment.[4] It was evident that feeding the children by another caregiver did not diminish these manifestations. This finding contradicted the dominant behavioral theory of attachment at that time that the child became attached to the mother because she fed the infant.

It is unclear if all the separated children have been reunited with their families. It is our hope that as political battles recede, careful attention will be shifted to these vulnerable children and their emotional needs, and that vigorous efforts will be undertaken to reunite all the families.

## References

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Debopam Samanta, MD *
*Neurology Division, Department of Pediatrics, University of Arkansas for Medical Sciences, Little Rock, Arkansas*
*Communications should be addressed to: Debopam Samanta; Neurology Division; Department of Pediatrics; University of Arkansas for Medical Sciences; 1 Children's Way; Little Rock, AR 72202.
*E-mail address:* dsamanta@uams.edu (D. Samanta).

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