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Randomized manipulation of early cognitive experience impacts adult brain structure [1]

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AVAILABILITY
Access online [2]

Excerpt from Abstract

Does early exposure to cognitive and linguistic stimulation impact brain structure? Or do genetic predispositions account for the co-occurrence of certain neuroanatomical phenotypes and a tendency to engage children in cognitively stimulating activities? Low socioeconomic status infants were randomized to either 5 years of cognitively and linguistically stimulating center-based care or a comparison condition. The intervention resulted in large and statistically significant changes in brain structure measured in midlife, particularly for male individuals. These findings are the first to extend the large literature on cognitive enrichment effects on animal brains to humans, and to demonstrate the effects of uniquely human features such as linguistic stimulation.
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