Influence of Poverty on Decision Making

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Abstract

Poverty shapes fundamental life experiences in individuals of all ages, but the impact of low socioeconomic status (SES) on children is documented as being most direct and long-lasting (Brooks-Gunn & Duncan, 1997). Children raised in poverty are at a disadvantage to their peers when it comes to the fundamental resources underlying success, opportunity and wellbeing. (McLoyd, 1998). These handicaps limit an individual's exposure to certain life experiences which are informative to the development of their characteristic decision-making styles (Sheehy-Skeffington & Rea, 2017).

Discussion

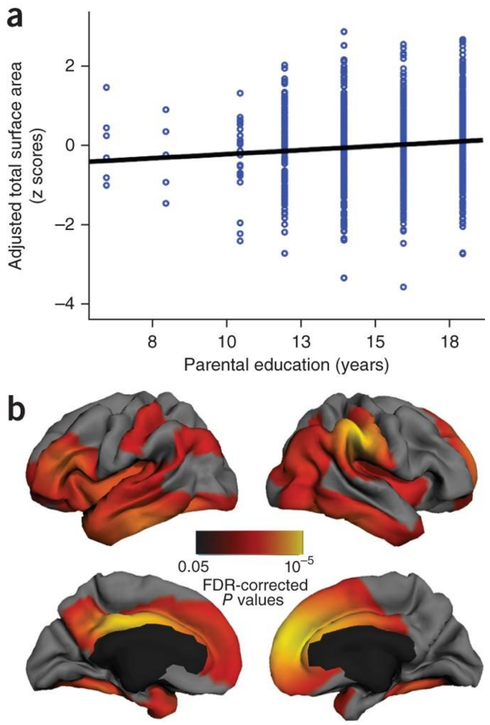
A childhood defined by poverty implicates detrimental factors to development and wellbeing, such as lack of adequate nutrition or sleep, weakened familial support for academic pursuits, and few opportunities for exposure to experiences critical to socioemotional development (Noble et al., 2015). Lack of access to these vital resources during the critical period of brain development causes trends to appear in the ultimate structure and ability to function (Sheridan et al., 2012). These changes in structure can lead to altered ability to think, plan, and orient: all critical aspects of decision-making processes.

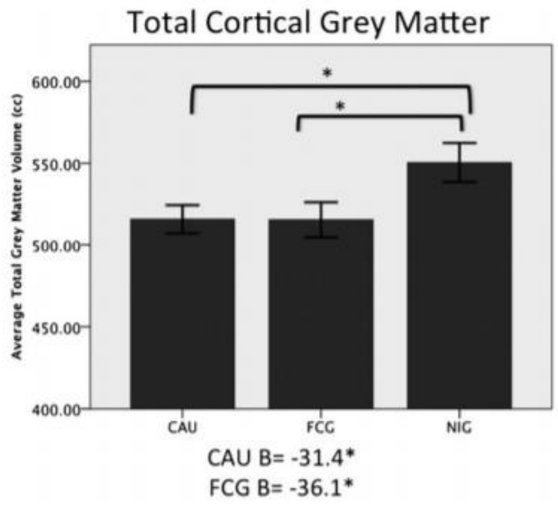
The cognitive effects of poverty are shown not only in assessments of structure and development, but through attention and self-control tasks. Exposure to poverty during periods of high plasticity in brain development is shown to affect children's academic performance, as well as ability to sustain directed attention (Sheehy-Skeffington & Rea, 2017).

Data

Below: **Parent education is linearly associated with cortical surface area (*N* = 1,099). (Noble et al., 2015)**

a) parental education is significantly associated ($P < 0.05$, FDR corrected) with children's total cortical surface area in a number of regions.
b) The association between parent education and cortical surface area was mapped to visualize regional specificity.





Above: **Average total cortical gray matter volume in cubic centimeters (cm3) for the CAUG, FCG, and NIG; error bars are ± 1 SEM. (Sheridan et al., 2012)**

This figure comes from a 2012 study of institutionalized youths in Romania, which investigated the development of brain structures in orphaned or fostered children. This study used both MRI and EEG techniques to measure the volume of grey and white matter of participants in one of three groups- ever-institutionalized group (EIG), foster care group (FCG) or never-institutionalized group (NIG). Results of testing show that the EIG participants had significantly lower total cortical volumes than the NIG (Sheridan et al., 2012)

Conclusions

- Poverty tangibly affects an individual's cognitive abilities. (Sheridan et al., 2012)
- The limiting nature of impoverished conditions affects the cognitive development and functioning of individuals; particularly children who have greater levels of plasticity. (Noble et al., 2015)
- Cognitive detriments due to low SES occur early and persist throughout development (Brooks-Dunn & Duncan, 1997)
- A child's experiences are limited and defined by their SES, as are their opportunities to develop, maintain, and exercise their decision-making techniques.

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