

**Mild juvenile stress increases resilience to the development of anxious behaviors and prevents neurogenic reduction after stress exposure in adulthood.**

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Stress, especially during sensitive periods of development, can induce neuroplastic changes in brain regions such as the hippocampus, which increases vulnerability to the negative effects of a second stressor during adulthood, precipitating the development of depressive symptoms. For this reason, C57BL/6J mice were subjected to two stress protocols, the first in the juvenile period and the second in adulthood. Neurogenic and behavioral changes (saccharin preference test and social behavior test) were analyzed. The results revealed that juvenile stress increased basal saccharin preference in adulthood. However, animals subjected to stress in both juvenile and adulthood showed anhedonic behavior. In addition, stress in adulthood resulted in increased anxious behavior without affecting interest in social relationships. Stress in adulthood reduced neurogenesis. In contrast, juvenile stress prevented the development of anxious behavior and the reduction of hippocampal neurogenesis induced by stress in adulthood. In conclusion, juvenile stress increases the risk of developing anhedonia after exposure to a second stress, but, in contrast to our expectations, mild stress during the juvenile period increases resilience to the development of anxious behaviors and prevents neurogenic reduction after stress exposure in adulthood.

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