

## **The effects of Socio-economic Status (SES) on the Developing Neural Networks and Plasticity of the Brain**

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This review study aimed to analyse and synthesize the available findings on effects of socio-economic status on the development of neural networks and plasticity of the brain. Adopting an approach to discuss the diagnostic and clinical significance of effects of Socioeconomic Status (SES) on the individual's cognitive neuropsychological development, this study began by understanding the definitions on associated main terms, synthesizing the research in the designated research area as well as emphasizing the preventive value of abnormal developmental aspects of an individual. Finally, the paper examined the possibilities of improvement suggestions on individuals with disadvantaged socioeconomic status. The analysis and the synthesis of the available studies showed that living in a disadvantaged lower socio-economic Status, affect the developing brain networks of the children negatively causing higher level of insufficiencies as well as disparities in number of cognitive functions. Among those cognitive functions which are negatively affected by lower SES, Language, Executive function, Working Memory, Intelligence becomes the highest vulnerable areas. Further, it was identified in this research that, in line with the concept of neural plasticity, the affected brain areas due to exposure to lower level of SES, can be improved through psychological and developmental interventions. Comparison studies on higher SES and lower SES children groups show that implementing intervention programs will benefit despite the devastating effects of SES as well as disadvantageous genetic makeup. But, addressing them is highly beneficial during the sensitive periods.

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