Synaptic Explosions: The Impact of Socioeconomic Status on Learning & Development

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The type of education a child receives is largely associated with their families socioeconomic status. The types of education impacts the child’s education in many ways. It determines many of the children’s life chances (i.e. higher education, jobs, income). But recently it has been suggested that socioeconomic status can have a drastic effect on the cognitive development and growth of children. There is a critical period in early childhood, during the ages of five to eight years old that will impact the cognitive functioning of children.

Synaptic Explosion & Pruning - What is it?

A Synapse is the transmission site for nerve impulses from one cell to another. One neuron could have hundreds of thousands of others. Synaptic Explosion is literally new neural pathways which are made through synapses. While Synaptic Pruning is when synapses that have not made connections will other neurons will die.

SES and Biological Development

These neural pathways leads to cognitive developments that is essential to learning and success in education: memory, language, critical thinking and logic. The time period in which these neural connections are taking are called critical period, in which an organism and its environment must have certain interactions to foster proper development.

Specialized Problems Associated with SES

What is not used, will literally be lost with cognitive development, through synaptic pruning. Although this biological function will take place no matter the social background of the child. It will, no doubt have excessive effects on the students. Children from lower socioeconomic statuses tend to face academic gap and hardship from the very beginning of school, due to the poor school quality and lack of resources within. Therefore the most dominant factor in the academic success of the child is not their intelligence, but rather the economic status of their parents and the motivation and attainment level of their fellow peers.