

Brigitte Röder: „Neural correlates of critical periods“ (October 19, 2007)

What is a sensitive period?

A limited epoch during development when experience on the brain is usually stronger; certain capacities are readily shaped or altered by experience.

What is a critical period?

Specific class of sensitive periods that result in irreversible changes in brain functions. After the end of the critical period, effects of atypical experience during the critical period cannot be re-mediated by restoring typical experience.

Main conclusions

Developmental and Adult Plasticity differ
>>> critical/sensitive periods do exist.

Critical/sensitive periods are a property of neural circuits.

Critical/sensitive periods differ for different functions (e.g., perceptual and cognitive functions) and even within a functional system (e.g. language).

References

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