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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Part 1: Mechanisms underlying brain changes during sensitive periods -- Development of functional properties in the early visual system: new appreciations of the roles of lateral geniculate nucleus -- Maturation of Corticolimbic Functional Connectivity during Sensitive Periods of Brain Development -- Microglia and sensitive periods in brain development -- Is Adolescence a Sensitive Period for the Development of Incentive Reward Motivation? Part 2: The influences of positive and negative

factors during sensitive periods -- Physical Activity, Fitness and Executive Functions in Youth: Effects, Moderators and Mechanisms -- Nutrition and brain development.-Understanding sensitive period effects in musical training -- Sensitive periods for recovery from early brain injury -- Part 3: Community level impact of sensitive periods: analyses and applications -- Statistical Modeling of Sensitive Period Effects Using the Structured Life Course Modeling Approach (SLCMA) -- Capitalizingon neuroplasticity across development to redirect pathways from juvenile justice involvement.

Sommario/riassunto

Sensitive periods occur when unique experiences permanently influence brain development either by their presence or absence. This volume covers underlying brain systems and behaviors that are sculpted by the environment in humans and animals in a search for commonalities. The mechanisms involved, the importance of timing in the process, and factors that can change the brain are discussed in this exciting book. Different chapters examine how experience guides the development of cells, circuits, and function using vision, cortical circuits, and cognition as frameworks. Scientific evidence for effective preventative intervention approaches, including diet, exercise, and music, are included to find ways to maximize child and adolescent development. The adverse effects of early brain injury are also included. As sensitive periods are gaining importance in their application in the real-world, novel statistical approaches for human studies are presented and the importance of sensitive periodsare covered by examining the juvenile justice system. The book has interdisciplinary appeal and scholars with an interest in brain resiliency or vulnerability will find it of particular interest.
