

Persistence of the cognitive effects of an early stimulation animal model

Persistencia de los efectos cognitivos de la estimulación temprana evaluados a través de un modelo animal

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Human and animal studies have clearly demonstrated the advantageous effects of seasonally enriched rearing environments. Nevertheless, little work has been done concerning the long-lasting persistence of all these behavioral modifications. To undertake this question, a very early enrichment animal model was used. From days 10 to 24 after birth, 28 male albino rats were exposed to a multisensory stimulated environment, while other 28 littermates constituted the control group. At 3 and 6 months old two cognitive abilities were analyzed: the spatial working memory (short term memory) and the latent learning capacity (long term memory). The results evidenced an improved working memory in both 3 and 6 months old rats exposed to the early enriched environment. Moreover, the adult early stimulated group performed as well as younger subjects both on error scores and speed to solve this test. Only in the adult group of rats a superior latent learning capacity of stimulated subjects was evidence