

Low activity levels affect child mental development

High activity levels (AL) in early childhood are associated with sub-optimal social and behavioural outcomes, but whether low AL have negative outcomes is unclear. Now, a study conducted by researchers at Boston University has demonstrated that AL are curvilinearly related to mental development. Their nonclinical sample included 626 twins aged 2 years recruited from the Boston University Twin Project; 608 twins returned for assessment at age 3 years. The participants were observed over two, 1-hour visits, where each twin was individually assessed in a test and a play situation. Qualitative and quantitative measures of AL were made, using: the Infant Behaviour Record to measure AL and assess interpersonal, affective, motivational and sensory behavioural domains; actigraphs to mechanically assess AL; the Bayley Scales of Infant Development to assess mental development; and the Toddler Behaviour Assessment Questionnaire. Statistical analyses found an inverted U-shaped relationship between mental development and AL observed in the laboratory. The researchers propose, therefore, that moderate AL are optimal for cognitive development in early childhood.

*Flom, M., Cohen, M. & Saudino, K. (2017), [Tipping points? Curvilinear associations between activity level and mental development in toddlers](#). *J Child Psychol Psychiatr*, 58:564-572. doi:10.1111/jcpp.12670*