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## **Neuropsychological morbidity linked to childhood sleep-disordered breathing.**

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Understanding the long-term neuropsychological consequences of sleep disorders in children poses a significant challenge to researchers. Since children are in a state of rapidly changing cognition and neurobehavioral function, impacts on development may have profound consequences. Recent studies now demonstrate that mild sleep apnea and snoring, once considered within the spectrum of normal sleep patterns, are associated with deficits of neuropsychological function. Preliminary data suggest that some of these cognitive deficits may be reversible following treatment of mild sleep apnea in children; however, factors such as age at treatment, duration of sleep disordered breathing, pre-morbid intellectual level, socioeconomic status, or the effectiveness of treatment may adversely affect long-term outcome. Furthermore, it is imperative that researchers determine whether the developing brain exhibits critical periods of plasticity during which episodes of sleep-disordered breathing might cause long-term or permanent neuropsychological effects.

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