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Snoring during early childhood and academic performance at ages thirteen to fourteen years.

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OBJECTIVES: Obstructive sleep apnea syndrome in young children is associated with an adverse effect on learning. However, the long-term impact of sleep-disordered breathing (SDB) during early childhood on learning remains unknown. **METHODS:** Questionnaires were mailed to seventh and eighth graders attending public schools whose class ranking was either in the top 25% (high performance [HP]) or bottom 25% of their class (low performance [LP]), and who were matched for age, gender, race, school, and street of residence. Snoring frequency and loudness at 2 to 6 years of age, tonsillectomy and adenoidectomy (T&A) for snoring or recurrent infection, school grades, and parental smoking and snoring were assessed. **RESULTS:** The questionnaire response rate was 82.8%. Because of ongoing ring, 13 responders were excluded, such that 1588 questionnaires could be analyzed (797 in LP and 791 in HP group). Frequent and loud snoring during early childhood was reported in 103 LP children (12.9%) compared with 40 HP children (5.1%; odds ratio: 2.79; confidence interval: 1.88-4.15). Furthermore, 24 LP and 7 HP children underwent T&A for snoring (odds ratio: 3.40; confidence interval: 1.47-7.84), while 21 LP and 19 HP children required surgery for recurrent tonsillitis. **CONCLUSIONS:** Children with lower academic performance in middle school are more likely to have snored during early childhood and to require T&A for snoring compared with better performing schoolmates. These findings support the concept that SDB-associated neurocognitive morbidity may be only partially reversible or that a "learning debt" may develop with SDB during early childhood and hamper subsequent school performance.

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