Adolescents sleeping more hours score higher in math

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Adolescents sleeping more hours score higher on mathematics, while those who sleep between six and ten hours (ie. an average sleep pattern) got significantly better scores, as compared to those with a short (6 hours or less per night) or long (more than 9 hours per night) pattern sleep. Moreover, this difference is more prominent in physical education.

This was the conclusion drawn in a study published in the January 2001 issue of the journal *International Journal of Clinical and* Health Psychology by Raúl Quevedo-Blasco, a professor at the Department of Personality Evaluation and Psychological Treatment, at the University of Granada, and by Víctor J. Quevedo-Blasco, a secondary school teacher at the I.E.S Flavio Irnitano in Seville, Spain.

The aim of this study was to analyze how sleep patterns can affect students' academic performance. Their academic performance was measured in terms of mean grade –in common subjects and at global level– of a group of Secondary School students. To such purpose, the authors analyzed a sample of 592 students aged 12 to 19 years from a Secondary School center in a rural region in Seville. From these middle-class 592 students, 231 (39%) were men and 361 (61%) were women.

Two Different Questionnaires

The students answered two different questionnaires aimed at measuring the quality of sleep, level of sleepiness or tendency to get asleep of

students in different situations. Authors found that adolescents sleeping more hours get higher marks in mathematics and that –within average sleep patterns- differences are more significative in physical education, as compared with the rest of subjects. This can be due to the inherent characteristics of these subjects, as these two subjects involve skills that are more influenced by sleep patterns, as the study authors explain.

The researchers observed that bedtime and wake time do not significantly influence academic outcomes, except for those individuals who go to bed earlier and get up later, which showed a significant worsening on academic achievement, as compared with their classmates.

The researchers also found significant information in connection with sleep latency (the time elapsed since the subject is lying in bed intending to sleep until they fall asleep). Scientists found that those who have a good sleep latency (less than 15 minutes) get significantly better marks than the rest.

As a general conclusion, the authors found that sleep patterns influence academic performance, as those adolescents with less day sleepiness were found to get lower marks than their classmates.

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