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**NEWSLETTER**

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## **Can Adequate Sleep Promote Non-Cognitive Development in Primary and Secondary School Students? An Empirical Analysis Based on a Survey of 153,901 Students**

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**S**LEEP, one of the most fundamental physiological activities of human beings, is crucial for physical and mental health of the individual. Adequate sleep is even more important for adolescents, who are in a critical stage of physical and intellectual growth, than adults. According to existing research, sleep deprivation is pervasive among Chinese teenagers and shows a tendency of further exacerbation. This study is an empirical analysis of the effects of sleep duration on the non-cognitive ability in teenagers with a large sample of 153,901 primary and secondary school students, using the ego depletion model, multiple linear regression, and propensity score matching.

### Research Findings:

- Sleep duration had a positive correlation with non-cognitive ability in primary and secondary students. Primary school students with at least 10 hours of sleep every day and secondary school students with no less than nine hours of sleep scored higher in the five domains of openness, conscientiousness, extraversion, agreeableness, and neuroticism, which were used as indicators of their non-cognitive ability.
- The average sizes of experimental effects among primary school students with at least 10 hours of sleep are 0.140-0.177 for openness, 0.167-0.201 for conscientiousness, 0.160-0.196 for extraversion, 0.110-0.138 for agreeableness, and 0.154-0.192 for neuroticism. With secondary school students with no less than nine hours of sleep, these figures are 0.274-0.315, 0.195-0.228, 0.330-0.382, and 0.273-0.338.

The research findings of the study indicate that *A Circular on Improving Sleep Management in Primary and Secondary School Students*, released by the Ministry of Education of China, proposes scientific sleep durations for the two groups. Legitimate sleep durations (10 hours for primary school students and nine hours for their secondary counterparts) are beneficial for their

non-cognitive development. Adequate sleep is essential for the all-round development of teenagers.

*Source: Educational Science Research, 2024; 2024(5):35-43.*