

## Walking to School Stimulates Your Mind

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Although it may be hard for the younger generation to conceptualize, maybe grandma and grandpa actually benefited intellectually from having to walk to school.

A new study from the University of Granada suggests walking to school improves cognitive performance — with a longer walk (greater than 15 minutes) bestowing even greater benefits.

These are some of the conclusions of a study published in *Archives of Pediatrics & Adolescent Medicine*.

The results come from findings of the nationwide AVENA (Food and Assessment of the Nutritional Status of Spanish Adolescents) study. The investigation is the first international study that associates mode of commuting to school and cognitive performance.



The authors analyzed a sample of 1700 boys and girls aged between 13 and 18 years (808 boys and 892 girls) in five Spanish cities (Granada, Madrid, Murcia, Santander and Zaragoza).

They studied variables of mode of commuting to school, cognitive performance, anthropometrics — like body mass index and percentage of overweight and obesity — and participants' extracurricular physical activity.

Researchers also gathered data on their families' socio-economic status using the mother's level of educational achievement (primary school, secondary school or university) and the type of school (statefunded or private) that participants attended.

Information on mode of commuting to school came from a question asking participants how they usually traveled to school and giving the following response options: on foot, by bicycle, car, bus or subway, motorcycle, and others. They were also asked how long the journey to school took them.

Cognitive performance was measured by applying the Spanish version of an educational ability test.

Study participants completed this standardized test that measures intelligence and the individual's basic ability for learning. The test assesses command of language, speed in performing mathematical operations, and reasoning.

Experts are aware that in adolescence, the plasticity of the brain is greatest. Researchers believe the study affirms that this time in life provides an opportunity for interventions to stimulate cognitive function.

However, paradoxically, adolescence is the time of life that sees the greatest decline in physical activity, and this is greater in girls. As such, researchers believe "inactive adolescents could be missing out on a very important stimulus to improve their learning and cognitive performance".

"Commuting to school on foot is a healthy daily habit, which contributes to keeping the adolescent active during the rest of the day and encourages them to participate in physical and sports activities.

"This boosts the expenditure of energy and, all in all, leads to a better state of health," said Palma Chillón,

researcher in the Department of Physical and Sports Education of the University of Granada, and David Martínez-Gómez, of the Autonomous University of Madrid.

Source: University of Granada

Student walking to school photo by shutterstock.

## **APA Reference**

Nauert, R. (2013). Walking to School Stimulates Your Mind. *Psych Central*. Retrieved on July 25, 2013, from http://psychcentral.com/news/2013/07/25/walking-to-school-stimulates-your-mind/57584.html