

Reading for pleasure early in childhood linked to better cognitive performance and mental wellbeing in adolescence

Date: June 27, 2023

Source: University of Cambridge

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FULL STORY

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In a study published today in *Psychological Medicine*, researchers in the UK and China found that 12 hours a week was the optimal amount of reading, and that this was linked to improved brain structure, which may help explain the findings.

Reading for pleasure can be an important and enjoyable childhood activity. Unlike listening and spoken language, which develop rapidly and easily in young children, reading is a taught skill and is acquired and developed through explicit learning over time.

During childhood and adolescence, our brains develop, making this an important time in which to establish behaviours that support our cognitive development and promote good brain health. However, until now it has been unclear what impact – if any – encouraging children to read from an early age will have on their brain development, cognition and mental health later in life.

To investigate this, researchers from the universities of Cambridge and Warwick in the UK and Fudan University in China looked at data from the Adolescent Brain and Cognitive Development (ABCD) cohort in the US, which recruited more than 10,000 young adolescents.

The team analysed a wide range of data including from clinical interviews, cognitive tests, mental and behavioural assessments and brain scans, comparing young people who began reading for pleasure at a relatively early age (between two and nine years old) against those who began doing so later or not at all. The analyses controlled for many important factors, including socio-economic status.

Of the 10,243 participants studied, just under a half (48%) had little experience of reading for pleasure or did not begin doing so until later in their childhood. The remaining half had spent between three and ten years reading for pleasure.

The team found a strong link between reading for pleasure at an early age and a positive performance in adolescence on cognitive tests that measured such factors as verbal learning, memory and speech development, and at school academic achievement.

These children also had better mental wellbeing, as assessed using a number of clinical scores and reports from parents and teachers, showing fewer signs of stress and depression, as well as improved attention and fewer behavioural problems such as aggression and rule-breaking.

Children who began reading for pleasure earlier also tended to spend less screen time – for example watching TV or using their smartphone or tablet – during the week and at weekends in their adolescence, and also tended to sleep longer.

When the researchers looked at brain scans from the adolescent cohort, they found that those participants who had taken to reading for pleasure at an early age showed moderately larger total brain areas and volumes, including in particular brain regions that play critical roles in cognitive functions. Other brain regions that were different among this group were those that have been previously shown to relate to improved mental health, behaviour and attention.

Professor Barbara Sahakian from the Department of Psychiatry at the University of Cambridge said: “Reading isn’t just a pleasurable experience – it’s widely accepted that it inspires thinking and creativity, increases empathy and reduces stress. But on top of this, we found significant evidence that it’s linked to important developmental factors in children, improving their cognition, mental health, and brain structure, which are cornerstones for future learning and well-being.”

The optimal amount of reading for pleasure as a young child was around 12 hours per week. Beyond this, there appeared to be no additional benefits. In fact, there was a gradual decrease in cognition, which the researchers say may be because it suggests they are spending more time sedentary and less time at other activities that could be cognitively enriching, including sports and social activities.

Professor Jianfeng Feng from Fudan University in Shanghai, China, and the University of Warwick, UK, said: “We encourage parents to do their best to awaken the joy of reading in their children at an early age. Done right, this will not only give them pleasure and enjoyment, but will also help their development and encourage long-term reading habits, which may also prove beneficial into adult life.”

Funders included: Wellcome and the National Institute for Health & Care Research (UK) and the National Natural Science Foundation of China.*