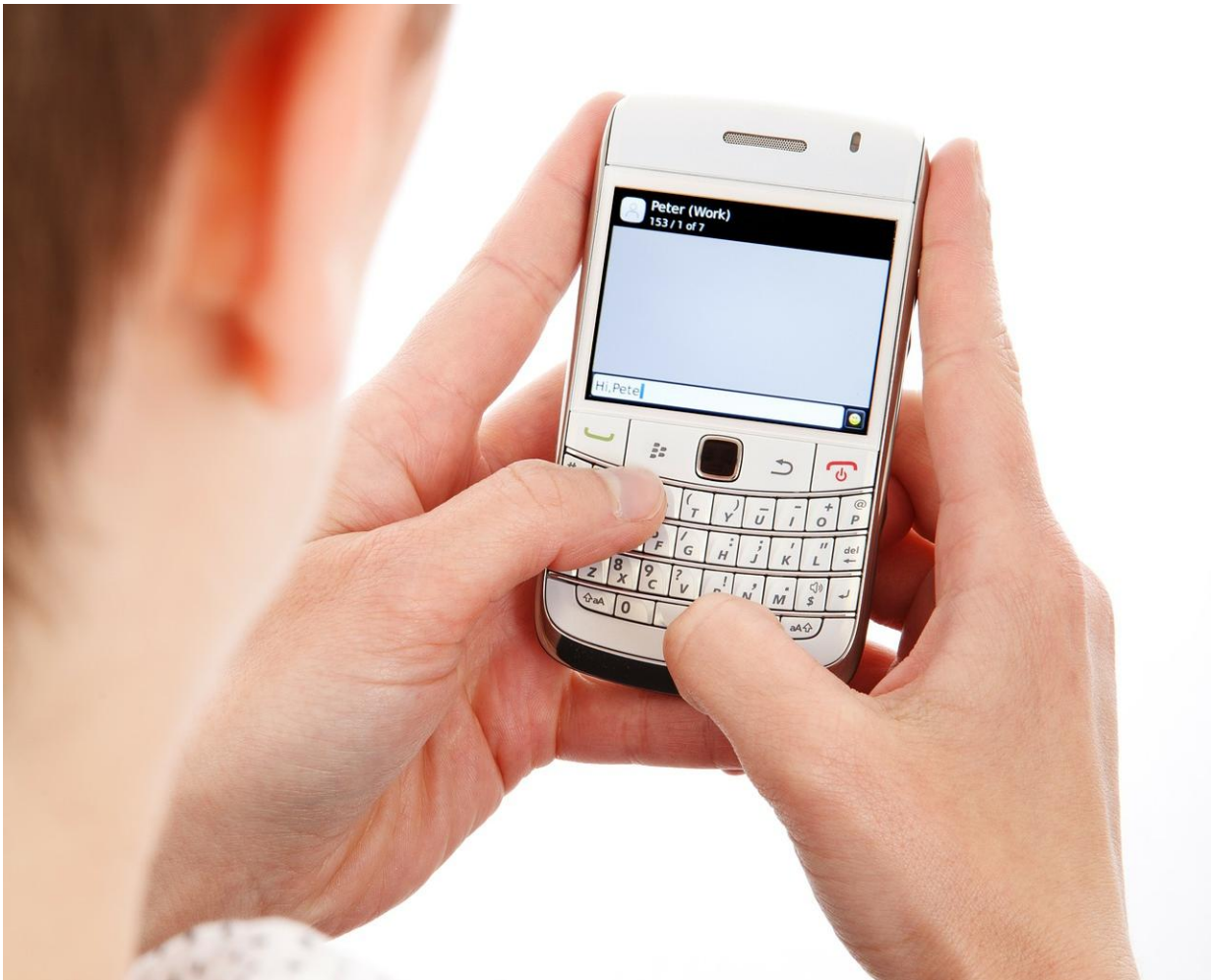


Kids who text and watch TV simultaneously likely to underperform at school

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The more time teenagers spend splitting their attention between various devices such as their phones, video games or TV, the lower their test scores in math and English tend to be. More time spent multitasking between different types of media is also associated with greater impulsivity and a poorer working memory in adolescents, says Amy S. Finn of the University of Toronto. Finn was one of the leaders of a study on the topic published in Springer's journal *Psychonomic Bulletin & Review*.

According to Finn, the term "media multitasking" describes the act of using multiple media simultaneously, such as having the television on in the background while texting on a smartphone. While it has been on the rise over the past two decades, especially among [adolescents](#), its influence on cognition, performance at school, and personality has not been assessed before.

To do so, a Media Use Questionnaire was administered to 73 eighth grade students living in the greater Boston area. It asked them how many hours per week they spent watching television or videos, listening to music, playing video games, for reading print or electronic media, talking on the [phone](#), using instant or text messaging, creating crafts or writing. Participants rated how often they combined these with another such activity. Aspects of their [working memory](#), their manual dexterity and vocabulary, and their levels of grit, conscientiousness and impulsiveness were also tested. Participants were also asked whether they believed that their ability was fixed or could be improved. The researchers ascertained the 73 students' scholastic performance by looking at their 2012 Massachusetts Comprehensive Assessment System scores in English and math.

Overall, participants reported consuming a great deal of media, and on average watched 12 hours of television per week. They tended to multitask between mediums 25 percent of the time.

The results show how participants' media consumption patterns outside of school are related to their performance in school tests. Teenagers who spent more time media multitasking fared significantly worse academically than others. They scored lower in certain aspects of their working memory, tended to be more impulsive and were more likely to believe that intelligence is not malleable. These results extend previous findings from adults and suggest that the relationships between cognitive abilities and media multitasking are already established by middle adolescence.

"We found a link between greater media multitasking and worse academic outcomes in adolescents. This relationship may be due to decreased executive functions and increased impulsiveness—both previously associated with both greater media multitasking and worse academic outcomes," summarises Finn.

Improving scholastic performance isn't just a simple matter of regulating the amount of time that teenagers spend watching television, playing video games or using their phones. "The direction of causality is difficult to establish. For example, [media multitasking](#) may be a consequence of underlying cognitive differences and not vice versa," says Finn. Future research with larger samples may shed light on the causal link.

More information: Matthew S. Cain et al. Media multitasking in adolescence, *Psychonomic Bulletin & Review* (2016). [DOI: 10.3758/s13423-016-1036-3](#)

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