

Reading 'beats' TV for sparking imaginative thinking, says expert

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Credit: Pixabay/CC0 Public Domain

Reading books is more effective at stimulating the imagination compared to watching images and stories unfold on screen, a new study has suggested.

It has long been thought that screen time can impact the brain's imaginative powers, with stories being interpreted and delivered through images for the viewer to consume rather than created in the mind.

There has been limited research, however, looking at both the imaginative impacts of screen time versus alternative activities, such as reading, to support this theory.

To test the idea that screen-time can have negative effects on the ability to imagine, Dr. Sebastian Suggate from the University of York, devised an experiment with more than 200 [young adults](#), presenting them with film clips—fast-paced and slow—as well as text to read.

Familiar objects

The participants were then asked to imagine and then mentally compare the characteristics of objects familiar to them—not featured in the film or text they had experienced—and the speed and accuracy of their responses were timed.

The questions required participants to imagine the objects, to provoke mental images, and then make comparisons of these based on what the objects looked or felt like. A participant might be asked which instrument is shinier, a trumpet or a flute, for example.

After viewing the films, participants were slower at these mental comparisons than after they had read texts.

Impaired imagery

Dr. Suggate, from the University of York's Department of Education, said, "We found that those who had been watching film clips had slightly

impaired imagery for 25 seconds compared to those who had just been reading and that this did not change depending on whether they had seen fast-moving or slow-moving images on screen.

"In reality, this is a very small time delay, but if you look at what this means over a longer period of time—days or years of consistently consuming images on screen—then we can see that this is actually a significant impact on the brain's ability to mentally visualize and feel."

The work follows a previous study where researchers investigated the longer term impacts on children aged 3-9 years, watching television between one and four hours a day over a period of 10 months. Results suggested that over time children's ability to mentally visualize was 'dulled' and that this suggested a potentially negative impact on imagining more broadly.

Sensory systems

Dr. Suggate explains, "In order to produce images in the brain or mind, we rely on a number of sensory systems, and not just our ability to see. It takes the experiences of sight, hearing, smell, taste, and touch to produce a response to the world around us, and our study in children suggests that passively consuming images for hours and over a long period of time without routinely stopping to do something else that tests our other sensory functions, or to simply pause their viewing to discuss what they had just seen on the television, dulls the imaginative capabilities.

"In our study with adults, we see a similar effect in a short period of time, and by comparing it to reading, we can see that the brain needs to actively create mental imagery, and we appear to be able to do this better when the images have not already been given to us via film clips."

It is thought that imagination plays an important role in [human](#)

[development](#) and can impact many abilities, such as how to plan, be creative, and empathize.

Young children

Dr. Suggate said, "More work is needed to understand how our new digital world impacts imagination, but like most things, balance seems to be the key. Some screen time is fine, but balancing this out with things like reading, interacting with other people, and exercising outdoors seems to be the best way to protect our imaginative capabilities."

"It is important that we do protect it because it has a big impact, particularly on [young children](#) as their brains develop, and the concern is that we want to avoid having generations of people who struggle to see themselves in other people's shoes and imagine alternative ways of addressing both big and small challenges. Many social and [environmental problems](#) provide good examples of this; in many ways, we need to be able to imagine what our world was and what it will be like if we don't do things differently."

More information: Sebastian Suggate et al, Does It Kill the Imagination Dead? The Effect of Film Versus Reading on Mental Imagery. *Psychology of Aesthetics, Creativity and the Arts*.
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