

Study: Attention can impair perception

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We normally think of paying attention to an object as a way to better perceive it, but U.S. scientists say sustained attention might worsen perception.

Previous work has suggested attention makes a visual stimulus easier to see by effectively increasing its contrast. However, contrast sensitivity decreases after prolonged periods of looking at high-contrast stimuli.

New York University researcher Samuel Ling and colleagues showed people black and white stripes and then asked them to report whether the stripes leaned to the left or the right; this task is harder to do when the contrast between the stripes is lower.

The researchers found when people paid attention to a particular set of stripes, they could initially do the task even with low-contrast stripes. However, after a prolonged period of attention, people needed higher-contrast stimuli to succeed at the same task.

The researchers say their results indicate prolonged periods of attention to specific stimuli might eventually impair, rather than improve, perception.

The study is presented in the October issue of the journal *Nature Neuroscience*.

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