## Does Watching Porn Really Shrink Your Brain?

A few years ago, a couple of German scientists—psychiatrist Jürgen Gallinat and psychologist Simone Kühn—published <u>a paper</u> that spooked men across the planet (and some women, too).

The researchers, who were analyzing brain structures and pornography consumption in men, noticed something striking: men who watched high amounts of porn had less grey matter in certain areas of the brain.

Media, of course, had a field day with the findings. "Viewing porn shrinks the brain," <u>declared</u> the *Daily Mail*. "Watching pornography damages men's brains," <u>said</u> *The Telegraph*.

More responsible were <u>HuffPost</u> and <u>IFL Science</u>, who ran these headlines: "Watching Porn Linked To Less Gray Matter In The Brain" and "Researchers Find Association Between Porn Viewing And Less Grey Matter In The Brain."

Here's what we know. Kühn and Gallinat analyzed 64 healthy men. They found that the subjects who spent hours watching porn had less grey matter in a particular part of the brain (the right striatum), an area key in the processing of rewards. (They also discovered that habitual porn users demonstrated less brain activity in the left striatum when these individuals were shown pornographic images.)

What's unclear is if the negative correlation in brain matter and porn use was caused by watching porn. It's possible, the authors acknowledge, that those with less grey matter in these regions of the brain are simply more inclined to watch pornography.

So does watching porn really shrink the brain? The honest answer is this: we don't know. It's worth pointing out,

however, that the authors themselves appear to believe that watching pornography can cause one's grey matter to diminish.

"Taken together, one may be tempted to assume that the frequent brain activation caused by pornography exposure might lead to wearing and downregulation of the underlying brain structure," they wrote, "as well as function, and a higher need for external stimulation of the reward system and a tendency to search for novel and more extreme sexual material."

One of the better critiques of the study was <u>made by</u> Christian Jarrett at *Wired* magazine, who pointed out that the authors failed to measure the personality traits of their subjects, relied on purely self-reported data, and did not follow up with participants to see how brains are impacted by pornography over time.

But Jarrett makes a greater mistake than the authors by reaching an overly broad and definitive conclusion based on weak reasoning:

"The researchers have witnessed newspapers spread headlines of brain shrinkage and brain harm, and yet they know that they specifically recruited psychologically and neurologically healthy men. In fact, therein lies the only really meaningful insight from this study. Look at it this way. In a survey of 64 men who answered recruitment adverts for a brain scanning study, it was found that they viewed an average of four hours porn a week. They do so with no apparent ill consequence — screening confirmed no psychiatric, medical or neurological problems. Of course there is a debate to be had about the merits and harms of porn for individuals and society. This study does not make a helpful contribution. Suggested new headline: 'Watching moderate amounts of porn won't hurt your brain.'"

This is a bizarre claim. Few if any scientists, I suspect,

would claim that watching pornography will cause such psychological damage that a potential subject would be flagged during a neurological screening.

Side-effects to watching pornography would likely be small and occur over time. Indeed, even if future studies find that watching porn does diminish grey matter over time, it's quite possible such changes would have little or no impact on behavior. We simply don't know.

So to declare the finding of Kühn and Gallinat as "virtually meaningless," as Jarrett did, is an overstatement. They established a correlation between porn-watching and a lack of grey matter in a key area of the brain. The next step should be finding out if watching porn is causing grey matter to diminish or if people with below average grey matter in the right striatum are simply more inclined to watch porn.

What I find most striking about the entire debate is that most people have already made up their mind, regardless of what the (conflicting) science says. Those who find porn morally repellant are convinced there must be harmful physical sideeffects to watching it. Others find it unfathomable that feeding one's brain vast amounts of graphic sexual imagery could possibly result in physiological or behavioral sideeffects. ("They used to say masturbation caused blindness, too!")

Hopefully Kühn and Gallinat offer some insights in the future. That said, perhaps asking if watching porn is *healthy* is the wrong question.

"And what is good, Phaedrus, and what is not good," asked the late philosopher Robert Maynard Pirsig, paraphrasing Socrates in Plato's <u>Phaedrus</u>. "Need we ask anyone to tell us these things?"