



## THE EFFECTS OF PORNOGRAPHY ON THE MALE BRAIN

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*“For by uttering boastful, empty words, they seduce, with fleshly desires and debauchery, people who have barely escaped from those who live in error. They promise them freedom, but they themselves are slaves of corruption, since people are enslaved to whatever defeats them.” - 2 Peter 2:18-19*

Over the past thirty years, increasing access to pornography has made millions of people — including an ever-growing number of men — “slaves of corruption.” This willing enslavement to pornography has affected almost every area of our society, from the home to the office to our churches. But the place most affected and most detrimentally transformed is the male brain.

“Because the human brain is the biological anchor of our psychological experience, it is helpful to understand how it operates.” says William M. Struthers, associate professor of psychology at Wheaton College. “Knowing how it is wired together and where it is sensitive can help us understand why pornography affects people the way it does.”<sup>i</sup>

Ultimately, freedom from this yoke of slavery can only be found in Christ (Galatians 5:1). Jesus is the only one who can truly save us from the effects of our sin and corruption. However, the destructive impact of pornography cannot be alleviated solely through increased evangelistic efforts.

As Christians we should seek the well-being of our society (Jeremiah 29:7). One important way we can more effectively heed that calling is to be aware of the damaging physical and psychological effects of pornography. We should also be able to articulate these harms to those who do not share the Christian worldview in order to better advocate for restrictions to pornography. We need to effectively communicate that pornography is not only a spiritual problem but also a serious individual and public health concern.

Here are several ways that pornography affects the male brain:

### **PORNOGRAPHY HIJACKS THE NORMAL BIOLOGICAL RESPONSE IN MEN**

Sexually explicit material triggers mirror neurons in the male brain. These neurons, which are involved with the process for how to mimic a behavior, contain a motor system that correlates to the planning out of a behavior. In the case of pornography, this mirror neuron system triggers the arousal, which leads to sexual tension and a need for an outlet.

“The unfortunate reality is that when he acts out (often by masturbating), this leads to hormonal and neurological consequences, which are designed to bind him to the object he is focusing on,” says Struthers. “In God’s plan, this would be his wife, but for many men it is an image on a screen. Pornography thus enslaves the viewer to an image, hijacking the biological response intended to bond a man to his wife and therefore inevitably loosening that bond.”

## **THE COOLIDGE EFFECT: WHY INTERNET PORNOGRAPHY IS SO ADDICTIVE**

Why do men seek out a variety of new explicit sexual images rather than being satisfied with the same ones? The reason is attributed to the Coolidge effect, a phenomenon seen in mammalian species whereby males (and to a lesser extent females) exhibit renewed sexual interest if introduced to new receptive sexual partners, even after refusing sex from prior but still available sexual partners. This neurological mechanism is one of the primary reasons for the abundance and addictiveness of Internet pornography.

## **PORNOGRAPHY LEADS TO “AROUSAL ADDICTION”**

In men, there are five primary chemicals involved in sexual arousal and response. The one that likely plays the most significant role in pornography addiction is dopamine. Dopamine plays a major role in the brain system that is responsible for reward-driven learning. Every type of reward that has been studied increases the level of dopamine transmission in the brain, and a variety of addictive drugs, including stimulants such as cocaine, amphetamine, and methamphetamine, act directly on the dopamine system. Dopamine surges when a person is exposed to novel stimuli, particularly if it is sexual, or when a stimuli is more arousing than anticipated. Because erotic imagery triggers more dopamine than sex with a familiar partner, exposure to pornography leads to “arousal addiction” and teaches the brain to prefer the image and become less satisfied with real-life sexual partners.

## **PORNOGRAPHY LEADS TO SEXUAL DESENSITIZATION**

Overstimulation of the reward circuitry—such as occurs with repeated dopamine spikes related to viewing pornography—creates desensitization. As Gary Wilson explains, “When dopamine receptors drop after too much stimulation, the brain doesn’t respond as much, and we feel less reward from pleasure. That drives us to search even harder for feelings of satisfaction—for example, by seeking out more extreme sexual stimuli, longer porn sessions, or more frequent porn viewing—thus further numbing the brain.”<sup>ii</sup>

## **INTERNET PORNOGRAPHY IS UNIQUELY HARMFUL**

What makes Internet porn unique? Wilson identifies a number of reasons, including:

1. Internet porn offers extreme novelty;
2. Unlike food and drugs, there are almost no physical limitations to Internet porn consumption;
3. With Internet porn one can escalate both with more novel “partners” and by viewing new and unusual genres;
4. Unlike drugs and food, Internet porn doesn’t eventually activate the brain’s natural aversion system; and
5. The age users start watching porn. A teen’s brain is at its peak of dopamine production and neuroplasticity, making it highly vulnerable to addiction and rewiring.

## **PORNOGRAPHY USE CAN CAUSE PSYCHOLOGICAL AND PHYSIOLOGICAL IMPAIRMENT**

Men's exposure to sexually explicit material is correlated with social anxiety, depression, low motivation, erectile dysfunction, concentration problems, and negative self-perceptions in terms of physical appearance and sexual functioning.

## **PORNOGRAPHY DEFORMS SEXUAL CHARACTER**

"The psychological, behavioral, and emotional habits that form our sexual character will be based on the decisions we make," says Struthers. "Whenever the sequence of arousal and response is activated, it forms a neurological memory that will influence future processing and response to sexual cues. As this pathway becomes activated and traveled, it becomes a preferred route—a mental journey—that is regularly trod. The consequences of this are far-reaching."

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<sup>i</sup>William M. M. Struthers, Ph.D, "The Effects of Porn on the Male Brain," *Christian Research Journal*, volume 34, number 05 (2011).

<sup>ii</sup>Gary Wilson, "Desensitization: A Numbed Pleasure Response," <http://yourbrainonporn.com/desensitization-numbed-pleasure-response>