

The Brain Science Behind Internet Pornography Addiction

After many years treating pornography addiction, we find that struggling individuals commonly wrestle with feelings of deep shame, self-loathing, confusion and exhaustion. They are completely perplexed as to why they can't break free, and why pornography is so powerful.

Pornography is powerful because it taps into intense emotional, biological and chemical connections throughout the brain and body. We have a "built-in" sexuality and attraction. Pornography "mimics" or "counterfeits" this built-in attraction. Its goal is to ignite, excite and exploit these natural urges. The most effective way I know to understand this process, is through the "Funnel of Sexual Process," an illustration first developed by Dr. Page Bailey and Mark Kastleman.

Let's take a look at the Funnel of Sexual Process from two different sexual experiences—inside a healthy relationship and during pornography viewing: Imagine in your mind an hourglass or funnel, wide at the top and slowly narrowing down to a very small passageway in the center and then back to a wide opening at the bottom. This is a perfect illustration of how the brain behaves in sexual process. In everyday life, our brain has a relatively wide perspective. But once an individual becomes sexually aroused, the brain immediately begins narrowing its focus as it releases a tidal wave of neurochemicals, culminating at climax, and then returning to its wide perspective. Let's look at this funnel experience from two opposite vantage points—in a healthy relationship versus using pornography. In doing this, let's track just four neurochemicals released during the funnel experience.

First is the neurochemical **dopamine**. In the brain, dopamine narrowly focuses attention and energy; causes us to ignore negatives; triggers feelings of ecstasy and arousal; and creates a powerful dependency. In a healthy relationship this is a wonderful chemical because it causes the couple to focus narrowly on each other and to ignore the negatives—I can tell you that I really appreciate it when my wife's brain releases dopamine! Dopamine also creates a healthy relationship dependency.

However, move this powerful chemical into the pornography funnel and, while the process is almost identical, the outcome is radically different. The porn viewer's energy and attention are narrowly focused on the images. Any thoughts of spouse, family, beliefs, consequences, future goals, etc., are ignored and blocked out, and the release of dopamine creates a chemical dependency linked to the images that is so powerful it has been directly compared to cocaine addiction.

Next, let's look at the neurochemical **norepinephrine**. Whatever is being experienced when this chemical is released, the smallest details of that experience are seared in the brain as if with a branding iron. In a healthy relationship, wonderful details of the intimate experience are remembered and recalled with fondness, bringing the couple closer together. In the pornography funnel, the release of norepinephrine causes the brain to remember the smallest details of every pornographic image.

The next neurochemical is known as **oxytocin**, the "cuddle chemical." It was first discovered flooding the brains of mothers holding their newborn child for the first time, creating a powerful bond and causing the release of milk for nursing. Oxytocin is a "bonding chemical" and is released when people hold hands, embrace and kiss. During sexual intimacy, a tidal wave of oxytocin is released in the funnel at climax, forging a powerful bond. But what happens when oxytocin is released during pornography viewing? Imagine an individual being bonded to fantasy images with the same kind of power that a newborn child is bonded to his mother and father!

And last of all, after climax, **serotonin** is released into the nervous system creating deep feelings of calmness, satisfaction and release from stress. Serotonin is referred to as the "natural Prozac." Because many individuals turn to pornography as a way to self medicate and escape the trials and pressures of life, the release of serotonin is a big factor in pornography being their "drug of choice."

Is Pornography a “Drug Addiction?”

Some cringe with labeling pornography as “addictive” because they believe doing so affords the porn user an excuse: “I can’t help myself, I’m addicted.” This is a preposterous position. When someone is addicted to alcohol, do we excuse his behavior because “he can’t help it?” Just because someone suffers with an addiction doesn’t mean he doesn’t have a choice. There is always a choice when it comes to breaking free from addictive behaviors.

The more important question is not “Is pornography addictive?” but rather, “Is pornography a chemical addiction? Does pornography use lead to a *chemical dependency* commonly experienced with illicit street drugs, alcohol, and prescription drugs? **Is pornography use “substance abuse?”**

Immediately, there are some in the scientific, medical and psychology fields who fire back, “How can you classify pornography as a drug or a substance? It doesn’t come

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in a liquid, powder or pill form. You don’t ingest it or inject it.” Our response is two-fold:

1. When an individual ingests or injects a “drug,” that chemical travels to the receptors in the brain and other parts of the body, seeking to “mimic” the body’s own natural neurotransmitters. In effect, the drug “fakes” the body into releasing its own endogenous chemicals.

Pornography “mimics” sexual intimacy and “fakes” the body into releasing a tidal wave of chemicals, which is exactly what pharmaceutical and illicit street drugs do. Can pornography not then be referred to as a “drug”?

2. For those who insist on precision in the use of scientific terms such as “drug,” allow us to put your minds at rest. Can we agree that pornography viewing triggers the release of the body’s own endogenous chemicals, just as sexual intimacy does? And that the porn viewer can become addicted to these internal chemicals just as he would if the release were triggered by a pharmaceutical drug? Is this not chemically-induced addiction?

One of the world’s leading researchers in the field of pornography as a drug addiction is Dr. Judith Reisman. For decades she has worked closely with some of the best minds in neuroscience and neuropsychology to prove that pornography should indeed be considered a drug, a chemical dependency, a form of substance abuse. Consider some powerful statements from her and her colleagues in a widely published research paper:

*Arousal dependence [through pornography] may be compared to biochemical alterations related to excessive amphetamine use. Satiation effects [hours looking at Internet porn] may be compared to those related to opiate use. Fantasy behavior can be related to such neurotransmitters as dopamine, norepinephrine, or serotonin, all of which are chemically similar to the main psychedelic drugs such as LSD.*¹

*Vanderbilt University psychiatrist Peter Martin’s research on “normal subjects” finds the brain activity experienced in sexual arousal of his normal subjects “looks like that accompanying drug consumption.”*²

*Addiction [can] exist within the body’s own chemistry. Any activity that produces salient alterations in mood can lead to compulsion, loss of control and progressively disturbed functioning.*³

*Pornography is not like a drug, it is an endogenously processed poly drug providing intense, although misleading, sensory rewards.*⁴

How ever you choose to say it—**Pornography addiction is a chemical addiction**, or, if you prefer—**Pornography causes the body to release endogenous chemicals which the viewer becomes addicted to**; this is an epidemic we can’t ignore.

Along with our colleagues, we have developed a powerful “online” pornography addiction recovery training and coaching program. As part of the *continuum of care*, this online resource is an invaluable tool for Therapists and 12-Step groups in helping struggling individuals break free. For more information, please visit: www.candeocan.com.

DR. RANDY HYDE HAS 25 YEARS EXPERIENCE AS A LICENSED CLINICAL PSYCHOLOGIST. HE IS BEST KNOWN FOR HIS REMARKABLE RECOVERY AND HEALING SYSTEMS, AND COMMON-SENSE APPROACH.

DR. BERNELL CHRISTENSEN IS A LICENSED MARRIAGE AND FAMILY THERAPIST WITH 30 YEARS EXPERIENCE. HE HAS DEDICATED HIS PROFESSIONAL LIFE TO HELPING INDIVIDUALS, COUPLES, AND FAMILIES OVERCOME DIFFICULT CHALLENGES AND ENJOY LIFE MORE FULLY.

1. M. Douglas Reed, *The Role of Pornography in Compulsive or Addictive Sexual Behaviors*, Ibid.
2. Dr. Judith Reisman, *The Psychopharmacology of Pictorial Pornography*, Ibid., p. 23
3. M. Douglas Reed, *The Role of Pornography in Compulsive or Addictive Sexual Behaviors*, Ibid.
4. Dr. Judith Reisman, *The Psychopharmacology of Pictorial Pornography*, Ibid., p. 23

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