



KEY TAKEAWAYS

- *To your brain, porn has the same effects as drugs.*
- *Porn hijacks the reward pathway in the brain.*
- *Just like drugs, you build up a tolerance so you need more porn for the same effects.*
- *Withdrawal symptoms can occur when you try and walk away.*

PORN IS LIKE A DRUG

On the surface, cocaine and porn don't seem to have a lot in common but studies are showing that viewing pornography tricks your brain into releasing the same pleasure chemicals that drugs do. What's more is your brain actually begins to rewire itself because of this artificial stimulation. It may sound crazy, but it's true.

On the surface, cocaine and porn don't seem to have a lot in common. One is purchased in seedy alleyways; the other is free to download. One habit can get expensive pretty fast, while the other is about the price of a high-speed Internet connection. Besides, Hugh Hefner doesn't exactly conjure up images of a cartel drug lord.

So where's the similarity? Inside the brain.

In case you're not a neurosurgeon, here's a crash course in how the brain works. Deep inside your brain, there's something called a "reward pathway." You've got one. Your cat's got one. For mammals, it comes standard. The reward pathway's job is to help keep you alive by doing exactly what its name promises: rewards you, or more specifically, rewards you when you do something that promotes life, such as eating food or achieving something you've worked hard for. And the way it rewards you is by releasing chemicals in your brain—mainly one called dopamine, but also others like oxytocin [See page 15 *Porn Is a Lie*].

Normally, these chemicals are really handy. They help us feel pleasure and to bond with other people, and they motivate us to come back to important activities that make us happy. The problem is, the reward pathway can be hijacked.

The way substances like cocaine and opioids make users feel high is by triggering the reward pathway to release unnaturally high levels of dopamine without making the user do any of the work to earn it. Want to guess what else does that? Porn.

And that surge of dopamine is causing more than just feelings. As it goes pulsing through the brain, dopamine helps to create new brain pathways that essentially lead the user back to the behavior that triggered the chemical release.

The more a drug user hits up or a porn user looks at porn, the more those pathways get wired into the brain, making it easier and easier for the person to turn back to using, whether they want to or not.

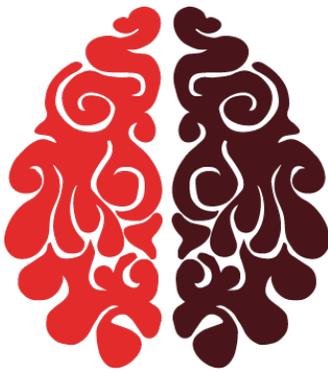
Over time, the constant overload of chemicals causes other brain changes as well. Just like a junkie will eventually require more and more of a drug to get a buzz or even just feel normal, porn users can quickly build up a tolerance as their brains adapt to the high levels of dopamine that porn releases. In other words, even though porn is still releasing dopamine into the brain, the user can't feel its effects as much.

That's because the brain is trying to protect itself from the overload of dopamine by getting rid of some of its chemical receptors, which act like tiny catcher's mitts that receive the dopamine released. With fewer receptors, the brain thinks less dopamine is there and the user doesn't feel as strong a reaction. As a result, they have to find more porn, find it more often, or find a more extreme version—or all three—to generate even more dopamine to feel excited.

And once a porn user becomes accustomed to a brain pulsing with these chemicals, trying to cut back on the habit can lead to withdrawal symptoms, just like with drugs. While people often think of porn as something that's been around forever, today's version of porn is a whole new ball game. Thanks to the Internet, porn now mixes the most powerful natural dopamine release the body can produce with a cocktail of other elements—endless novelty, shock, and surprise—all of which increase the dopamine surge. And because Internet porn offers an endless stream of variety, users can flip to a new image every time their high starts to fade, keeping dopamine levels elevated for hours.

Describing porn's effect to a U.S. Senate committee, Dr. Jeffrey Satinover of Princeton University said, "It is as though we have devised a form of heroin 100 times more powerful than before, usable in the privacy of one's own home and injected directly to the brain through the eyes."

- [1] Pitchers, K. K., Vialou, V., Nestler, E. J., Laviolette, S. R., Lehman, M. N., and Coolen, L. M. (2013). Natural and Drug Rewards Act on Common Neural Plasticity Mechanisms with DeltaFosB as a Key Mediator. *Journal of Neuroscience* 33, 8: 3434-3442; Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767; Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19. (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050060/>)
- [2] Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19; (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050060/>) Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226–230; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449; Leshner, A. (1997). Addiction Is a Brain Disease and It Matters. *Science* 278: 45–7.
- [3] Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226–230; Balfour, M. E., Yu, L., and Coolen, L. M. (2004). Sexual Behavior and Sex-Associated Environmental Cues Activate the Mesolimbic System in Male Rats. *Neuropsychopharmacology* 29, 4:718–730; Leshner, A. (1997). Addiction Is a Brain Disease and It Matters. *Science* 278: 45–7.
- [4] Hedges, V. L., Chakravarty, S., Nestler, E. J., and Meisel, R. L. (2009). DeltaFosB Overexpression in the Nucleus Accumbens Enhances Sexual Reward in Female Syrian Hamsters. *Genes Brain and Behavior* 8, 4: 442–449; Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226–230; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 108; Mick, T. M. and Hollander, E. (2006). Impulsive-Compulsive Sexual Behavior. *CNS Spectrums*, 11(12):944-955; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449; Leshner, A. (1997). Addiction Is a Brain Disease and It Matters. *Science* 278: 45–7.
- [5] Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226–230; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 75; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 107; What Is Oxytocin, *Psychology Today*, <http://www.psychologytoday.com/basics/oxytocin>
- [6] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 106;
- Kauer, J. A., and Malenka, J. C. (2007). Synaptic Plasticity and Addiction. *Nature Reviews Neuroscience* 8: 844–858; Mick, T. M. and Hollander, E. (2006). Impulsive-Compulsive Sexual Behavior. *CNS Spectrums*, 11(12):944-955; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449; Leshner, A. (1997). Addiction Is a Brain Disease and It Matters. *Science* 278: 45–7.
- [7] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 106; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449.
- [8] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 106;
- Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449.
- [9] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767; Pitchers, K. K., Vialou, V., Nestler, E. J., Laviolette, S. R., Lehman, M. N., and Coolen, L. M. (2013). Natural and Drug Rewards Act on Common Neural Plasticity Mechanisms with DeltaFosB as a Key Mediator. *Journal of Neuroscience* 33, 8: 3434-3442; Hedges, V. L., Chakravarty, S., Nestler, E. J., and Meisel, R. L. (2009). DeltaFosB Overexpression in the Nucleus Accumbens Enhances Sexual Reward in Female Syrian Hamsters. *Genes Brain and Behavior* 8, 4: 442–449; Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19; (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050060/>)
- Miner, M. H., Raymond, N., Mueller, B. A., Lloyd, M., Lim, K. O. (2009). Preliminary Investigation of the Impulsive and Neuroanatomical Characteristics of Compulsive Sexual Behavior. *Psychiatry Research* 174: 146–51; Angres, D. H. and Bettinardi-Angres, K. (2008). *The Disease of Addiction: Origins, Treatment, and Recovery*. *Disease-a-Month* 54: 696–721; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 107.
- [10] Angres, D. H. and Bettinardi-Angres, K. (2008). *The Disease of Addiction: Origins, Treatment, and Recovery*. *Disease-a-Month* 54: 696–721; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 102.
- [11] Pitchers, K. K., Vialou, V., Nestler, E. J., Laviolette, S. R., Lehman, M. N., and Coolen, L. M. (2013). Natural and Drug Rewards Act on Common Neural Plasticity Mechanisms with DeltaFosB as a Key Mediator. *Journal of Neuroscience* 33, 8: 3434-3442; Angres, D. H. and Bettinardi-Angres, K. (2008). *The Disease of Addiction: Origins, Treatment, and Recovery*. *Disease-a-Month* 54: 696–721; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 105; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 75.
- [12] Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19; (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050060/>) Angres, D. H. and Bettinardi-Angres, K. (2008). *The Disease of Addiction: Origins, Treatment, and Recovery*. *Disease-a-Month* 54: 696–721.
- [13] Angres, D. H. and Bettinardi-Angres, K. (2008). *The Disease of Addiction: Origins, Treatment, and Recovery*. *Disease-a-Month* 54: 696–721; Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41–44.
- [14] Angres, D. H. and Bettinardi-Angres, K. (2008). *The Disease of Addiction: Origins, Treatment, and Recovery*. *Disease-a-Month* 54: 696–721; Berridge, K. C. and Robinson, T. E. (2002). The Mind of an Addicted Brain: Neural Sensitization of Wanting Versus Liking. In J. T. Cacioppo, G. G. Bernston, R. Adolphs, et al. (Eds.) *Foundations in Social Neuroscience* (pp. 565–72). Cambridge, Mass.: MIT Press.
- [15] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 75; Caro, M. (2004). *The New Skin Trade*. *Chicago Tribune*, September 19; Brosius, H. B., et al. (1993). Exploring the Social and Sexual “Reality” of Contemporary Pornography. *Journal of Sex Research* 30, 2: 161–70.
- [16] Satinover, J. (2004). Senate Committee on Commerce, Science, and Transportation, Subcommittee on Science, Technology, and Space, Hearing on the Brain Science Behind Pornography Addiction and Effects of Addiction on Families and Communities, November 18.



PORN CHANGES THE BRAIN

Neurons that fire together, wire together. Just like other addictive substances, porn floods the brain with dopamine. That rush of brain chemicals happening over and over again rewires the brain's reward pathway ultimately changing the make up of the viewer's brain. This can result in an increased appetite for porn.

KEY TAKEAWAYS

- *Watching porn lays down new neuro-pathways in your brain.*
- *The more you use, the stronger the neuro-connections and the more difficult it is stop.*
- *That doesn't mean you can't stop. You can rebuild those pathways by avoiding pornography and seeking healthy alternatives.*

Yep, you read that right. Porn physically changes your brain.

One of the most exciting developments in our understanding of the brain in the last two decades is the discovery of something called neuroplasticity, “neuro” meaning brain and “plasticity” meaning changeability. In other words, scientists have discovered that your brain is a lot like a never-ending game of Tetris, constantly laying down new pathways based on your experiences. [1]

To explain how it works, brain scientists have a saying: Neurons that fire together, wire together. [2]

If you're wondering what a neuron is and why it's on fire, here's what that means. A neuron is a brain cell, and when brain cells get activated at the same time by something you see or hear or smell or whatever, they release chemicals that help strengthen the connection between those neurons. [3] For example, when you eat something delicious, your brain releases dopamine, a chemical that makes you feel good. [4] Or if you hold hands with someone you care about, your brain releases a chemical called oxytocin, which helps you bond with people. [5]

So if every time you went to visit your Uncle Carl he gave you a big hug and then took you out for ice cream, you'd probably start feeling pretty great about Uncle Carl, since your brain would build pathways connecting Uncle Carl with feeling happy and loved. You have these kinds of brain pathways for all sorts of things: riding a bike, eating a sandwich, and walking the dog. And when a person looks at porn, their brain creates new pathways for that, too. [6]

Just like other addictive substances, porn floods the brain with dopamine. [7] But since the brain gets overwhelmed by the constant overload of chemicals that comes with consistent porn use, it fights back by taking away some of its dopamine receptors [8]—which are like tiny ears on the end of a neuron that hear dopamine's message.

With fewer receptors, even if the brain is putting off the same levels of dopamine in response to porn, the user can't feel dopamine's effect as much. [9] As a result, the porn they were looking at doesn't seem as arousing or exciting, and they have to go hunting for more porn or more hardcore porn to get the effect the old porn used to offer. [10]

As a porn user's brain acclimates to the new levels of dopamine flooding through it, regular activities that would normally set off a burst of dopamine and make the person feel happy aren't strong enough to register anymore, leaving the user feeling down or uneasy whenever they're not looking at porn. [11] That's one reason pornography is so addictive. [12]

Once addiction sets in, the user has a whole new set of problems, because addiction damages the part of the brain that helps you think things through to make good choices—the brain's braking system. [13] For more than 10 years, studies have shown that drug addictions can cause the brain's frontal lobes to start shrinking. [14] While “frontal lobe” sounds really technical, basically it's the part of the brain that controls logical problem solving and decision making. [15] But recent studies have found that it's not just drugs that cause that kind of damage—the same problems show up with other kinds of addictions, such as overeating, Internet addictions, and sexual compulsion. [16]

And here's the really scary part: the more porn a person looks at, the more severe the damage to their brain becomes and the more difficult it is to break free. [17]

Citations

- [1] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, preface.
- [2] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 63.
- [3] Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226–230; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 63.
- [4] Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19; (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050060/>) Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 107; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 75; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449.
- [5] Schneiderman, I., Zagoory-Sharon, O., Leckman, J., and Feldman, R. (2012). Oxytocin During the Initial Stages of Romantic Attachment: Relations to Couples' Interactive Reciprocity. *Psychoneuroendocrinology* 37:1277-1285.
- [6] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767; Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696–721. Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 108.
- [7] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767; Georgiadis, J. R. (2006). Regional Cerebral Blood Flow Changes Associated with Clitorally Induced Orgasm in Healthy Women. *European Journal of Neuroscience* 24, 11: 3305–3316.
- [8] Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19; (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050060/>) Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696–721; Mick, T. M. and Hollander, E. (2006). Impulsive-Compulsive Sexual Behavior. *CNS Spectrums*, 11(12):944-955; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449.
- [9] Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19; (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050060/>) Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696–721; Mick, T. M. and Hollander, E. (2006). Impulsive-Compulsive Sexual Behavior. *CNS Spectrums*, 11(12):944-955.
- [10] Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696–721; Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41–44.
- [11] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 90.; Berridge, K. C. and Robinson, T. E. (2002). The Mind of an Addicted Brain: Neural Sensitization of Wanting Versus Liking. In J. T. Cacioppo, G. G. Bernston, R. Adolphs, et al. (Eds.) *Foundations in Social Neuroscience* (pp. 565–72). Cambridge, Mass.: MIT Press.
- [12] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 107; Berridge, K. C. and Robinson, T. E. (2002). The Mind of an Addicted Brain: Neural Sensitization of Wanting Versus Liking. In J. T. Cacioppo, G. G. Bernston, R. Adolphs, et al. (Eds.) *Foundations in Social Neuroscience* (pp. 565–72). Cambridge, Mass.: MIT Press.
- [13] Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19; (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050060/>) Leshner, A. (1997). Addiction Is a Brain Disease and It Matters. *Science* 278: 45–7.
- [14] Lyoo, K., Pollack, M. H., Silveri, M. M., Ahn, K. H., Diaz, C. I., Hwang, J., et al. (2005). Prefrontal and Temporal Gray Matter Density Decreases in Opiate Dependence. *Psychopharmacology* 184, 2: 139–144; Thompson, P. M., Hayashi, K. M., Simon, S. L., Geaga, J. A., Hong, M. S., Sui, Y., et al. (2004). Structural Abnormalities in the Brains of Human Subjects Who Use Methamphetamine. *Journal of Neuroscience* 24, 26: 6028–6036; Franklin, T. E., Acton, P. D., Maldjian, J. A., Gray, J. D., Croft, J. R., Dackiw, C. A., et al. (2002). Decreased Gray Matter Concentration in the Insular, Orbitofrontal, Cingulate, and Temporal Cortices of Cocaine Patients. *Biological Psychiatry* 51, 2: 134–142.
- [15] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767.
- [16] Yuan, K., Quin, W., Lui, Y., and Tian, J. (2011). Internet Addiction: Neuroimaging Findings. *Communicative & Integrative Biology* 4, 6: 637–639; Zhou, Y., Lin, F., Du, Y., Qin, L., Zhao, Z., Xu, J., et al. (2011). Gray Matter Abnormalities in Internet Addiction: A Voxel-Based Morphometry Study. *European Journal of Radiology* 79, 1: 92–95; Miner, M. H., Raymond, N., Mueller, B. A., Lloyd, M., Lim, K. O. (2009). Preliminary Investigation of the Impulsive and Neuroanatomical Characteristics of Compulsive Sexual Behavior. *Psychiatry Research* 174: 146–51; Schiffer, B., Peschel, T., Paul, T., Gizewshi, E., Forshing, M., Leygraf, N., et al. (2007). Structural Brain Abnormalities in the Frontostriatal System and Cerebellum in Pedophilia. *Journal of Psychiatric Research* 41, 9: 754–762; Pannacciulli, N., Del Parigi, A., Chen, K., Le, D. S. N. T., Reiman, R. M., and Tataranni, P. A. (2006). Brain Abnormalities in Human Obesity: A Voxel-Based Morphometry Study. *NeuroImage* 31, 4: 1419–1425.
- [17] Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696–721.



PORN IS ADDICTIVE

It wasn't very long ago that doctors and researchers believed that in order for something to be addictive, it had to involve an outside substance that you physically put into your body, like cigarettes, alcohol, or drugs.

“Pornographers promise healthy pleasure and relief from sexual tension, but what they often deliver is an addiction, tolerance, and an eventual decrease in pleasure.”

—Norman Doidge, MD, *The Brain That Changes Itself* [1]

KEY TAKEAWAYS

- *Porn can be addictive because of the level of neuro-chemicals released into the reward pathway.*
- *A tolerance can be built to porn and you end up needing more of it in more extreme forms.*

It wasn't very long ago that doctors and researchers believed that in order for something to be addictive, it had to involve an outside substance that you physically put into your body, like cigarettes, alcohol, or drugs. [2]

Once we got a peek into the brain, however, our understanding of how addictions work changed. [3] It turns out, cigarettes, alcohol, and drugs have more in common than you might think. Sure, on the outside, some are poured into a glass while others are lit on fire and smoked. But once they're in the body, they all do the same thing to the brain: flood it with a chemical called dopamine. [4] That's what makes them addictive. And porn does the exact same thing. [5]

You see, your brain comes equipped with something called a “reward pathway.” [6] Its job is to motivate you to do things that keep you and your genes alive—things like eating or having sex to produce babies. [7] The way it rewards you is by releasing dopamine into your brain, because dopamine makes you feel good. [8]

However, just because your brain has adapted to motivate you to do something doesn't mean it's good for you. For example, your brain produces higher levels of dopamine when you have chocolate cake than it does for whole-wheat bread. [9] Why? Because 3,000 years ago, high-calorie foods were really hard to come by, so when our ancestors found them, it was important that they eat a whole bunch while the getting was good. [10] These days, a bag of Oreos is only as far as the nearest supermarket. If we gorged every chance we got, chances are we'd get heart disease, gain weight, and develop a bunch of other health problems.

Porn is basically sexual junk food. When a person is looking at porn, their brain thinks they're seeing a potential mating opportunity, and pumps the brain full of dopamine. [11] And unlike healthy sexual relationships that build up over time with an

actual person, porn offers an endless stream of hyper-sexual images that flood the brain with high levels of dopamine every time the user clicks to a new image. [12]

Setting your brain up for an overload of feel-good chemicals might sound like a good idea at first, but just like with junk food, what feels like a good thing, in this case isn't at all. Because porn use floods the brain with high chemical levels, the brain starts to fight back. Over time, the brain will actually cut down on its dopamine receptors—the tiny landing docs that take the dopamine in once it's been released in your brain. [13] As a result, porn that once excited a person stops having the same effect, and the user has to look at more porn, look at porn more often, or find a more hardcore version—or all three—to get aroused. [14]

Eventually, as the brain acclimates to the overload of dopamine, users often find that they can't feel normal without that dopamine high. [15] Little things that used to make them happy, like seeing a friend or playing their favorite sport, can't compete with the dopamine flood that comes with porn, so they're left feeling anxious or down until they can get back to it. [16]

On top of that, dopamine doesn't travel alone. When the brain is getting a hit of dopamine, it's also getting new pathways built into it with a protein called “iFosB” (pronounced delta fos b). [17]

Essentially, iFosB's job is to help you remember to do things that feel good or are important. [18] While dopamine is motivating your brain to do things and rewarding it for doing them, iFosB is quietly leaving trail markers in your brain, creating a pathway to help you get back there. [19] As little as one dose of many drugs will cause iFosB to start building up in the brain's neurons, and of course porn's powerful dopamine surge causes iFosB to build up as well. [20]

The more a user looks at porn, the more iFosB accumulates, [21] essentially beating down the brain pathways leading to using, making

it easier and easier for the user to turn back to that behavior, whether they want to or not. [22] Eventually, if enough iFosB accumulates, it can “flip a genetic switch,” causing irreversible changes in the brain that leave the user more susceptible to addiction. [23]

And for teens, the risks are especially high, since a teen brain’s reward pathway has a response two to four times more powerful than an adult brain—which means teen brains release even higher levels of dopamine. [24] Teen brains also produce higher levels of iFosB, leaving them extra vulnerable to addiction. [25]

Citations

- [1] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 107.
- [2] Holden, C. (2001). Behavioral Addictions: Do They Exist? *Science* 294: 980.
- [3] Garcia, F. D. and Thibaut, F. (2010). Sexual Addictions. *American Journal of Drug and Alcohol Abuse* 36, 5: 254–260; Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696–721; Grant, J. E., Levine, L., Kim, D., and Potenza, M. N. (2005). Impulse Control Disorders in Adult Psychiatric Inpatients. *The American Journal of Psychiatry* 162, 11: 2184–2188.
- [4] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767; Hedges, V. L., Chakravarty, S., Nestler, E. J., and Meisel, R. L. (2009). DeltaFosB Overexpression in the Nucleus Accumbens Enhances Sexual Reward in Female Syrian Hamsters. *Genes Brain and Behavior* 8, 4: 442–449; Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226–230; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 108; Mick, T. M. and Hollander, E. (2006). Impulsive-Compulsive Sexual Behavior. *CNS Spectrums*, 11(12):944-955; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449; Leshner, A. (1997). *Addiction Is a Brain Disease and It Matters*. *Science* 278: 45–7.
- [5] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767; Garcia, F. D. and Thibaut, F. (2010). Sexual Addictions. *American Journal of Drug and Alcohol Abuse* 36, 5: 254–260.
- [6] Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19; (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050060/>) Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226–230; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449; Leshner, A. (1997). *Addiction Is a Brain Disease and It Matters*. *Science* 278: 45–7.
- [7] Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226–230; Balfour, M. E., Yu, L., and Coolen, L. M. (2004). Sexual Behavior and Sex-Associated Environmental Cues Activate the Mesolimbic System in Male Rats. *Neuropsychopharmacology* 29, 4:718–730; Leshner, A. (1997). *Addiction Is a Brain Disease and It Matters*. *Science* 278: 45–7.
- [8] Hedges, V. L., Chakravarty, S., Nestler, E. J., and Meisel, R. L. (2009). DeltaFosB Overexpression in the Nucleus Accumbens Enhances Sexual Reward in Female Syrian Hamsters. *Genes Brain and Behavior* 8, 4: 442–449; Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226–230; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 108; Mick, T. M. and Hollander, E. (2006). Impulsive-Compulsive Sexual Behavior. *CNS Spectrums*, 11(12):944-955; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449; Leshner, A. (1997). *Addiction Is a Brain Disease and It Matters*. *Science* 278: 45–7.
- [9] Johnson, P. and Kenny, P. (2010). Dopamine D2 Receptors in Addiction-Like Reward Dysfunction and Compulsive Eating in Obese Rats. *Nature Neuroscience* 13: 635–641.
- [10] Linden, D. J. (2011). Food, Pleasure and Evolution. *Psychology Today*, March 30.
- [11] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767; Pfau, J. (2011). Love and the Opportunistic Brain. In *The Origins of Orientation*, World Science Festival, June. Georgiadis, J. R. (2006). Regional Cerebral Blood Flow Changes Associated with Clitorally Induced Orgasm in Healthy Women. *European Journal of Neuroscience* 24, 11: 3305–3316.
- [12] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 106; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449.
- [13] Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19; (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050060/>) Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696–721.
- [14] Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696–721; Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents’ and Young Adults’ Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41–44.
- [15] Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696–721; Berridge, K. C. and Robinson, T. E. (2002). The Mind of an Addicted Brain: Neural Sensitization of Wanting Versus Liking. In J. T. Cacioppo, G. G. Bernston, R. Adolphs, et al. (Eds.) *Foundations in Social Neuroscience* (pp. 565–72). Cambridge, Mass.: MIT Press.
- [16] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 90.
- [17] Nestler, E. J. (2003). Brain Plasticity and Drug Addiction. Presentation at Reprogramming the Human Brain Conference, Center for Brain Health, University of Texas at Dallas, April 11.
- [18] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767.
- [19] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767.
- [20] Wallace, D. L., Vialou, V., Rios, L., Carle-Florence, T. L., Chakravarty, S., Kumar, A., et al. (2008). The Influence of DeltaFosB in the Nucleus Accumbens on Natural Reward-Related Behavior. *The Journal of Neuroscience* 28: 10272–7; Nestler, E. J. (2003). Brain Plasticity and Drug Addiction. Presentation at Reprogramming the Human Brain Conference, Center for Brain Health, University of Texas at Dallas, April 11.

[21] Nestler, E. J. (2008). Transcriptional Mechanisms of Addiction: Role of Delta-FosB. *Philosophical Transactions of the Royal Society B: Biological Sciences* 363: 3245–56. (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2607320/>)

[22] Nestler, E. J. (2008). Transcriptional Mechanisms of Addiction: Role of Delta-FosB. *Philosophical Transactions of the Royal Society B: Biological Sciences* 363: 3245–56. (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2607320/>)

[23] Nestler, E. J., Barrot, M., and Self, D. W. (2001). DeltaFosB: A Sustained Molecular Switch for Addiction. *Proceedings of the National Academy of Sciences* 98, 20: 11042-6.

[24] Sturman, D. and Moghaddam, B. (2011). Reduced Neuronal Inhibition and Coordination of Adolescent Prefrontal Cortex during Motivated Behavior. *The Journal of Neuroscience* 31, 4: 1471-1478.

[25] Ehrlich, M. E., Sommer, J., Canas, E., and Unterwald, E. M. (2002). Periadolescent Mice Show Enhanced DeltaFosB Upregulation in Response to Cocaine and Amphetamine. *The Journal of Neuroscience* 22: 9155–9159.



PORN AFFECTS YOUR BEHAVIOR

Many porn users find themselves getting aroused by things that used to disgust them or that go against what they think is morally right. And once they start watching extreme and dangerous sex acts, these porn users are being taught that those behaviors are more normal and common than they are.

KEY TAKEAWAYS

- *Porn users tend to think that what they see in porn is normal and even expect it from their partner.*
- *Habitual users have more accepting attitudes of violence and report feeling less empathy for rape victims.*

Have you ever heard the phrase “Monkey see, monkey do”? It sounds simple, but it’s actually an illustration of some pretty complex brain science.

You see, monkeys, humans, and other mammals all have something in their brain called a “reward pathway.” [1] Part of the reward pathway’s job is to promote life by rewarding you when you do something that either keeps you alive (e.g., eating) or creates a new life (e.g., sex). [2]

The way it rewards you is by pumping chemicals, especially one called “dopamine,” through your brain [hyperlink to Porn Changes the Brain]. [3] Dopamine makes you feel great, but while you’re enjoying that good feeling, it’s also building new pathways into your brain connecting together the different parts of the experience you had so you can remember to do that again. [4]

So when someone is looking at porn, while they think they’re just being entertained, their brain is busy at work building pathways between whatever’s happening on their screen and feelings of arousal. [5] Here’s where it gets tricky: The kind of porn a user watches can—and usually does—change over time. [6] So as their brain continually wires together what they’re seeing with feeling aroused, what turns them on can change too. [7]

A few years ago, a researcher named Jim Faust did an experiment with rats. [8] As you’d probably guess, rats usually don’t like the smell of death. But Faust found a way to change that instinct. Faust put virgin male rats in cages with female rats that had been sprayed with a liquid that smelled like dead, rotting rat. As it turned out, the drive to mate was more powerful than the instinct to avoid the smell, and the rats hit it off.

Once the male rats learned to associate sex with the smell of death, Faust put them in cages with dowels soaked in the same death smell. Consistently the male rats would play with the smelly dowels as though it were soaked in something they loved.

If you’re wondering how rats could possibly be trained to go against such a powerful natural instinct, the answer is dopamine. Since dopamine is released during sex, the rats’ brains wired together the pleasure of dopamine’s release with the rotten smell.

Sounds pretty gross, right? Well here’s the thing—remember how we said all mammals have the same reward pathway in their brain? Those rats’ preferences were rewired into their brains with the same process porn users’ brains go through when they look at porn. [9] And more often than not, the images their brains are wiring sexual arousal to get more and more extreme. [10]

In a 2012 survey of 1,500 guys, 56% said their tastes in porn had become “increasingly extreme or deviant.” [11] Because consistent porn users’ brains quickly become accustomed to the porn they’ve already seen [hyperlink to Porn Addiction Escalates], they have to constantly be moving on to more extreme forms of pornography to get aroused by it. [12] As a result, just like the rats, many porn users find themselves getting aroused by things that used to disgust them or that go against what they think is morally right. [13]

And once they start watching extreme and dangerous sex acts, these porn users are being taught that those behaviors are more normal and common than they are. [14] One study found that people exposed to significant amounts of porn thought things like sex with animals and violent sex were twice as common as what those not exposed to porn thought. [15] And when people believe a behavior is normal, they’re more likely to try it. [16]

Research has also found that watching degrading porn increases users’ dominating and harassing behavior toward women, [17] and leaves the user feeling less compassion for rape

victims. [18] Porn watchers are also more likely to express attitudes supporting violence against women [19]—which is especially scary since those who support sexual violence are more likely to commit that kind of violence in real life. [20] [See page 25, Porn Leads to Violence]

Obviously not everyone who looks at porn is going to turn into a rapist; but the reality is that studies have shown that as little as one exposure to pornography has the power to start changing ideas and attitudes, [21] and changes to behavior often aren't far behind.

Citations

- [1] Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19; (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050060/>) Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226–230; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449; Leshner, A. (1997). Addiction Is a Brain Disease and It Matters. *Science* 278: 45–7.
- [2] Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226–230; Balfour, M. E., Yu, L., and Coolen, L. M. (2004). Sexual Behavior and Sex-Associated Environmental Cues Activate the Mesolimbic System in Male Rats. *Neuropsychopharmacology* 29,4:718–730; Leshner, A. (1997). Addiction Is a Brain Disease and It Matters. *Science* 278: 45–7.
- [3] Hedges, V. L., Chakravarty, S., Nestler, E. J., and Meisel, R. L. (2009). DeltaFosB Overexpression in the Nucleus Accumbens Enhances Sexual Reward in Female Syrian Hamsters. *Genes Brain and Behavior* 8, 4: 442–449; Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226–230; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 108; Mick, T. M. and Hollander, E. (2006). Impulsive-Compulsive Sexual Behavior. *CNS Spectrums*, 11(12):944–955; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449; Leshner, A. (1997). Addiction Is a Brain Disease and It Matters. *Science* 278: 45–7.
- [4] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767; Pitchers, K. K., Vialou, V., Nestler, E. J., Laviolette, S. R., Lehman, M. N., and Coolen, L. M. (2013). Natural and Drug Rewards Act on Common Neural Plasticity Mechanisms with DeltaFosB as a Key Mediator. *Journal of Neuroscience* 33, 8: 3434–3442; Hedges, V. L., Chakravarty, S., Nestler, E. J., and Meisel, R. L. (2009). DeltaFosB Overexpression in the Nucleus Accumbens Enhances Sexual Reward in Female Syrian Hamsters. *Genes Brain and Behavior* 8, 4: 442–449; Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19; (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050060/>) Miner, M. H., Raymond, N., Mueller, B. A., Lloyd, M., Lim, K. O. (2009). Preliminary Investigation of the Impulsive and Neuroanatomical Characteristics of Compulsive Sexual Behavior. *Psychiatry Research* 174: 146–51; Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696–721; Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226–230; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 107.
- [5] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 109.
- [6] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Cline, V. B. (2001). *Pornography's Effect on Adults and Children*. New York: Morality in Media; Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41–44; NoFap Survey http://www.reddit.com/r/NoFap/comments/updy4/rnofap_survey_data_complete_datasets/
- [7] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 95.
- [8] Pfau, J. G., Kippin, T. E., and Centeno, S. (2001). Conditioning and Sexual Behavior: A Review. *Hormones and Behavior* 40: 291–321. ([http://www.pphp.concordia.ca/fac/pfau/Pfau-Kippin-Centeno\(2001\).pdf](http://www.pphp.concordia.ca/fac/pfau/Pfau-Kippin-Centeno(2001).pdf))
- [9] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 109.
- [10] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Cline, V. B. (2001). *Pornography's Effect on Adults and Children*. New York: Morality in Media; Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41–44; NoFap Survey http://www.reddit.com/r/NoFap/comments/updy4/rnofap_survey_data_complete_datasets/
- [11] NoFap Survey http://www.reddit.com/r/NoFap/comments/updy4/rnofap_survey_data_complete_datasets/
- [12] Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41–44.
- [13] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute.
- [14] Zillmann, D., and Bryant, J. (1984). Effects of Massive Exposure to Pornography. In N. M. Malamuth and E. Donnerstein (Eds.) *Pornography and Sexual Aggression*. New York: Academic Press.
- [15] Zillmann, D., and Bryant, J. (1984). Effects of Massive Exposure to Pornography. In N. M. Malamuth and E. Donnerstein (Eds.) *Pornography and Sexual Aggression*. New York: Academic Press.
- [16] Layden, M. A. (2004). Committee on Commerce, Science, and Transportation, Subcommittee on Science and Space, U.S. Senate, Hearing on the Brain Science Behind Pornography Addiction, November 18; Cline, V. B. (2001). *Pornography's Effect on Adults and Children*. New York: Morality in Media; Zillmann, D., and Bryant, J. (1984). Effects of Massive Exposure to Pornography. In N. M. Malamuth and E. Donnerstein (Eds.) *Pornography and Sexual Aggression*. New York: Academic Press.
- [17] Barak, A., Fisher, W. A., Belfry, S., and Lashambe, D. R. (1999). Sex, Guys, and Cyberspace: Effects of Internet Pornography and Individual Differences on Men's Attitudes Toward Women. *Journal of Psychology and Human Sexuality* 11, 1: 63–91; Allen, M., Emmers, T., Gebhardt, L., and Giery, M. A. (1995). Exposure to Pornography and Acceptance of the Rape Myth. *Journal of Communication* 45, 1: 5–26.

[18] Milburn, M., Mather, R., and Conrad, S. (2000). The Effects of Viewing R-Rated Movie Scenes that Objectify Women on Perceptions of Date Rape. *Sex Roles* 43, 9 and 10: 645–64; Weisz, M. G. and Earls, C. (1995). The Effects of Exposure to Filmed Sexual Violence on Attitudes Toward Rape. *Journal of Interpersonal Violence* 10, 1: 71–84; Ohbuchi, K. I., et al. (1994). Effects of Violent Pornography Upon Viewers' Rape Myth Beliefs: A Study of Japanese Males. *Psychology, Crime, and Law* 7, 1: 71–81; Corne, S., et al. (1992). Women's Attitudes and Fantasies About Rape as a Function of Early Exposure to Pornography. *Journal of Interpersonal Violence* 7, 4: 454–61; Check, J. and Malamuth, N. M. (1985). An Empirical Assessment of Some Feminist Hypotheses About Rape. *International Journal of Women's Studies* 8, 4: 414–23.

[19] Hald, G. M., Malamuth, N. M., and Yuen, C. (2010). Pornography and Attitudes Supporting Violence Against Women: Revisiting the Relationship in Nonexperimental Studies. *Aggression and Behavior* 36, 1: 14–20; Berkel, L. A., Vandiver, B. J., and Bahner, A. D. (2004). Gender Role Attitudes, Religion, and Spirituality as Predictors of Domestic Violence Attitudes in White College Students. *Journal of College Student Development* 45:119–131; Allen, M., Emmers, T., Gebhardt, L., and Giery, M. A. (1995). Exposure to Pornography and Acceptance of the Rape Myth. *Journal of Communication* 45, 1: 5–26.

[20] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute.

[21] Bridges, A. J. (2010). Pornography's Effect on Interpersonal Relationships. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 89–110). Princeton, NJ: Witherspoon Institute.



PORN ADDICTION ESCALATES

Because of its addictive nature, in order to just feel some sense of normality, an individual usually needs an ever increasing dosage of porn. The material that they seek out also evolves. Overtime their appetite pushed them to more hardcore versions to achieve the same level of arousal.

KEY TAKEAWAYS

- *Most users start on free porn, but it doesn't end there.*
- *You begin to need more extreme versions of pornography and more often to get the same effects.*
- *Turning to porn becomes the users preferred solution to stress.*

Have you ever wondered how pornographers that charge for their material stay in business when there's so much porn available for free? As Wendy Seltzer—an attorney and fellow at Yale Law School—explained, the answer is actually pretty simple: once porn users get hooked, they'll want more and more. "Seeing [free porn] just whets their appetite for more," Seltzer said. "Once they get through what's available for free, they'll move into the paid services." [1]

Fortunately for pornographers, that pattern isn't likely to change any time soon since the reason it happens is built into the brain.

Pornography researchers have found that users acclimate to the porn they watch—they get used to it, and it stops being exciting or arousing. Why? Because their brain's pleasure response has gotten numb. [2]

When a person is aroused by porn, their brain releases a chemical called dopamine that makes them feel pleasure. [3] As the dopamine goes through their brain, it leaves behind a pathway created by a protein called iFosB (pronounced delta fos b) [4] that connects feeling aroused to looking at porn. [5] Basically dopamine is saying "this feels good; let's remember how to get back here," and iFosB goes to work building a brain pathway to make it easier for the person to do that again. [6]

The problem is, when a person consistently looks at porn, their brain is constantly being flooded with a high level of dopamine. A healthy brain isn't used to that, so the brain responds by getting rid of some of its dopamine receptors, which take in the dopamine that's released so that the brain knows it's there. [7] With fewer receptors, the user can't feel the dopamine's effects as much—and suddenly the porn that used to excite starts seeming boring. [8]

To get the same excitement and arousal they used to feel, porn users need an even larger surge of dopamine; to get it, they have to look at more porn,

look at porn more often, or look at more hardcore material. [9] You see, it's not just arousal that gets dopamine pumping. The brain also releases it when it sees something novel, shocking, or surprising. [10] That's why consistent porn users often find themselves looking for harder and harder images. [11] On top of that, because they've built up such a high tolerance to arousing material, to feel excited many users have to combine sexual arousal with the feeling of aggressive release. [12] That's why so much of hardcore porn is full of images of women being physically harmed. [13] It's also the reason that many porn addicts quickly find themselves looking at things that used to disgust them or that they used to see as morally wrong. [14]

On top of needing harder material, porn addicts find themselves craving porn more and more often. [15] That's because while they're overloading their brain with dopamine, they're also building up higher levels of iFosB. [16] The more iFosB, the more the user's brain drives them to look at porn, even if they don't like the material they're looking at. [17]

As the addiction deepens, users not only become more impulsive, making it more likely that they'll give into their cravings, [18] but also whenever they encounter a stressful situation, they're more likely to feel like they don't have any way to deal with the stress other than by turning to porn's temporary distraction. [19]

And the more they turn back to their habit, the deeper the brain pathways that lead back to using become, making it harder and harder to break the cycle. [20]

Citations

- [1] Schwartz, J. P. (2004). *The Pornography Industry vs. Digital Pirates*. New York Times, February 8.
- [2] Pitchers, K. K., Vialou, V., Nestler, E. J., Laviolette, S. R., Lehman, M. N., and Coolen, L. M. (2013). Natural and Drug Rewards Act on Common Neural Plasticity Mechanisms with DeltaFosB as a Key Mediator. *Journal of Neuroscience* 33, 8: 3434-3442; Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696-721; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 105; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 75.
- [3] Hedges, V. L., Chakravarty, S., Nestler, E. J., and Meisel, R. L. (2009). DeltaFosB Overexpression in the Nucleus Accumbens Enhances Sexual Reward in Female Syrian Hamsters. *Genes Brain and Behavior* 8, 4: 442-449; Bostwick, J. M. and Bucci, J. E. (2008). Internet Sex Addiction Treated with Naltrexone. *Mayo Clinic Proceedings* 83, 2: 226-230; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 108; Mick, T. M. and Hollander, E. (2006). Impulsive-Compulsive Sexual Behavior. *CNS Spectrums*, 11(12):944-955; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445-1449; Leshner, A. (1997). Addiction Is a Brain Disease and It Matters. *Science* 278: 45-7.
- [4] Nestler, E. J. (2003). Brain Plasticity and Drug Addiction. Presentation at Re-programming the Human Brain Conference, Center for Brain Health, University of Texas at Dallas, April 11.
- [5] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767; Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696-721. Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 108.
- [6] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767.
- [7] Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19; (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3050060/>) Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696-721; Mick, T. M. and Hollander, E. (2006). Impulsive-Compulsive Sexual Behavior. *CNS Spectrums*, 11(12):944-955; Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445-1449.
- [8] Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696-721; Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41-44.
- [9] Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696-721; Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41-44.
- [10] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 75; Caro, M. (2004). *The New Skin Trade*. Chicago Tribune, September 19; Brosius, H. B., et al. (1993). Exploring the Social and Sexual "Reality" of Contemporary Pornography. *Journal of Sex Research* 30, 2: 161-70.
- [11] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57-68). Princeton, NJ: Witherspoon Institute; Cline, V. B. (2001). *Pornography's Effect on Adults and Children*. New York: Morality in Media; Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41-44; NoFap Survey http://www.reddit.com/r/NoFap/comments/updy4/rnofap_survey_data_complete_datasets/
- [12] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 112.
- [13] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 112.
- [14] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3-20). Princeton, N.J.: Witherspoon Institute.
- [15] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 108.
- [16] Nestler, E. J. (2008). Transcriptional Mechanisms of Addiction: Role of Delta-FosB. *Philosophical Transactions of the Royal Society B: Biological Sciences* 363: 3245-56. (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2607320/>)
- [17] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 108.
- [18] Mick, T. M. and Hollander, E. (2006). Impulsive-Compulsive Sexual Behavior. *CNS Spectrums*, 11(12):944-955.
- [19] Goldstein, R.Z. and Volkow, N. (2002). Drug Addiction and Its Underlying Neurobiological Basis: Neuroimaging Evidence for the Involvement of the Frontal Cortex. *The American Journal of Psychiatry* 159: 1642-52.
- [20] Angres, D. H. and Bettinardi-Angres, K. (2008). The Disease of Addiction: Origins, Treatment, and Recovery. *Disease-a-Month* 54: 696-721.

PORN KILLS LOVE



In real life, real love requires a real person. Research has found that after men are exposed to pornography, they rate themselves as less in love with their partner than men who didn't see any porn. On top of that, another study found that after being exposed to pornographic images, people were more critical of their partner's appearance, sexual curiosity, sexual performance, and displays of affection.

KEY TAKEAWAYS

- *Real love means real people.*
- *Porn makes real relationships more difficult and less satisfying.*
- *Porn can make you cynical about real love.*

Pornographers pretend that what they're selling is Love 2.0. It's like love, they say, but easier.

You see, in real life, real love requires a real person. And a real person has thoughts and ideas and talents. Maybe they're funny and fun to be around; maybe they're a great listener and always take time to hear how you're feeling; or maybe they're awesome at karaoke and being with them gives you the courage to get on stage too. Every person is a unique mix, and it's that awesome blend that we fall in love with.

Of course, pornographers can't offer any of that, so instead they capitalize on the fact that the real people that real love requires come with some complications. In real life, there's a chance your partner will be having a bad day or a bad hair day. Maybe they're tired or under a deadline, so they don't have time to do exactly what you want. And they have needs of their own that need to be considered.

In porn, all of that can get edited out: any physical flaws can be quickly Photoshopped away [1]; no matter what's happening to them, the people on screen can be made to look like they're having a good time [2]; and no one seems to have any needs of their own, opinions, or feelings to consider [3]. Besides, if anyone fails to immediately satisfy, there's always someone new to click to [4].

Doesn't sound much like real life or real love does it? Here's the thing: not only is porn a fantasy, but it also makes it harder for users to have real loving relationships [5].

Why? Because just like many other multibillion dollar industries, pornographers feed viewers completely unrealistic expectations in order to keep customers coming back [6]. Real love isn't any more like what happens in porn than the average Marlboro smoker is like a 6' 9" cowboy. But it works out well for pornographers since the more porn a viewer watches, the more their real relationships don't seem exciting enough [7], which gives

them a reason to turn back to porn. And the more they watch porn, the more likely they are to be indoctrinated with porn's version of how relationships should go [8].

Since porn often portrays women as nothing more than sex objects that need to be dominated [9], it's not surprising that porn users often start seeing real women that way as well [10]. In one study of porn's effects, researchers broke participants up into three groups: to one they showed a high amount of pornography, one a medium amount, and the third a lower amount, and then followed with questions about what participants thought about women [11]. Results showed that the more porn a man was exposed to, the more likely he was to prefer that women be submissive and subordinate to men. Since most women in our culture are taught to expect love to be built on equality and mutual respect, seeing women as subordinate isn't exactly a great start to lasting love. [12]

For those lucky enough to have found a special someone, using porn can take things downhill fast. Research has found that after men are exposed to pornography, they rate themselves as less in love with their partner than men who didn't see any porn [13]. On top of that, another study found that after being exposed to pornographic images, people were more critical of their partner's appearance, sexual curiosity, sexual performance, and displays of affection [14].

Over time, those who consistently use porn often may even lose interest in finding love altogether. Frequent porn use is associated with feeling cynical about love in general, less trust in romantic partners, and with feeling like marriage is confining [15].

Porn doesn't do any favors for the user's partner, either. Since so much of men's porn is only about what the man wants while ignoring anything about what's good for a woman

or a relationship, wives and girlfriends often end up feeling like their partner doesn't really value them. [16] Many partners of porn users end up depressed, anxious, and feeling like they can never measure up. [17]

Of course, pornographers don't bother to mention any of this. Part of porn's fantasy is that a person can live in both worlds—that they can create a real, loving relationship, but also bring in thousands of other sexual partners as long as those partners are kept behind a computer screen. In reality, a porn habit can take a serious toll on a person's ability to offer someone real, unselfish, meaningful love [18]—which often means that in the end, they're left without much more than what's behind that computer screen. [19]

Citations

- [1] Hilton, D. L. (2013). Pornography addiction—a supranormal stimulus considered in the context of neuroplasticity. *Socioaffective Neuroscience & Psychology*, 3, 20767; Paul, Pamela. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Holt and Co., 145.
- [2] Bridges, A. J., Wosnitzer, R., Scharrer, E., Chyng, S., & Liberman, R. (2010) Aggression and sexual behavior in best selling pornography videos: A content analysis update. *Violence against Women*, 16, 10. 1065-1085; Mosher, D. and Maclan, P. (1994). College men and women respond to x-rated videos intended for male or female audiences: gender and sexual scripts. *Journal of Sex Research*, 31, 2. 99-112.
- [3] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Paul, Pamela. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Holt and Co., 80.
- [4] Estellon, V., and Mouras, H. (2012). Sexual Addiction: Insights from Psychoanalysis and Functional Neuroimaging. *Socioaffective Neuroscience & Psychology* 2: 11814.
- [5] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 155–156; Burns, R. J. (2002). Male Internet Pornography Consumers' Perception of Women and Endorsement of Traditional Female Gender Roles. Austin, Tex.: Department of Communication Studies, University of Texas, p. 11; Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41–44.
- [6] Hilton, D. L. (2013). Pornography addiction—a supranormal stimulus considered in the context of neuroplasticity. *Socioaffective Neuroscience & Psychology*, 3, 20767; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 91.
- [7] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 91.
- [8] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute.
- [9] Woods, J. (2012). Jamie Is 13 and Hasn't Even Kissed a Girl. But He's Now On the Sex Offender Register after Online Porn Warped His Mind. *Daily Mail* (U.K.), April 25; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 80.
- [10] Ward, L. M. and Friedman, K. (2006). Using TV as a Guide: Associations Between Television Viewing and Adolescents' Sexual Attitudes and Behavior. *Journal of Research on Adolescents* 16, 1: 133-56.
- [11] Burns, R. J. (2002). Male Internet Pornography Consumers' Perception of Women and Endorsement of Traditional Female Gender Roles. Austin, Tex.: Department of Communication Studies, University of Texas, p. 11.
- [12] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute.
- [13] Bridges, A. J. (2010). Pornography's Effect on Interpersonal Relationships. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 89-110). Princeton, NJ: Witherspoon Institute.
- [14] Zillmann, D. and Bryant, J. (1988). Pornography's Impact on Sexual Satisfaction. *Journal of Applied Social Psychology* 18, 5: 438–53.
- [15] Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41–44.
- [16] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute.
- [17] Steffens, B. A. and Rennie, R. L. (2006). The Traumatic Nature of Disclosure for Wives of Sexual Addicts. *Sexual Addiction & Compulsivity* 13, 2 and 3: 247–67; Wolf, N. (2004). The Porn Myth. *New York Magazine*, May 24; Wildmom-White, M. L. and Young, J. S. (2002). Family-of-Origin Characteristics Among Women Married to Sexually Addicted Men. *Sexual Addiction & Compulsivity* 9, 4: 263–73.
- [18] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 155–156; Burns, R. J. (2002). Male Internet Pornography Consumers' Perception of Women and Endorsement of Traditional Female Gender Roles. Austin, Tex.: Department of Communication Studies, University of Texas, p. 11; Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41–44.
- [19] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute.

PORN IS A LIE



In porn, everything from the way people look to how and why they have sex is a lie. Porn users often get so obsessed with chasing something that isn't real that they miss out on actual relationships.

KEY TAKEAWAYS

- *Porn is nothing but a production.*
- *Porn makes you miss out on the best parts of actual relationships.*
- *Porn is like sexual junk food.*

Back in the 1950s, two researchers, Dr. Nikolaas Tinbergen and Dr. D. Magnus, played a trick on butterflies. [1] After figuring out which marks on female butterfly wings were most eye-catching to their mates, they created their own cardboard butterflies and painted them to look like super-females. Their wing patterns were based on the wings of normal butterflies, but with more exciting marks than would ever be found in nature.

And the butterflies fell for it. Even though real female butterflies were around and available, the males kept trying to partner with the cardboard versions. It wasn't getting them what they wanted—which was the chance to mate—but they had been tricked, so they ignored the real females and kept trying to charm the decoys.

Any of this sound familiar?

In porn, everything from the way people look to how and why they have sex is no more real than Tinbergen's cardboard wings. And just like the butterflies that got duped, porn users often get so obsessed with chasing something that isn't real that they miss out on actual relationships.

Thanks to teams of plastic surgeons and some help from Photoshop, the women in porn don't offer anything close to a realistic picture of what women in real life look like. [2] As a result, people that are regularly exposed to porn are more likely than others to feel poorly about how they look. [3] And after looking at even softcore porn, users feel worse about how their partner looks. [4]

And the fiction is more than skin deep. In most porn, a person is only worth the sum of their body parts; [5] it doesn't matter whether they're funny or smart, kind or interesting. All they are is a tool for sex. It shouldn't be a big surprise then that when teens watch or see sexual media, both boys and girls have stronger notions of women being sex objects. [6]

Even sex itself gets completely warped. A typical 45 minute porn flick takes three days of filming to produce, but leaves the viewer with the impression that everything they just watched happened without a break. [7] Porn also makes it look like no matter what a man does, the woman he's with is thrilled, even though the majority of sexual acts shown are degrading or violent. [8]

It can be tempting to think that porn is just one kind of sexual experience, not better or worse than any other sexual experience. After all, it can feel pretty similar. But our senses can be deceiving.

Let's say, for example, that you just got done with a 10 mile run on a hot day. You come inside and there are two glasses of water on the kitchen table. One is regular water from the tap; the other is salt water. Both look the same. Both are water. But while one glass will hydrate your body, the other will leave you more dehydrated than before. And over time, while regular water will keep you alive, drinking only salt water would kill you faster than if you drank nothing at all. [9]

It's the same with real relationships and porn. Why? Because porn is chock full of ideas and beliefs that are completely opposite of what real relationships, real sex, and real love are like. Healthy relationships are built on equality, honesty, respect, and love. But in porn, it's the reverse; interactions are based on domination, disrespect, abuse, violence, and detachment. [10]

Even the experience of using porn is the opposite of what real romantic relationships are like. A real romantic relationship is about being with a person and falling in love with them; it's about emotional connection and trust. In real relationships you can feel a person there, you can smell them and hear them laugh. With porn, however, sex is about being alone, watching other people do things. It's about constantly searching for something new, constantly being shocked and surprised. [11]

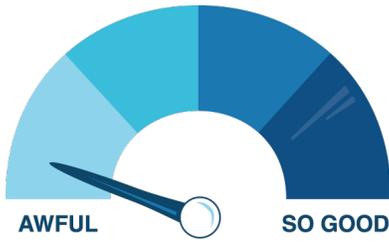
The more a person buys into the porn experience and its ideas, the harder it will be for them to have a real loving relationship [See Page 13, *Porn Kills Love*]—or even a real sex life [See page 17, *Porn Ruins Your Sex Life*].

Just like the butterflies learned, porn is not only deceiving, but it can also keep us from having the real relationships porn is trying to imitate [See page 13, *Porn Kills Love*]. Turns out dating a piece of cardboard isn't all that great.

Citations

- [1] Magnus, D. B. E. (1958). Experimental analysis of some 'over-optimal' sign-stimuli in the mating behavior of the fritillary butterfly. *Argynnis paphia*. Proceedings of the 10th International Congress on Entomology, 2, 405-418; Tinbergen, N. (1951). *The study of instinct*. Oxford: Clarendon Press.
- [2] Hilton, D. L. (2013). Pornography addiction—a supranormal stimulus considered in the context of neuroplasticity. *Socioaffective Neuroscience & Psychology*, 3, 20767; Paul, Pamela. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Holt and Co., 145.
- [3] Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2, 41-44.
- [4] Bridges, A. J. (2010). Pornography's Effect on Interpersonal Relationships. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 89-110). Princeton, NJ: Witherspoon Institute; Bergner, R. and Bridges, A. (2002). The significance of heavy pornography involvement for romantic partners: research and clinical implications. *Sex and Marital Therapy*, 28, 3, 193-206; Zillmann, D. and Bryant, J. (1988). Pornography's impact on sexual satisfaction, *Journal of Applied Social Psychology*, 18, 5, 438-53.
- [5] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57-68). Princeton, NJ: Witherspoon Institute; Paul, Pamela. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Holt and Co., 80.
- [6] Ward, L. M. and Friedman, K. (2006). Using TV as a guide: associations between television viewing and adolescents' sexual attitudes and behavior. *Journal of Research on Adolescents*, 16, 1. 133-56.
- [7] Interview with Jason Carroll, Ph. D., Aug. 2013.
- [8] Bridges, A. J., Wosnitzer, R., Scharrer, E. Chyng, S., & Liberman, R. (2010) Aggression and sexual behavior in best selling pornography videos: A content analysis update. *Violence against Women*, 16, 10. 1065-1085; Mosher, D. and Maclan, P. (1994). College men and women respond to x-rated videos intended for male or female audiences: gender and sexual scripts. *Journal of Sex Research*, 31, 2. 99-112.
- [9] Dean, S. (2013). *Why Can't You Drink Saltwater?* *Bon Appetit*, March 20.
- [10] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57-68). Princeton, NJ: Witherspoon Institute.
- [11] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 75; Caro, M. (2004). *The New Skin Trade*. *Chicago Tribune*, September 19; Brosius, H. B., et al. (1993). Exploring the Social and Sexual "Reality" of Contemporary Pornography. *Journal of Sex Research* 30, 2: 161-70.

PORN RUINS YOUR SEX LIFE



KEY TAKEAWAYS

- *Porn leads to less sex and less satisfying sex.*
- *Extended porn use can cause ED for men even in their 20s.*

Porn often leads to less sex and less satisfying sex. And for many users, porn can eventually mean no sex at all.

Porn promises a virtual world filled with sex—more sex, better sex. What it doesn't mention, however, is that the further a user goes into that fantasy world, the more likely their reality is to become just the opposite. [1] Porn often leads to less sex and less satisfying sex. [2] And for many users, porn eventually means no sex at all. [3]

It doesn't take much porn for things to start heading downhill. In one of the most comprehensive studies on porn use ever conducted, researchers found that after being exposed to softcore sexual material, both men and women were significantly less happy with their partner's looks, sexual curiosity, and sexual performance. [4] Even being exposed to porn just once can make people feel less in love with their significant other. [5]

Why? Because when a person is watching porn, the sexual roadmaps in their brain are being redrawn. [6] When a person has a sexual experience that feels good, their brain creates a map to get them back there [See page 3, *Porn Changes the Brain*]. And since our brains like novelty, brain maps that lead to something new and exciting are rewarded with an extra dose of brain chemicals that make us feel good while strengthening those brain pathways. [7]

Here's the catch: our brain maps are either use it or lose it. [8] Just like a hiking trail will start to grow over if its not getting walked on, brain pathways that don't get traffic start to get weaker. So when a person starts looking at porn, they first create and then strengthen brain pathways linking feeling aroused with images of porn. [9] Meanwhile the pathways connecting arousal with things like seeing, touching, or cuddling with their partner aren't getting used. Pretty soon, natural turn-ons aren't enough, and many porn users find they can't get aroused by anything but porn. [10]

For teens, it gets even scarier. Many teens never have the chance to learn what a healthy relationship is like before porn starts teaching them its version—which is typically filled with violence, domination, infidelity, and abuse. [11] Since most people aren't too excited about the idea of being in an abusive relationship, teens that have gotten their sex ed from porn often find that they can't connect with real romantic partners and that they don't know how to be turned on by anything other than images on a screen. [12] As biologist Gary Wilson

said, "Using porn is more than just training for the wrong sport. It's replacing these guys' ability to play the sport they really want to learn." [13]

Beliefs and feelings aren't the only things that change, either. For a skyrocketing number of male porn users, it becomes blindingly clear that there's a problem when they realize they can no longer have real sex at all. [14]

Thirty years ago, when a man developed erectile dysfunction (ED), it was almost always because he was getting older, usually past 40, and as his body aged, his blood vessels would get blocked, making it harder to maintain an erection. Chronic ED in anyone under 35 was nearly unheard of. [15]

But those were the days before Internet porn. These days, online message boards are flooded with complaints from porn users in their teens and 20s complaining that they can't maintain an erection. [16] But for this kind of ED, the problem isn't in the penis—it's in the brain. [17]

Erections are powered by chemicals in the brain's reward center [See page 1, *Porn Is Like a Drug*] that are released when a guy sees, hears, smells, or feels something that turns him on. [18] The problem for porn users is that they've hijacked their reward center by using porn to get it to overload on these chemicals. [19] As a result, the user's brain responds by cutting down on the amount of pleasure chemicals it produces and stops responding as well to the chemicals that are being released. [20] It's like when you're standing next to a fire alarm that goes off; it's too much noise so you cover your ears. That's what porn user's brains are doing. When chemical levels are too high, the brain fights back by blocking some of the flood of chemicals released.

On top of that, porn users have wired their brain to get aroused by sitting alone in a room looking at 2D images rather than connecting arousal to being with a real person. [21]

Due to their lowered sexual response and altered brain pathways, many porn users find they just can't get excited enough to maintain an erection without porn; and for many users, over time, even porn isn't enough. [22]

Citations

- [1] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute.
- [2] Bridges, A. J. (2010). Pornography's Effect on Interpersonal Relationships. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 89–110). Princeton, NJ: Witherspoon Institute; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 153; Zillmann, D. (2004). *Pornografie*. In R. Mangold, P. Vorderer, and G. Bente (Eds.) *Lehrbuch der Medienpsychologie* (pp.565–85). Gottingen, Germany: Hogrefe Verlag;
- [3] Robinson, M. and Wilson, G. (2011). Porn-Induced Sexual Dysfunction: A Growing Problem. *Psychology Today*, July 11.
- [4] Zillmann, D. and Bryant, J. (1988). Pornography's Impact on Sexual Satisfaction. *Journal of Applied Social Psychology* 18, 5: 438–53.
- [5] Bridges, A. J. (2010). Pornography's Effect on Interpersonal Relationships. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 89–110). Princeton, NJ: Witherspoon Institute.
- [6] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 103.
- [7] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 116.
- [8] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 59.
- [9] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 101.
- [10] Robinson, M. and Wilson, G. (2011). Porn-Induced Sexual Dysfunction: A Growing Problem. *Psychology Today*, July 11; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 153.
- [11] Bridges, A. J., Wosnitzer, R., Scharrer, E., Chyng, S., and Liberman, R. (2010). Aggression and Sexual Behavior in Best Selling Pornography Videos: A Content Analysis Update. *Violence Against Women* 16, 10: 1065–1085; Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute.
- [12] Wilson, G. (2013). Adolescent Brain Meets Highspeed Internet Porn; <http://yourbrainonporn.com/adolescent-brain-meets-highspeed-internet-porn> Woods, J. (2012). Jamie Is 13 and Hasn't Even Kissed a Girl. But He's Now on the Sex Offender Register After Online Porn Warped His Mind. *Daily Mail (U.K.)*, April 25. <http://www.dailymail.co.uk/news/article-2135203/Jamie-13-kissed-girl-But-hes-Sex-Offender-Register-online-porn-warped-mind-.html> Robinson, M. and Wilson, G. (2011). Porn-Induced Sexual Dysfunction: A Growing Problem. *Psychology Today*, July 11; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 104.
- [13] Wilson, G. (2013). Adolescent Brain Meets Highspeed Internet Porn. <http://yourbrainonporn.com/adolescent-brain-meets-highspeed-internet-porn>
- [14] Wilson, G. (2013). Adolescent Brain Meets Highspeed Internet Porn; <http://yourbrainonporn.com/adolescent-brain-meets-highspeed-internet-porn> Robinson, M. and Wilson, G. (2011). Porn-Induced Sexual Dysfunction: A Growing Problem. *Psychology Today*, July 11; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 105.
- [15] Robinson, M. and Wilson, G. (2011). Porn-Induced Sexual Dysfunction: A Growing Problem. *Psychology Today*, July 11; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 105.105.
- [16] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 105.
- [17] Capogrosso, P., Colicchia, M., Ventimiglia, E., Castagna, G., Clementi, M. C., Suardi, N., Castiglione, F., Briganti, A., Cantiello, F., Damiano, R., Montorsi, F., Salonia, A. (2013). One Patient Out of Four with Newly Diagnosed Erectile Dysfunction Is a Young Man—Worrisome Picture from the Everyday Clinical Practice. *Journal of Sexual Medicine* 10, 7:1833–41; Cera, N., Delli Pizzi, S., Di Pierro, E. D., Gambi, F., Tartaro, A., et al. (2012). Macrostructural Alterations of Subcortical Grey Matter in Psychogenic Erectile Dysfunction. *PLoS ONE* 7, 6: e39118; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 105.
- [18] Pfaus, J. G., Kippin, T. E., Coria-Avila, G. A., Gelez, H., Afonso, V. M., Ismail, N., and Parada, M. (2012). Who, What, Where, When (and Maybe Even Why)? How the Experience of Sexual Reward Connects Sexual Desire, Preference, and Performance. *Archives of Sexual Behavior* 41: 31–62; Pfaus, J. G., Kippin, T. E., and Centeno, S. (2001). Conditioning and Sexual Behavior: A Review. *Hormones and Behavior* 40: 291–321.
- [19] Nestler, E. J. (2005). Is There a Common Molecular Pathway for Addiction? *Nature Neuroscience* 9, 11: 1445–1449.
- [20] Hilton, D. L., and Watts, C. (2011). Pornography Addiction: A Neuroscience Perspective. *Surgical Neurology International*, 2: 19.
- [21] Hilton, D. L. (2013). Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity. *Socioaffective Neuroscience & Psychology* 3:20767; Robinson, M. and Wilson, G. (2012). Are Sexual Tastes Im-mutable? *Psychology Today*, November 8. <http://www.psychologytoday.com/blog/cupids-poisoned-arrow/201211/are-sexual-tastes-immutable>
- [22] Cera, N., Delli Pizzi, S., Di Pierro, E. D., Gambi, F., Tartaro, A., et al. (2012). Macrostructural Alterations of Subcortical Grey Matter in Psychogenic Erectile Dysfunction. *PLoS ONE* 7, 6: e39118.

PORN HURTS YOUR PARTNER



Several studies have found that partners of porn users often report feeling loss, betrayal, mistrust, devastation, and anger when they learn that the other half of their committed relationship has been using porn. Many show physical symptoms of anxiety and depression.

KEY TAKEAWAYS

- *Porn increases negative feelings in relationships.*
- *No serious research has proven that porn improves relationships.*
- *Porn makes women feel like they are never enough.*

Here's an inconvenient truth: While porn is something users can choose to do on their own, that use doesn't just affect them—it affects their partner too, and not for the better. Two of the most respected pornography researchers, professors Jennings Bryant and Dolf Zillman at the University of Alabama, who studied the effects of porn and media for more than 30 years, said that when it comes to porn use “no rigorous research demonstrations of desirable effects can be reported.” [1] In other words, in all the serious research that's been done on porn, no one has found that it has any benefits. What several studies have found, however, is that porn use can cause serious damage not only to the user, but also to those closest to them—especially their partner. [2]

Studies have shown that as little as one exposure to softcore porn can cause the user to feel less attracted to their partner. [3] And when a person frequently uses pornography, they're far more likely to feel less satisfied with their partner's looks, sexual performance, and sexual curiosity. [4]

Why all the sudden disappointment? Probably because porn takes a completely fictional version of how people look and behave [hyperlink to Porn Is a Lie], and makes it look like an exciting reality—one that their partners often feel they can never live up to. [5]

Given that the women depicted in porn are surgically enhanced, air-brushed, and Photoshopped, [6] it's not hard to see why, according to a national poll, only one in seven women doesn't think that porn has raised men's expectations of how women should look. [7]

And it's not only women's looks that are being held to porn's standards. In most porn, sex is all about men; [8] women are depicted as being happy with whatever a man wants to do, even if it's dangerous, painful, or humiliating. [9] A study of the most popular porn videos found that nine scenes out of 10 showed women being verbally or physically abused, yet the female victims almost always responded with either pleasure or appeared to be neutral. [10] In even the most mainstream

porn, the sex acts shown are overwhelmingly degrading toward women, and are usually geared toward enhancing men's pleasure. [11] As a result, male porn users' ideas of what sex should be are often warped. [12] Many partners report that they're often asked to act out porn scripts or do things they're not comfortable with or find demeaning. [13]

In interviews with college-age women, feminist writer Niomi Wolf has found that in sexual relationships, women frequently feel that “they can never measure up, that they can never ask for what they want.” [14]

And the emotional pain can run much deeper than having a bad time in bed. Since women in our culture typically expect their intimate relationships to be built on trust, respect, honesty, and love, when a woman learns that her partner is using porn—which typically glorifies the opposite: disrespect, abuse, aggression, and infidelity—it can not only damage the trust she has in her partner, but also shake the foundation of everything she believed about her relationship. [15]

That pain can have very serious consequences. Several studies have found that women often report feeling loss, betrayal, mistrust, devastation, and anger when they learn that their partner in a committed relationship has been using porn. [16] Many women show physical symptoms of anxiety and depression. Some show signs of PTSD, and some even become suicidal. [17]

To make matters worse, the majority of women who learn of a partner's pornography use isolate themselves at least somewhat from their normal sources of social support, just when they need those support networks most. [18] In many cases, women fear telling anyone at all, either because they're embarrassed about it or they're afraid of being blamed for their partner's problem. [19]

For many partners, the blame can even come

from themselves. One study of women in relationships with porn addicts found that while the women often felt their partner was uncaring or selfish, they also worried that somehow the problem was their fault. [20] And for many of the women, their partner's porn use made them feel like the entire relationship was a complete farce. [21]

Citations

- [1] Zillmann, D. (2004). Pornografie. In R. Mangold, P. Vorderer, and G. Bente (Eds.) *Lehrbuch der Medienpsychologie* (pp.565–85). Göttingen, Germany: Hogrefe Verlag.
- [2] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 160; Ryu, E. (2004). Spousal Use of Pornography and Its Clinical Significance for Asian-American Women: Korean Women as an Illustration. *Journal of Feminist Family Therapy* 16, 4: 75; Bridges, A. J., Bergner, R. M., and Hesson-McInnis, M. (2003). Romantic Partners' Use of Pornography: Its Significance for Women. *Journal of Sex and Marital Therapy* 29, 1: 1–14; Bergner, R. and Bridges, A. J. (2002). The Significance of Heavy Pornography Involvement for Romantic Partners: Research and Clinical Implications. *Sex and Marital Therapy* 28, 3: 193–206.
- [3] Bridges, A. J. (2010). Pornography's Effect on Interpersonal Relationships. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 89–110). Princeton, NJ: Witherspoon Institute; Bergner, R. and Bridges, A. J. (2002). The Significance of Heavy Pornography Involvement for Romantic Partners: Research and Clinical Implications. *Sex and Marital Therapy* 28, 3: 193–206.
- [4] Zillmann, D. and Bryant, J. (1988). Pornography's Impact on Sexual Satisfaction. *Journal of Applied Social Psychology* 18, 5: 438–53.
- [5] Bergner, R. and Bridges, A. J. (2002). The Significance of Heavy Pornography Involvement for Romantic Partners: Research and Clinical Implications. *Sex and Marital Therapy* 28, 3: 193–206; Senn, C. Y. (1993). Women's Multiple Perspectives and Experiences with Pornography. *Psychology of Women Quarterly* 17, 3: 319–41.
- [6] Hilton, D. L. (2013). Pornography addiction—a supranormal stimulus considered in the context of neuroplasticity. *Socioaffective Neuroscience & Psychology*, 3, 20767; Paul, Pamela. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Holt and Co., 145.
- [7] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute.
- [8] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 132.
- [9] Bridges, A. J., Wosnitzer, R., Scharrer, E., Chyng, S., and Liberman, R. (2010). Aggression and Sexual Behavior in Best Selling Pornography Videos: A Content Analysis Update. *Violence Against Women* 16, 10: 1065–1085.
- [10] Bridges, A. J., Wosnitzer, R., Scharrer, E., Chyng, S., and Liberman, R. (2010). Aggression and Sexual Behavior in Best Selling Pornography Videos: A Content Analysis Update. *Violence Against Women* 16, 10: 1065–1085.
- [11] Bridges, A. J., Wosnitzer, R., Scharrer, E., Chyng, S., and Liberman, R. (2010). Aggression and Sexual Behavior in Best Selling Pornography Videos: A Content Analysis Update. *Violence Against Women* 16, 10: 1065–1085; Marshall, W. L. (2000). Revisiting the Use of Pornography by Sexual Offenders: Implications for Theory and Practice. *Journal of Sexual Aggression* 6, 1 and 2: 67.
- [12] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 187; Layden, M. A. (2004). Committee on Commerce, Science, and Transportation, Subcommittee on Science and Space, U.S. Senate, Hearing on the Brain Science Behind Pornography Addiction, November 18; Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41–44.
- [13] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Ryu, E. (2004). Spousal Use of Pornography and Its Clinical Significance for Asian-American Women: Korean Women as an Illustration. *Journal of Feminist Family Therapy* 16, 4: 75; Shope, J. H. (2004). When Words Are Not Enough: The Search for the Effect of Pornography on Abused Women. *Violence Against Women* 10, 1: 56–72.
- [14] Wolf, N. (2004). The Porn Myth. *New York Magazine*, May 24.
- [15] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute.
- [16] Bridges, A. J., Bergner, R. M., and Hesson-McInnis, M. (2003). Romantic Partners' Use of Pornography: Its Significance for Women. *Journal of Sex and Marital Therapy* 29, 1: 1–14; Schneider, J. P. (2000). Effects of Cybersex Addiction on the Family: Results of a Survey. *Sexual Addiction & Compulsivity* 7, 1 and 2: 31–58.
- [17] Steffens, B. A. and Rennie, R. L. (2006). The Traumatic Nature of Disclosure for Wives of Sexual Addicts. *Sexual Addiction & Compulsivity* 13, 2 and 3: 247–67; Wildmom-White, M. L. and Young, J. S. (2002). Family-of-Origin Characteristics Among Women Married to Sexually Addicted Men. *Sexual Addiction & Compulsivity* 9, 4: 263–73.
- [18] Manning, J. C. (2010). The Impact of Pornography on Women: Social Science Findings and Clinical Observations. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 69–87). Princeton, NJ: Witherspoon Institute.
- [19] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Manning, J. C. (2010). The Impact of Pornography on Women: Social Science Findings and Clinical Observations. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 69–87). Princeton, NJ: Witherspoon Institute; Wildmom-White, M. L. and Young, J. S. (2002). Family-of-Origin Characteristics Among Women Married to Sexually Addicted Men. *Sexual Addiction & Compulsivity* 9, 4: 263–73.
- [20] Bergner, R. and Bridges, A. J. (2002). The Significance of Heavy Pornography Involvement for Romantic Partners: Research and Clinical Implications. *Sex and Marital Therapy* 28, 3: 193–206.
- [21] Bergner, R. and Bridges, A. J. (2002). The Significance of Heavy Pornography Involvement for Romantic Partners: Research and Clinical Implications. *Sex and Marital Therapy* 28, 3: 193–206.



PORN LEAVES YOU LONELY

The more pornography a person consumes the harder it becomes for them to be aroused by a real person or a real relationship. As a result, many users start feeling like something's wrong with them; they don't know how to be turned on by a real person, much less form a deep personal connection with one.

KEY TAKEAWAYS

- *Porn lessens your ability to connect in real relationships.*
- *People are often secretive about their porn use, separating them further from others.*
- *Porn can contribute to or increase other psychological problems in users.*

From a business perspective, the porn industry has a pretty clever racket going. Their product offers users temporary relief from anxiety, depression, and loneliness in exchange for making these same problems much worse in the long-term. [1] That works out really well for pornographers, since the worse their customers' anxiety and isolation grow, the more reason they have to turn back to porn. But for the user, the end result isn't nearly so nice.

"Any time [a person] spends much time with the usual pornography usage cycle, it can't help but be a depressing, demeaning, self-loathing kind of experience," says Dr. Gary Brooks, a psychologist who has worked with porn addicts for the last 30 years. [2]

The more pornography a person consumes, the more their brain connects being aroused with porn's fictional fantasy [hyperlink to Porn Changes the Brain][3]—and the harder it becomes for them to be aroused by a real person or a real relationship [See page 17, Porn Ruins Your Sex Life]. [4]

As a result, many users start feeling like something's wrong with them; they don't know how to be turned on by a real person, much less form a deep personal connection with one. [5]

Niomi Wolf, an author and political activist, has traveled all over the country to talk with college students about relationships. "When I ask about loneliness, a deep, sad silence descends on audiences of young men and young women alike," she says. "They know they are lonely together ... and that [porn] is a big part of that loneliness. What they don't know is how to get out." [6]

Studies have found that when people engage in an ongoing pattern of "self-concealment,"—which is when they do things they're not proud of and keep them a secret from their friends and family members—it not only hurts their relationships and leaves them feeling lonely, but also makes them more vulnerable to severe psychological problems. [7] For both male and female porn addicts, their habit is often accompanied by problems with

anxiety, body-image issues, poor self-image, relationship problems, insecurity, and depression. [8]

Porn teaches that both men and women aren't worth anything more than the sum of their body parts and how much sexual pleasure they can offer. [9] Whether porn users like it or not, those perceptions often start creeping into how they see themselves and other people in real life. [10] The harder it becomes for the user to see themselves and others as anything more than sexual objects, the harder it is to develop real relationships. [11]

"There's a certain way of experiencing sexual arousal that is the opposite of closeness," Brooks said. "At best, it can be managed somewhat by some people, but most of the time it creates a barrier that poisons relationships." [12]

Citations

- [1] Flisher, C. (2010). Getting Plugged In: An Overview of Internet Addiction. *Journal of Paediatrics and Child Health* 46: 557–9; Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 82; Kafka, M. P. (2000). The Paraphilia-Related Disorders: Nonparaphilic Hypersexuality and Sexual Compulsivity/Addiction. In S. R. Leiblum and R. C. Rosen (Eds.) *Principles and Practice of Sex Therapy*, 3rd Ed. (pp. 471–503). New York: Guilford Press.
- [2] Interview with Dr. Gary Brooks, Oct. 23, 2013.
- [3] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 105.
- [4] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 105; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 104.
- [5] Interview with Dr. Gary Brooks, Oct. 23, 2013; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 105.
- [6] Wolf, N. (2004). The Porn Myth. *New York Magazine*, May 24.
- [7] Laird, R. D., Marrero, M. D., Melching, J. A., and Kuhn, E. S. (2013). Information Management Strategies in Early Adolescence: Developmental Change in Use and Transactional Associations with Psychological Adjustment. *Developmental Psychology* 49, 5: 928–937; Luoma, J. B., Nobles, R. H., Drake, C. E., Hayes, S. C., O’Hair, A., Fletcher, L., and Kohlenberg, B. S. (2013). Self-Stigma in Substance Abuse: Development of a New Measure. *Journal of Psychopathology and Behavioral Assessment* 35: 223–234; Rotenberg, K. J., Bharathi, C., Davies, H., and Finch, T. (2013). Bulimic Symptoms and the Social Withdrawal Syndrome. *Eating Behaviors* 14: 281–284; Frijns, T. and Finkenauer, C. (2009). Longitudinal Associations Between Keeping a Secret and Psychosocial Adjustment in Adolescence. *International Journal of Behavioral Development* 33, 2: 145–154.
- [8] Flisher, C. (2010). Getting Plugged In: An Overview of Internet Addiction. *Journal of Paediatrics and Child Health* 46: 557–9; Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Kafka, M. P. (2000). The Paraphilia-Related Disorders: Nonparaphilic Hypersexuality and Sexual Compulsivity/Addiction. In S. R. Leiblum and R. C. Rosen (Eds.) *Principles and Practice of Sex Therapy*, 3rd Ed. (pp. 471–503). New York: Guilford Press.
- [9] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 80; Mosher, D. L. and Maclan, P. (1994). College Men and Women Respond to X-Rated Videos Intended for Male or Female Audiences: Gender and Sexual Scripts. *Journal of Sex Research* 31, 2: 99–112.
- [10] Interview with Dr. Gary Brooks, Oct. 23, 2013.
- [11] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 79; Lyons, J. S., Anderson, R. L., and Larsen, D. (1993). A Systematic Review of the Effects of Aggressive and Nonaggressive Pornography. In D. Zillmann, J. Bryand, and A. C. Huston (Eds.) *Media, Children and the Family: Social Scientific, Psychodynamic, and Clinical Perspectives* (p. 305). Hillsdale, N.J.: Erlbaum Associates.
- [12] Interview with Dr. Gary Brooks, Oct. 23, 2013.



PORN'S DIRTY LITTLE SECRET

To viewers, pornography can appear a fantasy world of pleasure and thrills. To those who create and participate in making pornography, however, their experiences are often flooded with drugs, disease, rape and abuse.

KEY TAKEAWAYS

- *The porn industry is plagued with drugs, violence, and rape.*
- *Many victims of sex trafficking are used to film pornography.*

“I got the &*%\$ kicked out of me Most of the girls start crying because they’re hurting so bad I couldn’t breathe. I was being hit and choked. I was really upset and they didn’t stop. They kept filming. [I asked them to turn the camera off] and they kept going.” –Regan Starr [1]

The pornography industry works hard to keep up a glamorous image, but behind the camera is a reality of violence, drugs, and human trafficking.

With some editing and off-screen coercion, pornographers can make it look like what’s happening onscreen is being enjoyed. But the un-cut version is a different story. Porn actors are constantly threatened and emotionally and verbally abused by agents and directors to force them into doing things they don’t want to do. [2]

“You’re viewed as an object and not as a human with a spirit,” wrote Jersey Jaxin, a former porn star that left the industry in 2007. “People do drugs because they can’t deal with the way they are being treated. Seventy five percent [of porn performers] and rising are using drugs. Have to numb themselves. There are specific doctors in this industry that if you go in for a common cold they’ll give you Vicodin, Viagra, anything you want because all they care about is the money. You are a number. You’re bruised. You have black eyes. You’re ripped. You’re torn. You have your insides coming out.” [3]

Not only do pornographers crop out the severe physical and emotional pain actors experience, but in many cases they also hide the fact that some “performers” aren’t given any choice at all.

Part of the lie porn producers want customers to buy into is that porn is legitimate entertainment made by glamorous people who are doing it because it’s what they want; it’s OK for the user to enjoy it because the people they’re watching seem to be enjoying it. What they don’t say is that some of those people look like they’re having a good time because behind the scenes they have a gun pointed at their head. And if they stop smiling, it will go off. [4]

Obviously, human trafficking is an underground business, making firm statistics hard to come by. But the facts in cases that come to light are chilling. For example, in 2011, two Miami men were found guilty of spending five years luring women into a human trafficking trap. They would advertise modeling roles, then when women came to try out, they would drug them, kidnap them, rape them, videotape the violence, and sell it to pornography stores and businesses across the country. [5]

That same year a couple in Missouri was charged with forcing a mentally handicapped girl to produce porn for them by beating, whipping, suffocating, electrocuting, drowning, mutilating, and choking her until she agreed. One of the photos they forced her to make ended up on the front cover of a porn publication owned by Hustler Magazine Group. [6]

Those cases are just the tip of the iceberg; many more like them exist, and for each victim discovered, countless others suffer in silence. [7]

Still others are victimized by being forced into prostitution.

Given that pornography makes prostitution and sexually exploiting others look normal, [8] it’s not surprising that there’s a strong association between pornography use and going to prostitutes. [9] In fact, men who go to prostitutes are twice as likely to have watched a porn film in the last year compared to the general population. [10] It’s also not surprising that when these customers show up, many come ready with porn images in hand to show the women they’re exploiting—many of which are human trafficking victims controlled by pimps—what they’ll be forced to do. [11]

And they’re not the only ones using porn as an illustration. “Pimps and traffickers use pornography to initiate their ... victims into their new life of sexual slavery,” says Dr. Janice

Shaw Crouse, a former UN representative and a senior fellow at the Beverley LaHaye Institute. Through exposure to porn, these victims “get hardened to accept the inevitable and learn what is expected of them.” [12]

In a study of 854 women in prostitution across nine countries, 49% said that porn had been made of them while they were in prostitution, and 47% said they had been harmed by men who had either forced or tried to force their victims to do things the men had seen in porn. [13]

In the end, porn fuels prostitution; and porn and prostitution are the products the sex trade exists to deliver. [14]

against Women. Minneapolis, Minn.: WHISPER.

[12] Crouse, J. S. (2008). Pornography and Sex Trafficking. Statement at the National Press Club. Washington, D.C., May 19.

[13] Farley, M. (2007). Renting an Organ for Ten Minutes: What Tricks Tell Us about Prostitution, Pornography, and Trafficking. In D. E. Guinn and J. DiCaro (Eds.) *Pornography: Driving the Demand in International Sex Trafficking* (p. 145). Bloomington, Ind.: Xlibris.

[14] Arevalo, E. and Regnerus, M. (2011). *Commercialized Sex and Human Bondage*. Public Discourse. Princeton, N.J.: Witherspoon Institute. February 11.

Citations

[1] Amis, M. (2001). A Rough Trade. *The Guardian* (U.K.), March 17.

[2] Dines, G. (2010). *Pornland: How Porn Has Hijacked our Sexuality*. Boston: Beacon, 70–73; Amis, M. (2001). A Rough Trade. *The Guardian* (U.K.), March 17.

[3] Lubben, S. Interview with “Jersey Jaxin,” <https://www.shelleylubben.com/former-porn-star-jersey-jaxin-story>

[4] Peters, R. W., Lederer, L. J., and Kelly, S. (2012). The Slave and the Porn Star: Sexual Trafficking and Pornography. In M. Mattar and J. Braunmiller (Eds.) *Journal of Human Rights and Civil Society* 5: 1-21.

[5] U.S. Department of Justice. (2012). Two Men Sentenced to Multiple Life Sentences for Enticing Women to South Florida to Engage in Commercial Sex Acts and Distributing Date Rape Pills. Press Release, Feb. 17.

[6] Peters, R. W., Lederer, L. J., and Kelly, S. (2012). The Slave and the Porn Star: Sexual Trafficking and Pornography. In M. Mattar and J. Braunmiller (Eds.) *Journal of Human Rights and Civil Society* 5: 1-21; U.S. Attorney’s Office for the Western District of Missouri. (2010). *Woman Tortured as Slave, Victim of Trafficking and Forced Labor*. Press Release, September 9. <http://www.justice.gov/usao/mw/news2010/bagley.ind.htm>

[7] Peters, R. W., Lederer, L. J., and Kelly, S. (2012). The Slave and the Porn Star: Sexual Trafficking and Pornography. In M. Mattar and J. Braunmiller (Eds.) *Journal of Human Rights and Civil Society* 5: 1-21.

[8] Lederer, L. (2010). Four Links between Sex Trafficking and Illegal Pornography. Presentation at a Capitol Hill Briefing on Pornography Harms. Washington, D.C, June 15.

[9] Arevalo, E. and Regnerus, M. (2011). *Commercialized Sex and Human Bondage*. Public Discourse. Princeton, N.J.: Witherspoon Institute. February 11; Malarek, V. (2009). *Johns: Sex for Sale and the Men Who Buy It*. New York: Arcade, 193–96; 202–4; Monto, M. A. (1999). *Focusing on the Clients of Street Prostitutes: A Creative Approach to Reducing Violence Against Women*. Paper submitted to the U.S. Department of Justice.

[10] Monto, M. A. (1999). *Focusing on the Clients of Street Prostitutes: A Creative Approach to Reducing Violence Against Women*. Paper submitted to the U.S. Department of Justice.

[11] Poppy Project. (2004). *When Women are Trafficked: Quantifying the Gendered Experience of Trafficking in the UK*. London: Eaves; Globbe, E., Harrigan, M., and Ryan, J. (1990). *A Facilitator’s Guide to Prostitution: A Matter of Violence*



PORN LEADS TO VIOLENCE

A few years ago, a team of researchers looked at the most popular porn films and they randomly picked 50 and analyzed them. Of the 304 scenes the movies contained, 88% contained physical violence. On top of that, 49% contained verbal aggression.

KEY TAKEAWAYS

- *Most mainstream porn contains violent sexual behavior against women.*
- *Watching violent porn changes attitudes and leads viewers to think violent sex is normal.*
- *Studies show that after viewing porn, even non-violent, men's attitudes toward women change.*

It's no secret that some porn is violent, but most people think that's something different from mainstream pornography—something out on the fringe. Not all porn is the same, its defenders say. People can choose what they like, and if they're into violent stuff, that's their business, right?

It's true that not all porn is the same, but the reality is that the majority of even the most mainstream porn is packed full of women being physically and verbally abused—and watching it takes a serious toll on the user.

A few years ago, a team of researchers looked at the most popular porn films—the ones bought and rented most often. [1] From that group, they randomly picked 50 and analyzed them. Of the 304 scenes the movies contained, 88% contained physical violence. On top of that, 49% contained verbal aggression. In total, only one scene in 10 didn't contain any aggression, and the typical scene averaged 12 physical or verbal attacks. One action-packed scene managed to fit in 128.

Unlike violence in regular movies where someone gets punched, gets mad, and fights back, 95% of the victims of aggression in the porn scenes either were neutral or responded with pleasure. And while the targets were women 94% of the time, when a man was the victim, he was four times more likely than his female costars to be upset at his attacker.

In other words, in porn, women are getting beat up and they're smiling about it.

For porn users, even those that manage to avoid violent material, it's difficult not to be influenced. Study after study has found that watching even non-violent porn is correlated with the user being more likely to use verbal coercion, drugs, and alcohol to push women into sex. [2] And those who consistently look at non-violent porn are more likely to support statements that promote abuse and sexual aggression of both women and girls. [3]

And the changes don't stop with the user's attitude. An analysis of 33 different studies found that exposure to both non-violent and violent porn

increases aggressive behavior, including both having violent fantasies and actually committing violent assaults. [4]

Not surprisingly, the more violent the porn, the more likely the user is to support and act out violence. [5]

If you're wondering how sitting in a chair watching porn can actually change what a person thinks and does, the answer goes back to how porn changes the brain [hyperlink to Porn Changes the Brain]. When a person is watching porn, their brain is busy wiring together whatever is happening on the screen to sexual arousal. [6] So if they're watching a woman get kicked around and called names while feeling aroused, they're more likely to associate that kind of violence with being sexy. [7] Even when porn isn't violent, viewers are learning to see other people as nothing more than objects made to be used for sexual pleasure. [8]

To make matters worse, when porn shows the victims of violence accepting or enjoying being hurt, the person watching is learning that people want and like to be treated that way, giving viewers permission to act that way themselves. [9]

That education leads to behavior changes that range from being more likely to verbally harass women, [10] to problems as serious as rape. The scary truth is that both non-violent and violent porn make users more likely to support violence against women and to believe that women enjoy being raped, [11] and those beliefs have been found across several research studies to be predictive of a person being sexually aggressive in real life. [12] With violent and rape porn, the associations get particularly strong. [13] In fact, one study found that those who reported higher past exposure to violent porn were six times more likely to report having raped someone than those that had low past exposure. [14]

Of course, not every porn watcher is going to turn into a rapist, but that doesn't mean

pornography use isn't still driving a wave of violence on a massive scale. The vast majority of the porn viewed by millions of people every day is teaching that humiliation and violence are a normal part of what sex is supposed to be [15]—and that education is changing what happens in bedrooms around the world. [16] It's making it harder for many men to feel aroused unless they can do the things they've seen in porn [17], and it's leaving women feeling like they can't express the pain it's causing them. [18] And the more porn teaches us that aggression is a part of sex, the more that violence is being made invisible. [19]

Citations

- [1] Bridges, A. J., Wosnitzer, R., Scharer, E., Chyng, S., and Liberman, R. (2010). Aggression and Sexual Behavior in Best Selling Pornography Videos: A Content Analysis Update. *Violence Against Women* 16, 10: 1065–1085.
- [2] Boeringer, S. B. (1994). Pornography and Sexual Aggression: Associations of Violent and Nonviolent Depictions with Rape and Rape Proclivity. *Deviant Behavior* 15, 3: 289–304; Check, J. and Guloien, T. (1989). The Effects of Repeated Exposure to Sexually Violent Pornography, Nonviolent Dehumanizing Pornography, and Erotica. In D. Zillmann and J. Bryant (Eds.) *Pornography: Research Advances and Policy Considerations* (pp. 159–84). Hillsdale, N.J.: Lawrence Erlbaum Associates; Marshall, W. L. (1988). The Use of Sexually Explicit Stimuli by Rapists, Child Molesters, and Non-Offenders. *Journal of Sex Research* 25, 2: 267–88.
- [3] Hald, G. M., Malamuth, N. M., and Yuen, C. (2010). Pornography and Attitudes Supporting Violence Against Women: Revisiting the Relationship in Nonexperimental Studies. *Aggression and Behavior* 36, 1: 14–20; Berkel, L. A., Vandiver, B. J., and Bahner, A. D. (2004). Gender Role Attitudes, Religion, and Spirituality as Predictors of Domestic Violence Attitudes in White College Students. *Journal of College Student Development* 45:119–131; Zillmann, D. (2004). Pornografie. In R. Mangold, P. Vorderer, and G. Bente (Eds.) *Lehrbuch der Medienpsychologie* (pp.565–85). Gottingen, Germany: Hogrefe Verlag; Zillmann, D. (1989). Effects of Prolonged Consumption of Pornography. In D. Zillmann and J. Bryant (Eds.) *Pornography: Research Advances and Policy Considerations* (p. 155). Hillsdale, N.J.: L. Erlbaum Associates.
- [4] Allen, M., Emmers, T., Gebhardt, L., and Giery, M. A. (1995). Exposure to Pornography and Acceptance of the Rape Myth. *Journal of Communication* 45, 1: 5–26.
- [5] Hald, G. M., Malamuth, N. M., and Yuen, C. (2010). Pornography and Attitudes Supporting Violence Against Women: Revisiting the Relationship in Nonexperimental Studies. *Aggression and Behavior* 36, 1: 14–20; Allen, M., Emmers, T., Gebhardt, L., and Giery, M. A. (1995). Exposure to Pornography and Acceptance of the Rape Myth. *Journal of Communication* 45, 1: 5–26.
- [6] Hilton, D. L. (2013). *Pornography Addiction—A Supranormal Stimulus Considered in the Context of Neuroplasticity*. *Socioaffective Neuroscience & Psychology* 3:20767; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 101.
- [7] Layden, M. A. (2010). *Pornography and Violence: A New look at the Research*. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books; Malamuth, N. M. (1981). Rape Fantasies as a Function of Exposure to Violent Sexual Stimuli. *Archives of Sexual Behavior* 10, 1: 33–47.
- [8] Layden, M. A. (2010). *Pornography and Violence: A New look at the Research*. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 80; Berkel, L. A., Vandiver, B. J., and Bahner, A. D. (2004). Gender Role Attitudes, Religion, and Spirituality as Predictors of Domestic Violence Attitudes in White College Students. *Journal of College Student Development* 45:119–131.
- [9] Bridges, A. J. (2010). *Pornography's Effect on Interpersonal Relationships*. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 89–110). Princeton, NJ: Witherspoon Institute; Layden, M. A. (2010). *Pornography and Violence: A New look at the Research*. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Marshall, W. L. (2000). Revisiting the Use of Pornography by Sexual Offenders: Implications for Theory and Practice. *Journal of Sexual Aggression* 6, 1 and 2: 67.
- [10] Barak, A., Fisher, W. A., Belfry, S., and Lashambe, D. R. (1999). Sex, Guys, and Cyberspace: Effects of Internet Pornography and Individual Differences on Men's Attitudes Toward Women. *Journal of Psychology and Human Sexuality* 11, 1: 63–91.
- [11] Layden, M. A. (2010). *Pornography and Violence: A New look at the Research*. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Milburn, M., Mather, R., and Conrad, S. (2000). The Effects of Viewing R-Rated Movie Scenes that Objectify Women on Perceptions of Date Rape. *Sex Roles* 43, 9 and 10: 645–64; Weisz, M. G. and Earls, C. (1995). The Effects of Exposure to Filmed Sexual Violence on Attitudes Toward Rape. *Journal of Interpersonal Violence* 10, 1: 71–84; Ohbuchi, K. I., et al. (1994). Effects of Violent Pornography Upon Viewers' Rape Myth Beliefs: A Study of Japanese Males. *Psychology, Crime, and Law* 7, 1: 71–81; Corne, S., et al. (1992). Women's Attitudes and Fantasies About Rape as a Function of Early Exposure to Pornography. *Journal of Interpersonal Violence* 7, 4: 454–61; Check, J. and Guloien, T. (1989). The Effects of Repeated Exposure to Sexually Violent Pornography, Nonviolent Dehumanizing Pornography, and Erotica. In D. Zillmann and J. Bryant (Eds.) *Pornography: Research Advances and Policy Considerations* (pp. 159–84). Hillsdale, N.J.: Lawrence Erlbaum Associates; Check, J. and Malamuth, N. M. (1985). An Empirical Assessment of Some Feminist Hypotheses About Rape. *International Journal of Women's Studies* 8, 4: 414–23.
- [12] Hald, G. M., Malamuth, N. M., and Yuen, C. (2010). *Pornography and Attitudes Supporting Violence Against Women: Revisiting the Relationship in Nonexperimental Studies*. *Aggression and Behavior* 36, 1: 14–20; Layden, M. A. (2010). *Pornography and Violence: A New look at the Research*. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Boeringer, S. B. (1994). *Pornography and Sexual Aggression: Associations of Violent and Nonviolent Depictions with Rape and Rape Proclivity*. *Deviant Behavior* 15, 3: 289–304; Check, J. and Guloien, T. (1989). The Effects of Repeated Exposure to Sexually Violent Pornography, Nonviolent Dehumanizing Pornography, and Erotica. In D. Zillmann and J. Bryant (Eds.) *Pornography: Research Advances and Policy Considerations* (pp. 159–84). Hillsdale, N.J.: Lawrence Erlbaum Associates; Marshall, W. L. (1988). The Use of Sexually Explicit Stimuli by Rapists, Child Molesters, and Non-Offenders. *Journal of Sex Research* 25, 2: 267–88.
- [13] Hald, G. M., Malamuth, N. M., and Yuen, C. (2010). *Pornography and Attitudes Supporting Violence Against Women: Revisiting the Relationship in Nonexperimental Studies*. *Aggression and Behavior* 36, 1: 14–20.
- [14] Boeringer, S. B. (1994). *Pornography and Sexual Aggression: Associations of Violent and Nonviolent Depictions with Rape and Rape Proclivity*. *Deviant Behavior* 15, 3: 289–304.

[15] Bridges, A. J. (2010). Pornography's Effect on Interpersonal Relationships. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 89-110). Princeton, NJ: Witherspoon Institute; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books; Layden, M. A. (2004). Committee on Commerce, Science, and Transportation, Subcommittee on Science and Space, U.S. Senate, Hearing on the Brain Science Behind Pornography Addiction, November 18.

[16] Ryu, E. (2004). Spousal Use of Pornography and Its Clinical Significance for Asian-American Women: Korean Women as an Illustration. *Journal of Feminist Family Therapy* 16, 4: 75.

[17] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books.

[18] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57-68). Princeton, NJ: Witherspoon Institute; Wolf, N. (2004). The Porn Myth. *New York Magazine*, May 24.

[19] Bridges, A. J. (2010). Pornography's Effect on Interpersonal Relationships. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 89-110). Princeton, NJ: Witherspoon Institute.



PORN WARPS IDEAS ABOUT SEX

Whether they want to or not, the majority of teens are getting some of their sex ed from porn. Researchers have repeatedly found that people who have seen a significant amount of porn are more likely to start having sex sooner and with more partners, and to engage in riskier kinds of sex, putting them at greater risk of getting sexually transmitted infections.

KEY TAKEAWAYS

- *Porn has become a fictional version of sexual education for most young people.*
- *The porn industry has become more extreme*
- *Sexual preferences of porn viewers have become heavily influenced by pornography.*
- *Porn edits out the consequences of unhealthy sex practices.*

Can you imagine what would happen if your school's health class was taught by a cigarette salesman? Chances are, you wouldn't hear much about lung cancer or how much shorter the typical smoker's life span is. He might even try to tell you that smoking could boost your sprint time. Sounds ridiculous, right? Here's the problem: that's the kind of education millions of teens are getting about sex every day.

While porn is often called "adult material," many of its viewers are well under the legal age. Whether they want to or not, the majority of teens are getting some of their sex ed from porn. [1] And just like cigarette commercials show healthy people puffing away instead of the cancer-causing reality, porn is offering a completely warped idea of what partners, sex, and relationships are really like. [2]

In porn, sex with strangers is made to look normal [3]—and more often than not, it's more than one stranger at a time. In a study of popular porn videos, the number of sexual partners in a scene ranged from one to 19, and averaged at three. And the kinds of sexual acts pornographers get on film are often degrading, dangerous, or violent. [4]

"A competitive market means that pornographers are trying to outdo each other to come up with the most extreme images," wrote John Wood, a therapist who works with youth addicted to pornography, in an article talking about porn's effects. "This contest to push the boundaries means that straight intercourse is considered too boring. Images of brutal anal sex and women being humiliated and degraded by two or more men at any one time are the new norms." [5]

As a result, studies show that people who view porn are far more likely to think things like group sex or dangerous sexual positions are more common than their non-porn-watching peers. [6]

And in many cases, attitudes make their way into behavior. Researchers have repeatedly found that

people who have seen a significant amount of porn are more likely to start having sex sooner and with more partners, and to engage in riskier kinds of sex, putting them at greater risk of getting sexually transmitted infections. [7]

Sociologist Michael Kimmel has found that men's sexual fantasies have become heavily influenced by porn, [8] which gets awfully tricky when their partners don't want to act out the degrading or dangerous acts porn shows. [9] As a result, men who look at pornography have been shown to be more likely to go to prostitutes, [10] often looking for a chance to live out what they've seen in porn. [11] In one survey of former prostitutes, 80% said that customers had shown them images of porn to illustrate what they wanted to do. [12]

What pornography doesn't show is what healthy sex is like, since most pornographers cut out things like kissing, cuddling, and other positive kinds of affection. [13]

They also cut out the consequences of the kinds of sex shown. [14] In porn, no one contracts sexually transmitted infections; there are no unwanted pregnancies, no cervical cancer, no intestinal parasites, and no skin tearing. And no matter how rough a person treats their partner, in porn, nearly everything looks like it feels good. [15]

In fact, in the study of popular porn videos, in nine scenes out of 10, a woman was being hit, beaten, yelled at, or otherwise harmed, and the result was almost always the same—the victim either seemed not to mind or looked happy about it. [16]

Not only does porn offer up a fictional version of sex education, but also that education is being delivered in a way perfectly tailored to how our brains learn. [17] Images are an

especially powerful teacher, since they can pack in a whole lot of information that the viewer can understand very quickly. And while words are often interpreted as opinions, our brains are more likely to interpret images as facts; after all, it's a lot harder to argue with something you're seeing happen in front of you. [18]

Our brains also learn better when they're sexually aroused. [19] When you add in the focused concentration of searching through pornographic images to find exactly what the user is looking for, and reinforcing what's being taught with the reward of sexual climax, it creates the perfect conditions for wiring what porn teaches into the brain [See page 3, *Porn Changes the Brain*]. [20]

As a result, consistent porn users wire their sexuality to looking at 2D images of unrealistic, surgically altered bodies. [21] Instead of learning to build relationships with real people, it often feels more natural and arousing to them to be alone in front of a computer. [22] "It's sad," said Dr. Gary Brooks, a psychology professor who studies porn's effect on men. "Boys who are initiated in sex through these images become indoctrinated in a way that can potentially stay with them for the rest of their lives." [23]

Citations

- [1] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 16–17; Prigg, M. and Sims, P. (2004). Truth About Dangers of Net as Half of Children Are Exposed to Porn. *The Evening Standard* (London), September 3; U.S. Government Accountability Office. (2003). *File-Sharing Programs: Peer-to-Peer Networks Provide Ready Access to Child Pornography*. Washington, D.C.: GAO, February.
- [2] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute; Carroll, J. S., Padilla-Walker, L. M., and Nelson, L. J. (2008). Generation XXX: Pornography Acceptance and Use Among Emerging Adults. *Journal of Adolescent Research* 23, 1: 6–30; Layden, M. A. (2004). Committee on Commerce, Science, and Transportation, Subcommittee on Science and Space, U.S. Senate, Hearing on the Brain Science Behind Pornography Addiction, November 18; Marshall, W. L. (2000). Revisiting the Use of Pornography by Sexual Offenders: Implications for Theory and Practice. *Journal of Sexual Aggression* 6, 1 and 2: 67; Mosher, D. L. and MacLan, P. (1994). College Men and Women Respond to X-Rated Videos Intended for Male or Female Audiences: Gender and Sexual Scripts. *Journal of Sex Research* 31, 2: 99–112; Brosius, H. B., et al. (1993). Exploring the Social and Sexual "Reality" of Contemporary Pornography. *Journal of Sex Research* 30, 2: 161–70.
- [3] Carroll, J. S., Padilla-Walker, L. M., and Nelson, L. J. (2008). Generation XXX: Pornography Acceptance and Use Among Emerging Adults. *Journal of Adolescent Research* 23, 1: 6–30.
- [4] Bridges, A. J., Wosnitzer, R., Scharrer, E., Chyng, S., and Liberman, R. (2010). Aggression and Sexual Behavior in Best Selling Pornography Videos: A Content Analysis Update. *Violence Against Women* 16, 10: 1065–1085.
- [5] Woods, J. (2012). Jamie Is 13 and Hasn't Even Kissed a Girl. But He's Now on the Sex Offender Register after Online Porn Warped His Mind. *Daily Mail (U.K.)*, April 25.
- [6] Layden, M. A. (2004). Committee on Commerce, Science, and Transportation, Subcommittee on Science and Space, U.S. Senate, Hearing on the Brain Science Behind Pornography Addiction, November 18; Zillmann, D. (2000). Influence of Unrestrained Access to Erotica on Adolescents' and Young Adults' Dispositions Toward Sexuality. *Journal of Adolescent Health* 27, 2: 41–44.
- [7] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Carroll, J. S., Padilla-Walker, L. M., and Nelson, L. J. (2008). Generation XXX: Pornography Acceptance and Use Among Emerging Adults. *Journal of Adolescent Research* 23, 1: 6–30; Haggstrom-Nordin, E., Tyden, T., and Hanson, U. (2005). Associations between Pornography Consumption and Sexual Practices among Adolescents in Sweden. *International Journal of STD & AIDS* 16, 2: 102–7; Wingood, G. M., et al. (2001). Exposure to X-Rated Movies and Adolescents' Sexual and Contraceptive-Related Attitudes and Behaviors. *Pediatrics* 107, 5: 1116–19.
- [8] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 27.
- [9] MacKinnon, C. A. (2005). Pornography as Trafficking. *Michigan Journal of International Law* 26, 4: 999–1000; Raymond, J. (2004). Public Hearing on the Impact of the Sex Industry in the EU, Committee on Women's Rights and Equal Opportunities Public Hearing at the European Parliament. New York: Coalition Against Trafficking in Women.
- [10] Monto, M. A. (1999). Focusing on the Clients of Street Prostitutes: A Creative Approach to Reducing Violence Against Women. Paper submitted to the U.S. Department of Justice.
- [11] Malarek, V. (2009). *Johns: Sex for Sale and the Men Who Buy It*. New York: Arcade, 193–96; MacKinnon, C. A. (2005). Pornography as Trafficking. *Michigan Journal of International Law* 26, 4: 999–1000; Raymond, J. (2004). Public Hearing on the Impact of the Sex Industry in the EU, Committee on Women's Rights and Equal Opportunities Public Hearing at the European Parliament. New York: Coalition Against Trafficking in Women.
- [12] Globbe, E., Harrigan, M., and Ryan, J. (1990). *A Facilitator's Guide to Prostitution: A Matter of Violence against Women*. Minneapolis, Minn.: WHISPER.
- [13] Bridges, A. J., Wosnitzer, R., Scharrer, E., Chyng, S., and Liberman, R. (2010). Aggression and Sexual Behavior in Best Selling Pornography Videos: A Content Analysis Update. *Violence Against Women* 16, 10: 1065–1085.
- [14] Bridges, A. J., Wosnitzer, R., Scharrer, E., Chyng, S., and Liberman, R. (2010). Aggression and Sexual Behavior in Best Selling Pornography Videos: A Content Analysis Update. *Violence Against Women* 16, 10: 1065–1085; Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute.
- [15] Bridges, A. J., Wosnitzer, R., Scharrer, E., Chyng, S., and Liberman, R. (2010). Aggression and Sexual Behavior in Best Selling Pornography Videos: A Content Analysis Update. *Violence Against Women* 16, 10: 1065–1085; Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute.

[16] Bridges, A. J., Wosnitzer, R., Scharrer, E., Chyng, S., and Liberman, R. (2010). Aggression and Sexual Behavior in Best Selling Pornography Videos: A Content Analysis Update. *Violence Against Women* 16, 10: 1065–1085.

[17] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute.

[18] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute.

[19] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute.

[20] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute.

[21] Hilton, D. L. (2013). Pornography addiction—a supranormal stimulus considered in the context of neuroplasticity. *Socioaffective Neuroscience & Psychology*, 3, 20767; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 109; Paul, Pamela. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Holt and Co., 145.

[22] Woods, J. (2012). Jamie Is 13 and Hasn't Even Kissed a Girl. But He's Now On the Sex Offender Register after Online Porn Warped His Mind. *Daily Mail* (U.K.), April 25; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 109.

[23] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 187.



PORN HATES FAMILIES

Research has found that marriages in which one person has a porn problem or sexual compulsion are often plagued by less intimacy and sensitivity, as well as more anxiety, secrecy, isolation, and dysfunction in the relationship. And since many porn users end up losing their jobs as a result of looking at porn on a company computer, these marriages often end up with less financial security as well.

KEY TAKEAWAYS

- *Marriages with porn problems have less intimacy and sensitivity.*
- *Porn use increases the likelihood of infidelity.*
- *Children of porn users experience less parental involvement.*

Life as a pro basketball player looks pretty good. The pay is great, you'd get to wear shorts to work, and your professional goals would include things like dunking more. So let's say you decided to make that your plan: professional ball player by age 21. Chances are, you wouldn't start preparing by picking up a cigarette habit and switching to a donuts-only diet.

So what does aiming for the NBA have to do with porn? The point is, most of us have an idea of what we want to do in life, and for the majority of people, that plan involves having a family. In fact, 80 percent of young adults say that getting married is an important priority in their life plan. [1] And considering married people are far more likely to say they are "highly satisfied" with their life, it's probably not such a bad goal. [2] The problem for porn users is that healthy marriages and porn often don't mix well.

Research has found that marriages in which one person has a porn problem or sexual compulsion are often plagued by less intimacy and sensitivity, as well as more anxiety, secrecy, isolation, and dysfunction in the relationship. [3] And since many porn users end up losing their jobs as a result of looking at porn on a company computer, these marriages often end up with less financial security as well. [4]

In fact, many women—regardless of what their religious beliefs are—see looking at porn as a serious threat to being able to stay married at all. [5] Why? For one thing, when a partner is using porn often, it takes away time they could otherwise be spending together. [6] On top of that, many partners consider it cheating—or close to cheating—when their partner is using images of someone else's body to get aroused. [7]

And virtual cheating isn't the only thing user's spouses have to worry about. Studies have found that married porn users are more likely than non-users to have sex with someone other than their spouse, [8] and men who look at porn are

also more likely to go to prostitutes. [9] As one researcher said, "Men witness the abuse of women in pornography constantly, and if they can't engage in that behavior with their wives, girlfriends, or children, they force a [prostitute] to do it." [10]

And even if a user never goes that far, people who look at pornography are also more likely to be more sexually permissive—such as being OK with having lots of sexual partners and dangerous kinds of sex—which is associated with having less stable marriages later in life. [11]

As a result, divorces related to porn use have "exploded," says Dr. Gary Brooks, a psychologist who has been working with porn addicts for 30 years. [12] In a survey of members of the American Academy of Matrimonial Lawyers taken in 2002, 62 percent of the divorce attorneys surveyed said that obsession with porn had been a significant factor in divorces cases they had handled in the last year. [13]

Whether or not a porn user's marriage falls apart, their spouse isn't the only one affected. Children are often victims, too, either by being exposed to pornographic images or by being abandoned by a parent who uses the time they could be spending with their kids to instead sit alone in front of their computer. [14] In a 2004 poll conducted by Elle magazine and MSNBC.com, a fifth of male respondents confessed that porn was taking away hours that used to be spent with their partner or kids. Among users that spent five or more hours per week on porn, that number shot up to 37 percent. [15]

Not everyone will or even wants to make it to the NBA, but most people want to be happy [See page 21, Porn Leaves You Lonely] and to have a happy family as well. And the more we learn about porn and its effects, the clearer it becomes that a porn habit makes both those goals harder and harder to reach.

Citations

- [1] Hymowitz, K., Carroll, J. S., Wilcox, W. B., and Kaye, K. (2013). *Knot Yet: The Benefits and Costs of Delayed Marriage in America*. University of Virginia: The National Marriage Project, 32.
- [2] Hymowitz, K., Carroll, J. S., Wilcox, W. B., and Kaye, K. (2013). *Knot Yet: The Benefits and Costs of Delayed Marriage in America*. University of Virginia: The National Marriage Project, 32.
- [3] Wildmom-White, M. L. and Young, J. S. (2002). Family-of-Origin Characteristics Among Women Married to Sexually Addicted Men. *Sexual Addiction & Compulsivity* 9, 4: 263–73.
- [4] Wildmom-White, M. L. and Young, J. S. (2002). Family-of-Origin Characteristics Among Women Married to Sexually Addicted Men. *Sexual Addiction & Compulsivity* 9, 4: 263–73.
- [5] Bridges, A. J., Bergner, R. M., and Hesson-McInnis, M. (2003). Romantic Partners' Use of Pornography: Its Significance for Women. *Journal of Sex and Marital Therapy* 29, 1: 1–14.
- [6] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 155.
- [7] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 163.
- [8] Wright, P. (2013). U.S. Males and Pornography, 1973–2010: Consumption, Predictors, Correlates. *Journal of Sex Research* 50, 1: 60–71; Zillmann, D. and Bryant, J. (1988). Effects of Prolonged Consumption of Pornography on Family Values. *Journal of Family Issues* 9: 518–554.
- [9] Malarek, V. (2009). *Johns: Sex for Sale and the Men Who Buy It*. New York: Arcade, 193–96; MacKinnon, C. A. (2005). Pornography as Trafficking. *Michigan Journal of International Law* 26, 4: 999–1000; Monto, M. A. (1999). Focusing on the Clients of Street Prostitutes: A Creative Approach to Reducing Violence Against Women. Paper submitted to the U.S. Department of Justice.
- [10] MacKinnon, C. A. (2005). Pornography as Trafficking. *Michigan Journal of International Law* 26, 4: 999–1000.
- [11] Carroll, J. S., Padilla-Walker, L. M., and Nelson, L. J. (2008). Generation XXX: Pornography Acceptance and Use Among Emerging Adults. *Journal of Adolescent Research* 23, 1: 6–30.
- [12] Interview with Dr. Gary Brooks, Oct. 23, 2013.
- [13] Dedmon, J. (2002). Is the Internet Bad for Your Marriage? Online Affairs, Pornographic Sites Playing Greater Role in Divorces. Press Release from The Dilenschneider Group, Inc.
- [14] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute; Schneider, J. P. (2000). Effects of Cybersex Addiction on the Family: Results of a Survey. *Sexual Addiction & Compulsivity* 7, 1 and 2: 31–58.
- [15] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 155.



PORN'S HARM IS CHANGING FAST

Skeptics of pornography's danger will often point out that porn has been around for a long time. After all, cavemen drew sexual images on their stone walls, and the ancient Greeks painted it on their pottery. But comparing ancient paintings on clay vases to today's endless stream of live action videos depicting every possible sexual act, available 24 hours a day on a device that fits into your pocket isn't exactly comparing apples to apples.

KEY TAKEAWAYS

- *Pornography has changed with technology.*
- *Porn has become more intense, violent, degrading, and humiliating over time.*
- *People are being exposed at younger and younger ages.*

Today's pornified culture is something very new. It's something the world has never seen.

So what changed? Like most large cultural shifts, nothing happened overnight, but some wheels were already turning back in 1953, the year Hugh Hefner published the first copy of Playboy.

Sex had become a more prominent part of American's cultural conversation due in part to Dr. Alfred Kinsey, who five years earlier had published a controversial but extremely popular book on sexuality. [2] He was heralded as one of the first scientists and writers to talk so openly about sexuality. [3] As a result, his books went flying off the shelves. [4]

Hefner capitalized on the trend with his magazine. However, to maximize sales, he had to change porn's image; instead of being thought of as something your friend's creepy uncle might have, porn needed to look mainstream. To do that, Hefner put pornographic photos next to essays and articles written by respected authors. In Playboy, porn looked like a gentleman's pursuit.

The next big shift happened in the 1980s, when VCRs made it possible for people to watch movies at home. [5] For porn users, that meant that instead of having to go to seedy movie theaters on the wrong side of town, all they had to do was go to the back room at their local movie rental place. Sure, they still had to go out to find it, but porn was suddenly a lot more accessible.

And then the Internet changed everything. [6]

Once porn hit the Web, suddenly there was nothing but a few keystrokes between anyone with an Internet connection and the most graphic material available, [7] and the online porn industry exploded. Between 1998 and 2007, the number of pornographic websites grew by 1,800%. [8] According to a 2004 study of Internet traffic in May of that

year, porn sites were visited three times more often than Google, Yahoo!, and MSN Search combined. [9]

And porn hasn't stayed behind the computer screen. Now that porn is more available, affordable, and anonymous than ever before, more people are becoming addicted [10] and its influence has soaked into every aspect of our lives. [11] Popular video games feature full nudity. [12] Snowboards marketed to teens are plastered with images of porn stars. [13] Even children's toys have become more sexualized. [14]

Television shows and movies have been impacted too as producers and writers have upped the ante with more and more graphic content to keep the attention of audiences accustomed to porn. [15] Between 1998 and 2005, the number of sex scenes on American TV shows nearly doubled. [16] And it's not just happening on adult programs. In a study conducted in 2004 and 2005, 70% of the 20 TV shows most often watched by teens included sexual content and nearly half showed sexual behavior. [17]

And the more our society becomes sexually saturated, the more porn makers pump out harder and harder material to make sure they stay on the cutting edge. [18]

"Thirty years ago 'hardcore' pornography usually meant the explicit depiction of sexual intercourse," wrote Dr. Norman Doidge, in his recent book on neuroscience, *The Brain That Changes Itself*. "Now hardcore has evolved and is increasingly dominated by the sadomasochistic themes ... all involving scripts fusing sex with hatred and humiliation. Hardcore pornography now explores the world of perversion, while softcore is now what hardcore was a few decades ago The comparatively tame

softcore pictures of yesteryear ... now show up on mainstream media all day long, in the pornification of everything, including television, rock videos, soap operas, advertisements, and so on.” [19]

And not only is there more porn to watch, but also there are more ways than ever to watch it. [20] Today, not only do we have high-speed Internet, we've got it on tap for devices we have with us 24 hours a day. Families have gone from having one shared computer to often having multiple personal laptops, smartphones, and tablets. With the launch of Google Glass, it's now possible to have an Internet-enabled screen in front of our eyes nearly every minute of the day.

As porn's availability has risen, so have its devastating effects on people [See page 1, Porn Is Like a Drug], relationships [See page 13, Porn Kills Love], and society [See page 25, Porn Leads to Violence] at large. [21] As therapist John Woods recently wrote, pornography addiction “is no longer just a private problem. It is a public health problem.” [22]

Citations

- [1] Stoner, J. and Hughes, D. (2010). Introduction. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. xv–xix). Princeton, NJ: Witherspoon Institute.
- [2] Brown, T. M. and Fee, E. (2003). Alfred C. Kinsey: A Pioneer of Sex Research. *American Journal of Public Health* 93, 6: 896-897.
- [3] Brown, T. M. and Fee, E. (2003). Alfred C. Kinsey: A Pioneer of Sex Research. *American Journal of Public Health* 93, 6: 896-897.
- [4] Brown, T. M. and Fee, E. (2003). Alfred C. Kinsey: A Pioneer of Sex Research. *American Journal of Public Health* 93, 6: 896-897.
- [5] McAlane, D. (2001). Interview on American Porn. *Frontline*, PBS, August.
- [6] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 3; McCarthy, B. W. (2002). The Wife's Role in Facilitating Recovery from Male Compulsive Sexual Behavior. *Sexual Addiction & Compulsivity* 9, 4: 275–84; Schneider, J. P. (2000). Effects of Cybersex Addiction on the Family: Results of a Survey. *Sexual Addiction & Compulsivity* 7, 1 and 2: 31–58.
- [7] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Stoner, J. and Hughes, D. (2010). Introduction. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. xv–xix). Princeton, NJ: Witherspoon Institute.
- [8] Websense Research Shows Online Pornography Sites Continue Strong Growth. (2004). *PRNewswire.com*, April 4.
- [9] Porn More Popular than Search. (2004). *InternetWeek.com*, June 4.
- [10] Schneider, J. P. (2000). Effects of Cybersex Addiction on the Family: Results of a Survey. *Sexual Addiction & Compulsivity* 7, 1 and 2: 31–58.
- [11] Bridges, A. J. (2010). Pornography's Effect on Interpersonal Relationships. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 89-110). Princeton, NJ: Witherspoon Institute; Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute; Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 102; Caro, M. (2004). *The New Skin Trade*. Chicago Tribune, September 19.
- [12] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute.
- [13] Paul, P. (2010). From Pornography to Porno to Porn: How Porn Became the Norm. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 3–20). Princeton, N.J.: Witherspoon Institute.
- [14] Bridges, A. J. (2010). Pornography's Effect on Interpersonal Relationships. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 89-110). Princeton, NJ: Witherspoon Institute.
- [15] Caro, M. (2004). *The New Skin Trade*. Chicago Tribune, September 19.
- [16] Kunkel, D., Eyal, K., Finnerty, K., Biely, E., and Donnerstein, E. (2005). Sex on TV 4. Menlo Park, Calif.: The Henry J. Kaiser Family Foundation.
- [17] Peter, J. and Valkenburg, P. M. (2007). Adolescents' Exposure to a Sexualized Media Environment and Their Notions of Women as Sex Objects. *Sex Roles* 56, 5 and 6: 381–95.
- [18] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 105.
- [19] Doidge, N. (2007). *The Brain That Changes Itself*. New York: Penguin Books, 102.
- [20] Layden, M. A. (2010). Pornography and Violence: A New look at the Research. In J. Stoner and D. Hughes (Eds.) *The Social Costs of Pornography: A Collection of Papers* (pp. 57–68). Princeton, NJ: Witherspoon Institute; Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 3; McCarthy, B. W. (2002). The Wife's Role in Facilitating Recovery from Male Compulsive Sexual Behavior. *Sexual Addiction & Compulsivity* 9, 4: 275–84.
- [21] Paul, P. (2007). *Pornified: How Pornography Is Transforming Our Lives, Our Relationships, and Our Families*. New York: Henry Hold and Co., 3, 19.
- [22] Woods, J. (2012). Jamie Is 13 and Hasn't Even Kissed a Girl. But He's Now On the Sex Offender Register after Online Porn Warped His Mind. *Daily Mail (U.K.)*, April 25.