Pornography and the Consumption of Chaos: A Call for Education, Understanding, and Action

Donald L. Hilton, Jr., MD
Utah Coalition Against Pornography
March 22, 2014
Eliminate the word ‘pornography’ and replace it with the less biased term ‘visual sexual stimuli’
Ley, Prause, & Finn, 2014

“Since many benefits of sexual stimuli also have been identified, we follow the APA recommendation to use less biased language.”
Recommendation from the SPAN lab at UCLA for clients to report their therapists for treating them for sex addiction because it is not listed in the DSM (is not ‘real’)

This has since been removed from the site...
“Know your enemy and know yourself and you can fight a hundred battles without disaster.”

Sun Tzu
Intellect is therefore a vital force in history, but it can also be a dissolvent and destructive power. Out of every hundred new ideas ninety-nine or more will probably be inferior to the traditional responses which they propose to replace. No one man, however brilliant or well-informed, can come in one lifetime to such fullness of understanding as to safely judge and dismiss the customs or institutions of his society, for these are the wisdom of generations after centuries of experiment in the laboratory of history. A youth boiling with hormones will wonder why he should not give full freedom to his sexual desires; and if he is unchecked by custom, morals, or laws, he may ruin his life before he matures sufficiently to understand that sex is a river of fire that must be banked and cooled by a hundred restraints if it is not to consume in chaos both the individual and the group.

An emotional solvent..
Valerie Voon, MD, PhD
Neuropsychiatrist, Department of Psychiatry
Head, Compulsive Disorders Research Group
Cambridge University
Neuroplasticity

“The brain is the source of behavior, but in turn it is modified by the behaviors it produces…

…learning sculpts brain structure.”

Zatorre et.al., Nature Neuroscience 2012
Addiction represents a pathological, yet powerful, form of learning and memory.

Kaeur JA, Malenka JC: “Synaptic plasticity and addiction.” *Nature Reviews Neuroscience* 8, 844-858 (November 2007)
Atrophy seen in reward-associated pathways in both natural (process) addictions and drug addiction

- Cocaine (Franklin, 2002 Biol Psych)
- Methamphetamine (Thompson, 2004 J Neurosci)
- Opiates (Lyoo, 2005 Psychopharmacology)
- Obesity (Pannaccuilli, 2006 Neuroimage)
- Sexuality (Schiffer, 2007 J Psych Research)
- Internet Addiction (Zhou, 2011 Eur J Rad)
Gray matter volumes of [multiple brain areas] were significantly correlated with the duration of Internet addiction in the adolescents with Internet Addiction Disorder...

Our results suggested that long-term Internet addiction would result in brain structural alterations, which probably contributed to chronic dysfunction in subjects with Internet Addiction Disorder.

Recovery visualized on neuroimaging: Positive Neuroplasicy

- Atrophy in gray matter areas associated with reward in methamphetamine addiction recover and increase to more normal volumes with recovery. (Kim et.al., *Int Jour NeuPsyPhar* 2005)

- Enlargement of gray matter after mindfulness therapy. – “The adult nervous system has the capacity for plasticity, and the structure of the brain can change in response to training.” (Holzel et. al. *Psychiatry Research: Neuroimaging* 2011)
DNA
Up to 10 thousand trillion synapses in the brain...

Source: Jon Lieff, MD   http://jonlieffmd.com/blog/neuroplasticity-learning-and-brain-circuits
“Good old dopamine, the chemical mover that gets us to chase after whatever it is we want, whatever spells relief. For starving animals, dopamine makes the brain a vehicle for seeking food; for addicts, it sends the brain hunting for drugs. In fact, dopamine-powered desperation can change the brain forever, because its message of intense wanting narrows the field of synaptic change, focusing it like a powerful microscope on one particular reward. Whether in the service of food or heroin, love or gambling, dopamine forms a rut, a line of footprints in the neural flesh. And those footprints harden and become indelible, beating an intractable path to a highly specialized – and limited – pot of gold.”

Marc Lewis, Memoirs of an Addicted Brain; A Neuroscientist Examines His Former Life on Drugs. Public Affairs, New York. 2011 pg 156.
“Growing evidence indicates that the VTA-NAc pathway and the other limbic regions cited above similarly mediate, at least in part, the acute positive emotional effects of natural rewards, such as food, sex and social interactions. These same regions have also been implicated in the so-called 'natural addictions' (that is, compulsive consumption of natural rewards) such as pathological overeating, pathological gambling and sexual addictions.”

“In summary, the work presented here provides evidence that, in addition to drugs of abuse, natural rewards (food and sex in this paper) induce ΔFosB levels in the Nac...our results raise the possibility that ΔFosB induction in the NAc may mediate not only key aspects of drug addiction, but also aspects of so-called natural addictions involving compulsive consumption of natural rewards.”

Not just rodents...

“These data indicate that our examination of ΔFosB and CaMKII induction by cocaine in rodent NAc is clinically relevant to human cocaine addiction.”

..."usurping" of pleasure reward systems important in survival...

*Proceedings of the National Academy of Sciences (PNAS, 2011)*

**Relation of addiction genes to hypothalamic gene changes subserving genesis and gratification of a classic instinct, sodium appetite**

Induction of Salt Appetite Alters Dendritic Morphology in Nucleus Accumbens and Sensitizes Rats to Amphetamine

Roitman et al., 2002

Natural and Drug Rewards act on common neural plasticity mechanisms with DeltaFosB as a key mediator

Pitchers et al., 2013

Images from Pitchers et al., 2010, Biological Psychiatry
Healthy volunteers

Compulsive Pornography Users

Valerie Voon, MD, PhD
Neuropsychiatrist, Department of Psychiatry
Head, Compulsive Disorders Research Group
Cambridge University
“Not even a smidgen of such evidence exists...”

Santorum’s Bad Porn Science, Salon, March 20, 2012
http://www.salon.com/2012/03/20/santorums_bad_porn_science/
“Mr. Congressman, cigarettes and nicotine clearly do not meet the classic definition of addiction.”

James Johnson, Chairman and CEO of RJ Renolds Tobacco Company

Rep. Waxman’s Subcommittee on Health and the Environment
April 14, 1994
American Society of Addiction Medicine

- Physicians qualified to treat all aspects of addiction, including drug withdrawal, with prescription medication if necessary

- In August 2011 released new definition of addiction

- Four year process involving over 80 experts
ASAM Definition 2011

• Addiction is a chronic disease of the brain affecting the reward/motivation/memory systems.

• For the first time, addiction is defined as including non-substance addictions such as to food, sex, and gambling.

• In other words, sexual addiction, including pornography addiction, is a chronic disease of the brain affecting reward, motivation, and memory.
The addictiveness of Internet pornography is not a metaphor. Not all addictions are to drugs or alcohol. People can be seriously addicted to gambling, even to running. All addicts show a loss of control of the activity, develop tolerance so that they need higher and higher levels of stimulation for satisfaction, and experience withdrawal if they can’t consummate the addictive act. All addiction involves long-term, sometimes lifelong, neuroplastic change in the brain.

Norman Doidge, MD
Psychiatrist, Columbia, University of Toronto

The Brain That Changes Itself, pg 106.
NIDA director Nora Volkow also felt that her institute's name should encompass addictions such as pornography, gambling, and food, says NIDA adviser Glen Hanson. "She would like to send the message that [we should] look at the whole field."

Science Online, 9 Aug 2007
DSM Perspective

- Based on behavior, not biology
- “atheoretical” since 1980
- DSM doesn’t claim to describe etiology or biology, only behavior
Recommendation from the SPAN lab at UCLA for clients to report their therapists for treating them for sex addiction because it is not listed in the DSM (is not ‘real’)

This has since been removed from the site...
The DSM’s “fundamental flaw: it says nothing about the biological underpinnings of mental disorders.”

Jabr, May 2013, Scientific American
Evidence they can understand?

“...understanding of addiction requires understanding of a broader network of neural connections involving forebrain as well as midbrain structures.”

ASAM, definition of addiction, explanatory footnote #1.
http://www.asam.org/for-the-public/definition-of-addiction
If it’s ‘immoral’ it can’t actually be harmful...

“Another way to conceptualize sex addiction is as a violation of society’s moral standards, along with someone’s distress about that violation. One should not [self stimulate] too much, according to common norms; one should not have too much indiscriminate sex; cheat on one’s spouse; be too sexually involved with porn, objects, or those with whom there’s no romantic love to redeem the sex (such as casual pickups or sex workers). The sex addiction concept helps patrol these arbitrary moral boundaries.”

Dr. Marty Klein

"At its core, addiction isn't just a social problem, or a moral problem, or a criminal problem. It's a brain problem whose behaviors manifest in all these other areas... It's about underlying neurology, not outward actions."

Michael Miller, MD
ASAM

Porn healthy?...

"It provides a legal outlet for illegal sexual behaviours or desires, and its consumption or availability has been associated with a decrease in sex offenses, especially child molestation...We need better methods to help people who struggle with the high frequency use of visual sexual stimuli, without pathologizing them or their use thereof..."

David Ley, PhD
PsychCentral 2/2014
“Additionally, VSS may provide a legal outlet for illegal sexual behaviors or desires. Increased VSS consumption or availability has been associated with a decrease in sex offenses, especially child molestation and inhibition of aggression.”
Tell the kids to watch it so they don’t have to eat it!
Does what we watch (learn) affect us?

“Advertisers are paying top dollar for Super Bowl commercials this year, with the price of a 30-second spot hitting a record high of at least $4 million.”

CNN Money 2013
Pornography: Beneficial or ‘detrimental?'
It turns out that pornography is good for you.
Gad Saad, PhD  Psychology Today, Jan 21, 2010

“Lastly we see that objections to erotic materials are often made on the basis of supposed actual, social or moral harm to women. No such cause and effect has been demonstrated with any negative consequence.”


“A positive correlation was obtained between the amount of hardcore pornography that was viewed and the impact of the benefits reaped. This positive correlation was found for both sexes. In other words, the more that one watched porn, the stronger the benefits (for both sexes)! There you have it. I am reporting on recent data regarding this debate and in so doing I wish to highlight the fact that ideology should never trump scientific evidence.”

Gad Saad, PhD, commenting on Hald and Malmuth’s 2008 paper “Self-Percieved Effects of Pornographic Consumption,” Archives of Sexual Behavior.
“The bigger pornography gets, the lower the birthrate becomes.”

Tom Wolfe
“Rape is Grossly Underreported in the US, Study Finds”
HuffPost Crime, Nov 2013

“The Bureau of Justice Statistics' (BJS) National Crime Victimization Survey (NCVS) measures the rates at which Americans are victims of crimes, including rape and sexual assault, but there is concern that rape and sexual assault are undercounted on this survey...Sadly, accurate information about the extent of sexual assault and rape is difficult to obtain because most of these crimes go unreported to police.”

Sexual Assault is one of the most under reported crimes, with 60% still being left unreported.

Justice Department, National Crime Victimization Survey: 2008-2012

“Sexual Assaults in the Military are Skyrocketing” Williams & Dreissel, Slate, May 2013

“Sexual Reports in Military Increase” Baldor, AP, Dec 28, 2013

“The number of reported sexual assaults across the military shot up by more than 50 percent this year...”

“US: Soaring Rates of Rape and Violence Against Women”

“The National Crime Victimization Survey, based on projections from a national sample survey, says that at least 248,300 individuals were raped or sexually assaulted in 2007, up from 190,600 in 2005, the last year the survey was conducted. The study surveyed 73,600 individuals in 41,500 households. Among all violent crimes, domestic violence, rape, and sexual assault showed the largest increases. Except for simple assault, which increased by 3 percent, the incidence of every other crime surveyed decreased.”

“Japan Considers Crackdown on Sex Trafficking” LA Times Pearson, 2005

"The Japanese human-trafficking problem is the sex industry," said Kazuo Inoue, an opposition Democratic Party lawmaker and anti-trafficking activist who says the crackdown also needs to address the root cause - demand stoked by loosely regulated red-light districts.”

“Violent crime rates have dropped, except when it comes to sexual assault.
In 2010 Statistics Canada reported the largest overall drop in violent crime since 1999. But sexual assault cases are actually up 5%, increasing for the first time since 2005.”

“Crime Rates Against Women Increase in India.” 2003, tilak, Aljazeera.

The problem of gender-based violence is getting worse. National Crime Record Bureau statistics show crimes against women increased by 7.1 percent nationwide since 2010. There has been a rise in the number of incidents of rape recorded too. In 2011, 24,206 incidents were recorded, a rise of 9 percent from the previous year. More than half of the victims are between 18 and 30 years of age.

“Obama targets sexual assault epidemic.” Mail.com, 2014, Gillum

“A White House report highlights a stunning prevalence of rape on college campuses, with 1 in 5 female students assaulted while only 1 in 8 student victims report it. "No one is more at risk of being raped or sexually assaulted than women at our nation's colleges and universities," said the report by the White House Council on Women and Girls.”


...Of those surveyed, 28% said they had raped a woman or girl, and 3% said they had raped a man or boy. Almost half who said they had carried out a rape admitted they had done so more than once, with 73% saying they had carried out their first assault before the age of 20. ... One in 20 men said they had raped a woman or girl in the last year. (Professor Rachel Jewkes lead research team).
That ruling was a disaster. What the Court failed to understand is that whether the image is real or a composite, so long as it appears to be a child, it has the same effect on the viewer. So the notion that virtual is a good alternative to real is ridiculous.

The practical effect of the ruling is that many judges will not allow a child porn prosecutions to proceed unless the prosecutor can establish that the person(s) depicted is actual. That has meant that many good cases don't go forward - the prosecutor simply cannot track down the child and therefore verify to the court that he or she is real.

Personal Communication, Patrick Trueman, former Chief of the Child Exploitation and Obscenity Section, US Department of Justice
And the wisdom of their wise men shall perish...
Isaiah 29:14
"Give your throat a vacation...

Smoke a FRESH cigarette"

It's the cigarette you have been looking for, so we say: try Camel and see the difference.

It's the peppery that left in tobacco by inefficient smoking methods that makes you cough.

We've actually put smoke of Youk, dust, or tobacco that burns and irritate your throat.

There is no peppery that in Camel—there's whisked away to a special flavoring process.

There are no taste, roughly, pungent, harsh—this sweet and mild Camels of which Camel are blended come to you in prime, smokeable condition, thanks to the Rumford Pack.

This scientific process—wet plate ensures Cellophane, but increases proof.
BAYER
PHARMACEUTICAL PRODUCTS.

We are now sending to Physicians throughout the United States literature and samples of

ASPIRIN

The substitute for the Salicylates, agreeable of taste, free from unpleasant after-effects.

HEROIN

The Sedative for Coughs,

HEROIN HYDROCHLORIDE
Its water-soluble salt.

You will have call for them. Order a supply from your jobber.

Write for literature to
FARBENFABRIKEN OF ELBERFELD CO.
40 Stone Street, New York,
Selling Agents.
NEW CURE FOR DRUNKS

There is a cure for alcoholics that has shed its radiance into thousands of desolate homes. It does its work silently and surely that while the affected loved ones look on, the drunkard is reclaimed, even against his will or without his knowledge.

Tawny Cocaine Port
The cure works like magic, consisting almost entirely of cocaine syrup and weak grapes. If any drunkard drinks copious amounts of this cocaine syrup, they will almost instantly lose their need and want of alcohol and will gain a new want for life and fun.

Dr. Harold Bogg, Founder

Tell them to drink more
then hand them Bogg's tawny port

The cure is cleverly disguised in a valuable port bottle that fools even the hardest of alcoholics.
“I have found that there are four major factors that most predict success in recovery.

- **First**, the individual must be *personally motivated* to be free of his addiction and possess a willingness to do *whatever it takes* to achieve success...you can never force a person to get well if he doesn’t want to.
- **Second**, it is necessary to create a *safe environment*, which drastically reduces access to porn and other sexual triggers.
- **Third**, he should affiliate with a *twelve-step support group*.
- **Fourth**, the individual needs to select a *counselor/therapist* who has had special training and success in treating sexual addictions.”

Victor L. Cline: Chapter 1; “The Pornography Trap; How the mass media affects our values and behavior” : Association of Mormon counselors and Psychotherapists (AMCAP), Vol 1, No. 1, 1975
Can I help you?
Another characteristic of this growth stage is a deep abhorrence of one’s old behavior. Once people in recovery have enough distance from their old problematic behaviors, they often have extremely visceral reactions when they think about them. Many say they look back almost in disbelief at some of the things they’ve done. By the time recovery reaches the growth stage, it no longer involves false starts. Consciousness of sobriety and of richer relationships has brought the person to a new level of being. And it’s at this stage that people in recovery often talk about the compulsion of addictive behavior as a gift. They have experienced a depth of humanity that many people never achieve. Their compulsive or addictive behaviors and subsequent recovery have given them a greater perception, compassion, and presence. Not only do they serve as models for other recovering people who follow them, but they are literally helping our whole society heal.

Patrick Carnes, PhD, *In the Shadows of the Net*, pg 142
Step 12 - The George Bailey Effect
Changing the debate

1. Increase research funding (biological, demographic, behavioral/emotional)
Changing the debate

1. Increase research funding (biological, demographic, behavioral/emotional)
2. More balanced press coverage of research
Porn and Aggression: Fueling the Fire

“This current study analyzes the content of popular pornographic videos, with the objectives of updating depictions of aggression, degradation, and sexual practices and comparing the study’s results to previous content analysis studies. Findings indicate high levels of aggression in pornography in both verbal and physical forms. Of the 304 scenes analyzed, 88.2% contained physical aggression, principally spanking, gagging, and slapping, while 48.7% of scenes contained verbal aggression, primarily name-calling. Perpetrators of aggression were usually male, whereas targets of aggression were overwhelmingly female. Targets most often showed pleasure or responded neutrally to the aggression.”

Sexual desire, not hypersexuality, is related to neurophysiological responses elicited by sexual images

Vaughn R. Steele, PhD\textsuperscript{1,2}, Cameron Staley, PhD\textsuperscript{3}, Timothy Fong, MD\textsuperscript{4} and Nicole Prause, PhD\textsuperscript{1,4*}

\textsuperscript{1}The Mind Research Network, Albuquerque, NM, USA; \textsuperscript{2}Department of Psychology, University of New Mexico, Albuquerque, NM, USA; \textsuperscript{3}Counseling Center, Idaho State University, Pocatello, ID, USA; \textsuperscript{4}Department of Psychiatry, University of California, Los Angeles, USA

\textbf{Background:} Modulation of sexual desires is, in some cases, necessary to avoid inappropriate or illegal sexual behavior (downregulation of sexual desire) or to engage with a romantic partner (upregulation of sexual desire). Some have suggested that those who have difficulty downregulating their sexual desires be diagnosed as having a sexual ‘addiction’. This diagnosis is thought to be associated with sexual urges that feel out of control, high-frequency sexual behavior, consequences due to those behaviors, and poor ability to reduce those behaviors. However, such symptoms also may be better understood as a non-pathological variation of high sexual desire. Hypersexuals are thought to be relatively sexual reward sensitized, but also to have high exposure to visual sexual stimuli. Thus, the direction of neural responsivity to sexual stimuli expected was unclear. If these individuals exhibit habituation, their P300 amplitude to sexual stimuli should be diminished; if they merely have high sexual desire, their P300 amplitude to sexual stimuli should be increased. Neural responsivity to sexual stimuli in a sample of hypersexuals could differentiate these two competing explanations of symptoms.
Pornography addiction – a supranormal stimulus considered in the context of neuroplasticity

Donald L. Hilton Jr., MD*

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Addiction has been a divisive term when applied to various compulsive sexual behaviors (CSBs), including obsessive use of pornography. Despite a growing acceptance of the existence of natural or process addictions based on an increased understanding of the function of the mesolimbic dopaminergic reward systems, there has been a reticence to label CSBs as potentially addictive. While pathological gambling (PG) and obesity have received greater attention in functional and behavioral studies, evidence increasingly supports the description of CSBs as an addiction. This evidence is multifaceted and is based on an evolving understanding of the role of the neuronal receptor in addiction-related neuroplasticity, supported by the historical behavioral perspective. This addictive effect may be amplified by the accelerated novelty and the ‘supranormal stimulus’ (a phrase coined by Nikolaas Tinbergen) factor afforded by Internet pornography.
‘High desire’, or ‘merely’ an addiction? A response to Steele et al.

Donald L. Hilton, Jr., MD*

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The validity of an argument depends on the soundness of its premises. In the recent paper by Steele et al., conclusions are based on the initial construction of definitions relating to ‘desire’ and ‘addiction’. These definitions are based on a series of assumptions and qualifications, the limitations of which are acknowledged by the authors initially, but inexplicably ignored in reaching the firm conclusions the authors make. Yet, the firmness of these conclusions is unwarranted, not only as a result of conceptually problematic initial premises but also due to problematic methodology.

(ERPs) and a subsequent description of their study design, followed by results and discussion, and culminating in the following summary:

In conclusion, the first measures of neural reactivity to visual sexual and non-sexual stimuli in a sample reporting problems regulating their viewing of similar stimuli fail to provide support for models of pathological hypersexuality, as measured by questionnaires. Specifically, differences in the P300 window between sexual and neutral stimuli were reliably produced in the sample (of men).

It demonstrates a naiveté with regard to what is now an accepted understanding of current reward neuroscience, in that it pronounces sexual desire as inherent, immutable, and uniquely immune from the possibility of change either qualitatively or quantitatively. Even more critically, however, as illustrated by the Steele et al. paper, is that this myopic dogma fails to comprehend the truth that neuroscience now tells us that ‘high desire’, when it results in compulsive, unwanted, and destructive behavior, is ‘merely’ an addiction.
Changing the debate

1. Increase research funding (biological, demographic, behavioral/emotional)
2. More balanced press coverage of research
3. Understand the addictive nature of pornography, and treat it accordingly
Since pornography can be an addiction, these “just say no” types of approaches are likely to only create more frustration and self-defeating ideation... the intervention and treatment modality must recognize the problem as a full addiction, and treat it with the same consideration given to alcohol or chemical substances.

Dr John Mark Haney
Therapist
813 students from six colleges
87% of the young men and 31% of young women view pornography
48.4% of young men view at least weekly
20% view daily or every other day

Changing the debate

1. Increase research funding (biological, demographic, behavioral/emotional)
2. More balanced press coverage of research
3. Understand the addictive nature of pornography, and treat it accordingly
4. Understand betrayal trauma and support family members of those who are addicted
Although their partners were not in actual contact with other females, these women clearly viewed the pornographic activities as a form of infidelity. The theme that runs through their letters is that the man has taken the most intimate aspect of the relationship, sexuality, which is supposed to express the bond of love between the couple and be confined exclusively to the relationship, and shared it with countless fantasy women.

Bergner and Bridges, 2002
Journal of Sex and Marital Therapy
Changing the debate

1. Increase research funding (biological, demographic, behavioral/emotional)
2. Seek more balanced press coverage of research
3. Understand the addictive nature of pornography, and treat it accordingly with regard to those who are affected
4. Understand betrayal trauma and provide support structure for family members of those who are addicted
5. Decide to personally make a difference
Silence in the face of evil is itself evil: God will not hold us guiltless. Not to speak is to speak. Not to act is to act.

Deitrich Bonhoeffer
“We will have no truce or parley with you, or the grisly gang who work your wicked will... You do your worst - and we will do our best...

We ask no favors of the enemy. We seek from them no compunction. We do not expect to hit without being hit back, and we intend with every week that passes to hit harder. Prepare yourselves, then, my friends and comrades, for this renewal of your exertions. We shall never turn from our purpose, however somber the road, however grievous the cost, because we know that out of this time of trial and tribulation will be born a new freedom and glory for all mankind.”

Winston Churchill
July 14, 1941