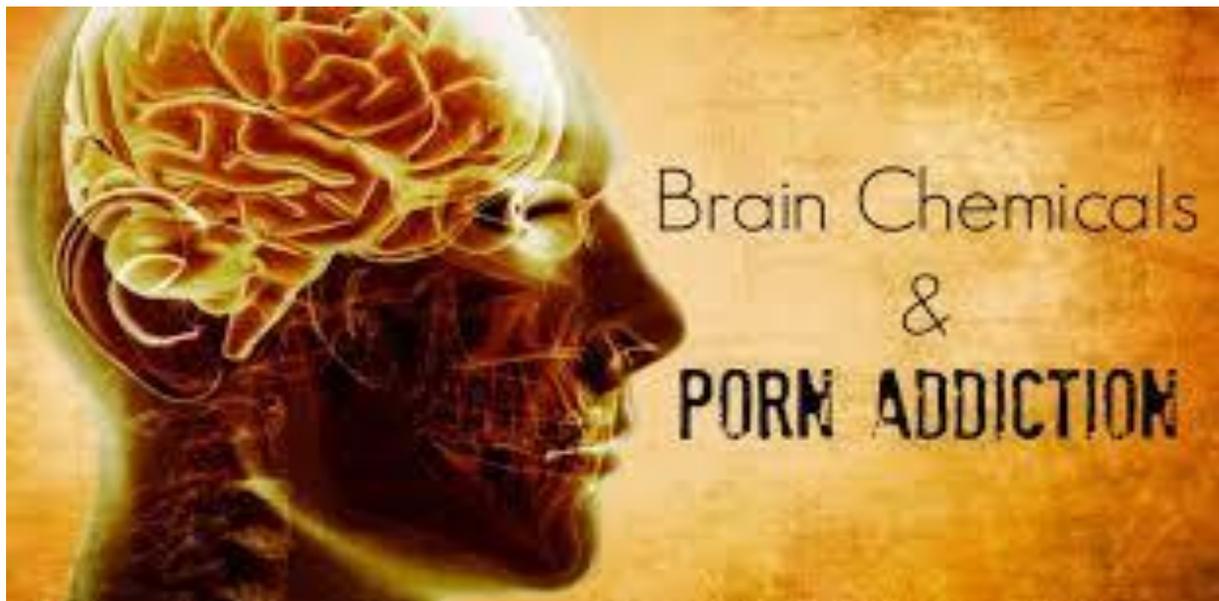
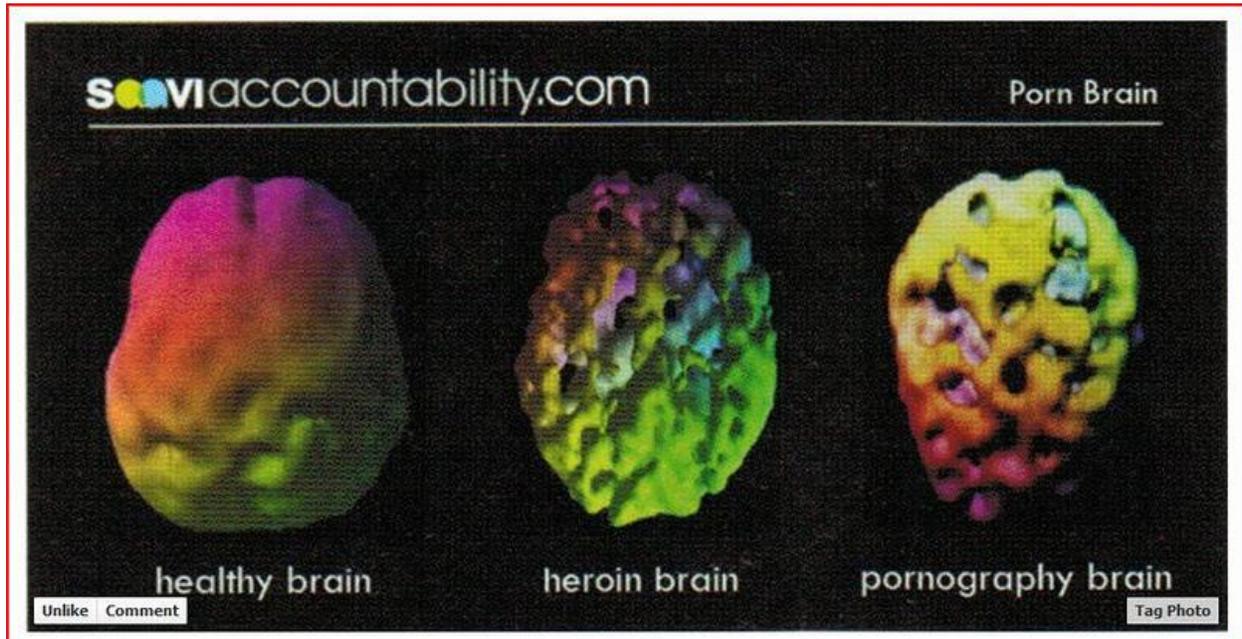


Daily Life with Christ-81: Understanding brain addictions. Behavior-induced brain addictions: Pornography (how it shrinks the brain and sexual intimacy).



To recap, the aim of this study has been to provide better understanding regarding the science of brain addictions and pathologies. Seems like at the beginning of every new year, Christians and non-Christians dogmatically make New Year's resolutions to kick some bad habit, some vice. In their immaterial higher selves, they have desires that are perennially overcome by their lower desires. E.g., they know (higher immaterial self) they should not eat or drink so much, but year after year many fail because they are overcome by their lower sense appetites (lower corporeal self). Their immaterial minds are hijacked by their "diseased/abnormal" physical brains.

We have also noted the nature of love (both licit and illicit) in man as the primary drive. We are all inescapably drawn to what we perceive as our greatest good, our loves. The goal in achieving a mature and fully human life is to live by proper knowledge and proper love. As far as knowledge, we have noted both the cognitive life (which processes only about 40 bits of information a second) as well as the cognitive unconsciousness life (which processes about 10 million bits of information a second).

We have noted how psychoactive drugs change the brain and in so doing hijacks the mind. We have noted the three areas of the brain that are changed: the VTA, nucleus accumbens, and prefrontal cortex. We have also noted that God does not have a brain and thus should never be thought of as having these areas of the brain. God is not a big or Infinite Man.

Following this, we have noted how psychoactive drugs like caffeine, nicotine, alcohol, marijuana, cocaine, amphetamines, and opioids can rewire, change the chemistry of, the brain. We have also noted that there are certain compulsive behaviors that also rewire the brain in much the same way as psychoactive drugs—as noted in our look at the Gambler’s Brain and the effect of junk food on the brain.

This article is about how pornography changes, rewires, corrupts, and shrinks the brain—how pornography can cause disease in an otherwise normal functioning brain. In sum, the same neural circuits that motivate us to eat high-calorie foods and take drugs also motivate us to be fruitful and multiply. These circuits reward us handsomely whenever we engage in sex, and they motivate us to do so. Again, this is one of the things our reward circuit was designed for by God. After all, if we were not motivated to have sex, we might not have any children.

As designed by God, our brains are adapted for an environment in which sexually provocative stimuli are rare. Before magazines, televisions, computers, and the internet, it was actually pretty rare to see someone without any clothes on unless one was married or see others engaging in sexual activity.

Western culture changed all of that. In contemporary culture, we are inundated with images of naked or nearly naked people constantly. In fact, two out of three shows on television today include significant sexual content. And that proportion only increases during prime time. Many of today’s shows either depict or strongly imply sexual intercourse.

And television is nothing compared to pornography. Getting reliable statistics on pornography is difficult but it is estimated that pornography accounts for about 80% of total pay-per-view Internet content. An analysis of 400 million Web searches found that about 20% were looking for erotic content. Other studies have indicated that the most-common query terms were sexual in nature. As these numbers suggests, the pornography industry is an incredibly big business. The amount of revenue is about 30 billion dollars annually. That is larger than annual revenue of Netflix, Yahoo, and the National Football League combined.

Clearly, porn is another example of a modern-day supernormal stimulus. In fact, it can be even more stimulating than psychoactive drugs or junk food. Whereas in simpler and more virtuous times, it would be relatively rare to see sexually provocative literature, now it is as simple as a click of your mouse.

Neuroscientific studies of porn addiction (e.g., via brain imaging) have shown the same neural effects of supernormal stimuli that are very similar to the effects of hard drugs. Recall in our previous studies that dopamine is the “dope” molecule that is associated with incredible wanting or craving. Psychoactive drugs and certain behaviors (junk food, porn, gambling) flood the brain with dopamine, which then creates the brain addiction, and with brain addiction the brain goes from normal and healthy to abnormal and diseased—e.g., the VTA floods brain with dopamine, the nucleus accumbens is numbed, and thinking in the prefrontal cortex is inhibited). Instead of a rational life governed by thought and enjoying a healthy pleasure center, the person lives by irrational self-destructive cravings—living more like an animal than a human being made in the image of God.

With regard to pornography, neuroimaging of men shows that the more men expose themselves to pornography, the least neural activity in the reward circuit. This is consistent with the idea that they have developed a brain tolerance to sexually provocative images and a numbed reward response. Those who expose themselves to porn cut new pathways in the brain, which then causes the person to think about illicit sex with the slightest environmental clues. Just like a drug addict will uncontrollably crave drugs due to environmental clues (like seeing a needle), just like a junk food addict will uncontrollably crave junk food as the sight of certain foods (sugary or salty snacks on the kitchen counter), a porn addict will experience uncontrollable craving of illicit sex at the sight of the least proactive image. There is a physical change in the brain that takes place that causes the porn addict to have nothing but sex on the brain. Given the prominence of sexually suggestive images in our culture, it is very difficult for a sex/porn addict to enjoy a healthy thought life. He becomes a slave to his sex cravings, cravings which when acted upon will be less satisfying than it would otherwise be—like the drug addict and his drug. They are never satisfied.

Again, science has demonstrated conclusively that porn consumption “cuts” and runs on the same pathways in the brain as cocaine and other hard drugs. As the levels of consumption and addiction have increased in our culture, neuroscientists have begun studying the brain through functional MRIs to see the impact of porn consumption (of all levels) on the brain. Porn not only changes the function of the brain, it changes the structure of the brain. Parts of the brain actually begin to shrink with increased exposure and other parts become desensitized (nucleus accumbens, the pleasure center). So, like an alcoholic builds up a tolerance for alcohol, people who use porn build up a tolerance. The result of the increased use of porn is increased levels of sexually deviant thoughts and behavior—higher levels of fetish or extremes in porn are needed to continue the same level of excitement and dopamine release in the brain. And with that, porn users begin to find less interest in their spouses and increasing preoccupation with levels of interest in “newness” of other partners and extremes in sex to be simulated. The more illicit activity they expose themselves to, the less they enjoy in licit sex, lovemaking with the spouse. Another downside is that male porn users have higher levels of erectile dysfunction including ability to orgasm than non porn users.

The more porn exposure and activity a person actualizes, the more dopamine is supercharged in the brain, which then leads to addiction and loss of impulse control. As this activity increases, parts of the brain are diminished—the brain actually shrinks. The parts of the brain wired up for

love, romance, intimacy and emotional connections shrinks by atrophy. The beauty of lovemaking is lost. The transcendentals are lost as sex is reduced to merely the physical pleasures from the physical acts, and if it is only physical, it will diminish over time, leading to increasing insatiability and deviance. The person who has cultivated a porn brain becomes more like an animal than a loving person made in the image of God.

One of the greatest uphill battles to becoming free from these chemical and structural changes in the brain is self-justification, spawned by improper knowledge and improper love. If one does not live by proper knowledge and proper love, improper knowledge and improper love will motivate one to justify the activity because it feels good and will resent anyone or anything that tries to take it away (which is in fact a precursor of addictive behavior). This is common among drug addicts, sugar addicts, and porn addicts. But, like it or not, MRI brain scans show many holes in the brain scans of cocaine and porn addicts. We are talking about science and the brain.

The truth is that not everything that we like or that feels good... like alcohol, drugs, sugar, and high-risk activities... is good for us. Many will argue that their porn use doesn't impact their brain, relationships and isn't addictive or damaging. Even when shown brain scans of all levels of porn users and what's happening to their brains – with science that really shows with great definition that porn consumption is not healthy and is as addictive and damaging as other substances – often they will deny the science in favor of what turns them on. They will often claim that their relationship and sex life aren't suffering right now—they think they are the exception to the science and are not impacted whatsoever. However, not every fantasy, not everything that turns our crank or lights up our dopamine centers is good for us. We are not animals. We are so much more! We are made in the image of God!

Again, for both sexes, porn addiction causes dramatic areas of brain shrinkage and a ripple effect of issues not just sexually as far as erectile and climax issues, but in people's ability to enjoy healthy emotionally connected sex with a spouse and thus maintain satisfaction and joy within relationships.

There are healthy ways of increasing dopamine levels and making one feel good that don't cause shrinkage in the brain (or in the pants). Life in God brings great love for God and love and respect for all others is chief among them. Proper knowledge and proper love for God promotes healthy and respectful thoughts for all others, seeing others as possessing infinite value—rather than viewing them as sexual objects.

Of course, the first step to being cured is that the person must want to change—as with the drug addict. If he does not want to change, there is no help. For those who desire to change, the first step is the same as all other drug-induced or behavior-induced addiction: change behavior. This begins with controlling one's environment (just like with drug or food addiction). We become what we actualize in our lives. For porn-induced brain diseases, this means avoiding all porn.

The fact that the brain is pliable is both good and bad news. The bad news is that it is easy to damage one's brain, to cultivate a deviant brain/mind, through drugs and certain behaviors. The good news is that the brain can be changed back to normal by healthy behavior, and healthy thoughts. This is best accomplished by the Christ-centered life. However, this does not mean it

will be easy. It would be easy if we were just immaterial beings, but we are not. We are both physical and immaterial: we have both physical brains and immaterial minds—and they are so intimately connected that what happens to one happens to the other.

In the Christ-centered life, the believer avoids porn and thus avoids problems associated with a shrinking brain, a dysfunctional sexual life with his/her spouse, and being a slave to illicit thoughts and desires. By a healthy spiritual life, the believer is able to fully enjoy sex as a God-given gift for the expression of love and union in marriage without any of the pernicious consequences associated with a porn/deviant/diseased brain. By life in God, the believer is able to more fully enjoy the blessedness of licit sex.

For the Glory of God,

Pastor Don