# How we struggle

## Our dopamine driven world...

Dopamine — the reward response in the brain

- "Feel good" hormone... linked to pleasure and satisfaction
- Makes something feel rewarding... therefore you want to keep doing it
- In other words, it fuels motivation.
- Gives sense of pleasure and reward

# How we struggle

#### Healthy ways we get a dopamine release:

- Activities that are enjoyable good food, winning a game, making a basket, good music, exercise
- Achieving a goal marking something off a to-do list, finishing something, completing a task, exercise
- Anticipation of something enjoyable planning a trip, looking forward to something you desire
- General health things high protein food, certain kinds of food, sleep, sunlight (Parkinson's disease affects dopamine...
   high doses of sugar and junk food give dopamine hit...)

Interestingly, pain blocks the release of dopamine, which is why pain relief feels so good.

# How we struggle

We can become addicted to things that give us that pleasure response... especially if it's an easy thing to do.

- Working in the garden can give us a dopamine hit, but it's harder to get addicted.
- Scrolling on our phone gives us an easy dopamine hit, and therefore it gets easy to be hooked.
- Over time, we need more of the drug or "drug" to get the same level of hit (tolerance).

# Unhealthy ways to get dopamine response:

- Drugs...
- Digital use: screens, phone scrolling, clicking on things, Facebook likes...video games...
- Shopping (esp online)...

Look for activities we have have trouble disengaging from: can't put my phone down... can't stop working

#### One <u>very</u> unhealthy way to get a dopamine response:

Pornography...

"Our brains were designed for the occasional spurt of dopamine to fuel our motivation. With pornography, we're given a firehose. Consequently, especially with the advent of smartphones in 2007, pornography addiction has become rampant." (covenanteyes.com, "Porn and Dopamine: Superstar or Supervillain?")

Pornography delivers a more potent dopamine punch than cocaine!

- The initial dopamine spike in pornography is not as high as cocaine, but it's more sustained, for longer.
- Pornography warps our brain like hard drugs and alcohol do.

No surprise... dopamine (with other God-given brain chemicals) really hurts our brains with pornography.

We damage and poison our brain when we enslave ourselves to pornography.

Brain scans show the porn addict has a shrunk brain like an alcoholic.

#### Stages of pornography enslavement in the brain

1. Sensitization of the "drug".

Sensitization

2. Desensitization of everything else.

De-Sensitization

3. Your brain shrinks the good voices.

Shrinks

4. The whole rollercoaster sinks.

Sinks

https://www.utahvalleypsychology.com/pornography-addiction-science-fact-or-science-fiction-2/

- 1. Sensitization of the "drug".
- We start to be hyper-sensitized to the source of the pleasure chemicals.
- Images are seared into the brain.
- We start to crave the thing that gave us such a high.
- We start associating the associated things: where you were, time of day, your computer or phone, your mental state, the problems you were trying to avoid, etc.

  Sensitization

2. Desensitization of everything else.

So that our brain doesn't overload, it starts dialing down on dopamine reception in the brain and reduces stimulation.

- Because we've overfed the brain, it literally makes everything less pleasurable.
- It's similar to how we respond to loud noises...

We start caring less about the other things that should give us that sense of reward.

De-Sensitization

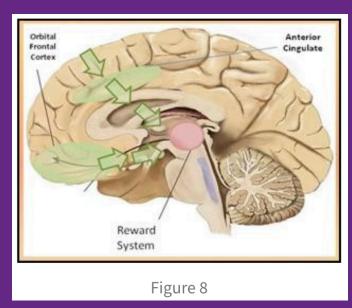
"Food, friends, family, work/school achievements, social activities, and dating are our major sources of pleasure and stimulation. These important activities drive us to form healthy relationships, and learn social skills.... The loss of receptor sites during desensitization changes how a person experiences normal sources of pleasure.... These important and healthy survival resources become weaker and less enjoyable. We then need higher sources of dopamine, such as pornography, to help us feel normal levels of pleasure. Over time, individuals addicted to porn spend less time with family, friends, intimate partners, and seeking achievements. Sources that used to bring pleasure are no longer sufficient and are replaced by pornography."

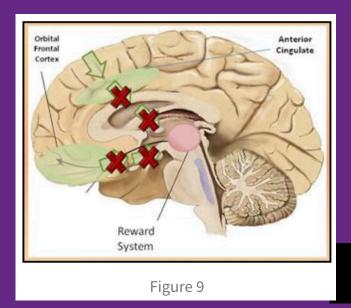
Dr. Robert Dindinger, https://www.utahvalleypsychology.com/porfact-or-science-fiction-2/

De-Sensitization

- 3. Our brain shrinks the good voices.
- To maintain the drug, our brain starts with sensitization and de-sensitization. But after a while, your brain is affected in more drastic ways to achieve a more permanent dopamine pipeline.
- Hypofrontality the shrinking of the parts of the brain you use to say "no" to your urges.
  - "I'd love to color on the walls with crayons, but last time I did that, I got in big trouble!"
  - "It would be a lot of fun to skip school, but I want to get good grades. So I'll buckle down and do my homework."

- 3. Your brain shrinks the good voices.
- Sadly, as the enslavement increases, our brains have shrunk the parts of the brain we need to make good and righteous decisions.





Shrinks

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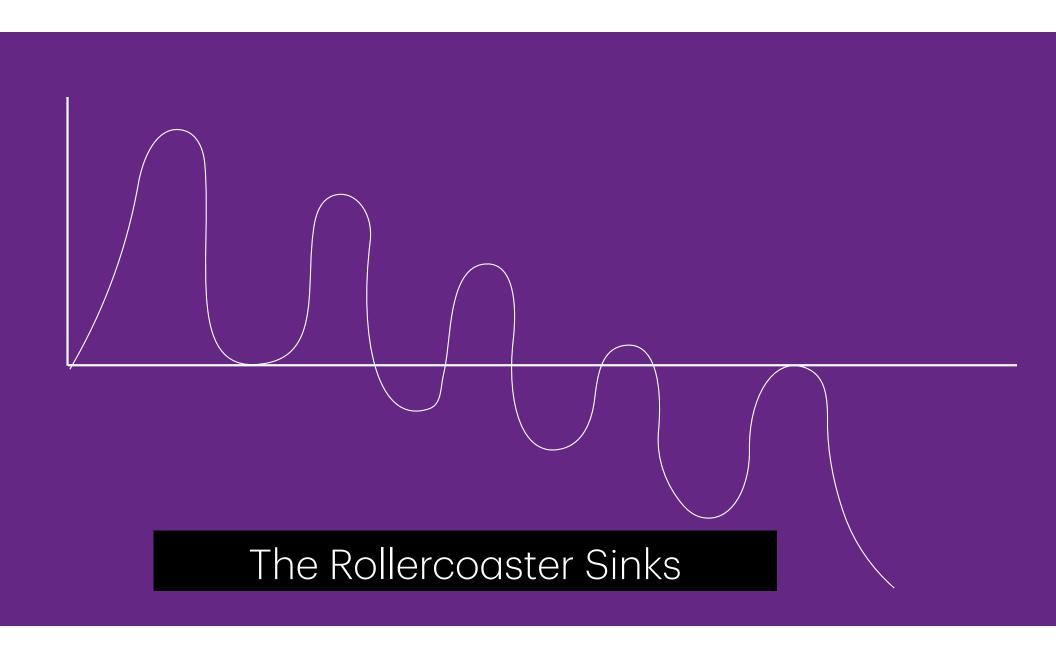
- 3. Your brain shrinks the good voices.
- Sadly, as the enslavement increases, our brains have shrunk the parts of the brain we need to make good and righteous decisions.
- "Cambridge researcher Dr. Valerie Voon found that the brains of porn addicts look a lot like the brains of drug addicts, both displaying similar damage to the frontal lobe.... That means the more porn you watch, the harder it is to make rational decisions regarding porn." (covenanteyes.com, "Why is Porn Addictive")

"Many who reached this stage find that they are seeking and engaging in pornography even when they really do not want to. Individuals who are trying to quit viewing and engaging in pornography often report that they...feel like they are on auto pilot.... When these areas of the brain are shut down, other damaging activities occur. For example, people at this stage tend to make more risky decisions and engage in increasingly risky behaviors (Nestler & Malenka, 2004). Some move from pornography into sexually deviant and/or illegal behavior.... Morals begin to change."

Dr. Robert Dindinger, https://www.utahvalleypsychology.com/pcaddiction-science-fact-or-science-fiction-2/

Shrinks

- 4. The whole rollercoaster sinks
- Eventually, the pornography does less to make us feel good... and it serves more and more to keep you from feeling bad.
- You think the drug is going to keep giving you a high, but after a while it's just trying to keep you from always feeling so bad!
  - Your body starts making you feel terrible until you get your fix.
    - It's sounding an alarm that you need to rush back to your drug!



4. The whole rollercoaster sinks

"The dopamine deficit means they no longer experience pleasure from their drug of choice, but they must consume it just to feel normal. For many, watching pornography serves only to numb the pain they experience on a daily basis. As one commenter on our blog said:

'Porn might feel like our little safe place ... but that's a lie. It's a little self-isolating hell...'" (covenanteyes.com, Porn and Dopamine: Superstar or Supervillain?)

"[Another brain change] is an alteration of the bodies normal stress responses.... Prolonged exposure to pornography hijack the body's stress responses to promote pornography seeking and engaging behavior (Macmillan, 2009). When the body senses that triggers related to pornography are not being acted on, the body starts releasing stress hormones.... In order to end the stress response, the individual... [engages] in pornography seeking behavior. This is analogous to the seatbelt alarms that are now in most cars. The alarm keeps ringing in an attempt to promote enough discomfort for you to decide to put your seatbelt on. For pornography addicts, the stress and discomfort felt from the altered stress system makes avoiding pornography very difficult."

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Sinks

#### Here's the stages we looked at:

## Stages of pornography enslavement in the brain

- 1. Sensitization of the "drug".
- 2. Desensitization of everything else.
- 3. Your brain shrinks the good voices.
- 4. The whole rollercoaster sinks

Your homework for next class:

What would wisdom from God's word say how to counter each of these four steps, to help the person addicted to pornography conquer their slavery?

Sensitization

De-Sensitization

Shrinks

Sinks