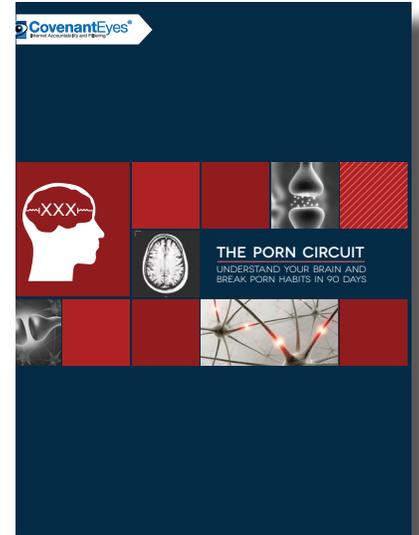


Pornography and the Brain

Thank you for sharing this presentation with others. You are going to change people's lives.

This guide and script are designed for a 40-minute presentation. It is based on the free Covenant Eyes ebook *The Porn Circuit: Understand Your Brain and Break Porn Habits in 90 Days*, which can be found at www.covenanteyes.com/ebooks. You should print, read, and highlight the ebook before giving this presentation, because that will help you answer questions that are bound to arise from your audience.

Rehearse this script until it feels comfortable. Trying to memorize the script probably won't work. Instead, we encourage you to print a copy of this script, highlight it, and use it during your presentation to help you stay on track. Be conversational and don't worry about reading the script word for word, except when directed or where you feel it is helpful. Time yourself during practice runs so you can deliver the material you feel is most important during the time you have allotted.



Slide 1

(Leave this slide up while people enter the room so they know they are in the right session. In your own words, introduce yourself and give a brief description about your session that fits your audience.)

Slide 2

(Explain to your audience that they don't have to take notes. Everything you present can be found in a free download of *The Porn Circuit: Understand Your Brain and Break Porn Habits in 90 Days*. This book is free at www.covenanteyes.com/ebooks.)

Slides 3 through 6

(In your own words, use these slides to discuss how porn is seeping into homes and causing harm.)

Slide 7

An obsession with porn on the surface doesn't seem logical. Aren't people just doing what they want?

Slide 8 From The Experts

It should be easy to say, "I think porn is causing pain in my life, so I'm just not going to look at it anymore." After all, when you touch a hot stove, your brain says, "Ouch, that burns. No more of that!"

If shame and negative feelings follow porn use, and a person promises not to view it again, shouldn't that be enough to ensure they won't seek porn weeks, days, or even hours later?

But unlike the hot stove, porn is exciting, it can completely capture one's attention, it distracts a person from any other thought, and through masturbation it delivers a potent dose of euphoria.

Slide 9 Between Your Ears

In a simple scenario the brain says, “I saw porn, the body masturbated, it felt good. In the future, let’s do it again. Really, I need this again. I’m not sure I’m getting what I need, how about a little more?” Mix in the anxiety of using the forbidden, the fear of being caught, and the secrecy of repetition and the brain learns even more and gets powerful cocktails of signals and hormones that ensure future cravings.

Interestingly enough, our brains have the right idea, but the process has been hijacked. We were created to say, “My spouse is attractive to me. When we bond it captures my complete attention. When we touch, I feel aroused, cared for, loved, and I enjoy a spiritual connection. I feel not only a physical rush but also a deep bond with my spouse and sexual satisfaction. This person is part of me, let’s do that again soon.”

SLIDE 10 – Myths Vs. Neurological Learning

Many people, especially men, are stuck because they believe myths or lies about their use of porn.

- Read 1st part of slide
- Ask your audience: Do you hear other excuses? What are they? (Wait and listen. Acknowledge your audience’s perceptions of the lies and myths people believe about why someone is stuck in porn.)

Neurological Science

The science of neurology is showing our brains can be molded like plastic by our repeated experiences. This is called brain plasticity, and people *learn* to associate sexual arousal with specific stimuli, according to Dr. Norman Doidge who wrote *The Brain That Changes Itself*.

READ

Dr. Doidge explains that “human beings exhibit an extraordinary degree of sexual plasticity compared with other creatures” (p. 94). By “plasticity” he means that our brains and our sexuality are molded by our experiences, interactions, and other means of learning, which is why people vary in what they say is attractive or what turns them on. The brain actually creates neural pathways that say a specific type of person or activity is arousing.

Biological explanations are often too simplistic, he argues. After all, strong muscles on a man might predict he can protect his offspring, but a woman may find a man’s voice more attractive than the surface of his body. In past centuries, women in art were often large by today’s standards of super-thin fashion models. Doidge calls these preferences “**acquired tastes**.”

READ

“Acquired tastes are initially experienced with indifference or dislike but later become pleasant—the odors of cheeses, Italian bitters, dry wines, coffees, patés, the hint of urine in a fried kidney. Many delicacies that people pay dearly for, that they must “develop a taste for,” are the very foods that disgusted them as children.”

Slide 11 Elizabethan Love Apple

In Elizabethan times lovers were so enamored of each other's body odors that it was common for a woman to keep a peeled apple in her armpit until it had absorbed her sweat and smell. She would give this "love apple" to her lover to sniff in her absence. We on the other hand, use synthetic aromas of fruits and flowers to mask our body odor from our lovers. Which of these two approaches is acquired and which is natural is not so easy to determine.

A substance as "naturally" repugnant to us as the urine of cows is used by the Masai tribe of East Africa as lotion for their hair—a direct consequence of the cow's importance in their culture.

Many tastes we think "natural" are acquired through learning and become "second nature" to us. We are unable to distinguish our "second nature" from our "original nature" because our neuroplastic brains, once wired, develop a new nature, every bit as biological as our original.

This will come as sad news to many. The attraction, compulsion, and even addiction to porn are learned behaviors, which means people play a huge role in their own habituation. Don't blame it on biology or evolution. A person hunts porn because they taught their brains that it is arousing, an outlet of sexual expression, and a means of escape.

Slide 12 Brain Science

People often misunderstand addiction, believing a substance must be inhaled, taken orally, or injected into the body. The truth is that the body produces everything needed for a chemical addiction, it just needs a repetitive action. This is true of gaming and gambling addictions as well.

Let's examine some of these chemicals.

Dopamine

Dopamine is one of the superheroes of the brain, because it has so many powers.

If someone could siphon away your dopamine, it would be worse than sitting in a vault of Kryptonite. Even Superman wouldn't do much of anything. He might not even eat or drink.

Dopamine...

- focuses your attention.
- motivates you forward.
- activates or enhances rewards circuitry that make you feel good.
- plays a major role in memory. It helps us to recall what is important in our environment, and to remember the appropriate response to a stimulus.

Have an apple handy for an easy prop and a bit of humor

Ask for a volunteer (*Guys are best*) and bring him to the front with you. Ask the volunteer to put the apple in his armpit, and describe the "love apple" example to the left. As you finish, tell them you don't want that apple back. Tell them to give away their "love apple" to someone in the audience.

Dopamine “fuels the tension and craving for meeting a need,” Dr. William Struthers writes in *Wired for Intimacy, How Pornography Hijacks the Male Brain*. That’s why dopamine is released in response to all drugs of addiction, and plays a role in many disorders affecting motivation and attention such as obsessive-compulsive disorder and behavioral addictions.

So let’s recap. Dopamine helps the brain remember what is interesting and how to respond to it. It focuses the mind on a specific task while other concerns are ignored and says, “Hey, do this now!” It provides a neurological reward that feels good, and assists in cravings for more of the activity.

Without doubt, dopamine is either a superhero or a super foe, depending on whether an activity affects a person positively or negatively.

Testosterone

Though it’s not listed on this slide, I think it’s important to discuss testosterone in men.

1. Testosterone dramatically increases sexual arousal and desire.
2. It is released in men throughout the day, but when sexual cues are picked up by the brain the testes increase production.
3. Because testosterone is slow to dissipate, and men who habitually view pornography cause their own chemical imbalance. They build up an excess of testosterone in their system, and it causes their own hyper sexual awareness.

Slide 13

Norepinephrine

- Helps one to be more alert.
- It also acts as a hormone for sexual arousal, and sexual memory.
- It helps us burn emotional experiences in our minds. Whether it’s a wonderful sexual experience with our spouse or a provocative sexual image, the information is stored for easy recall with the help of norepinephrine.

Slide 14

Oxytocin

Oxytocin is often referred to as the bonding hormone.

- Big releases arrive when mothers and fathers hold their newborn babies.
- It plays a big role in sexual bonding to one’s mate.
- It is often called the cuddle hormone because oxytocin levels rise when a couple snuggles, hold hands, or express other intimacy. In his seminars, Dr. Todd Bowman of Lifeline Counseling Center encourages married couples to enjoy face-to-face sex that provides as much skin contact as possible for the greatest release of the bonding chemical.
- Oxytocin is one reason a kiss is so powerful.

Because oxytocin is also released in climax, it can have a **negative impact for the porn user**. Instead of bonding to a real mate, the porn viewer’s brain bonds to the image, video, or situation, especially when the activity is reinforced through repetition.

Endogenous Opiates

People were designed to have an amazing sexual experience. The body produces natural or endogenous opiates, which during climax provide pain relief and a sense of **transcendence and euphoria**.

Slide 15

Serotonin

Serotonin is released after climax and brings feelings of calm, wellbeing, and satisfaction. High serotonin levels also decrease sexual motivation. These factors help explain why men are often accused of being ready for a nap after sex.

SEGUE

Of course, your skull is more than a chemical bathtub. All of those hormones and neurotransmitters are actually interacting with the physical brain and its neural connections.

Slide 16 Creating Neural Pathways

Allow me to emphasize significant points before we move on.

1. Remember, the lifelong ability of the brain to wire and rewire its neurocircuitry is referred to as brain plasticity or neuroplasticity.
2. This brain neuroplasticity also operates under a dynamic of “use it or lose it.” Do an activity more often and the brain will create neural pathways that make an activity easier to think about and complete. Have you ever tried something new and the more times you did it the easier it was to do? Of course. That’s because repetition helps our brain build neural pathways for the activity.
3. Repetition helps you learn anything. But because sexual activity launches such an amazing fireworks show in our brains, it takes less repetition to build these porn pathways than it would for us to engrain cravings for other activities.

Slide 17 The Porn Rut

To better understand the porn rut, it’s important to explore scenarios common to porn use and even addiction. There are four words we need to keep in mind: Sensitization, Triggers, Desensitization and Hypofrontality.

Sensitization

A person who uses a pornographic image or story and masturbates for the first time begins a learning process of how to respond to porn in the future. With repetition the brain responds not only to the initial stimulus, but also to related stimuli. **After a person becomes sensitized, very little is needed to trigger a response; a superhighway is connected to the rewards circuitry.**

Triggers

Cigarette smokers can name a list of activities that spark a physical and mental desire for a smoke: drinking a cup of coffee, finishing a meal, sipping alcohol. These cues are called triggers, and when presented the brain gets a shot of dopamine that motivates a person to smoke, ingest nicotine, and fire the rewards circuitry of the brain.

Triggers also surface for porn and masturbation

- These sensitization cues can vary greatly from person to person depending on their gender, marital status, environment, and the types of porn and activities they use.
- Being home alone is a trigger for some people to view porn.
- Some people lie awake at night, taunted with thoughts of getting up to view porn online and masturbate while the family sleeps.

Desensitization

Though not true for everyone, many porn users find they need a greater amount or more intense porn to activate a state of arousal.

The brain has decided after multiple porn excursions that this amount of dopamine isn't normal. So it has reduced the amount of dopamine in response to porn, and it has reduced the number of dopamine receptors for the neural circuits associated with porn use.

To escape this desensitization, people, and men especially, expand their pornographic tastes to more novel stimuli. What was once considered hardcore—a heterosexual couple engaged in intercourse—is now considered mundane, Doidge says. Varied forms of sex mixed with force, violence, and humiliation are now fused into today's pornographic scripts.

Hypofrontality

Compulsiveness is a good descriptor of hypofrontality. Many porn users feel focused on getting to porn and masturbating even when a big part of them is saying, "Don't do this." Even when negative consequences seem imminent, impulse control is too weak to battle the cravings.

The prefrontal cortex is the decision making part of the brain, but it has become weak.

Slide 18 Mixed Emotions

Shame and guilt often play a role in addiction. Instead of fleeing the activity that is causing the guilt, people often return to its temporary escape. This contributes to a cycle of addiction: Feeling bad, acting out to escape, feeling the rush of orgasm, then feeling bad again. Then the cycle repeats itself.

Slide 19 - Pathways

Quote from Dr. William Struthers (*Wired For Intimacy*, pg. 85):

“Like a path is created in the woods with each successive hiker, so do the neural paths set the course for the next time an erotic image is viewed. Over time these neural paths become wider as they are repeatedly traveled with each exposure to pornography. They become the automatic pathway through which interactions with women are routed. The neural circuitry anchors this process solidly in the brain. ...All women become potential porn stars in the minds of these men. They have unknowingly created a neurological circuit that imprisons their ability to see women rightly...

Repeated exposure to pornography creates a one-way neurological superhighway where a man’s mental life is over-sexualized and narrowed. It is hemmed on either side by high containment walls making escape nearly impossible.”

Slide 20 Carve New Neural pathways

Neurologists show that to overcome bad habits and addictions, a person needs to build new and positive habits in his or her life, which will in turn create new and positive neural pathways.

Simply avoiding bad habits leads to failure. New and rewarding pathways are needed to avert crashes.

While that sounds simple, dopamine-driven habits that have been developed over years of repetition are extremely difficult to ignore in favor of new healthy alternatives.

Optional information: Men and women who have masturbated to pornography since adolescence have massive numbers of pathways and cues that lead them back again and again to pornography. The desire feels more like a survival need, similar to food, water and shelter. Avoiding acting out feels unhealthy, both physically and mentally. How will they cope with stress, boredom, painful memories, sexual impulses, and even their daily routine?

There is likely no single magic formula, no one-size-fits-all recovery system, but therapists and neurologists point to common strategies and steps that lead to real and long-term freedom.

Slide 21 - Eureka!

Most of us have had moments of clarity that often came after working at a problem for some time. It might be an insight into the future that helps a person decide to take a new job, or for lovers to marry.

Finding a eureka moment of decision comes with a stark realization and a clarity of purpose. Recovery from porn needs a eureka moment, a splash of cold water, a wake-up call, a line drawn in the sand. Thought, knowledge, and understanding are needed to understand porn is the problem and that escape is paramount.

In the case of pornography, this “aha” moment may come amid a crisis. When a person’s secret love affair with porn is discovered by loved ones it can cause heartbreak, disappointment, and anger. In 56% percent of divorce cases, pornography is listed as a major contributing factor to the split. (1) The

knowledge that one's marriage can be part of such a dismal statistic can be highly motivating and can spark a new point of clarity.

Moments of clarity about pornography are everywhere. Finding one or several to cling to is a first step to escaping porn.

Of course, making the choice to change is the start of a formidable battle. Now, the time has come to take action.

Slide 22 - 90-day goal

Dr. Mark Laaser and several other therapists and neurologists say **the first step to escaping pornography is to pull out a calendar and establish a 90-day goal** in which porn and masturbation are to be cut off. (7) A person may use the calendar on their smart phone or computer if they like, but they should use a calendar they will look at every day.

Dates of celebration should be noted to recognize progress, such as Day 3, Day 5, Day 7, Day 14, Day 25 and so on. Positive treats or rewards will vary from person to person, but it's valuable to reward and recognize those milestones along the way.

The long-term goal is to actually stop the porn and masturbation cycle completely, but 90 days of escape is the first goal to achieve. And for many it will look like a mountain, a period of porn and masturbation abstinence they have not known for years or even decades.

It's time to use the brain to fight back. Remember, we talked about the prefrontal cortex? The prefrontal cortex is the decision making logical part of the brain, and each time that a person resists temptation and each time a positive habit is reinforced, the prefrontal cortex gets stronger. That means a person's willpower grows and the cues and cravings for porn use grow weaker.

This time period is awash with peril. **Often during this time people will say to themselves, "I've been doing well. I need a little relief. One more time won't hurt."** Giving in to porn or masturbation will increase recovery time, stall one's progress, and worse, make the effort a failure. It is self-defeating.

If a person does act out, they should take note of how the fall occurred and avoid that temptation. Get back to a 90-day plan and don't give up. If the fall is an isolated slip, Dr. Laaser says restarting the 90-day clock isn't necessary. But a deep binge with porn or a series of falls means it's time to restart the 90-day period of abstinence.

Read

Why 90 days, even abstinence?

First of all, a person needs to learn that they won't die without sex, especially for 90 days. But more importantly, the person struggling with pornography or sex addiction needs to work proactively about learning true intimacy.

- It takes 14 days to detox.
- 30 days to begin to gain confidence
- 90 days to begin learning about genuine intimacy. Sex is not equal to genuine intimacy. Sex is one expression of intimacy.

For someone with an obsessive porn habit or an addiction, the focus has been on personal and immediate gratification.

Varying cultural, social, and psychological issues have robbed a porn user of their potential for intimacy. And this 90-day period without sex is an optimal time to learn and grow.

What does intimacy look like? There is no formula for intimacy, it's individual to couples but it has a lot to do with giving and sharing. Consider reading, praying, cooking, and taking walks together. Many couples have forgotten how to play and have fun together. Couples need to explore non-sexual means to express intimacy, and after the 90-day break, they will find this discovered intimacy will make their sex life even stronger and more fulfilling, Laaser says.

Slide 23 - Clean House

Ninety days will seem like a long haul for a person starting this journey, and it will be impossible to avoid temptation if there are secret stashes. When Cortez decided to invade the world of the Aztecs in 1519, he burned his ships so there was no easy way to back out.

People committed to battling porn must set their “porn escape routes” ablaze.

Slide 24 - Clean Computers and Mobile Devices

Internet pornography is likely the greatest source of porn temptation for people today. WiFi access is everywhere and laptops and mobile devices make porn access a click away.

Filtering is helpful, but filters are a lot like a fence. It keeps young kids in the yard, but a teen or an adult will knock on the fence to find a weak spot or search for an open gate. That's why I recommend Internet Accountability, which monitors how the Internet is used and sends a report to an Accountability Partner you choose. Anytime you knock on the fence to test your limits it shows up on your report, and that allows a good conversation, so you can discuss your temptations with a friend or mentor.

Slide 25 – The 3A's

Dr. Al Cooper described a Triple-A Engine that draws people into online sexual activity: accessibility, affordability, and anonymity.

These three factors work like three legs on a stool: remove just one of the legs and the stool will fall (or at least make it awkward to sit on).

The leg easiest to break is anonymity.

Many therapists agree that Internet Accountability software is one of the most effective ways for a person to protect themselves or their loved one online. Accountability software encourages a person to think before they click and avoid temptations, which builds up the willpower and decision making of the brain's prefrontal cortex. It also allows mentors to provide guidance and arms them with accurate information for in depth conversations with the person who is struggling.

Slide 26 – How Does Covenant Eyes Work?

I've told you a little about how Covenant Eyes works. But here is a little more detail.

Covenant Eyes is owned by Christians, and it is the only company in the world that provides ratings for the Internet pages that you or your kids visit. Every page is rated similar to how video games and TV shows are rated, such as T for Teen and M for Mature.

This information is provided in a report and is emailed to an Accountability Partner you choose for yourself, and you can receive reports for your kids.

Covenant Eyes provides software for Windows and Mac computers, Android phones and tablets, and iPhone, iPad, and iPod touch. You may choose to use Accountability or use both Accountability and Filtering for each member of your family.

Optional information: In 2011, a Fuller Theological University study showed that using Covenant Eyes with Motivational Interviewing (basically, encouraging discussions) provided a 66% decrease in relapse episodes, compared with a control group.

Lee wrote: "First, not only can both Covenant Eyes and MI be effective in reducing the frequency of pornography use, many participants in the study were able to completely eliminate porn use after entering the study and reported zero relapse episodes. Second, Covenant Eyes and MI, when used together, appear to contain much promise in helping people really make a change in their pornography use patterns."

Slide 27 - New Habits, New Pathways, and Dopamine Rewards

Simply avoiding porn isn't the answer. New positive activities are needed. Keep in mind the neurological concept of "use it or lose it." Avoid an activity and its desire will wane, pursue an activity and it will become more engrained.

New and positive habits need to be introduced and they need to be rewarding and entertaining.

Yes, entertaining! It's not an uncommon cross addiction for the average addict to be a workaholic also. So finding ways to recreate, relax, and experience quiet time. Wood working, reading scripture daily, and hiking are just a few examples of healthy pasttimes.

Don't forget to exercise because it naturally feeds the body dopamine and endorphins.

READ

“This approach (of introducing positive habits) makes plastic sense because it grows a new brain circuit that gives pleasure and triggers dopamine release which, as we have seen, rewards the new activity and consolidates and grows new neuronal connections,” Dr. Doidge writes in *The Brain That Changes Itself*. “This new circuit can eventually compete with the older one, and according to use it or lose it, the pathological networks will weaken. With this treatment we don’t so much ‘break’ bad habits as replace bad behaviors with better ones.”

Slide 28 – What to Do Now

Whatever rewarding activity is pursued, it needs to be an activity that is reoccurring. Building new rewarding neural pathways requires time and ongoing repetition.

1. **Neurons that fire together wire together.** Repeating a pleasurable activity instead of the compulsive activity, such as porn use, forms a new circuit that is gradually reinforced instead of the compulsion.
2. **Neurons that fire apart wire apart.** When a person refuses to act on a compulsion, like porn and masturbation, it weakens the link between the activity and the idea that it will provide relief.

Slide 29 - Pure Thought

“For as he thinks, so is he.” Proverbs 23:7. This verse from the ancient writings of Solomon is backed by neurology. From the concept of “**use it or lose it,**” **fantasizing about porn and sex equates to “using it”** or practicing the very thing you are hoping to avoid.

When people close their eyes and visualize a simple object, such as the letter *a*, the primary visual cortex lights up, just as if it would if the subjects were actually looking at the letter *a*. Brain scans show that in action and imagination many of the same parts of the brain are activated.

Inappropriate thoughts can be combatted with positive thoughts, such as thinking of a new hobby, playing music, repeating an inspiring quote, or some other positive activity. Mental and physical escape routes should be prepared in advance to ward off sexual thinking. Of course, each time temptation is resisted the person’s decision making power grows stronger.

Addressing the Pain of the Past

Although ineffective and addictive, pornography and masturbation are often used as a salve for pain, anxiety, depression, self-doubt, anger and other unhealthy feelings. These emotions and misgivings are often deeply rooted, stemming from childhood, teen, and even adult trauma, abuse, or wounds. All families have healthy and unhealthy qualities, and even mistakes “create wounds in the human spirit,” Dr. Laaser teaches.

Blaming others and avoiding responsibility for porn use or sex addiction will not help someone get well, but the person should acknowledge the wounds they suffered and accept that they did not deserve them. Rather than burying painful memories, which may include physical, mental, and sexual abuse, these memories need to be brought to the surface where they can be discussed and reviewed with a good friend or a counselor.

Vigilance

The road to recovery is a heavyweight bout. A boxer keeps his gloves up to protect his face, his elbows down to protect his ribs, and his eyes focused on his opponent's every move. In recovery, lowering one's guard is like begging for a sucker punch. Stop being vigilant and the addictive habits can ease back into life and again claim control.

People in recovery have fresh memories of their obsessions, and they must be on guard to dodge and block the cues, triggers, and temptations that face them daily. Because the memories of pornography and the neural pathways that were created for porn will remain, vigilance must be part of everyday living.

Positive Thinking

Saying you "can't" is a convenient excuse for a lack of patience, perseverance, and hard work. You must cling to the truth that you "can."

Florence "Flo Jo" Joyner, the world's fastest woman who captured three gold medals in the 1988 Summer Olympics, offered this mantra: "Believe, achieve, succeed."

Studies show that the Little Engine Who Could had the right idea. Telling one's self, "I think I can," produces results. Positive thinking often begins with **positive self-talk** or unspoken thoughts that are optimistic in the face of challenges. Positive thinking lowers rates of depression and distress and improves coping skills during times of hardship or stress. It can even increase lifespan. (21)

Slide 30 - Becoming Something New

Whether the person started using porn in adolescence or adulthood, their goal is not to become what they once were. One's mind can never return to innocence. Rather it can grow into something new.

Imagine that brain activity is like Play-Doh and that everything a person does shapes it. If the Play-Doh started as a square and it's rolled into a ball, it's possible to make a square again, but it won't be the exact same square. The molecules of the Play-Doh have been rearranged. The "cure" doesn't mean returning to the preexisting state.

The neural system is plastic, not elastic... An elastic band can be stretched, but it always reverts to its former shape, and the molecules are not rearranged in the process. The plastic brain is perpetually altered by every encounter, every interaction.

Men and women who immerse themselves in 90 days of abstinence can create within them positive desires, fresh competence, and steadfast willpower. **The old mental tracks will remain, but can be ignored for new positive habits.** Each person makes a unique journey with individual outcomes. After more than a year of freedom, many describe their sexual desires with positive confidence and self-assuredness. Others, view their recovery as a fragile freedom.

Whether characterized as cast iron or fragile glass, freedom is achievable and worth fighting for one day at a time.

- The End, Time for Questions and Answers -