



GOD'S WORK OF ART – YOUR BRAIN

This lesson will focus on how substance abuse can impact youth's ability to experience joy.

On Substance Abuse, Session 1 – Beacons of Joy

LESSON DEVELOPED BY

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GOAL

Substance Abuse as a “Joy Inhibitor”

TIPS TO PREPARE

- Read through the teaching plan and handouts.
- Preview the video, and if you have time, view the optional additional videos.
- Collect magazines and cut out images. (If you have time, you might put these into individual plastic sheet protectors, but that is optional.)
- Spend some time in prayer and reflection for the youth in your session, and for other young people facing problems with substance abuse.
- Read and reflect on the scripture texts for this session (below).

MATERIALS CHECKLIST

- Spread magazine photos out across a large table enabling students to walk around the table to view the images
- Chairs (or on-floor seating) are in a circle
- If a white board or newsprint is available, or on a power point slide, display the NRSV text of Eph. 2:10 so that students may see it as they enter.
- Glue sticks
- Posterboard or newsprint for collage

SETTING THE ATMOSPHERE

- Optional: music playing during image selection/gathering time
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SCRIPTURE FOCUS

- Psalm 104:14-15
 - Psalm 139:14-15
 - Ephesians 2:10
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Purpose

The goals of this session are:

1. To introduce youth to the topic of substance abuse and addiction through the lens of their impact on the ability to experience true joy.
 2. To provide a science-based understanding of addiction as a resource for theological reflection.
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Objectives

In this session, youth will: identify features of life associated with joy and flourishing; learn about differences between substance use, abuse, and addiction; explore how our brains are made by God to be “pre-wired for joy” and how substance abuse interrupts that by offering false joy.

Further Study

Video Resources:

1. "Addiction: What is it?" from be smart be well.com, available on Vimeo at <https://vimeopro.com/video2goil/bsbw/video/63840329>
2. "The Reward Circuit: How the Brain Responds to Natural Rewards and to Drugs" (2 minutes), available on YouTube
3. Animated video "The Science of Addiction" by Life Noggin (2 minutes), available on YouTube

Books and Websites for Background:

1. Daniel J. Siegel, M.D., *Brainstorm: The Power and Purpose of the Teenage Brain, An Inside-Out Guide to the Emerging Adolescent Mind, Ages 12-24*. New York: Jeremy P. Tarcher/Penguin, 2013.
 2. Omar Manejwala, M.D., *Craving: Why We Can't Seem to Get Enough*. Center City, MN: Hazelden. 2013.
 3. National Council on Alcoholism and Drug Dependence website: NCADD.ORG
 4. Substance Abuse and Mental Health Services Administration website: samhsa.gov
 5. National Institute on Drug Abuse website: www.drugabuse.gov
 6. Hazelden Betty Ford Foundation website: hazeldenbettyford.org
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Gather

Gather (5 minutes)

- Opening Prayer
 - Greeting One Another
 - Introduction of Session
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Engage

Engage (30 minutes)

- Give each person a small sheet of paper or index card and a pen/pencil. Ask them to take one minute to think about how they would define addiction. Then pairing up with another (or in threes if that suits your group better), ask each pair/trio to quickly construct and write down a definition of addiction based on their current understanding. Remind the participants that because substance use and addiction are complex, there is no single, perfect definition, and that perhaps various pairs will bring up different aspects that are important to include. Have the groups share these quickly, with the leader writing key words from their sharing on newsprint or white board.
- Watch the brief video “Addiction: What is it?” (be smart be well.com; also on Vimeo and YouTube) Ask the group how the ideas about addiction shared by speakers in the video support or change the ideas that group members mentioned in their definitions. The key elements of the video’s presentation of addiction are:
 1. addiction is a disease;
 2. addiction involves changes that happen in a person’s brain that cause them to lose control over their use of a substance even though using it brings on negative consequences;
 3. addiction can happen to anyone.

Bring the discussion to a close with the following: For us as Christians, we can also understand substance abuse and addiction as a “barrier” or “impediment” to the joy God desires for us: it takes away our freedom to make choices; it narrows the focus of life away from love of neighbor and self toward love of a drug; and because of how drug abuse changes our brains, the “fake joy” in substance abuse makes us less able to experience real joy.

Activity 2: “Joy, Drugs, and Our Brains”

Share the following information with the group, using the handouts provided in the resource section as teaching aids.

Option: you may wish to use one of the following two-minute video resources available on YouTube, plus discussion to introduce this topic, either instead of or in addition to communicating the information-points below: “The Reward Circuit: How the Brain Responds to Natural Rewards and to Drugs” (2 minutes); or the animated video “The Science of Addiction” by Life Noggin (2 minutes).

The Human Brain: God’s work of art for our enjoyment of life

1. Not all substance use is substance abuse or addiction. Read Psalm 104: 14-15. Remind participants that there are multiple scripture texts that describe wine as something given for humans to enjoy, and that tell of it being used in celebratory ways (e.g., Jesus and the wedding at Cana).

“*Substance use*” simply refers to ingesting a substance (e.g., alcohol) or a engaging in a behavior (e.g., gambling, internet gaming) that can change one’s mood.

“*Substance abuse*” is when a person uses more frequently, and perhaps uses more of, a drug

or alcohol, even though it has some negative consequences for them. For example, a college student who continues to engage in “binge drinking” several times a month, even though it causes her to be physically ill and to miss classes, is engaged in substance abuse.

“*Addiction*” is persisting in using alcohol or other drugs even when harmful or negative consequences result. When the college student begins to develop *cravings* (an intense desire for alcohol), *tolerance* (she must use more alcohol, more often, and/or in stronger forms to get the same effect as she did initially), and *withdrawal* (feelings of physical illness that come from the absence of the drug), these are signs that she is addicted.

3. What’s the brain got to do with it? Our brains have a system of cells called the “dopamine reward system.” Dopamine is a neurochemical that gets released in our brains when we do certain things like connect with a friend, have a good meal, or accomplish a task we’re proud of, brain. When levels of dopamine rise, we feel a sense of well-being and goodness. Scientists suggest that this brain chemistry rewards us with good feelings when we do things that contribute to our survival and well-being. You might even say that the dopamine reward system is the *biological* aspect of joy—it’s responsible for the sense of well-being we experience. In other words, while joy cannot be reduced to a neurochemical event in the brain, it seems that God created us with brain chemistry that is the biological basis for that sense of well-being and flourishing we associate with joy, all the way down to the cellular level, in the way our brains work! Ephesians 2:10 tells us that “we are what God has made us, created in Jesus Christ for good works, which God prepared beforehand to be our way of life.” Sometime the beginning of this verse is translated, “We are God’s work of art!” Nothing makes that clearer than the artistry of the human brain. God designed us for joy: read Ps. 139: 14-15. substance abuse becomes a barrier to joy when it changes our brain circuitry.
4. Here’s the problem: the brain’s reward system doesn’t just get activated by things that are good for us. Substance use, along with certain behaviors like gambling, also can activate the dopamine reward system in the brain, causing higher amounts of dopamine to be released, which means that the person experiences dopamine’s effects at an even greater level of intensity. *And, we tend to repeat actions for which we are rewarded.* This brain response to the substance (e.g., alcohol) or behavior (e.g., internet gaming) thereby reinforces repetition of it: we want to play the internet game again/longer/at the next level, to get even more of this reward affect; to have another drink. For some people that is not a problem: they still have control over how much they drink or of their gaming.
5. But as they continue to use a drug like alcohol more often and in greater amounts, the brain begins to change. Using more of a drug, more often, or gambling for higher stakes, causes dopamine “spikes” which the user feels as *an intense reward* for the behavior.

So the brain “learns” that drug use or internet gaming will bring about the dopamine surge and therefore *it stops making and releasing as much natural dopamine.*

5. When the elevated dopamine level caused by substance use drops, the fall from the peak back to the baseline of dopamine feels especially low. This creates conditions for a craving to develop for whatever substance or behavior brings about the dopamine surge. Over time, the brain’s reward system begins to respond with a surge of dopamine not only to the active use of the substance, but also to planning, imagining, and anticipating its use.
6. As more of a person’s time, energy, and resources go into using drugs, there begin to be negative effects in multiple areas of life (job, school, relationships, interests in other

activities), but the person continues to use. In fact, they use even more, to activate the dopamine reward system and to stave off the cravings and bad feelings that come when the effects of the substance wear off. The reason “just say no” doesn’t work is because this compulsion to use is not under the conscious control of the person—it’s based on what is going on with the dopamine reward system in the brain. Addiction is when a person continues to use a substance or engage in a behavior repetitively and compulsively, even though doing so has negative consequences in their life.

7. Teenagers are especially vulnerable to substance abuse and addiction because their baseline dopamine levels are lower, meaning that when the reward system is activated, the “reward spike” they experience delivers a stronger reward, thus reinforcing repetition of behaviors like substance abuse or excessive internet gaming.

Reflect

Reflect (20 minutes)

Activity 3: Think-Write-Talk

Write Eph. 2:10 on a board for everyone to see, or have participants locate it in bibles. Beneath it, write, “Even our brain cells are designed by God for joy!”

Ask each participant to think/meditate on their own silently for 2 minutes on this scripture verse and about what they have seen in the video/ heard in the presentation. Then instruct them to write down key words or phrases to complete the following:

- (1) One thing I heard that sticks with me is _____.
- (2) Right now, thinking about substance use and addiction, I am feeling _____.
- (3) What it means to me that I am God’s work of art is _____.

Invite volunteers to share. (If no one is willing to share in the whole group, have them do this in pairs.)

Send Forth

Send Forth (5 minutes)

Collage Prayer: Close the session by passing out glue sticks to share, asking each person to glue onto a large poster board their chosen “image of joy” magazine picture to create a collage of joy.

You might wish, as a form of silent prayer, simply to invite people to look upon the images and soak in what these images say about the genuine joy God desires for our lives and of which God is creator and source, a joy inhibited by substance abuse’s fake joy. Spend a few minutes in silence and closing with a simple “You are God’s work of Art! Go out in joy, Amen.”

Or you might follow the formation of the collage with this form of prayer: gathered in a circle holding hands, explain that after a minute of reflection on the images in the collage, you will open the prayer by praying aloud. You then will gently squeeze the hand of the person to your right. Each person in the circle offers their prayer either silently or aloud, “passing it along” to the next person by squeezing the hand of the person to their right, until this prayer chain reaches the leader again who concludes the prayer by saying, “Go out from here as God’s work of art; as people seeking *real* joy. May God’s joy equip us all to guard ourselves from forms of fake joy like substance use that can harm and distort our lives away from the amazing abundance God has in mind for us. Go in the peace, joy, and knowledge of God’s love for you in Jesus Christ and in the Holy Spirit. And let all God’s people say **Amen.**”