

Q.

What is brain process involved that creates what participants describe as using dreams?

Α.

I don't know about the brain process being any different than when we all experience stress dreams. According to a study published in science daily (https://www.sciencedaily.com/releases/2019/02/190212190849.htm) use dreams seem to be more common in people in recovery with more severe addiction histories. But the dreams tend to lessen over time. According to the authors, these dreams are connected to psychological angst around being in recovery. And the longer the person is in recovery, the more the angst decreases, so there are not so many use dreams.

Q.

I had heard that an addict brain's, no matter which drug, will heal as much as possible in 2 years of sobriety. Is that true?

Α.

There is not hard rule about the brain healing or changing for X number of years. We know that people in recovery for 5 years have less risk of returning to use than people in recovery for 2 years. So the brain is continuing to heal, the motivation pathway is continually being strengthened to avoid using with new connections being made constantly. The conditioned response to using decreases over time, beyond 2 years, showing ongoing changes to the brain.

0.

Why when people going through treatment, doctor's telling patients not to use sugar?

 $\mathsf{A}_{\text{-}}$

It could be for two reasons, probably both.

First, sugar activates the brain's reward areas by increasing dopamine release in the nucleus accumbens the same way drugs and alcohol do. The stimulation of the reward center may trigger cravings for the drug of choice, leading to a higher potential for return to use.

Second, sugar itself is an addictive substance. As I wrote above, its intake leads to increased dopamine release in the nucleus accumbens (the reward center) and can lead to an addiction to sugar just as if it were cocaine or alcohol. Food addictions lead to the same kind of decreased dopamine receptor activity as drugs of abuse in the brain illustrations in my talk. Treatment providers are wary of people substituting one addiction for another, like sugar for alcohol. We are also careful that our clients do not substitute a gambling addition for a drug or alcohol addiction.



How/why did you go from neuroscientist to judge? What inspired the change?

- It was a burnout story. I got burned out working in the lab and decided to pursue a different path. When I went to law school, I thought I would do patent law or intellectual property law, but I loved being in the courtroom. I ended up as a public defender in Detroit but moved to Northern New Mexico in 2011. I practiced family law in tribal and state courts. The Pueblo of Pojoaque liked my style and invited me to apply to be their judge in 2013.
- Does the brain generally go back to square one in terms of dopamine receptors when they relapse?
- With a short term return to use, after the brain has healed, it doesn't go back to the same place it was when the person was deep in use. We know this because when people with months of sobriety have a return to use, they are generally able to get back on track fairly quickly and don't lose all the momentum and ability to process information that they have gained.
- Can that also explain depression in people with trauma history?
- Not sure what this refers to but trauma history and depression are often linked and have many of the same symptoms.
- Can I be reminded of who the person was that she mentioned who did the Ted Talk where Rat Park was addressed?
- Johan Hari
 https://www.ted.com/talks/johann_hari_everything_you_think_you_know_about_addiction_is_
 wrong?language=en



Should programs look to extend past a year to a minimum of 18 months or longer to allow further brain recovery?

I think that would generally be a good idea because it gives a longer period of stable recovery for the person to build habits of recovery and focus on building recovery capital. Adding six months of aftercare with regular check-ins after graduation is a what we've attempted to accomplish. There was a study that showed that checking in with graduates regularly, even without any power over the graduate, increases the likelihood that they will stick with recovery.

But it's hard if you lose jurisdiction over the person after a year for misdemeanors. The person has no reason to answer your calls. Some love staying connected but most are done. Adding a mandatory extra six months is a hard sell to keep people in a program that would be longer than their misdemeanor probation term.

- What is a Trauma Certification? How long was the trauma training? Do you recommend a particular Trauma Certification program? What is the contact information regarding the Trauma Certification?
- My staff and myself did a general certification after a six part self-directed online trauma training through the International Trauma Training Institute (https://traumaonline.net/). There was a test after each part and a final test we had to pass to get a certification. The one we took was treatment focused with some discussion of what is happening physiologically.

I think there are lots of trauma trainings available online or by request for court staff. So don't get hung up on getting a trauma certification because it does cost about \$200 for each person. I would seek out more general trainings, like through NADCP.

- How far do you go with rules reduction? On Zoom, I am seeing parents try to Vape or smoke during hearings and I feel like that's too lax (and don't allow it) but would you allow that? You talk about power and control, but isn't that the participant trying to push back on norms and rules?
- For Zoom, I expect people to be in a quiet place where they can fully participate. I don't think I would have a problem with someone smoking during a Zoom hearing if it wasn't interfering with participation. But it could be pushing back against norms since obviously they couldn't smoke in the courthouse. Each court/judge has to have their own limits and adhere to their own philosophies. One judge I know absolutely will not allow hats in the courtroom. My rules reduction goes farther than any other judge I know of. I don't allow clothing with marijuana or drug or alcohol references because that potentially affects other participants by being triggering.



- Is the sample progress note available? It would be nice to have a copy
- I've attached the fake weekly progress note. Our weekly report is tied to our database, so each team member can input data in their arena (UA results, update treatment progress, MH meeting, AA/NA meetings, etc.) and then we can all review it.
- With using those specific questions- do the participants ever feel (report) like too much information is being given to the courts? Like their privacy is being compromised.
- I haven't had the problem of participants feeling like the court gets too much information. Of course we have all releases of information signed. The participant doesn't see the weekly report, that is a staffing tool that we don't even print out: we share it on a large monitor in the courtroom and on screenshare for Zoom. The treatment providers of course have professional confidential obligations, even with a release of information.

Clients sometimes get unhappy about me asking about returns to use or other negative actions from the week that may lead to a sanction. They don't want their peers to know, but that it part of wellness court.



To know the real effects of a brain scan wouldn't we need the scan of the individual prior to substance use? How do we really know that the Brain never fully gets back to what is considered normal for the individual? Also, if someone gets into substance use would they not have less dopamine and higher serotonin levels prior to the development of addiction compared to someone who never experienced addiction associated with the control group? P.S. very good information thank you so much!!! Also, for all those interested in more information with the connection between addiction and trauma. I would recommend" In the Realm of Hungry Ghost: Close Encounters with addiction" by Gabor Mate... it is a must read for those involved in addiction and drug courts.

I love Gabor Mate. Excellent book.

Yes, to be scientifically rigorous, the person would be scanned before substance misuse, but that's not going to happen, of course. We don't know for sure that the brain does not go back to what it was like before use but we know that after even decades of sobriety, people in recovery can be triggered into use or be tempted to use their drug of choice.

The interplay of dopamine, serotonin, and other neurotransmitters in addiction is highly complicated. Different people have different drugs of choice (like alcohol rather than opioids) potentially because of the different levels of the various neurotransmitters and receptors. Everyone's brain is different. There are lots of factors that may make someone more susceptible to becoming addicted, including genetics, trauma history, environmental factors (stress), and epigenetics. Scientists are working to tease out the factors that lead to addiction or can help someone recover.



Can you talk about resilience and how that can be identified and supported?

I think of resilience as the brain healing. We see it with positive actions taken by our participants and encourage any positive steps. Like showing up at the beginning, even if late. Eventually, participants will start showing up on time and actively participating in their treatment. This, to me, is the resiliency of the brain healing over the months of the program.

Because stress is so closely linked to return to use, I encourage my staff to be positive about participants and reduce stress/fear of non-compliance. Of course, probation officers have a very different role than treatment providers but our PO's try to create positive interactions that encourage positive strengths-based change.

Of course, not everyone succeeds. Some abscond or simply do not improve no matter what efforts the team is putting in or are detrimental to the other participants (disruptive, etc.)

- What certificate or title, should we look for when referring a client for trauma therapy? Is it a trauma certified clinician?
- There are lots of certifications that treatment providers may have, depending on their license. One common title is Certified Clinical Trauma Professional (CTTP). It's important to make sure that the treatment provider has some specialized trauma continuing education or coursework. Ask the treatment provider about their experience or training in trauma therapy to make sure they are qualified.
- How should a case manager approach a client who shares he needs help dealing with his PTSD, but when the appointment is made... he doesn't show up?
- In that case, I have the case manager keep trying to reach out and reschedule. If the person is interacting with other team members, they will work together to remind the person of the importance of showing up for the appointment. Sometimes it will take a while to get the person to buy-in and you might have to let it go until more trust is established. The person may not be ready yet.









This project was supported by Grant No. 2019-MU-BX-K005 awarded by the Bureau of Justice Assistance. The Bureau of Justice Assistance is a component of the Department of Justice's Office of Justice Programs, which also includes the Bureau of Justice Statistics, the National Institute of Justice, the Office of Juvenile Justice and Delinquency Prevention, the Office for Victims of Crime, and the SMART Office. Points of view or opinions in this document are those of the author and do not necessarily represent the official position or policies of the U.S. Department of Justice.