

Daily Life with Christ-70: Understanding brain addictions (9): Psychoactive drugs and the 3 characteristics of brain addictions: (1) abuse, (2) dependence, and (3) excessive craving.



We have noted the two levels of human thinking (consciousness, cognitive unconscious), the three parts of the brain involved in brain addiction (prefrontal cortex, nucleus accumbens, and ventral tegmental area, for illustration see Daily Life with Christ-59), and how our timeless God cannot be confused with human thinking or a human brain with all of its sequential processes and parts.

Now I would like to move into three characteristics of brain addictions and the various types of substances involved in brain addictions: caffeine, junk food, nicotine, alcohol, marijuana, opioids like heroin, and stimulants like cocaine and methamphetamines. Before we get started, a word of warning: please do not use this scientific information on brain addictions to judge or look down on others who may suffer from some brain addiction. There are many wonderful and loving people of incredible virtue and love for the Lord who suffer from one brain addiction or another. Hardly anyone escapes from some compulsive behavior. The goal is to understand the physical changes in the brain that leads to addiction. Understanding is the first step to addressing any problem.

First, a few definitions and descriptions, starting with “drug.” A drug is any substance that changes biological function when it is introduced into the body from the outside. Cocaine, heroin, and marijuana all satisfy this definition, but so does antacids.

Second, “psychoactive” drug. A psychoactive drug affects the function of the brain and produces psychological effects like changes in mood, perception, and cognitive. Because psychoactive drugs change brain chemistry, they are often addictive. We can see the difference between a “drug” and a “psychoactive drug” by comparing an antacid with cocaine—the antacid does not cause physical changes in the brain, cocaine does. Psychoactive drugs are not limited to hard drugs like cocaine and heroin. Nicotine, alcohol, and caffeine are also psychoactive drugs.

Third, using a psychoactive drug is different than being addicted to a psychoactive drug. Many psychoactive drugs are used in contemporary medicine every day without any problems. For example, opioid drugs like morphine and codeine can be very addictive, but they are still the choice in medicine for the management of pain. Under the supervision of a doctor, these treatments do not usually lead to addiction. Moreover, millions of people use psychoactive drugs recreationally from time to time, and the vast majority of them do not become addicted. E.g., there are a great many people who use alcohol, a psychoactive drug, on a regular basis without becoming alcoholics.

Fourth, while addiction is not always easy to define precisely, there are three dominant characteristics: (1) abuse, (2) dependence, (3) craving. Recall, that we have noted the three areas of the brain that are physically changed in brain addictions: the prefrontal cortex (thinking) is inhibited, the nucleus accumbens (pleasure center) is numbed (requiring more and more drug for the same effect), and the ventral tegmental area (craving) is overstimulated.

Let us note the three dominant characteristics of brain addiction (due to abnormal physical change in brain chemistry). First, abuse. In all addictions, whether it is junk food, caffeine, or alcohol, there is abuse. Regardless of negative consequences, the person continues to use the psychoactive drug. For example, alcoholics often continue drinking despite the significant liver damage. Even in the face of the destruction of their beloved wife and children, an alcoholic will continue abusing alcohol. The abuse of alcohol increasingly leads to neglecting major responsibilities in life, like personal health and occupation.

A second characteristic is a dependence. Drug addicts depend on their drug, both psychologically and even physically. As they develop tolerance to the effects of the drug, they need more and more to get the same effect. If a drug addict abruptly quits taking the drug, he will often experience very unpleasant physical and psychological symptoms. The addict needs the drug just to feel normal; he just can't function properly without them. This is true both of coffee/caffeine as well as cocaine.

The third hallmark of addiction is craving. Whether the addictive substance is sugar, caffeine, cocaine, or alcohol, the addict suffers from an extremely strong desire or urge for the substance. This craving can be so strong that the addict may find it difficult to think about anything else. The person becomes completely obsessed with getting more of the psychoactive drug. Any environment factor, like seeing a candy bar, a beer bottle, or a needle, will induce an almost irresistible craving.

It must be remembered that these abuses, dependences, and cravings are physiologically as well as psychologically based. Man is not a soul that just happens to have a body for locomotion. Man is soul/body composite which means that the physical is as real and powerful as the immaterial/spiritual. It is not just a matter of personal willpower from the immaterial soul. The soul is linked inextricably to the body so that the state of the body has a profound influence on the soul (just think of the action and thinking of a person's soul when it becomes inebriated through the body).

The brain is part of the body and what goes on in the brain affects the immaterial soul, a soul that gives life to the whole body. For an excellent scholarly look at the distinction between the brain and the mind, as well as between soul and body, see "Philosophy of Mind," by Edward Feser.

What we need in dealing with our own addictions and the addictions of others is understanding. In the next article, we will look at the various addictions, starting with the psychoactive drug most of us love, namely, caffeine.

In closing, let me just say that brain addictions have pernicious effects on the quality of life because they all destroy true freedom. In brain addictions, we are at war with ourselves. Like the drug addict who thinks he is free because he is doing the drugs that he wants/craves, we often follow our compulsions without realizing how unfree we are to our truer and higher selves. Is it not odd when we do recognize it, when we see our fragmented and alienated selves, we end up hating (in our higher natures) the very things that we love (in our lower natures)? Romans 7:15, "For what I am doing, I do not understand. For what I will to do, that I do not practice; but what I hate, that I do."

Christ offers freedom, but this freedom can never be divorced from what we expose ourselves to or what we actualize in our lives. We are soul/body, which is why we are told to stay away from certain fleshly lusts that war against the soul (1 Pet. 2:11).

The Christian who can enjoy all legitimate desires of the flesh without suffering from brain addiction is a believer who is able to live in the blessings of 1 Corinthians 10:31 Therefore, whether you eat or drink, or whatever you do, do all to the glory of God. He is able to enjoy the temporal and physical blessings of God because he is not addicted to them. In fact, He sees God's goodness through them.

In Christ,

Pastor Don Hargrove