

## 1: Addictive Behaviors - Journal - Elsevier

*Addiction is a disease that is based in the brain. It is long lasting and can come back again and again. People with addictions use illegal drugs or misuse prescription drugs, alcohol, or tobacco, even though doing so can cause problems in their lives. Drug or alcohol use changes the way the brain.*

In an inpatient recovery program, a patient can get the help they need to cope with a life lived drug-free. Regardless of the addiction, most programs follow the same general treatment processes, customizing them as needed to fit the individual needs of the patient. Any addictive substance use causes a variety of symptoms that can conceal other medical or psychological problems in the patient. Discovering the condition after the detoxification process ends can help those treatment personnel who are charged with customizing the addiction recovery programs for drugs, alcohol and behavioral addictions. Treating one condition while ignoring the other can lead to complete failure in treating the patient for the addiction. Treatment for addiction often involves the ingestion of medication during the treatment process. Behavioral addictions may also require medication, as many are due, in part, to chemical imbalances in the brain. As the patient gains a higher sense of personal value, many of the reasons behind the addictive behavior no longer apply. However, patients must be self-motivated to resist those impulses that led to the alcohol, drug, or behavioral addictions. Behavioral therapy can help them identify personal motivation to do so. Once uncovered, the therapist and patient work on methods to help build coping mechanisms for these factors, replacing addictive behavior with reactions that do not involve the addiction. The patient and the therapist develop a set of skills to help in the resistance of the addictive activity. These skills are then available to the patient to help cope with those motivating factors whenever one occurs. In this way, the patient can avoid repeating the addictive behavior. Therapy also works toward general life improvement. Completing a treatment program successfully means moving on to life outside the treatment facility. This means finding replacement activities for the addictive behavior formally engaged in. Drugs, alcohol and behavioral addictions can be time-consuming, so if the patient does not find a healthy way of filling that time, the desire to return to the addictive behavior will increase. Developing this kind of lifestyle requires some form of support. One of the more common support programs for recovering patients is those that use the step method. The programs started in with the founding of Alcohol Anonymous. The basis of these programs is the 12 steps that a recovering patient must take in order to continue to deal with the addiction. Any recovery support group needs to have regular meetings with other members. Whether the group is a step program, a spiritual one, or simply a gathering of peers who all have the experience of addiction and recovery in common, getting together helps to strengthen the motivation to continue to resist the addictive behavior. During a support group meeting, members of the group share common experiences with addiction. For example, wellness coaching is available to help recovering patients deal with the everyday issues they face in life without returning to the addictive behaviors. Everything from financial guidance to interpersonal relations can be gone over and improved upon during wellness coaching sessions. Sources National Institute on Drug Abuse. Types of Treatment Programs. Introduction to Behavioral Addictions.

## 2: The 5 Most Common Behavior Traits of an Addict

*Home > Drug and Alcohol Rehab Topics > Common Symptoms and Behavior of Addiction. Common Symptoms and Behavior of Addiction The Commonalities of Addiction. Every addict is unique, but there are observable traits that such individuals tend to share.*

Most people engage in hundreds of different behaviors throughout the day, each one with its own set of consequences. In general, people make choices about which behavior to engage in next relatively thoughtfully and with the intent to improve their experience. For example, if you are hungry, you may choose to get a healthy snack that will not only satisfy your hunger but also give you energy to continue your day. However, someone who is living with a food addiction may choose to eat even when not hungry and may binge eat unhealthy foods in large amounts. When the behavior becomes impulsive in nature and begins to contribute to the development of a range of physical and mental health problems and the person is unable to stop, it is termed an addiction. Does this mean that you can be addicted to any behavior? It is a question that fuels an ongoing debate. Unfortunately, the fact is that if a little self-control were the only issue, then people struggling with behavioral addictions would certainly stop engaging in their behavior of choice long before it harmed their physical health, ended primary relationships, and caused a host of financial, legal, and mental health problems. What we do know is that there are several behaviors that are commonly reported as occurring at an addiction level, wreaking havoc and destroying lives for as long as they remain untreated. Additionally, many who struggle with gambling addiction may consider or attempt suicide. Food Addiction Though we all have to eat, and many people are prone to overeating on occasion or eating out of boredom or for pure enjoyment, people who struggle with food addiction cannot control their compulsive eating behaviors. Additionally, people who are addicted to food may develop a tolerance for food, as is characteristic of people who are addicted to drugs or alcohol. People who struggle with food addiction may be obese, but people who have a normal BMI may also struggle with the disorder. Damaged relationships, issues of self-esteem, and other health problems may also result. While roller coaster rides and adventure sports like parachuting out of an airplane or snowboarding off cliffs may be the lengths that most people will go with the intent of catching an adrenaline rush, some people take it further. Risky driving like driving under the influence, having unprotected sex with strangers, and choosing other activities that clearly put them at risk can indicate an addiction to risk when the person is unable to stop engaging in these activities despite the increase in negative consequences. Video Game Addiction Addiction to the fantasy and escape provided by video game play is a growing phenomenon. Graphics are getting better all the time, new games are always coming out, and the ability to communicate with others via headsets while playing the game with people who would otherwise be strangers from all around the world is uniquely interesting to people who may have a hard time connecting with others in person. Similarly, taking on the role of someone else and living a virtual life can also be alluring. As compared to a substance abuse addiction or even to other process addictions, video game addiction may seem relatively harmless, and certainly many people can play video games on occasion without ever developing a problem. When Addiction Is Out of Control and Help Is Needed Identifying when a behavior has turned into a problem issue and that problem has developed into an addiction can be tricky. It can be easy to be too close to the person and unable to recognize when things have gone from occasionally upsetting to a diagnosable disorder that requires treatment. The fact is that addiction is defined as a disease of the brain, a chronic illness that requires intensive therapeutic and medical treatment. When this happens, and the person is still unable to stop engaging in the addictive behavior even with a genuine desire to stop or great fear or remorse about what has and will happen, it is time to seek treatment. Many of the same programs that are effective in the treatment of dependence upon drugs or alcohol are effective in the treatment of behavioral addictions. An effective behavioral addiction treatment program should offer all clients access to the resources they need. This may include any combination of the following: Some clients describe insomnia, feelings of agitation, panic, angry outbursts, headaches, and other withdrawal symptoms when they stop indulging in the addictive behavior. Therapeutic support through this transitional period can assist the client in reaching stability in treatment and

improve the capacity to focus on growth and healing going forward. It is often just as important for loved ones and family members to engage in their own healing processes as it is for the person living with the behavioral addiction. Choosing a range of therapies that assist the client in reaching treatment goals, and staying in treatment for as long as necessary to ensure that the client is strong and stable in recovery are key to an effective behavioral addiction treatment program. If a substance abuse or addiction disorder is a part of the experience of a client seeking treatment for a behavioral addiction, it is essential that treatment for that substance abuse disorder is integrated into the overall treatment plan. For many clients, the urge to drink or do drugs is coupled with the urge to engage in the process addiction. For example, some say that as soon as they get a drink in hand, the next thought is gambling. Others may include the use of stimulant drugs as a part of their ritual when they engage in behaviors triggered by or related to sex addiction. No matter what the combination of disorders is, it is often recommended that the person enroll in a residential treatment center that is equipped with the staff, resources, and experience to empower healing on all fronts. Statistics, Facts, and Data Gambling addiction may impact up to percent of the American public. Its signs, symptoms, and impacts may vary across genders , age groups, and other populations. Men are more likely to develop a gambling problem and at an earlier age as compared to women, but women make up about 25 percent of those living with a gambling addiction. Though similar in many ways, food addiction is different from binge eating disorder. Though both may result in obesity, people who struggle with food addiction may also be of normal weight. The period between sessions of eating large amounts of food may be characterized with different eating behaviors among patients living with BED as compared to food addiction. It is estimated that about one in 10 young people who plays video games has an addiction to the behavior. Some people in treatment for video game addiction report experiencing something like withdrawal symptoms when they are unable to play â€” angry outbursts, sweating, etc. Compulsive shopping is often believed to be a female problem, but CNN reports that about 6 percent of women struggle with the problem â€” and so do 5. Even one of the common signs of the disorder â€” frequent arguments over money with a spouse or significant other â€” is a normal issue. People who struggle with sex addiction are often also living with other significant mental health disorders such as bipolar disorder or borderline personality disorder. Engaging in potentially self-injurious behavior during manic periods or in general may be a sign of these other disorders and must be considered as a possibility during evaluation and diagnosis at the outset of treatment. Well before it becomes an addiction, however, chronic social media use can contribute to anxiety in users who describe feelings of discomfort and agitation if they are unable to connect â€” an issue that could potentially be termed a withdrawal symptom. Some studies suggest that medication may be helpful in the treatment of some process addictions even if they do not co-occur with other mental health disorders. For example, some studies suggest that naltrexone may be an effective choice in the treatment of online sex addiction.

## 3: Understanding Addiction - Drug & Alcohol Addiction

*Mechanisms of Addiction The actions of alcohol that cause intoxication, initiate and maintain excessive drinking behavior, and promote relapse during abstinence occur primarily in the brain.*

Alcoholism is a chronic disorder, which is marked by certain alcoholic behaviors along with specific genetic traits. For example, compulsive drinking is a behavior while those with an alcoholic personality are more likely to fall victim to addiction. Heavy or chronic alcohol use leads to psychological and physical dependence and possibly addiction. At the beginning stages, there are very few symptoms that would indicate a real issue. The obvious signs of alcoholism may not become apparent until the tipping point has occurred. For example, functional alcoholics can maintain a normal life with no signs at all. There are some common behaviors of an alcoholic that would indicate alcoholism at an early stage. If you notice your loved one copes with difficulties by drinking, this could be a warning sign. As the disease progresses, so do the more obvious signs of problem drinking. Behaviors of alcoholics include how much they drink as well as their drinking patterns. This can range from binge drinking, heavy social drinking, alcohol abuse and alcoholism. Anything more would indicate that there is a degree of problem drinking when someone consistently exceeds these numbers: For women, more than seven drinks per week is considered a problem. The definition of binge drinking is when women drink up to 4 drinks in a 2-hour sitting. Heavy alcohol use is when binge drinking occurs 5 or more times in a day period. Their behaviors are considered to be high-risk drinking and they are likely well on their way to becoming addicted to alcohol. Anyone who consistently binge drinks at least once a week are considered high-risk drinkers. They are much more likely to develop alcoholism than others are. To assess whether a person is struggling with alcoholism, medical professionals use two distinct assessments for diagnostic purposes. They look at several perspectives involved with alcohol abuse and addiction to determine whether an individual is addicted or on the verge of an addiction. What are Drinking Behaviors? Typical behaviors of alcoholics are often things that people will do when drinking has gotten out of control. While alcohol can cause many of us to be risky, it is when this becomes a daily occurrence for the problem drinker that it needs to be investigated and addressed. Drinking behaviors are things people do while under the influence of alcohol. Alcohol changes how the brain functions so people might commit hurtful or illegal acts unintentionally while drunk. Abusive acts including emotional, physical, and verbal abuse. They will likely do secret drinking. They might be neglectful. More likely to start fights or physically assault others. They may be illogical and say hurtful things with no recollection the next day. They may drive drunk or get in a car with a drunk driver. There may be irresponsible sexual activity such as unprotected sex or sexual assault. They may commit crimes. So Why Are these Alcoholic Symptoms? An in-depth study about what alcoholism does to the brain found some unarguable proof. Drinking causes people to act differently sometimes. Many people will become more excited and happy. When someone drinks too often, their brain changes and they can exhibit poor judgment and risky behavior as part of signs of alcoholism. This becomes a constant problem in their daily life because the brain has been affected. Cognitive test scores, and MRI scans within the study revealed that the hippocampus area of the brain shrinks. This is the part of the brain responsible for reasoning and memory. For someone who had four or more drinks per day, they were 6 times more at risk of hippocampus shrinking than non-drinkers. A moderate drinker was only 3 times more likely than a non-drinker was. Signs of an alcoholic personality may be explained due to the fast decline of cognitive performance. Test showed that heavy drinkers quickly declined in their ability to name as many words that began with a specific letter in a minute. There is a very obvious effect of alcohol on behavior. It can change the way someone acts and his or her personality may even change. In fact, many crimes are committed while a person was under the influence. Even those who are usually calm and levelheaded can become aggressive and violent when intoxicated. Alcohol can drastically change a person. The signs of alcoholism are quite mild with someone like this. It may be difficult to even notice signs of alcohol abuse among these individuals. They are able to go about their daily lives as if they were sober. Many high-functioning alcoholics are even able to hold important jobs. For example, some may work in law enforcement, while others may work in the medical field. The problem is,

they are still taking big risks on their health. They are still ruining their kidneys and liver when drinking regularly the way they do. If you suspect someone is drinking too much but they hold it together, they are still in the midst of an unhealthy addiction that they have no control of.

### Alcoholic Risk Factors and Problem Drinking

There are some people that are more susceptible to becoming an alcoholic, which puts them at greater risk. Their alcoholic personality traits make them more susceptible to developing alcoholism. In conjunction with alcoholism symptoms, professionals may have an easier time determining the disease by these factors. They may also be able to determine if other mood disorders are causing a co-occurring disorder. If family history includes alcoholism, there is a greater risk. How a person is raised. Alcoholics and relationships are a major factor in someone becoming an alcoholic later on in life. This is especially true if it is your biological parent. Racial groups are more at risk of alcoholism such as American Indians and Native Alaskans. As a person grows up, they may be subjected to a certain social environment. Individuals from certain demographics have shown to be more likely to develop alcoholism. Emotional health of the person. If someone is depressed or anxious, they are more likely to turn to alcohol to numb their symptoms. Many people with social anxiety will drink so they become more open to conversation. A person with a family history who also associates with heavy drinkers. Those who suffer from mental health issues like depression, bipolar disorder, or anxiety. This is known as dual diagnosis or co-occurring disorder. Some mental disorders cause people to exhibit risky behaviors. This makes them more likely to abuse drugs or alcohol. When they become addicted to a substance, they will then have to manage both illnesses. This is a more complex type of addiction and is more challenging to overcome. They can still enjoy alcohol without being hooked on it if they are able to control their own intake.

### Alcohol Tolerance and Behaviors:

An alcoholic can therefore drink more than other people can without getting drunk because they build a tolerance. Regular heavy drinkers usually have to drink more and more in order to have the same effect. In some cases, the amount of alcohol that needs to be consumed will be dangerously close to the amount that can cause alcohol poisoning. Tolerance develops because the liver produces more enzymes which is known as alcohol dehydrogenase. The enzyme is responsible for breaking down and metabolizing alcohol. The effects of alcohol will be less pronounced, and more alcohol is needed to achieve the desired effects. If a tolerance develops, it will take more alcohol to feel effects you once felt with less drinks. Alcohol tolerance interferes with your behavior and how you function. It is the certain path to alcoholism and the first sign of a problem. While you may not be addicted yet, tolerance does influence drinking behavior and health consequences may occur: It encourages more alcohol consumption. Can cause organ damage. Affects how tasks are performed. Contributes to the dependency of alcohol down the road. May stop medications from being effective. Increases toxicity of other drugs. Creates a greater risk for alcoholism.

### The Second Warning Sign

Someone who is heavily into the second stages of alcoholism will likely experience withdrawal symptoms.

## 4: Obvious Behaviors of an Alcoholic Personality

*Addiction may involve the use of substances such as alcohol, inhalants, opioids, cocaine, nicotine, and others, or behaviors such as gambling; there is scientific evidence that the addictive.*

Addiction is a chronic, relapsing brain disease defined by a physical and psychological dependence on drugs, alcohol or a behavior. An addiction heavily impacts the way a person thinks, feels and acts. Many individuals with addictive disorders are aware of their problem, but have difficulty stopping on their own. When a person consumes a substance repeatedly over time, they begin building a tolerance. A tolerance occurs when you need to use larger amounts of drugs or alcohol to achieve the same effects as when you started. Prolonged substance abuse can result in a dangerous cycle of addiction where a person needs to continue using drugs or alcohol in order to avoid the uncomfortable symptoms of withdrawal. By the time a person realizes they have a problem, drugs or alcohol have already seized control, causing them to prioritize its use over everything else that was once important in their lives. No one ever plans to become addicted. There are countless reasons why someone would try a substance or behavior. Some are driven by curiosity and peer pressure, while others are looking for a way to relieve stress. Other factors that might steer a person toward harmful substance use behavior include: Children who grow up in environments where drugs and alcohol are present have a greater risk of developing a substance abuse disorder down the road. Mental health disorders Teens and adults with mental disorders are more likely to develop substance abuse patterns than the general population. Get started on the road to recovery. Find Out How Addiction and the Brain Excessive substance abuse affects many parts of the body, but the organ most impacted is the brain. After repeated drug use, the brain is unable to produce normal amounts of dopamine on its own. This means that a person will struggle to find enjoyment in pleasurable activities like spending time with friends or family when they are not under the influence of drugs or alcohol. Learn more about how an addiction takes hostage of the brain. All too often people try to get better on their own, but this can be difficult and in some cases dangerous. Recognizing and Understanding Addiction Identifying a substance abuse problem can be a complicated process. While some signs of addictive behaviors are obvious, others are more difficult to recognize. Many people who realize they have a problem will try to hide it from family and friends, making it harder to tell whether someone is struggling. Television, media and film often depict people with substance abuse issues as criminals, or individuals with moral shortcomings. Anyone can develop patterns of abuse or risky behaviors, no matter their age, culture or financial status. A dependence is present when someone develops a physical tolerance to a substance. They may experience withdrawal symptoms if they stop using the drug altogether. Usually, a dependency is resolved by slowly tapering off the use of a particular substance. Addictions manifest themselves as uncontrollable cravings to use drugs, despite doing harm to oneself or others. The only way to overcome an addiction is through treatment. Read more about addiction versus dependence. Ready to get help? Speak with an expert - OR -.

## 5: Understanding Addiction: How Addiction Hijacks the Brain

*Most people understand addiction when it comes to a dependence on substances, such as alcohol, nicotine, illicit drugs, or even prescription medications, but they have a hard time with the concept of addictive behaviors.*

November 9, The 5 Most Common Behavior Traits of an Addict The behavior of an addicted person is baffling, frustrating, frightening and sad. The power of addictive substances is so strong that many people are overwhelmed by it. Their actions and words are dictated by their need for more drugs but those who know and love him or her may not be able to understand why they are acting the way they are. There are a few people who can be addicted to drugs or alcohol and continue to function at a job or in society. Almost no one can succeed equally in all areas of life. Thus, wives, children, siblings and parents may see the worst of his behavior while co-workers or friends may think things are fine for quite a while longer. When someone you love is addicted, the truth is very hard to face. This list is provided to help you separate fact from fantasy.

Common Behavior Traits of an Addict 1. They have to tell lies to mislead people about where they were when they were really out buying or using drugs or alcohol. They have to lie about where the hundreds or thousands of dollars went. The more they feel they need drugs, the more likely they are to feel the need to lie. Family and good friends can be fooled by a skillful liar for years. But all this time, the person is slowly destroying herself. You might be able to check some of the stories. The real tipoff is that these strange things keep happening to him. Gradually, his life descends into chaos, camouflaged by these lies. Unless they are also addicted, the family and close friends of an addicted person really want her to thrive and be happy. They try to encourage good decisions but the addicted person is on a destructive track. The allure of the drugs is so powerful, she feels she needs the drugs to function, to be able to get through another day, to not get desperately sick from withdrawal. So she manipulates those who love her the most. Drugs like opiates, alcohol, methamphetamine, cocaine, synthetics like Spice and even marijuana can change a person who was loving and open with her family into someone who has to manipulate everyone so they will let her keep using drugs. With love in their hearts, family and close friends try to convince the addicted person to stop using these deadly substances, to go to rehab. And perhaps the most awful type of manipulation occurs between a man and wife or girlfriend and boyfriend. When caught using drugs, the addicted person will promise to do better, to go to meetings, to start going to church, to get another job, to stop seeing drug dealers or other drug users. The non-addict really wants to believe the promises so he lets up on the pressure. He lets the addict back in the home or backs down from kicking her out. As soon as the pressure is off, the addicted person will probably be attentive and loving for a little while—until the next binge of drug or alcohol use. Then all bets are off. An addict may call in the middle of the night, crying and professing love, begging to see the one he loves just one more time, but then if they meet, he asks for money just to get some good food and then is gone. The money goes to drugs. Unfortunately, this pattern of manipulation all too often goes on for months or years without there being any change in behavior. When everything valuable is gone and the children are at risk, the non-addict finally moves away or changes the locks. They are just more manipulation. They are very likely to be engaged in criminal acts. Eventually, the money runs out. They have pawned or sold everything of value. They owe friends and family money. There are no more assets but the drugs or alcohol have to be obtained. At this point, many people will begin committing crimes. Selling or manufacturing drugs are common ones. Burglary, robbery, identity theft, credit card theft, car thefts and shoplifting are also common. An employee may steal items from the place of business and pawn or sell them. Someone with access to cash may embezzle from a company. Many people steal items from the homes of family or friends. When a person is addicted to prescription drugs, the crimes may be a little different. He may visit multiple doctors to get prescriptions for pills or may forge prescriptions. In recent years, there have been more safeguards put in place in most states so that these attempts are less likely to succeed. Of course, there is driving while drunk or high. An addict will shift the blame. Irresponsibility is the name of the game for an addict. Whereas this person may have lived their prior life as a highly responsible individual, drug addiction steals that quality away. Whatever happens is never his fault. If he fails at some activity, those close to him will be blamed. Family will appeal to him to

please care for the children and his spouse, please get another job, please stop using these drugs and so on. Even if he wants to, the addiction is more powerful than he is and he will be drawn to his drug dealer, his drug-using friends and whatever means he must employ to keep the drugs coming. What really has to happen is that he must be rehabilitated to the point of having more power than the drugs. An addict is very likely to become abusive. With the delusional thinking common to most addicts, he can perceive those around him as being threatening, dangerous or malicious. As he shifts the blame, he may physically, mentally or emotionally attack those he blames. The spouse of an addict very often bears the brunt of both the blame and the abuse. He or she is not supportive. Mental and emotional abuse may be directed at the spouse to completely shut down any ability to effectively fight the real problem—the addiction. If it were not bigger and more powerful at this moment than his own will, he would not be addicted, he would stop using drugs and begin to fix his life. There is Hope But out of this whole tragic, chaotic situation, there is a ray of hope. Rehabilitation and recovery are possible. When a person goes through an effective rehabilitation program and overcomes his or her need for drugs or alcohol, it is possible to see that bright, caring and responsible person come back again. Not every program focuses on bringing about these changes. There are many programs where the philosophy is to medicate the person in recovery with methadone, Suboxone, antidepressants or anti-anxiety drugs. The Narconon program is dedicated to bringing about strong life skills so a person can succeed in life. Not only are there no drugs given as part of the Narconon rehab program, there is a step of the program devoted to a healthy method of detoxifying the body of old drug residues as this helps with clarity of thinking—and many people say it also reduces or even may eliminate cravings. Another major step of the program offers an innovative way to recover from the trauma of the past and regain a sharp new perception of the present. This recovery takes time, so there is no set time limit on the Narconon program. A person progresses through the steps at his or her own rate. The most important thing is that he regains the skills he needs to build a new, sober life and repair his loving relationships with family and close friends. This is the goal of the Narconon program—a goal that has been successfully achieved for nearly fifty years. If this sounds good to you and you want to know more, just give us a call. She has developed and administered drug prevention programs worldwide and worked with numerous drug rehabilitation centers over the years. Sue is also a fine artist and painter, who enjoys traveling the world which continues to provide unlimited inspiration for her work. You can follow Sue on Twitter , or connect with her on LinkedIn.

## 6: The Science of Addiction: Drugs, Brains, and Behavior

*addictive behaviors and the addictive process Any activity, substance, object, or behavior that has become the major focus of a person's life to the exclusion of other activities, or that has begun to harm the individual or others physically, mentally, or socially is considered an addictive behavior.*

The personal and family tragedies related to addiction are heartrending and, quite often, desperate. The struggles to break addiction and restore lives are uniquely challenging. And the scientific breakthroughs now taking place to help understand, prevent, and successfully treat addiction are nothing short of astonishing. Two NIH institutes that are already on the forefront of research into drug and alcohol addiction recently joined with cable TV network HBO to present an unprecedented multiplatform film, TV, and print campaign aimed at helping Americans understand addiction as a chronic but treatable brain disease. Developed with funding from the Robert Wood Johnson Foundation, Addiction and related video and print materials seek to help Americans understand addiction as a chronic yet treatable brain disease and spotlight promising scientific advancements. Many Americans today do not yet understand why people become addicted to drugs or how remarkable scientific advances are literally redefining the arena of addiction, notes Nora D. We have identified many of the biological and environmental factors and are beginning to search for the genetic variations that contribute to the development and progression of the disease. The economic costs of substance abuse and addiction alone are estimated to exceed a half trillion dollars annually in the United States due to health care expenditures, lost productivity, and crime. Nora Volkow Addiction is now understood to be a brain disease because scientific research has shown that alcohol and other drugs can change brain structure and function. Advances in brain imaging science make it possible to see inside the brain of an addicted person and pinpoint the parts of the brain affected by drugs of abuse providing knowledge that will enable the development of new approaches to prevention and treatment. Willenbring were featured in the HBO documentary, as were scientific research results and new understandings developed through the work of their respective institutes. Currently, addiction affects

Consisting of nine segments, the film presents an encouraging look at addiction as a treatable brain disease and the major scientific advances that have helped us better understand and treat it. From emergency rooms to living rooms to research laboratories, the documentary follows the trail of an illness that affects one in four families in the United States. One segment, "The Adolescent Addict," explains that the adolescent brain differs from the adult brain because it is not yet fully developed. Volkow, adolescent brains may be more susceptible to drug abuse and addiction than adult brains. However, because it is still developing, the adolescent brain may also offer an opportunity for greater resilience. Although treatment can yield positive results, many families are unwilling to look outside the home for help due to concerns about stigma. Medications for use in treating alcoholism also are a focus of the program, including a segment on topiramate, under study by NIH-supported researchers at a clinic in Charlottesville, Virginia. At present, there are three FDA-approved medications available to treat alcohol dependence: Naltrexone, available by tablet or monthly injections, interferes with drinking reward and reinforcement, and acamprosate works on multiple brain systems to reduce craving, especially in early sobriety. Willenbring, these medications are not addictive and can be helpful adjuncts to treatment. On the Web [www](http://www). A comprehensive four-DVD set of the documentary and the 13 short films is available nationally. Volume 2 Number 2 Pages 14 -

## 7: right-arrow copy

*Alcoholic Drinking Behaviors That are Hard to Ignore It's important to know the signs of alcoholism, especially if you have a loved one who has a problem. Alcoholism is a chronic disorder, which is marked by certain alcoholic behaviors along with specific genetic traits.*

Understanding Addiction How Addiction Hijacks the Brain Addiction involves craving for something intensely, loss of control over its use, and continuing involvement with it despite adverse consequences. Addiction changes the brain, first by subverting the way it registers pleasure and then by corrupting other normal drives such as learning and motivation. Although breaking an addiction is tough, it can be done. Addiction exerts a long and powerful influence on the brain that manifests in three distinct ways: For many years, experts believed that only alcohol and powerful drugs could cause addiction. Neuroimaging technologies and more recent research, however, have shown that certain pleasurable activities, such as gambling, shopping, and sex, can also co-opt the brain. Although a standard U. New insights into a common problem Nobody starts out intending to develop an addiction, but many people get caught in its snare. Consider the latest government statistics: Nearly 23 million Americans—almost one in 10—are addicted to alcohol or other drugs. More than two-thirds of people with addiction abuse alcohol. The top three drugs causing addiction are marijuana, opioid narcotic pain relievers, and cocaine. In the s, when researchers first began to investigate what caused addictive behavior, they believed that people who developed addictions were somehow morally flawed or lacking in willpower. Overcoming addiction, they thought, involved punishing miscreants or, alternately, encouraging them to muster the will to break a habit. The scientific consensus has changed since then. Today we recognize addiction as a chronic disease that changes both brain structure and function. Just as cardiovascular disease damages the heart and diabetes impairs the pancreas, addiction hijacks the brain. This happens as the brain goes through a series of changes, beginning with recognition of pleasure and ending with a drive toward compulsive behavior. Pleasure principle The brain registers all pleasures in the same way, whether they originate with a psychoactive drug, a monetary reward, a sexual encounter, or a satisfying meal. In the brain, pleasure has a distinct signature: All drugs of abuse, from nicotine to heroin, cause a particularly powerful surge of dopamine in the nucleus accumbens. The likelihood that the use of a drug or participation in a rewarding activity will lead to addiction is directly linked to the speed with which it promotes dopamine release, the intensity of that release, and the reliability of that release. Even taking the same drug through different methods of administration can influence how likely it is to lead to addiction. Smoking a drug or injecting it intravenously, as opposed to swallowing it as a pill, for example, generally produces a faster, stronger dopamine signal and is more likely to lead to drug misuse. The hippocampus lays down memories of this rapid sense of satisfaction, and the amygdala creates a conditioned response to certain stimuli. Learning process Scientists once believed that the experience of pleasure alone was enough to prompt people to continue seeking an addictive substance or activity. But more recent research suggests that the situation is more complicated. Dopamine not only contributes to the experience of pleasure, but also plays a role in learning and memory—two key elements in the transition from liking something to becoming addicted to it. This system has an important role in sustaining life because it links activities needed for human survival such as eating and sex with pleasure and reward. The reward circuit in the brain includes areas involved with motivation and memory as well as with pleasure. Addictive substances and behaviors stimulate the same circuit—and then overload it. Repeated exposure to an addictive substance or behavior causes nerve cells in the nucleus accumbens and the prefrontal cortex the area of the brain involved in planning and executing tasks to communicate in a way that couples liking something with wanting it, in turn driving us to go after it. That is, this process motivates us to take action to seek out the source of pleasure. Do you have addiction? But acknowledging the problem is the first step toward recovery. Do you use more of the substance or engage in the behavior more often than in the past? Have you ever lied to anyone about your use of the substance or extent of your behavior? Development of tolerance Over time, the brain adapts in a way that actually makes the sought-after substance or activity less pleasurable. In nature, rewards usually come only with time and

effort. Addictive drugs and behaviors provide a shortcut, flooding the brain with dopamine and other neurotransmitters. Our brains do not have an easy way to withstand the onslaught. Addictive drugs, for example, can release two to 10 times the amount of dopamine that natural rewards do, and they do it more quickly and more reliably. In a person who becomes addicted, brain receptors become overwhelmed. The brain responds by producing less dopamine or eliminating dopamine receptors—an adaptation similar to turning the volume down on a loudspeaker when noise becomes too loud. People who develop an addiction typically find that, in time, the desired substance no longer gives them as much pleasure. Compulsion takes over. At this point, compulsion takes over. The pleasure associated with an addictive drug or behavior subsides—and yet the memory of the desired effect and the need to recreate it the wanting persists. The learning process mentioned earlier also comes into play. The hippocampus and the amygdala store information about environmental cues associated with the desired substance, so that it can be located again. These memories help create a conditioned response—intense craving—whenever the person encounters those environmental cues. Cravings contribute not only to addiction but to relapse after a hard-won sobriety. A person addicted to heroin may be in danger of relapse when he sees a hypodermic needle, for example, while another person might start to drink again after seeing a bottle of whiskey. Conditioned learning helps explain why people who develop an addiction risk relapse even after years of abstinence. Cultivate diverse interests that provide meaning to your life. Understand that your problems usually are transient, and perhaps most importantly, acknowledge that life is not always supposed to be pleasurable. Paths toward recovery , a special health report published by Harvard Health Publications. This site is for information only and NOT a substitute for professional diagnosis and treatment. We depend on support from our readers. All donations help and are greatly appreciated.

### 8: Addiction Recovery Programs for Drugs, Alcohol and Behavioral Addictions

*Of all behavioral addictions, an addiction to gambling is the one that most closely resembles drug and alcohol addiction. The American Psychiatric Association (APA) classifies gambling disorder as.*

Alcoholism Treatment Individuals who wish to overcome an alcohol abuse problem have a number of options. Alcohol treatment centers are designed to help individuals who are addicted or who abuse alcohol in a number of ways. Typically, treatment centers require an individual to stay at the center for a specific amount of time. Many centers offer both long- and short-term treatment options. During treatment, individuals go through detoxification. Detoxification is the set of interventions used to keep a person safe as they readjust to a lack of alcohol in the body. Treatment centers are designed to provide support in the form of individual therapy, as well as group therapy and educational classes on drug addiction. During therapy sessions, alcoholics can explore their reasons behind their excess alcohol consumption, as well as what they can do to overcome their abusive behavior. Outpatient treatment is also an option for many alcoholics. Outpatient treatment centers are designed to provide recovering alcoholics with a place to explore their destructive behavior. Many outpatient treatment centers provide anonymous group meetings, as well as other programs to help recovering individuals overcome their issues. With outpatient treatment, individuals are not placed in a controlled environment and may be vulnerable to outside temptation during treatment. Typically, this type of treatment is ideal for those who have successfully completed an inpatient treatment program and want a step-down level of care or those whose addiction are subjectively not as severe. Statistics There are more people in the United States who drink on a regular basis than there are people who do not drink at all, according to the NSDUH. Almost 88,000 people died each year between and due to alcohol-related causes. Alcohol is the third leading cause of preventable death in the U.S. More than 15 million people needed treatment for an alcohol use disorder in 2010. Teen Alcohol Abuse Alcohol tops the list of drugs used by teenagers. Adults are not the only ones who can suffer from alcohol abuse. Many teenagers are at risk of developing an alcohol abuse problem due to the accessibility of the substance and peer pressure. Alcohol tops the list of drugs used by teenagers, per the National Institute on Drug Abuse. Teen alcohol abuse symptoms include:

## 9: Drug Misuse and Addiction | National Institute on Drug Abuse (NIDA)

*Addiction can occur in many forms. Often, it is assumed that physical dependence characterized by withdrawal symptoms is required in order for someone to be diagnosed with an addiction disorder, but the fact is that behavioral addiction can occur with all the negative consequences in a person's life minus the physical issues faced by people who compulsively engage in drug and alcohol abuse.*

Next Getting High on Something Other Than Drugs or Alcohol When most people hear the word addiction , they think of dependence on a substance, such as drugs or alcohol. And for good reason: According to the U. In fact, just substitute the word "behavior" for "substance," and you open up the definition of addiction to all kinds of dependencies, some of which may surprise you. Gambling Addiction Constantly bucking your odds? Of all behavioral addictions, an addiction to gambling is the one that most closely resembles drug and alcohol addiction. As with drugs, alcohol, and even gambling, hypersexual activity seems to respond best to step programs, such as Sex Addicts Anonymous. But it can be a problem for some people when it involves loss of control, as well as negative consequences at work and at home. Research presented at the annual meeting of the American Psychiatric Association seemed to support the idea of Internet addiction by showing changes in the brain identified by neuroimaging. Studies suggest that compulsive Internet use affects 6 to 14 percent of Internet users. Do you purchase items to avoid feeling sad but then feel guilty afterwards? Do you have a closet full of clothes that still have the price tags on them? You could be a shopaholic. Studies show that compulsive shopping affects more women than men, and that it can result in big problems, both financially and personally. How can you get help? Treatment for a shopping addiction usually involves counseling and behavioral therapy. Research shows that video game addiction is most common in boys and men and one study even found that as many as 1 in 10 video players between the ages of 8 and 18 are "out-of-control gamers" and games begin to feel more like reality than fantasy. Plastic Surgery Addiction To improve the way they look, some people go under the knife again and again and again. In fact, people with a propensity for plastic surgery may obsessively go from doctor to doctor until they find a plastic surgeon or dermatologist who agrees to treat them. The truth is, these people are more likely to have body dysmorphic disorder BDD than a cosmetic surgery addiction. About 1 to 2 percent of the population has body dysmorphic disorder, according to the International OCD Foundation , and the disorder is thought to be many times more prevalent among plastic surgery patients. People with this disorder are preoccupied with their appearance and believe that they are ugly or deformed. Food Addiction For years, Americans have argued over whether food obsessions can actually be food addictions or whether this "disorder" is more of an excuse. In truth, binge eating disorder is a real problem that affects about 3 percent of adults in the United States. Symptoms include eating to ease emotions, overdoing it on food while alone, and feeling guilty after the binge. The cause of eating disorders is not known, but it is probably linked more to depression than addiction. Risky Behavior Addiction Thrill seekers share many of the same symptoms as drug addicts ; they get a rush from skydiving or rock climbing, but after a while, they seek out even more dangerous adventures to feel that same level of excitement. And studies show that these thrills flood the brain with the same chemicals released by addictive drugs. Not all behavioral addictions meet the classic definition of physical addiction, but they do share many of the psychological and social hallmarks and they will respond well to traditional types of addiction treatment.

V.5 Classroom activities and projects Articulating the inarticulate: singularities and the counter-method in Susan Howe Tajikistan Privatization Programs And Regulations Handbook Through a time sieve Agricultural sociology College Prowler University of California Santa Barbara Crystal report 8.5 export to in vb6 Bollywood sheet music books The mode of intrusion of Cornish elvans Chapter 16: Nancy McWilliams: The Wisdom of Not Knowing Three Little Witches and the Fortune-Tellers Curse (Three Little Witches, No 6) Im Westen Nichts Neues (Twentieth Century Texts) Reckless Liaisons. The valedictorian, and other stories People and land in the holiness code Missile base 612. Cellular generation, transport, and effects of eicosanoids Animals to the Rescue! Manhattan gre rc guide IQ and Aptitude Tests Forest conditions in the Crows Nest Valley, Alberta Securities regulation in China Narratives of ecstasy Are humans always selfish? Milwaukee landmarks Basic electronics for robotics The politics of self-defense: Mark Essex, the soul patrol, and black vigilantism The norton anthology of american literature 1865 to present Ethics notes in hindi The Big Fork game. Textbook of Neonatal Dermatology 59-second employee Medical treatment of the transgender adolescent Hugging the Trees Health information management textbook On the autonomy of the democratic state Ground-water geochemistry of Kwajalein Island, Republic of the Marshall Islands, 1991 Terrorism and drug trafficking The Profit Impact of Marketing Strategy Project How To Make One Hell Of A Profit and Still Get In To Heaven