

Sample research paper on substance abuse

[Health & Medicine](#), [Alcoholism](#)



Substance Abuse

The biopsychosocial risk factors associated with alcohol dependence.

Dependence on alcohol is a worrying concern for many. It not only affects the person addicted to it but people around too. Scientists have always tried to understand what it is that gets one person addicted while others exposed to the same circumstances and environment stay away from addiction.

There are biopsychosocial risk factors associated with alcohol dependence and a lot of theories that try to explain addiction. Some of the theories that explain alcohol addiction are Genetic theories, which deal with the genetic predisposition to alcohol addiction, with genes passed on through generations being the risk factor. Other risk factors associated with alcohol addiction are biological markers – brain waves provoked in response to some specific stimuli. Tests conducted on participants have shown that low P300 amplitudes indicate people prone to alcoholism. P300 being the wave that occurs 300 milliseconds after a stimulus and which is often being used in this kind of research (Chassin, 1998, p. 449-463). Childhood behavior or uncontrolled, restless and distractible behavior as a kid leads to alcohol dependence or addiction as an adult. ADHD or psychiatric disorders and anti-social behavior are other risk factors for alcohol dependency. Sometimes suicidal tendencies also push a person towards dependence on alcohol and other addictive substances. Apart from biological factors there are also psychosocial risk factors associated with alcohol addiction. They are (i) parenting, family environment and peers- children accustomed to their parents drinking in the house are more likely to start drinking early on and getting addicted to it while minimal parental supervision and lack of

communication can also induce drinking and dependence later on. Peer pressure is another risk factor associated with alcohol addiction where people try to fit in social groups by indulging in drinking and reach the point where they cannot stop. Expectancies about alcohol-induced high and advertisements also induce a person to start drinking and get addicted to it. The effect of childhood trauma or other disturbing events also serves as a catalyst to later addiction to alcohol. Although these biological and psychosocial risk factors explain alcohol dependency, these aren't applicable to everyone as each person has a different reaction to external stimuli and temptations (Rehm, 2011).

The biological mechanisms that contribute to alcohol dependence and why some groups of people are less likely to develop it.

Studies into alcohol dependence and addiction have now established that there is a neurobiological basis for addiction. Intake of alcohol slows down brain activity by bringing down the excitatory action of the neurotransmitter glutamate. It also increases the inhibitory actions of the neurotransmitter GABA. This temporary reduction in the brain function leads to people drinking alcohol more often. Another biological reason that leads to alcohol addiction can be the abnormalities in the brain of some individuals. The brains of alcoholics have abnormal neurotransmitter systems, found more in the mesocorticolimbic dopamine system. This system entails dopamine-releasing neurons that connect the ventral tegmentum (VTA) of the midbrain to the medial prefrontal cortex and the nucleus accumbens (NAC) in the limbic system. Usually called the "reward system," it transmits inputs that

lead to a sensation of reward for euphoria when processed in the limbic system (OTA report, 1993).

Phenomena of ‘ tolerance and withdrawal’

Addiction is an action or state of being when a person gets used to a substance or behavior to the extent that it interferes with their regular life. Tolerance is the state when a person no longer gets high and when the substance no longer has an effect on them. This tolerance behavior is applicable to alcohol, nicotine and other drugs. Withdrawal symptoms are the physical and psychological behaviors exhibited when the body no longer gets the drugs it is used to. In understanding addictions, a look into the phenomena of tolerance and withdrawal becomes important as it explains the extent of the addiction and also gives clues to the possible solutions that can be used to cure the person of his or her addiction.

Successful strategies for preventing alcohol abuse and dependence

There are a lot of strategies to prevent alcohol abuse and dependence. The success of a strategy depends on the intervention techniques, the age group and also the social setting of the individual. Intervention in the early stages through community involvement, support groups, seminars and talks in schools has proved to be most successful in underage alcohol abusers. Another strategy that has proven to be the most successful is the use of certain medications to alter the chemicals in the brain. This strategy usually works for people with abnormalities in the brain that lead them to abuse alcohol. Successful strategies depend largely on how much of background information is being collected on the alcoholic. Alcohol addiction is largely

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biological and psychosocial and finding the underlying cause of the addiction will go a long way in helping someone get off the addiction. Continued support, strong family and social base, making sure the medications are taken on time, knowing the alcoholics expectation of alcohol and slowly demolishing those thoughts are some strategies that can be tried on addicts to cure them of their addiction.

The physical consequences of opiate and amphetamine addiction

The effects of opiates on the brain are short-lived and this explains the addiction. The addiction to opiates is a result of an attempt to keep experiencing the short lived high. The physical consequences of opiate addiction can be devastating and includes solitary behavior, digestive difficulties, extreme mood alterations or mood swings, jaundice, continued used of opiates, lying and other deceitful behavior to obtain the drug, isolation, swelling, shakes when the drug is not available, decline in overall performance at school or work and vision problems. Other physical consequences include cramping, diarrhea, itchy skin, joint and muscle aches and pains, nausea, decreased immunity insomnia, anxiety disorders and persistent headache (Amphetamines in FOCUS, 2013). Disorientation, unkempt appearance, neglect of personal hygiene is also other symptoms and physical consequences of opiate addiction. An opiate addiction becomes fatal when the patient takes an overdose or if the opiate is toxic.

Amphetamine is a drug and a strong stimulant that depends up the breathing rate and dilates the eye. It gives instant energy that makes the addict go without food or sleep. More than the other drugs, amphetamines

can have some serious physical consequences. Some of the physical consequences of amphetamine abuse include chest pain, heart failure and convulsions. Regular amphetamine users also experience severe mental disturbances such as hostile-aggressive behavior and paranoia (Maisto et al, 2004).

Major stages of smoking behavior and the major biological, psychological, and social variables that make it difficult for a smoker to abstain

There are four major stages of smoking behavior or addiction. In the first stage or the experimental stage, the smoker can remain without smoking or abstain from smoking for a long time without experiencing any symptoms. In the second stage, the realization stage the dependence begins and the individual experiences a mild desire to grab a few puffs when they go without smoking for a long time. This desire, when ignored, goes away and the individual does not give much thought to it later. In the third stage or the self-loathing stage, the desire to smoke gets stringer to an extent that it starts intruding on their thoughts. The desire to smoke gets stronger after a while that it becomes difficult for a person to ignore, the thoughts of smoking. The fourth stage or the quitting stage is a stronger version of stage 2 and 3, the desire becomes almost impossible to ignore and it reaches a stage where the individual needs to smoke to be able to function normally. Nicotine craving can be pretty bad in a smoking addict. They begin to feel that they cannot function normally nor do certain regular things if they do not smoke. It is not only the brain that craves a smoking fix, but it is also exhibited physically through shakes and an uncontrollable desire to smoke. Sometimes the very thought or the symbolism of smoking psychologically

drives a person to smoke repeatedly. Journalists and writers are more susceptible to smoking addictions as smoking becomes a habit that they can no longer track. They also associate it with their jobs. Social smokers are also more likely to become addicts. Peer pressure is another social reason that makes it difficult for smokers to stop the habit. They feel obligated or tempted to smoke when they are surrounded by smokers. What starts as an effort to fit in and feel part of the group soon develops into an addiction and quitting would mean getting out of the social group. Thus, a combination of biological, psychological and social factors makes it difficult for a smoker to abstain.

References

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