

# When does gaming, social media and other behaviour become an addiction?



As with all addictions not all researchers agree that video gaming and social media use is a harmful or an addictive activity. Many people, including parents, believe that video games expand the imagination, give children the opportunity to work collaboratively, and sharpen cognitive skills. Yet if a person spends most of their time on devices at the expense of (school) work, physical exercise, family events, or social activities, the benefits seem less certain.

Some researchers class obsessive device use as an addiction comparable to gambling, drug abuse, or alcoholism (Lustig, R. H. 2017). Internet-based gaming for instance, often involves also financial stakes or gain and loss of social status which compounds the addictive nature of the behaviour. Video game/social media use addiction is considered a type of impulse control disorder that can change the brain structure, caused by repetitive release of dopamine, a brain chemical that causes a short-lived rush of pleasure and energy ultimately leading to over-stimulation and tolerance to the stimulant. Dopamine is the same neurotransmitter involved in other addictive activities, such as alcohol/drug abuse and gambling. In most western countries there is a misconception that has a lot to do with large corporations advertising their products 'as a direct pathway to happiness', however they are only stimulating our '*dopamine pathways*' leading ultimately (if overstimulated) to addiction and depression. All recent research into brain -functions has established that contentment is connected to a different neurological function via the '*serotonin pathway*'.

## **Understanding the difference between Contentment (being) and Pleasure (rewards)**

Richard Lustig (University of California, professor of paediatrics author of "*The Hacking of the American Mind*" and other publication) has done extensive research about the neurological implications of contentment and pleasure and how they translate into western society. His message is based on scientific evidence connecting aspects of biochemistry, neuroscience, genetics, physiology, medicine, nutrition, psychology, psychiatry, public health, economics, philosophy, theology, history, and law.

### **Reward vs contentment**

Lustig defines happiness as the Aristotelian concept of eudemonia—that is, "**contentment**" or well-being or human flourishing. Contentment is not prone to acute changes in one's life and is often less influenced by social circumstances. On the other hand, pleasure is defined as the concept of gratification (**reward**) it is immediate and depends on circumstance.

Lustig identifies 7 differences between **reward** and **contentment**.

- 1 - Reward is short-lived, contentment lasts much longer
- 2 - Reward is visceral in terms of excitement, contentment is ethereal and calming
- 3 - Reward can be achieved with substances, contentment is usually achieved with deeds
- 4 - Reward occurs with the process of taking, contentment is often generated through giving
- 5 - Reward is yours and yours alone, your contentment, or lack of it, often impacts other people directly and can impact society at large.
- 6 - Reward when unchecked can lead us into misery, like addiction. There is no such thing as lethal or excessive contentment.
- 7 - Last and most important, reward is driven by **dopamine**, and contentment by **serotonin**. Each is a neurotransmitter—a biochemical manufactured in the brain that drives feelings and emotions—but the two couldn't be more different.

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## Dopamine vs serotonin

Lustig explains the chemical formula of contentment or well-being is based serotonin interacting with a delicate receptor in our brain called serotonin 1a receptor. This process he claims seems to be uniquely involved in decreasing anxiety and mitigating depression. It is our natural way to find rest and enables us to recharge our energy levels. When our biological system perceives the need for nutrients for instance Dopamine is essential to get our system aroused and seek out 'rewards' (food - therefore It is essential for survival). On the other hand, too much dopamine makes us aggressive and paranoid. Neuroscientists have proven that an excess of dopamine kills neurons and prevents the encounter between serotonin and its 1a receptor. Additionally, if an individual experiences stress (elevated cortisol levels), in chasing rewards in form of Dopamine release (e.g. excessive gaming) which when in excess, also reduces serotonin levels. This downward spiral (chronic excessive reward seeking leads) can often lead to addiction, depression or a number of other psychological disorders.

Imagine a easily impressed teenager watching endless explicit advertisements, plays 4-8 hour gaming stints, drinks or eats sugar laden foods (not knowing that sugar equates to high dopamine levels), received a bad result in an exam, jumped on the smartphone seconds after the morning alarm, watched hopeless news on TV, did not resist an invitation for a binge-drinking party, sleeps less than 7 hours per day, counted anxiously the number of likes on various addictive social network apps...all leading to extreme dopamine and cortisol levels reducing serotonin levels....

## The four Cs, the path towards Contentment

With an understanding about the differences between pleasure and happiness (based on the chemistry at play) and how external organizations, companies and governments, try to lock us into a perpetual reward loop to manipulate our brains and get our money, it is logical to aim for a change in our behaviours.

**Connect**– develop your social connections, meet friends and make new ones, engage into direct conversations, but make sure it is as often as possible face to face – radically reduce screen time

**Contribute**– Volunteer, practice altruism, give time or money or attention and compassion to others without expecting any personal gain. Give to others because it feels good.

**Cope**– Sleep more, unplug from your devices, meditate, practice mindfulness, exercise,

**Cook**– for yourself, for your family and your friends, with fresh and unprocessed ingredients

## Gaming addiction classified as world-wide mental health condition

BRIDGET JONES15:48, Jan 03 2018

<https://www.stuff.co.nz/entertainment/games/100302244/gaming-addiction-classified-as-worldwide-mental-health-condition> <http://news.berkeley.edu/2018/08/14/sleep-viral-loneliness/>

## Screens and teens: survival tips for parents on the technology battlefield

<https://www.telegraph.co.uk/family/parenting/screens-teens-survival-tips-parents-technology-battlefield/>

Lustig, R. H. (2017). *The Hacking of the American Mind: The Science Behind the Corporate Takeover of Our Bodies and Brains*. Penguin.