

**A Modern Addiction:
Social Networking
and
Technology**

June 7, 2016

Alexandra Lopez, MA, LCADC, SAC, ICCS, CPS, CCS, BCPC

“We are addicted to our thoughts.
We cannot change anything if we
cannot change our thinking.”

— Santosh Kaluar, *Quote Me Everyday*

What We Call Modern
Addictions ...

The best predictor of treatment success is not clients' professed willingness to change per se, but their ability to specify behaviors they are willing to perform or avoid in order to effect change.

(Bertholet et al., 2009)

Major Steps Towards the Modern World
Re-naming the "Substance-Related Disorders" category "Addiction and Related Disorders," a move which reflects both of the above changes.

Newer Behaviors of Concern...
It has been over 13 years since pioneer Kimberley S. Young adapted the DSM IV criteria for gambling addictions to define Internet addiction. While her proposed diagnosis criteria have virally spread (to use a familiar term related to social networking) all over the world, it seems that the scientific community is not yet ready to reach a consensus as to what this type of addiction entails.

Internet Addiction

DSMV V draft released earlier this year revealed “work group members decided there was insufficient research data” to include *Internet Addiction* in the newly created “behavioral addictions” category.

The Disease
of
Addiction:
Lets start here...

Addiction is a broad term, which is used to describe an entire process by which people (or animals) become dependent on a particular substance or behavior in order to cope with life. This dependence becomes so important to the individual that they will persist in using the substance, or engaging in the behavior, even *when it is harmful to themselves, their family, and other important areas of their life.*

Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.

American Society of Addiction Medicine, 2011

Addiction is now viewed by the scientific and medical community as a **disorder of brain functioning** that, like all other disorders of bodily organs, is significantly influenced and impacted by a wide variety of personal, environmental, psychological and physical factors.

A Disease Model

Addiction A Brain Disease



In psychiatry, the only disorders that have been considered addictions are those involving alcohol or other drugs. Now, the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders include for the first time "behavioral addictions"—a change some say is long overdue and others say is still premature.

All addictive substances and activities affect **neurotransmitters**, and these effects are the source of the associated “high.” **Dopamine** is thought to be the primary neurotransmitter involved in all addictions. Dopamine is the neurotransmitter that *regulates pleasure*.

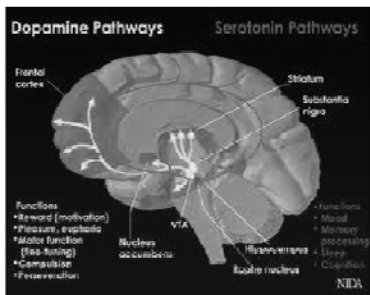
Its domain is satisfaction and euphoria.

How it works ...

Within seconds of entering the body, drugs cause dramatic changes to synapses in the brain. By bypassing the five senses and directly activating the brain's reward circuitry fast and hard, drugs can cause a jolt of intense pleasure.

Drugs of abuse affect the brain in such a dramatic way that the brain must try to adapt. One way the brain compensates is to reduce the number of dopamine receptors at the synapse. As a result, after the user has "come down", they will need more of the drug next time they want to get high.

Tolerance



Anything that makes us feel good, including a compliment or a hug, elevates the dopamine in our brains. Scientists now regard dopamine as "the master molecule of addiction."

(Madeleine Nash, 1997).

It is thought that addicts increase their usage or the amount they use in order to maintain the high levels of dopamine they have become habituated to through substance abuse.

Genetic factors account for about half of the likelihood that an individual will develop addiction. Environmental factors interact with the person's biology and affect the extent to which genetic factors exert their influence. Resiliencies the individual acquires (through parenting or later life experiences) can affect the extent to which genetic predispositions lead to the behavioral and other manifestations of addiction. Culture also plays a role in how addiction becomes actualized in persons with biological vulnerabilities to the development of addiction.

Addiction is characterized by :

- **Inability to consistently Abstain;**
- **Impairment in Behavioral control;**
- **Craving; or increased "hunger" for drugs or rewarding experiences;**
- **Diminished recognition of significant problems with one's behaviors and interpersonal relationships; and**
- **A dysfunctional Emotional response.**

• ASAM, 2011

Process Addictions..
What's the Connection?

Understanding the
Phenomena

The Addictive Process

In recent decades, researchers have noticed that the *concepts they evolved to explain how substance abuse works can apply by analogy to other forms of repeated dysfunctional behaviors* even when these do not involve ingesting any “addictive” substances.

For starters ...

- A Process Addiction is : A pathological relationship to a mood-altering *experience*
- A Chemical addiction is: A pathological relationship to a mood-altering *substance*

A **process addiction** is a condition in which a person is dependent upon some form of behavior, such as love, sex, gambling, shopping, and even technology - it is a blanket term for any **behavioral addiction** that does not involve drugs or alcohol.

Chemical changes in the brain from the behaviors often associated with process disorders produce a euphoric effect. The chemical changes and the individuals response to the changes becomes addictive

dysregulated behavior
=
dysregulated brain.

**Imagine...
Chocolate on the Brain**

The correlation between activities that elicit dopamine and the feelings that they produce can cause the addicted individual to continue to engage in self defeating activities. Tolerance then builds as a result of the repetitive behaviors.

For example:
In a newly published study, scientists from The Scripps Research Institute have shown for the first time that the **same molecular mechanisms that drive people into drug addiction are behind the compulsion to overeat.**

What is happening when you engage in these behaviors is you are activating chemicals in the pleasure center of your brain. These chemicals can include serotonin, dopamine and adrenaline. An intense hit of these chemicals can become addictive.

Those who suffer from process addictions display the same characteristics and behavior patterns as those with substance addictions (including withdrawal symptoms). Because of this, psychological treatment and rehabilitation is necessary in order to overcome the addiction.

What happens in addiction is lethally simple...The reward pathways in the brain have been so overstimulated that the system basically turns on itself, adapting to the new reality of addiction, whether its cocaine or cupcakes.

The Scripps Institute , 2010

These findings confirm what we and many others have suspected," Kenny said, "that overconsumption of highly pleasurable food triggers addiction-like neuroadaptive responses in brain reward circuitries, driving the development of compulsive eating. Common mechanisms may therefore underlie obesity and drug addiction."

The Scripps Institute , 2010

Startling Stats ...

In a Chinese study, the prevalence rate of internet addiction was 6.0% among teen internet users. School, interpersonal, and anxiety problems were associated with a higher risk for internet addiction. [Tang et al., 2014](#)

Poor self-rated health, unhappiness, and depression were significantly related with Internet addiction in male and female teens. Depressed girls had a much higher risk of internet addiction than boys who were experiencing similar feelings of depression. [Ha et al., 2014](#)

Compared to control subjects, individuals classified as addicted to the Internet reported greater feelings of depression and rated their family functioning as more negative. [Senormanci et al., 2014](#)

Compared to control subjects, individuals classified as addicted to the Internet reported greater feelings of depression and rated their family functioning as more negative. [Senormanci et al., 2014](#)

In a sample of Chinese youth, those with Internet addiction reported greater dissatisfaction with their families, greater parent-child conflict, and saw their parents as more punitive, and less supportive, warm. Youth who were addicted to the Internet were more likely to have divorced parents, be an only child, and live with a single parent. [Li, 2014](#)

In a Chinese study, teens classified as highly addicted to the internet were twice as likely to also display self-injurious behavior. [Xie et al., 2010](#)

In 2005, just 9 - 15 million people in the United States used the internet every day. Every three months the rate of use was increasing by 25%. [Wieland et al., 2005](#)

10% of South Korean youth are considered to be at high risk for internet addiction. [Park et al., 2009](#)

7% of Chinese elementary and middle school students suffer from internet addiction. The rate is higher in males (10%) than in females (4%). The rate is higher for rural students (8%) than for city students (5%). [Liu et al., 2010](#)

For Example ...

Just five minutes after meeting sleep and energy expert Dr Nerina Ramlakhan in her central London clinic, she delivers some bad news.

"You've got the classic pattern of someone who's in a fatigue cycle," she says.
"You're running on survival energy. Your sympathetic nervous system is in overdrive. I would guess you feel pretty shattered mid-afternoon which would mean you are running on adrenalin, noradrenalin, cortisol."
I'm turning into a dopamine junkie - the brain chemical associated with pleasure that is released when we are stimulated, whether that is by food, sex, excitement... or screen time.

Dr Ramlakhan works at the privately run Nightingale Hospital, and is a member of its technology addiction treatment team.

Surely tiredness is a by-product of a busy modern life - children, work, hobbies etc - rather than that relaxing time spent watching Netflix in bed?

"The thing many of my patients have in common is the fact that they are in front of screens all the time. Even when they try to sleep at night. It has become so pervasive," she says.

They go to bed but can't sleep, or fall asleep exhausted and wake up tired. People started telling me they couldn't switch their brains off."

"We see a decrease in memory, a decline in grades, they're not developing the part of their brain that's a muscle that needs to be developed for singular focus,"

Social networks are massively addictive. Most people check and interact on social sites constantly throughout the day. And they have no idea how much actual time they spend on social media.

Cornell Information Science published research earlier this month that looked at (among other things) the difficulty some people have in quitting Facebook and other social networks. They even have a label for the failure to quit: "social media reversion."

The addictive aspect of social networking is associated with FOMO ~ fear of missing out. Everyone is on Facebook. They're posting things, sharing news and content and talking to each other 24/7.

The biggest tool in the social media addiction toolbox is algorithmic filtering. Sites like Facebook,

Google+ and, soon, Twitter, tweak their algorithms, then monitor the response of users to see if those tweaks kept them on the site longer or increased their engagement. We're all lab rats in a giant, global experiment.

From : <http://www.computerworld.com/article/3014439/internet/social-media-addiction-is-a-bigger-problem-than-you-think.html>

The use of algorithms for making social streams increasingly addictive explains a lot. It explains why Facebook (which has been tweaking its addiction algorithm the longest) now gets more than a billion users a day. It explains why Google never let you turn off algorithmic stream filtering all the way. And it explains why Twitter wants to algorithmically filter feeds, despite the general objection of users.

From : <http://www.computerworld.com/article/3014439/internet/social-media-addiction-is-a-bigger-problem-than-you-think.html>

Social media addiction is real, and it can damage careers, degrade life and even harm relationships.

**Diagnosis
Where Do We Fit In?**

In-depth understanding of addictive processes **must begin with the general and common features of addiction** and move to the specifics of the addictive expression in a specific individual. Whether the addiction is single or multiple, substance or process, legal or illegal or an unstable and shifting combination of all the above, certain recurring and recognizable common features distinguish addictive from non-addictive processes.

Garrett, 2012

The fundamental idea that clients are experiencing a *loss of control* over a significant aspect of their behavior does provide useful insights into how the problem works and how to assess and treat it.

Discussion and targeted research of process disorders is relatively recent. In 1997 Brown pointed out how problem gambling, for example, shares a number of features with substance addictions:

- cognitive distortions and deficits in decision-making
- rituals to trigger arousal
- low treatment success rates (but frequent spontaneous cures)
- decline in enjoyment over time
- perceived loss of control.

Today we know that in clients with process addictions we will assess:

- salience, obsession, abnormal or pathological importance of the substance or behavior
- persistence, rigidity, inflexibility and repetition of the particular addictive behavior

- relative immunity to adverse consequences and resistance to learned modification of behavior

And very often...

An interrelated system of psychological defenses which, like a string of military forts, function in concert to protect the individual from the full realization and acknowledgement of the self- and other- harmful nature of his addiction and hence provide cover and concealment for the continued expression of the addictive process.

The DSM 5...
and the Future of Addictive
Disorders

The essential feature of behavioral addictions is the failure to resist an impulse, drive, or temptation to perform an act that is harmful to the person or to others

Each behavioral addiction is characterized by a recurrent pattern of behavior that has this essential feature within a specific domain. The repetitive engagement in these behaviors ultimately interferes with functioning in other domains. In this respect, the behavioral addictions resemble substance use disorders. Individuals with substance addictions report difficulties in resisting the urge to drink or use drugs.

So far, only one behavior has made the cut: gambling

In the previous DSMIV, Pathological or compulsive gambling was categorized as an **impulse control disorder**. Impulse Control Disorders have been increasingly viewed as part of the *family of addictions*.

Assessment
&
Treatment

An individual struggling with a Process Addiction can relate to the common themes of substance induced disorders. These themes include **guilt, shame, remorse, grandiosity, loss, hopelessness** and more. Oftentimes they will lie constantly to cover up the addiction, deny there is a problem and seek to shift blame to others.

The best *predictor for a client having a given process addiction is evidence for their already having another process addiction.* Such addictions overlap, conceal and substitute for one another, and may sabotage treatment for one addiction if any others are not identified and addressed.

Treatment **readiness** is critical to the process- and often complicated to assess. Even though a particular process addiction may be causing a client considerable harm, the client may not specify it as an acute problem for a number of reasons. Understanding the Stages of Change Model by DiClemente is critical to client care.

Because the understanding must usually precede the behavior change, clinicians can't force the process, they can only seek to help it along.

(DiClemente, 2003)

Some theorists believe that tolerance for one kind of behavioral addiction breeds increased tolerance for other kinds (cross-tolerance). Problem gambling, for example, frequently occurs in concert with other process addictions, particularly an involvement with risky sexual practices. Process addictions go together, substitute for one another and reinforce one another.

(Carnes et al., 2005)

People who abuse substances are four to 10 times more likely than the general population to have a gambling problem. Most commonly the substance abuse predates the process addiction, but sometimes the process addiction begins first, or both concerns arise simultaneously.

(Kausch, 2003)

Since a process addiction so often appears in tandem with other substance or process addictions, *this entire constellation of problems must to some extent be treated as a package when determining what is to be attempted in treatment.*

(Carnes et al. 2005)

Although we know that substance addiction looks much like the process addictions, *clinicians should be careful not to apply substance abuse and addiction tools to the assessment of process addictions.*

Some tools for assessment may include...

Some Helpful Interventions...

- motivational interviewing (Miller & Rollnick)
- the matching of therapy to the client's current state of change
- brief counseling focused on clearly defined solutions
- Cognitive Restructuring
- Given the frequency of addiction substitution, cognitive-behavioral clinicians need to ensure that clients understand the ways in which a range of addictions may interact

(Carnes et al., 2005).

Recovery

Recovery from process addictions is a phenomenon that goes on to a great extent independently of the clinician. Indeed, it can be said that recovery is the process that prompts clients to seek treatment in the first place—if they seek it at all—not something the clinician conjures up.

(Bertholet et al., 2009)

Abstinence may or may not be a realistic and suitable treatment goal.

As a professional, you must be willing to reassess personal theoretical models. With some process addictions, particularly eating disorders, abstinence could be highly undesirable.

(Behrendt et al., 2008)

Sometimes it is sufficient to settle for a significant reduction in the amount of harm the client's process/behavior is causing, or to substitute less harmful behaviors for the problematic ones.

Factors like the clinician's theoretical orientation, the client's willingness to change, and the perceived underlying causes of the problem all come into play here.

The professional should...

- 1) understand the motivation for behavior;
- 2) establish a baseline of the behavior, encouraging a decrease;
- 3) address the client's cognitive distortions;
- 4) establish underlying causes of stress and distress;
- 5) address underlying depression;
- 6) evaluate and improve coping skills;
- 7) restructure free time; and
- 8) determine the outcome, and prevent relapse.

Relapse
&
Process Addictions

Recovery in process addictions can become complex and often overwhelming since the behaviors that have made an individual's life "unmanageable" are often *normal* and even *routine* in the social context of everyday life. It is also critical to recognize that there is still significant stigma in regards to these disorders. And in many cases, society does not believe that they exist. They are not yet on our radar as epidemic...

Even if treatment succeeds in reducing or eliminating a process addiction, there is a risk of "replacement" process addictions arising after therapy if the broad range of potential and actual problem behaviors has not been addressed.

Mutual aid (12-step) programs may be particularly helpful to clients following treatment, provided they don't focus too exclusively on particular issues, like gambling. The social support they provide can fill the vacuum created when treatment ends.

(Hook et al., 2008).

A lack of physical limits makes relapse common- especially when we are working with eating disorders.

Also common is the tendency to self-medicate.

Final Thoughts

There will always be controversy—as there should be—when any forms of inherently normal human behaviors such as eating or sex are clinically designated as pathological.

Weiss, 2012

While the power to “label” must always be carefully wielded to avoid turning social, religious or moral judgments into diagnoses equal care must be taken not to avoid researching and creating diagnostic criteria for these otherwise healthy behaviors should they go awry.

Weiss, 2012

“
It’s probably weird to think about an addiction like it’s a sentient being, but that’s how it feels. Like it’s something living inside you. Something you can’t get rid of because killing it means killing you.”

Ellen Hopkins, *Identical*



Contact Information:
Alexandra Lopez, MA, LCADC, CCS, SAC, CPS, DRCC
alexvlopez@yahoo.com

This training material was created by Alexandra Lopez. No part of this PowerPoint Presentation may be reproduced or used in any publication, presentation or web posting without the written consent of the author.
