



Radical
Exposure
Tapping


Laurie MacKinnon Ph.D.
Insite Therapy and Consulting
Sydney



1

Impulse-Control Problems

- Gambling
- Sex
- Shopping
- Shoplifting
- Exhibitionism
- Food compulsion
- Porn
- Video gaming




2

Brain's Reward System

Brain receptors for opioids.
In nature the release of endorphins:


- modulates pain and stress
- rewards behaviour for finding food, having sex, bonding with partner, looking at babies.
- Wiring increases that behaviour



3

Super Stimuli in Nature


- Stickleback Fish males with rigid throat defend territory against anything red
- Bird species look after large eggs will even look after a large ball
- Male butterflies will try to mate with cardboard figures that have elaborate patterns



4

Hijacking the Brain's Reward system

- Opiates released during the super stimuli flood the neurons with high levels of dopamine not occurring in nature
- Brain rewires to increase craving for the pleasurable activity
- Cortex decreases ability to inhibit impulses
- Homeostasis: pleasure centre reduces the degree of pleasure to compensate for increased stimuli



5

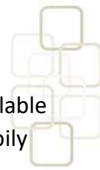
Hijacking the Need to Eat to Survive

In nature

- High reward food is sweet (bitter more likely poison) and fruit is scarce
- High reward food is calorie dense and the sources (animal fat and nuts) are scarce

In society:

- Sweet and calorie dense food always available
- Refined foods super stimuli sweet, salty, oily



6

Hijacking the Need to Control Pain

In nature:

Opioid receptors – brain releases natural endorphins to modulate pain

In society, super stimuli:

Alcohol, heroin, morphine always available



7

Hijacking the Need for Sex

In nature:

- Rare to see sexual stimuli

In society:

- Nudity, sexuality on TV
- Sexual images always available on the Internet
- Pornography online is \$20 billion industry



8

Hijacking the Need to Hunt

In nature:

- Hunting - fortunate if successful in using a projectile to hit a target for food every few days

In society:

- Video games - hit a target with a projectile multiple times with multiple targets, many times in an hour.



9

Hijacking the Need to Forage

In nature:

- Forage all day to get enough to eat
- Time and effort needed to create covering for warmth convey status, and for sexual appeal

In society:

- Supermarkets are open and have food available from around the world every day of the year.
- Clothing stores are open every day the year,



10

Compulsive Behaviour

Need and longing + experience of intense reward = Create cues (internal state cues and environmental cues)

Cues trigger impulsive behaviour



11

- The person impulsively re-enacts the behaviour
- Opioids and other reinforcing brain chemicals released
- More cues become associated
- Cues elicit ever stronger desire (dopamine)

- Over time neural pathway becomes super highway
- Behaviour becomes compulsive



12

Need and longing

- Adolescence – emotional turmoil starts search for relief and comfort
- ACE Adverse childhood experiences



13

ACE Adverse childhood experiences

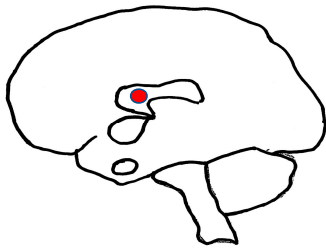
17,000 Middle-class adults , 8 categories, 1 point each

- Recurrent and severe physical abuse
- Recurrent and severe emotional abuse
- Sexual abuse
- Growing up in a household with:
 - alcoholic or drug user
 - family member imprisoned
 - mentally ill, chronically depressed or institutionalized member
 - mother treated violently
 - both biological parents not present



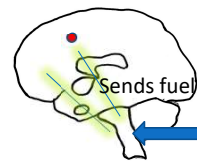
14

Pleasure Centre



15

Dopamine is the Fuel

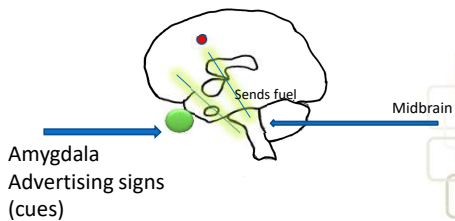


Midbrain



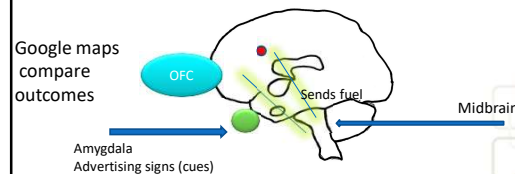
16

Amygdala is the advertising

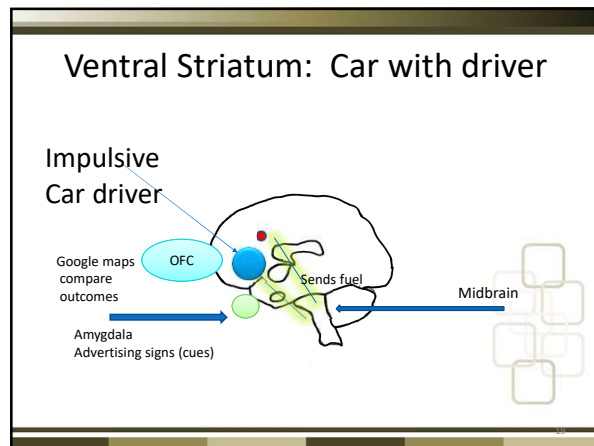


17

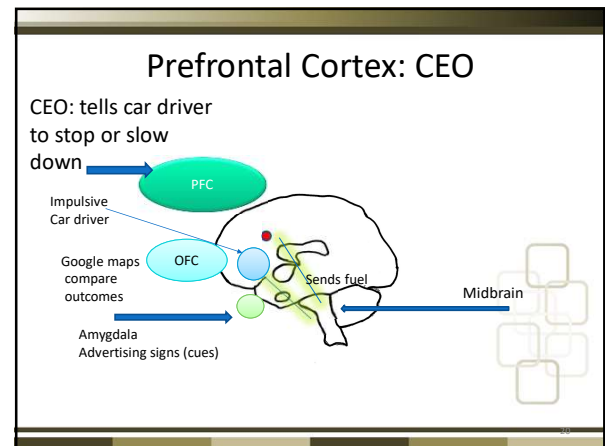
Orbitofrontal Cortex: Maps



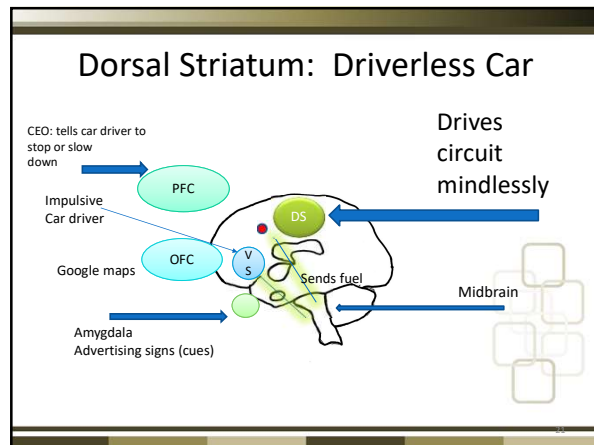
18



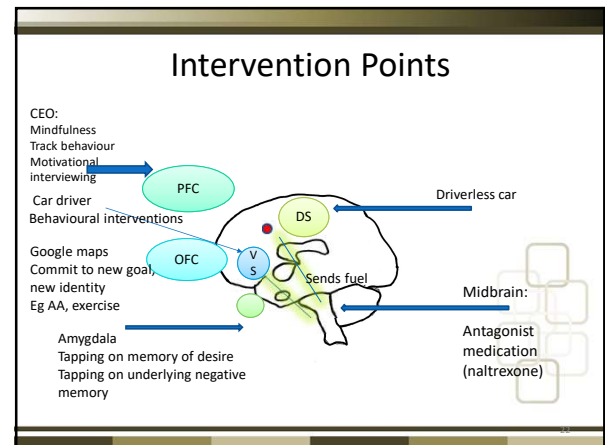
19



20



21



22

Quitting Aids


Substance	Medication	Effect
Alcohol	Naltrexone opioid receptor antagonist	Decreasing the reinforcing effects of alcohol
Opioids	Naltrexone opioid receptor antagonist	Blocks reward of the drug
Sugar	Gymnema Sylvestre	Reduces taste of sweetness in mouth
Nicotine	Nicotine patches Bupropion nicotinic antagonist	Replace nicotine allow gradual withdrawal Inhibits the action of acetylcholine

23

- ## Tapping on Compulsions
- Session 1
1. What is the history, frequency, and context of the compulsion?
 2. What specific aspect of the compulsion has the most emotional intensity?
 3. What is the specific positive feeling linked with the compulsion and what is the (Pos) SUDs rating?
 4. Where in the body does the client feel these positive feelings? What does it feel like?


24

RET Advanced Workshop Compulsive Behaviour



5. Ask the client to imagine performing the (a) compulsion (b) the positive feeling, and (c) physical sensations.
6. Tap while the client focuses on #5.
7. When the Pos SUDS is reduced to 1, ask about the related negative cognition. (Why is so important?) If no memory is available, float back.
8. Process underlying negative memory.

25



Second session

9. Re-evaluate.
10. If necessary, do steps 2 to 8 again
11. Continue to re-evaluate and process in further sessions until the person's no longer has a drive toward the compulsive behaviour.

Adapted from
The feeling-state theory of impulse-control disorders and the Impulse-Control Disorder Protocol.
Miller, Robert
Traumatology, Vol 16(3), Sep 2010, 2-10

26