

A discussion about addiction

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Topics

1. What is addiction?
2. What processes underlie addiction?
3. How does addiction relate to other psychological problems?
4. How can we combat addiction?

Definitions

Addiction	A type of mental disorder involving repeated strong motivation to engage in a given behaviour, learned through experience, with actual or potential harmful consequences
Strong motivation	A state of strong want, need or impulse to engage in a behaviour
Addictive behaviour	A behaviour to which someone is addicted
Addiction strength	The strength of motivation to engage in an addictive behaviour
Addiction severity	The amount of harm resulting from an addictive behaviour

Issues to discuss

- Focus on motivation
- How strong is 'strong'?
- Is learning necessary?
- Does this set the boundaries in the right place?
- What about 'withdrawal symptoms'?
- Is it necessary to include reference to harm?
- Is it a disorder, disease or neither?

Processes believed to be involved in addiction

Processes	Description	Example
Cost-benefit analysis	The benefits of the addictive behaviour are judged by the addict to outweigh the costs	At least some people addicted to alcohol believe that the benefits in terms of anxiety relief and mental escape are worth the financial, social and health costs
Incentive sensitisation	Repeated exposure to addictive drugs leads to sensitisation of brain pathways that generate feelings of 'wanting' in response to drug cues independent of feelings of 'liking'	Smoking crack cocaine leads to feelings of craving in situations similar to those where this has occurred, independent of feelings of euphoria produced by the drug

Processes believed to be involved in addiction

Processes	Description	Example
Reward seeking	Addicts learn that addictive behaviours provide positive feelings of enjoyment and euphoria	Methamphetamine users seek the 'rush' provided by the drug
Attachment	Addicts become emotionally attached to drugs or addictive behaviours because these have been reliable sources of comfort or gratification	Smokers often report feeling a sense of bereavement during the early stages of stopping smoking: like they have lost a cherished friend or family member

Processes believed to be involved in addiction

Processes	Description	Example
Drive reduction	Repeated engagement in an addictive behaviour results in development of an acquired drive, which is experienced as craving, after a period of abstinence.	Repeated use of nicotine alters brain physiology so that abstinence results in an acquired drive state, experienced as cigarette craving
Distress avoidance	Addicts learn that addictive behaviours relieve mental and physical distress caused by mental health problems, life circumstances, and/or withdrawal symptoms	Repeated use of heroin results in changes in brain chemistry leading to adverse mood and physical symptoms when concentrations of the drug fall below certain concentrations in the brain

Processes believed to be involved in addiction

Processes	Description	Example
Social influence	Cultural, sub-cultural, peer group and/or family norms promote or are permissive of addictive behaviour	Family and peer group are important factors influencing the development of smoking and alcohol consumption
Impaired control	Addictive behaviours develop, and are maintained by, pre-existing or acquired inefficiencies in brain systems required for impulse control	Use of stimulant drugs leads to impairment in frontal lobe functioning required to inhibit impulses to continually repeat the use leading to bingeing

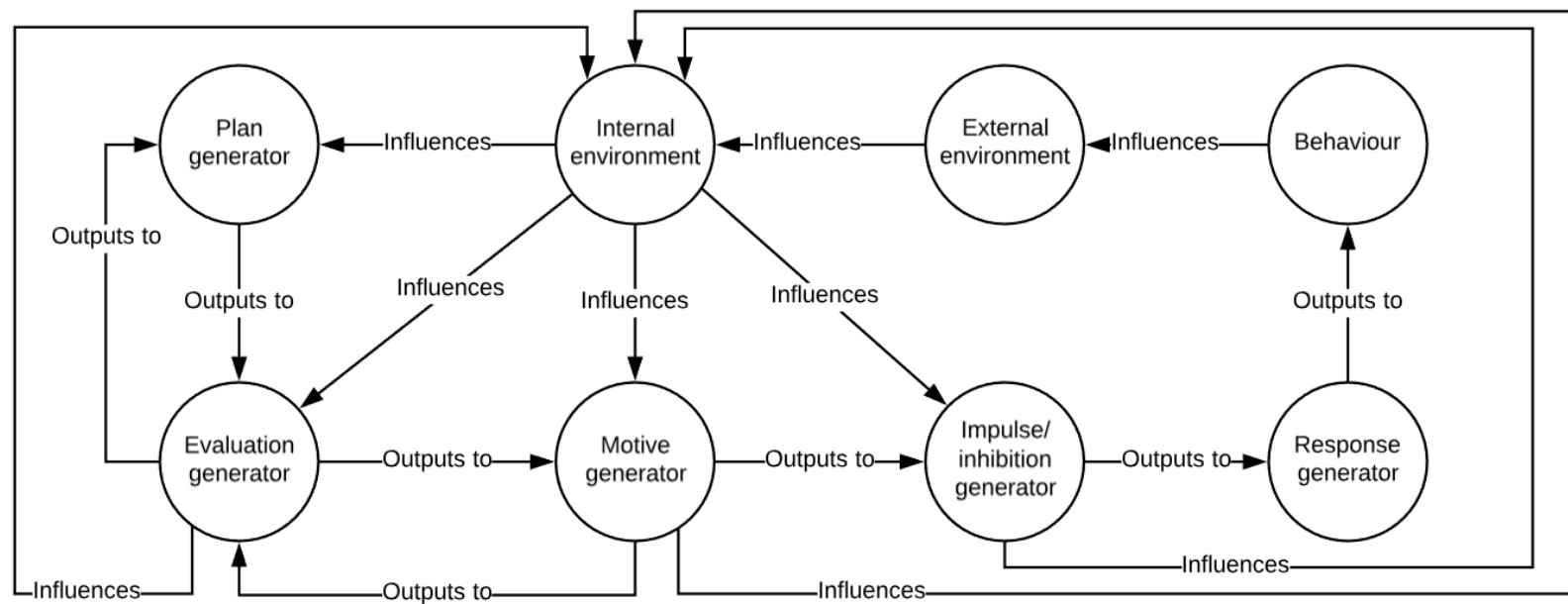
Processes believed to be involved in addiction

Processes	Description	Example
Classical conditioning	Repeated pairing of stimuli (cues) associated with effects of addictive behaviours leads those stimuli to generate anticipatory reactions to those effects	Lights, images and sounds are used by gaming machine manufacturers to promote high rates of use of those machines
Operant conditioning	Addictive behaviour are followed by powerful positive or negative reinforcers (rewards or offset of aversive stimuli) in the presence of discriminative stimuli (cues), so that those stimuli come to provoke a strong impulse to engage in the behaviour	Use of psycho-stimulants is maintained by the positive reinforcing properties of these drugs

PRIME Theory

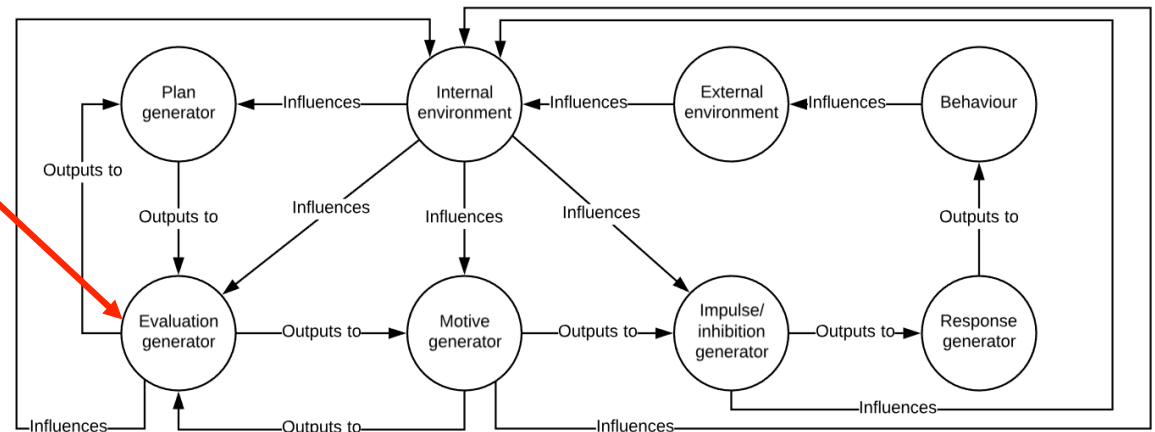
- A theory of motivation that has been used help understand addiction
- Focuses on the **momentary control of behaviour**
- Proposes control processes involving generation of
 - Plans
 - Responses
 - Impulses/inhibitions
 - Motives
 - Evaluations
- Proposes that responses are generated by impulses/inhibitions which are generated by comparing influences from different sources

PRIME: The structure of human motivation



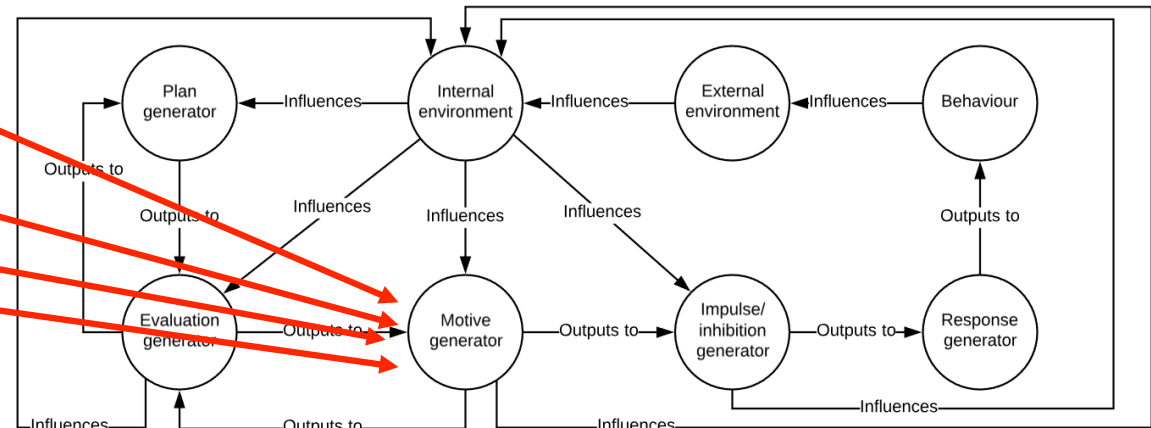
PRIME and addiction processes

- Cost-benefit analysis
- Incentive sensitisation
- Reward
- Attachment
- Drive reduction
- Distress avoidance
- Social influence
- Impaired control
- Classical conditioning
- Operant conditioning



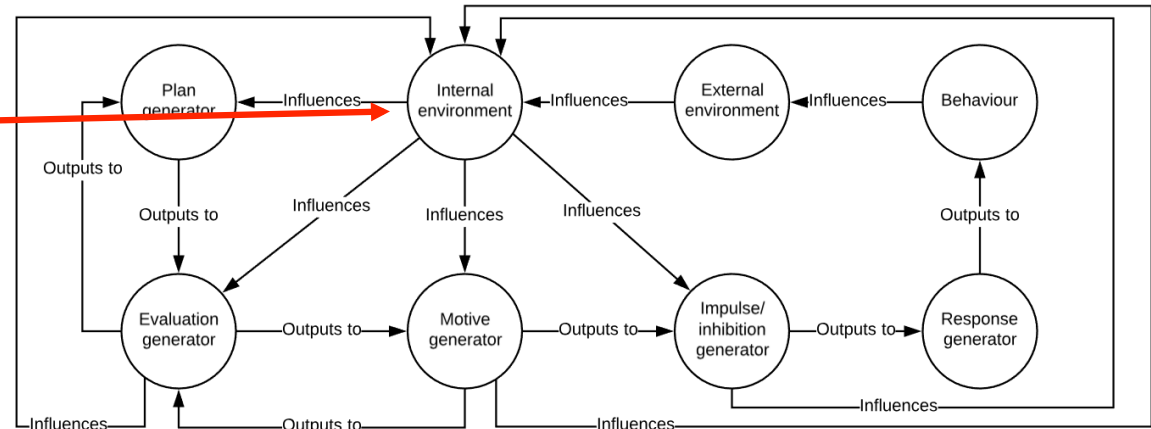
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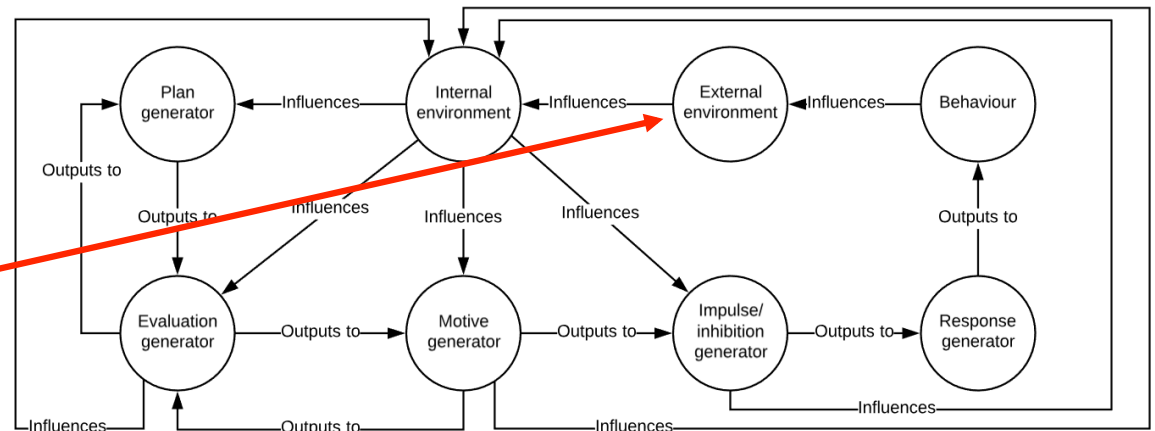
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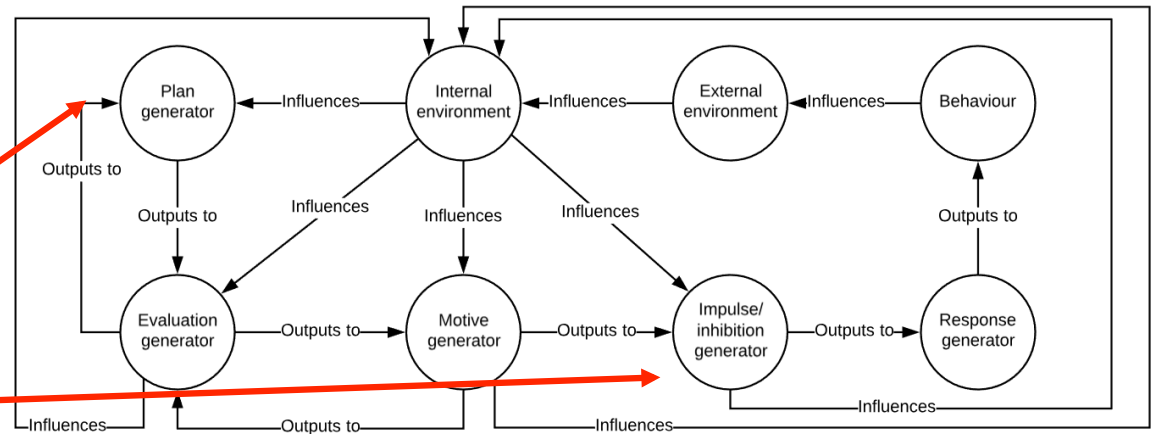
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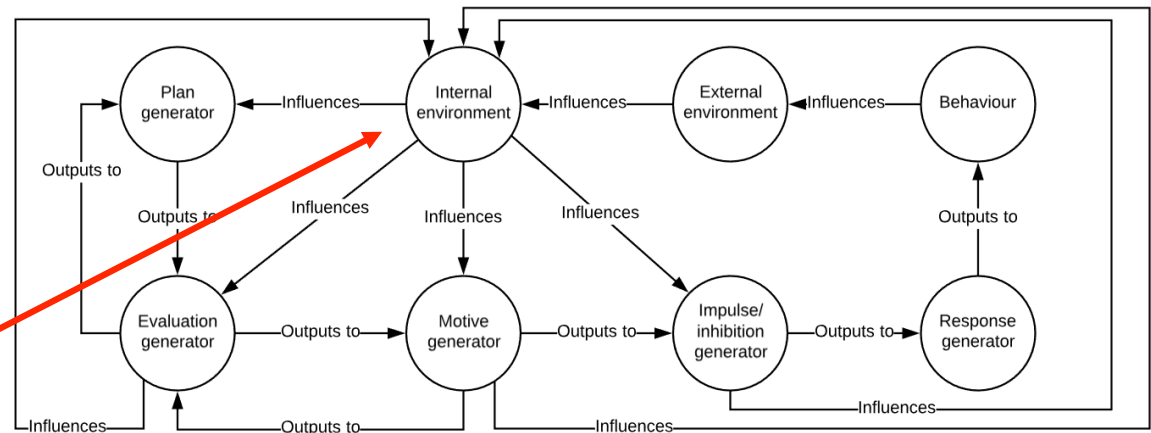
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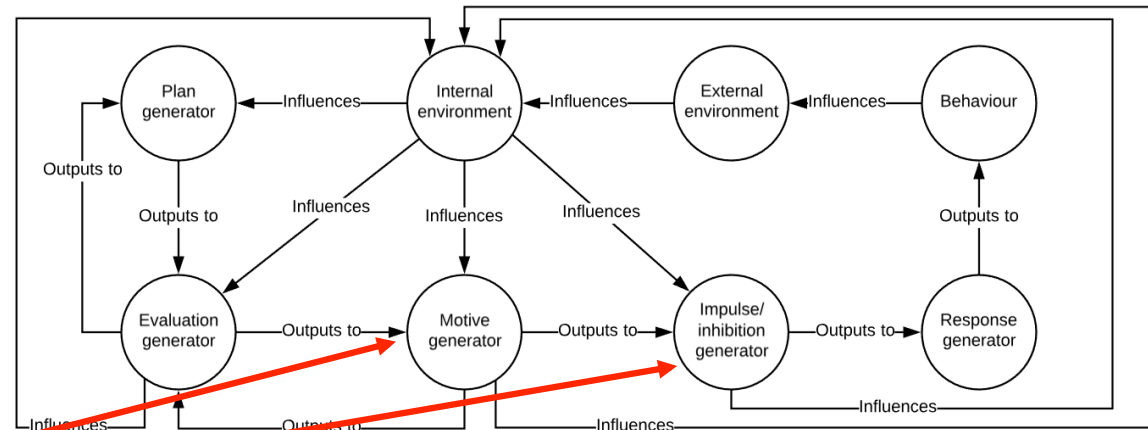
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Issues to discuss

- Are all these processes involved?
- Are any other processes involved?
- Are some of these processes more important than others?
- Can we arrive at a simple integrative model?

Addiction and psychological problems

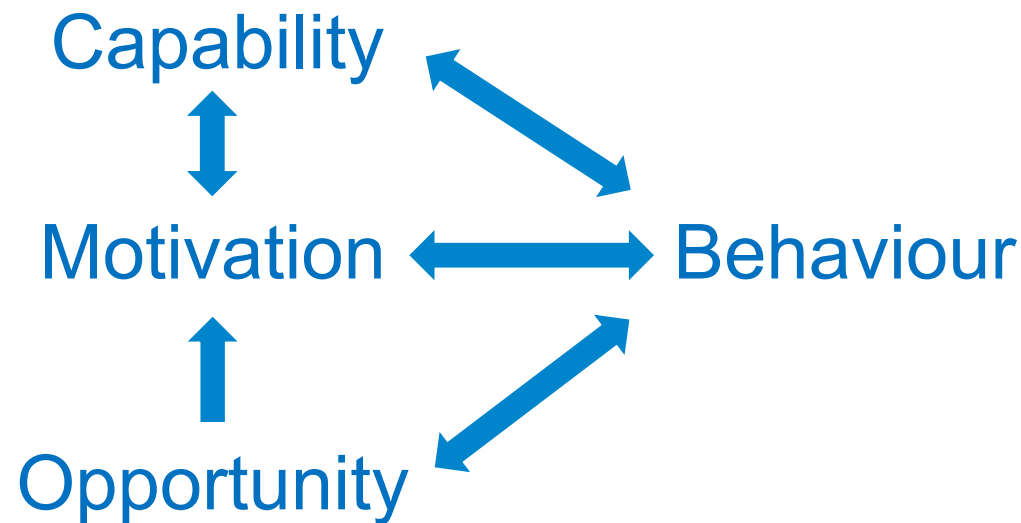
- Mental health disorders positively associated with addiction
 - Mood disorders
 - Psychotic disorders
 - Impulse control disorders
- Life circumstances positively associated with addiction
 - Poverty
 - Poor parenting and abuse
 - Adverse living conditions
 - Addictive behaviours among peer group
 - Lack of opportunities for fulfilment

Issues to discuss

- Other factors not covered?
- Mechanisms underlying associations?
- Implications for interventions?

COM-B: The key to unlocking behaviour change

Behaviour occurs when, at that moment, we have the **capability** and **opportunity**, and we are more **motivated** to do that thing than anything else



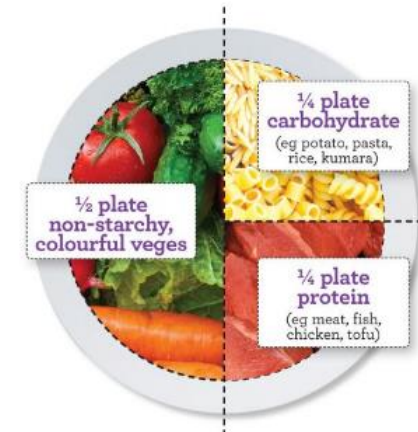


Capability

The physical or psychological ability to do something



Knowledge
Skills*
Strength*
Stamina*



* Mental and physical



Unlocking behaviour change

Find out which of capability, opportunity and/or motivation will need to change and how that can be sustained



Capability



Opportunity



Motivation



Behaviour

Do they know what they need to do, why they need to do it and how they can do it?

How confident are they in their ability to resist temptations?

What skills and experiences can they build on?





Opportunity



The **social** and **physical** environmental factors that enable us to do something



Resources
Access
Norms
Cues



Unlocking behaviour change

Find out which of capability, opportunity and/or motivation will need to change and how that can be sustained



Capability



Opportunity



Motivation



Behaviour

Do they have the financial or other resources to support their change?

Does their physical and social environment support change?

What can they do to reduce exposure to temptation?



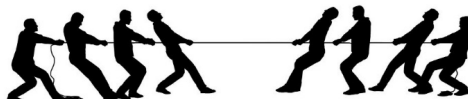


Motivation



The strength of desire or urge to do something

**Reflective/
Conscious**



**Automatic/
Unconscious**

Intentions and goals
Decisions and plans
Beliefs about costs and benefits

Wants and needs
Impulses and inhibitions
Developing a habit



Unlocking behaviour change

Find out which of capability, opportunity and/or motivation will need to change and how that can be sustained



Capability



Opportunity



Motivation



Behaviour

How committed are they to the goals they have set?

How steadfast are they likely to be in the face of challenges?

What habits and needs do they have that will get in the way of change?





Behaviour

Other behaviours that may support or hinder behaviour change



Unlocking behaviour change

Find out which of capability, opportunity and/or motivation will need to change and how that can be sustained



Capability



Opportunity



Motivation



Behaviour

What other behaviours could get in the way of making the needed changes?

What other behaviours could support the desired change?



Unlocking behaviour change

Find out which of capability, opportunity and/or motivation will need to change and how that can be sustained



Capability



Opportunity



Motivation



Behaviour



Preventing, treating and managing addiction

- Supply side
 - Restrict or prohibit supply
 - Increase financial cost
 - Restrict or prohibit marketing
 - Control product features
- Demand side
 - Change social norms
 - Provide treatment (behavioural and/or pharmacological)
 - Create media campaigns
 - Restrict or ban use
 - Build resilience

Issues to discuss

- Innovative ideas for treatment?
- Innovative ideas for prevention?
- The role of legislation?
- Where to focus resources?
- Prospects for drastically reducing prevalence?

Final thoughts?