Impulse Control in People's Lives

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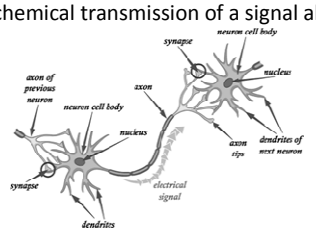
What is an Impulse?

1. An electrochemical transmission of a signal along a nerve fibre



2. A sudden urge or driving force that prompts an unpremeditated act or urge to act

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What is Impulsivity?

- Impulsivity: Predisposition toward rapid, unplanned reactions to internal or external stimuli without regard for the negative consequences of these choices to the impulsive person person or to others

"I could never tell where inspiration begins and impulse leaves off. I suppose the answer is in the outcome. If your hunch proves a good one, you were inspired; if it proves bad, you are guilty of yielding to thoughtless impulse."

Beryl Markham

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Characteristics of Impulsivity

- Rapid & unplanned action – not simply impaired judgment
- Likely to occur in the presence of strongly appealing stimuli or strongly stressful stimuli
- Likely to occur in the absence of strong cognitive thoughtful controls

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Dysfunctional Impulsive Behaviour

– Going on spending sprees
– Driving recklessly
– Promiscuous sex
– Binge eating
– Yelling, shouting, or screaming at others
– Threatening to harm others
– Getting into physical fights
– Destroying property
– Shoplifting

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Determinants of Impulse Control

Complex interaction between:

•Genes
•Physical events
•Social experience & learning

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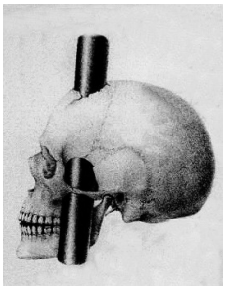
Phineas Gage



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Frontal Lobe Syndrome

- Cognitive
  - Short attention span
  - Poor working memory
  - Poor short term memory
  - Difficulty in planning & reasoning / impulsivity
- Emotional
  - Difficulty inhibiting emotions
- Behavioural
  - Perseveration
  - Inappropriate aggression or sexual behaviour
  - Inappropriate humour

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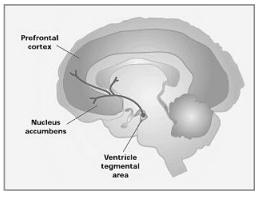
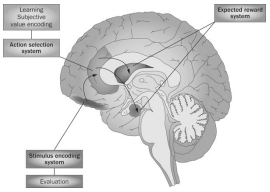
The **GO** & **STOP** Systems



GO - Dopamine



STOP - Serotonin

"The trouble with talking too fast is you may say something you haven't thought of yet."
Ann Landers

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Psychiatric Disorders with Suspected Frontal Lobe Impairment

- Attention Deficit Hyperactivity Disorder
- Schizophrenia
- Mood disorders
- Dementias
- Substance Abuse disorders
- Sexual Deviant disorders
- Impulse Control disorders
- Antisocial & Borderline Personality disorders
- Neurological damage from trauma, infection, hypoxia

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Almost all of us do things that are impulsive, irresponsible and out of character (as teenagers) That's really tied to how (young people's) brains work, ...
Fortunately, most people don't commit heinous crimes.
But almost everyone can look back on things they did as adolescents and say to themselves, 'What was I thinking?'

Dr. David Fassler

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Impulse Control & Intellectual Disability

- Genetic factors &neurological insults⇨ overarousal, hyperirritability, hyperexcitability
- ID hinders normal learning of impulse control
- ID contributes to smaller repertoire of coping strategies
- The more severe the level of ID, the more pronounced these effects are

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Impulse Control Disorders

- Intermittent Explosive Disorder
- Trichotillomania
- Kleptomania
- Pyromania
- Pathological Gambling
- Impulse Control Disorder NOS
  - E.g. Skin Picking

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Impulse Control Disorders

- DSM-IV TR
  - these disorders represent " the failure to resist an impulse, drive or temptation to perform an act that is harmful to the person or to others"
  - in most of these, "the individual feels an increasing sense of tension or arousal before committing the act and then experiences pleasure, gratification or relief at the time of committing the act.
  - Following the act, there may or may not be regret, self-reproach or guilt"

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Intermittent Explosive Disorder

DSM IV TR Criteria	DM-ID Adapted for Mild to Profound ID
A. Several episodes of failure to resist aggressive Impulses that result in serious assaults or destruction of property	**Frequent episodes that last for at least 2 months** of failure to resist aggressive impulses that result in ……
B. Degree of aggressiveness during episodes is grossly out of proportion to precipitating psychosocial stressors	Degree of aggressiveness is out of proportion to the precipitating psychosocial stressors **& to level of ID**
C. Aggressive episodes not better explained by another mental disorder: (Antisocial or borderline personality disorder, Psychosis, Mania, Conduct Disorder, ADHD & not due to direct effects of a substance or medical condition such as head trauma or Alzheimer's)	Aggressive episodes not better explained by any other mental disorder **except if the other disorder is mild compared to the aggression or is temporally unrelated to the aggression**

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Trichotillomania

DSM-IV TR	DM-ID Mild to Moderate ID	DM-ID Severe to Profound ID
A. Recurrent pulling out of hair with noticeable hair loss	No adaptation	No adaptation
B. Increasing tension before pulling out the hair or when trying to resist pulling	Might not apply b/c of person's inability to express feelings	This criterion does not apply
C. Pleasure, gratification or relief when pulling out hair	Might not apply b/c of inability to express feelings	Does not apply
D. Not better accounted for by another mental disorder and not due to a medical condition such as dermatological condition	No change – but in ID it may occur in conjunction with other disorders such as Self Injurious Behaviour	No adaptation

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Pyromania

DSM-IV TR	DM-ID – Mild ID	DM-ID Moderate to Profound
A. Deliberate purposeful fire setting more than once	No adaptation	No adaptation
B. Tension or affective arousal before the act	No adaptation	Does not apply
C. Fascination with, curiosity about, attraction to fire & things about fire	No adaptation	No adaptation
D. Pleasure, gratification, relief when setting fires or involvement with aftermath	No adaptation	Does not apply
E. Not done for money, to conceal criminal activity, anger/ vengeance, to improve living circumstances, as result of psychosis , or as result of impaired judgement (e.g. ID)	No adaptation	Does not apply
F. Not better explained by Conduct Disorder, Mania, or ASPD	No adaptation	Not better explained by *any* other mental disorder

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Fire Setting

- 18% of recidivist fire setters had an intellectual disability (Lindberg 2005)
  - From this study, it appears that persons with ID are over-represented in fire setting
- Most frequent antecedent emotions in persons with ID who set fires:
  - Anger
  - Perception of not being listened to or attended to
  - Sadness / depression

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Fire Setting Offence Cycle

Washington State Fire Setting Staff Training Manual 19

Categories of Fire Setters

- Naive – does not appreciate risk / consequences
- Reactive – crisis driven, bored, has had recent psychosocial stress, high sense of unmet needs
  - moderate risk of future fires
- Delusional – secondary to another mental disorder such as schizophrenia, depression, bipolar etc.
- Delinquent – angry, looking to hurt others, seeking revenge; use fire as a weapon ; may have Conduct Disorder, ASPD;
  - high risk for future fires;
- Pyromania – very high risk
- Criminal - profit

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Kleptomania

DSM-IV TR	DM-ID – Mild to Severe ID
A. Recurrent failure to resist impulses to steal objects that are not needed for personal use or monetary value	No adaptation
B. Increasing tension before the theft	Often does not apply d/t to difficulty in persons identifying such feelings
C. Pleasure, gratification or relief at time of theft	Often does not apply d/t difficulty expressing such feelings
D. Not committed for anger or vengeance & not b/c of delusion or hallucination	No adaptation **Also not due to lack of concept of ownership**
E. Not better explained by Conduct Disorder, Mania, or Antisocial Personality	No adaptation

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Pathological Gambling

DSM IV TR Criteria	Adapted for MILD ID	Adapted for Moderate to Profound ID
A. Persistent recurring gambling with 5 or more of:	No adaptation A: 1-10	A: 1-10 do not apply
1. Preoccupied with reliving past gambling, planning next venture, thinking of how to get money to gamble		
2. Needs to gamble with increasing amounts of money to achieve desired excitement		
3.Repeated unsuccessful efforts to control or stop gambling		
4. Restless/irritable when trying to cut down or stop gambling		
5. Gambles to escape problems or to relieve dysphoric mood		
6. After losing, often returns to try to recoup losses		

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Pathological Gambling (Cont'd)

DSM IV TR Criteria	Adapted for MILD ID	Adapted for Moderate to Profound ID
7. Lies to family & significant others to conceal extent of gambling	No adaptation A: 1-10	A: 1-10 do not apply
8. Has committed illegal acts (forgery, fraud, theft, embezzlement) to finance gambling		
9. Has jeopardized or lost a significant relationship, job, school or career opportunity b/c of gambling		
10. Relies on others to provide money to relieve desperate financial situation caused by gambling		
B. Gambling behaviour not better accounted for by a Manic Episode	B. No adaptation	B. No adaptation

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How Do We Help People with Impulse Control Problems?

- A biopsychosocial assessment should lead to interventions directed at the cause(s) of the impulsivity
- Are skills to manage impulse control absent?
  - Lack of opportunity to learn skills? Then teach
  - Neurological damage which impairs learning or causes high arousal? Possible role for meds, external controls
- Skills present but not being utlized?
  - Disinhibition by drugs/alcohol? Substance treatment
  - Disinhibition by psychiatric illness? Psychiatric Rx
  - Irritability from pain/medical illness? Medical Rx
  - Low motivation to use skills? Increase motivation

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Internal vs External Strategies

- Internal
  - Skill acquisition
  - Cognitive / behavioural interventions
  - Mindfulness
  - Medication
- External
  - Restriction of access to situations which may trigger the impulse

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Things to do for Impulsivity

- Approach the person effectively
- Distraction
- Structure & consistency
- Avoid exposure to risky situations
  - Antecedent controls better than consequences
- Functional coping skills
- Cognitive / Behaviour therapy
- Mindfulness

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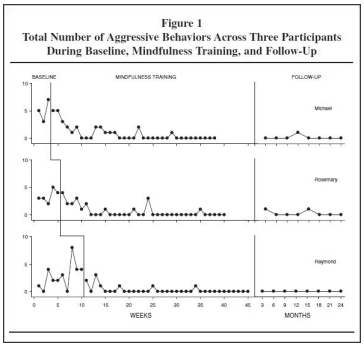
Mindfulness in Moderating Aggression



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Pharmacological Interventions

- Depending on underlying issues, response to meds can vary from gratifying to equivocal
- Almost every class of meds has been used in the treatment of impulsivity with greater or lesser degrees of benefit
  - Antipsychotics, antidepressants, mood stabilizers, stimulants, cholinesterase inhibitors, narcotic antagonists

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Table 2 Double-blind pharmacological treatment studies of impulse control disorders

Disorder	Treatment	Outcome
	Antidepressants	
Pathological gambling (PG)	• Clomipramine*	Clomipramine produced a 90% improvement in a single patient
	• Sertraline*	Sertraline did not produce results superior to placebo
	• Fluvoxamine*	Fluvoxamine superior to placebo on CGI scale and YBOCS-PG
	• Fluvoxamine*	Fluvoxamine not statistically significant from placebo except in young males
	• Paroxetine*	Paroxetine group significantly improved compared with placebo on CGI
	• Paroxetine*	Paroxetine and placebo groups with comparable improvement on all measures
	• Escitalopram*	Significant improvement for escitalopram subjects while placebo group had a relapse of gambling symptoms
	• Bupropion*	Bupropion and placebo produced similar results
Trichotillomania	• Clomipramine**	Significant improvement with clomipramine when compared with desipramine
	• Fluoxetine*	Fluoxetine produced no significant improvement when compared with placebo
	• Fluoxetine, clomipramine*	Fluoxetine and clomipramine produced similar positive results
	• Fluoxetine*	Fluoxetine failed to show significant improvement when compared with placebo
	• Fluoxetine vs behavior therapy vs wait list*	Behavior therapy showed significant improvement; fluoxetine did not
Pathological skin picking	• Fluoxetine*	Fluoxetine produced significant improvement compared with placebo
	• Fluoxetine*	After open-label phase, those randomized to fluoxetine maintained positive results while the placebo group returned to baseline severity levels
Compulsive buying*	• Fluvoxamine*	Fluvoxamine and placebo groups with comparable improvement on YBOCS-CB, CGI, and GRF
	• Fluvoxamine*	Fluvoxamine and placebo groups with comparable improvement on YBOCS-SV and CGI
	• Citalopram*	Citalopram group significantly improved compared with placebo
	• Escitalopram*	Relapse rates not significantly different between escitalopram and placebo
Compulsive sexual behavior	• Citalopram*	Citalopram significantly reduced both urges and behavior compared with placebo
Kleptomania	• Escitalopram*	Relapse rates not significantly different between escitalopram and placebo
	Mood stabilizers	
Pathological gambling (PG)	• Lithium carbonate SR*	Lithium produced significantly reduced PG symptoms compared with placebo
Intermittent explosive disorder (IED)	• Divalproex sodium*	No significant changes seen seen in IED subjects who did not have a cluster B personality disorder
	Opioid antagonists	
Pathological gambling (PG)	• Naltrexone*	Naltrexone group significantly improved compared with placebo on CGI and G-SAS
	• Nalmefene*	Nalmefene produced significant improvement in PG symptoms compared with placebo
	Glutamatergic agents	
Pathological gambling (PG)	• N-acetylcysteine (NAC)*	Of randomized responders, 83.3% on NAC still met responder criteria at study end-point compared with 28.6% on placebo

CGI, Clinical Global Impression scale; YBOCS-PG,Yale-Brown Obsessive Compulsive Scale modified for Pathological Gambling; YBOCS-CB, Yale-Brown Obsessive Compulsive Scale modified for Compulsive Buying; SAM, Stikal Assessment of Monitoring; YBOCS-SV, Yale-Brown Obsessive Compulsive Scale – Shopping Version; SR, slow release; G-SAS, Gambling Symptom Assessment Scale.

Out of 26 placebo controlled studies using a variety of meds, 12 failed to show a difference between drug & placebo

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Case History – "Sally"

(from *Impulsivity: Theory, Assessment and Treatment Ed. by Webster & Jackson)*

- Single woman with intellectual disability
- Friendly & likeable yet disruptive & challenging
- Various psychiatric diagnoses; often refused psychiatric services
- Long history of involvement with multiple systems – medical, psychiatric, social, correctional etc.
- Many dysfunctional impulsive behaviours – breaking windows, throwing objects at cars & people, cutting herself
- Often demand help but refuse to attend
- Refused admittance to many "last resort" housing services

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Case History – "Sally"

(from *Impulsivity: Theory, Assessment and Treatment; Ed. by Webster & Jackson)*

- Case conference with Multi-Service Network in British Columbia
  - Attended by representatives from corrections, social services, mental health, & emergency housing
- Plan:
  - Emergency housing , then placement in long term housing
  - Income assistance weekly from social services
  - Counselling from mental health & probation officer remained involved after expiration of probation
- Improvement with diminished behavioural problems and even began to attend school
- Decompensation after disclosure of sexual abuse history
- Plan:
  - additional supports provided to long term residence staff,
  - Increased 1:1 service
  - Psychotherapy re sexual abuse
- Stabilized & doing well

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Summary

- Everyone can experience impulsive actions
- Impulsive action not necessarily pathological unless it often negatively impacts the life of the person or of others
- Frontal lobes of brain important in impulse control
- Impulse control problems seen in a number of psychiatric disorders – not just the Impulse Control Disorders

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Summary

- Impulse control mediated through balance between "Bottom-up" drives & "Top-down" skills
- Persons with ID may have additional challenges in impulse control due to a variety of biopsychosocial factors related to the ID
- Interventions must follow from a good biopsychosocial evaluation
- No universal treatment, pharmacological or psychosocial for problematic impulse control

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Resources

- How Impulsive Are You?
  http://www.blogthings.com/areyouimpulsivequiz/
  http://faculty.mdc.edu/jmcnair/imp_test.php
- *Impulse Control Difficulties in ID - Role in Behavioral and Psychiatric Disorders*; William Gardner; NADD Bulletin: Volume VIII Number 3 Article 1; http://www.thenadd.org/cgi-bin/checkmember.pl?page=pages/membership/bulletins/v8n3a1
- *Impulsivity: Theory, Assessment & Treatment*; Ed by Webster & Jackson; Guilford Press 1997
- *Mindfulness Training Assists Individuals With Moderate Mental Retardation to Maintain Their Community Placements*; Singh et al; *Behav Modif* 2007; 31; 800
- *Pharmacological treatment of impulsivity & aggressive behavior*; http://www.scielo.br/pdf/rbp/v31s2/en_v31s2a04.pdf

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