Substance use disorder

*Complex developmental vulnerability*

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Access to public health system for Substance Use Disorder

Recognize the complex pathogenesis of substance use disorders.

Advocate against prejudices and stigma.

Promote accessibility to treatment facilities.
Turn genes on - off

The maintenance of such permanent changes in brain function requires changes in gene expression

epigenetic changes induced by drugs and vulnerability factors
Infant attachment was also significantly associated with a principal component that accounted for 11.9% of the variation in genome-wide DNA methylation.

These effects were most apparent when comparing children with a secure versus a disorganized attachment.
Children with secure attachment were able to wait the longest periods of time, whereas those with insecure-disorganized attachment had the most difficulties in waiting.
Secure-organized attachment

I can wait. I trust my parents. No need to be concerned
Delay discounting is associated with substance use in college students.
Kollins, 2003

Individuals reporting more illicit drug use and younger ages of first use tend to discount the value of future hypothetical rewards.
Am J Drug Alcohol Abuse.
Relations among delay discounting, addictions, and money mismanagement: implications and future directions.
Behav Pharmacol.

Reward delay discounting as an index of impulsivity:

Impulsive discounting
- problematic behaviours
- drug use
- pathological gambling
Addiction as an attachment disorder.
Unterrainer et al., 2018

- a significant relationship between Substance Use Disorder and insecure attachment

- characterize Substance Use Disorder as a possible expression of an attachment disorder.
Neurobiol Stress.

**Child maltreatment and the development of substance use and disorder.**
Cicchetti and Handley, 2019

Children who experience maltreatment are at risk for the development of problematic substance use and disorder in adolescence and beyond

externalizing pathway of risk
J Youth Adolesc.  

**Childhood Neglect, Internalizing Symptoms and Adolescent Substance Use: Does the Neighbourhood Context Matter?**  
Dupre et al., 2017

Internalizing problems mediated the link between the severity of neglect in early childhood and adolescent substance use.
30.4% reported any Childhood Sexual Abuse and 8.4% intercourse

Self-reported abuse was positively associated with all disorders:
- bulimia
- alcohol dependence
- drug dependence
Subst Abuse
A Review on Attachment and Adolescent Substance Abuse: Empirical Evidence and Implications for Prevention and Treatment. Schindler and Bröning, 2015

Strong evidence for a general link between Substance Use Disorder and insecure attachment.

Psychol Bull.
A Meta-Analysis of Longitudinal Associations between Substance Use and Interpersonal Attachment Security
Fairbairn et al., 2018
Heroin as an attachment substitute? Differences in attachment representations between opioid, ecstasy and cannabis abusers.
Schindler et al., 2009

- Heroin: an emotional substitute for lacking coping strategies.

- Cannabis: used to support existing deactivating and distancing strategies.

- Ecstasy: related to insecure attachment but not to a specific attachment strategy.
Psychobiological responses to unpleasant emotions in cannabis users.
Somaini and Gerra, 2012

an association between active cannabis use, subjective reduced sensitivity to negative emotions and threat
Attachment anxiety may mediate between childhood adversity and harmful drinking in both men and women.

Attachment anxiety may be a potential therapeutic target.
Frustration Tolerance and Personality Traits in Patients With Substance Use Disorders. Ramirez-Castillo et al. 2019

Frustration Tolerance is commonly related to disorganized attachment (anxiety and trauma)

They might be important factors to consider within therapeutic programs for persons with substance use disorders.
Mummy, daddy, and addiction: Implicit insecure attachment is associated with substance use in college students. Serra et al., 2019

**Implicit attachment** significantly associated with the use of licit (tobacco) and illicit (cannabis) drugs.

Polydrug use is especially common among students with an insecure implicit attachment.

better predictor of substance use in college students than direct, self-reported measures of attachment.
Social inequalities in mental disorders and substance misuse in young adults: A birth cohort study in Southern Brazil.
Barros et al., 2018
Socio-economic status associated with insecure attachment
Adolescent from high socioeconomic status try cannabis (episodic experimenting) more often than young people from lower socioeconomic status.

However, cannabis regular use, with the risk of being affected by cannabis use disorders, associated with a lower socioeconomic status, bad school results, early school leaving.

Young people from high socioeconomic status dispose of greater sociocultural resources to master and regulate their consumption (Beck et al., 2013)
- Family
- School
- Community
Attachment

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