

S2470C

Behaviour Change

Lesson 07

Addiction

Lecturer / Programme Chair: Dr Elaine Wong`



Learning Outcomes

- Define ***addiction***.
- Describe the various models for explaining the ***etiology*** of addiction.
- Identify ***risk*** & ***protective*** factors influencing addiction.
- Describe the various ***approaches*** in the treatment of addiction.
 - Family Therapy
 - Cognitive Behavioural Therapy
 - Solution-focused Therapy
 - Group Therapy





Case Study – In the Life of A Drug Addict



Thomas Koh: From A Life Of Drug Addiction To Saving Addicts' Lives
<https://www.youtube.com/watch?v=ybVKued1aVE>



Types of Addiction

Negative peer pressure, wrong perceptions of ways to cope with pressure, boredom, and curiosity are some of the factors that may lead a person to misuse or abuse substances such as drugs, inhalants, alcohol and tobacco. However, substance abuse is accompanied by many other dangers and risks. Even the misuse and possession of certain substances like heroin and cocaine are serious offences in Singapore. This article gives a general overview of substance abuse and addiction.



SUBSTANCE ABUSE AND ADDICTION: AN OVERVIEW

<https://www.hpb.gov.sg/article/substance-abuse-and-addiction-an-overview>

Alcohol

Drug

Gambling

Gaming

Internet

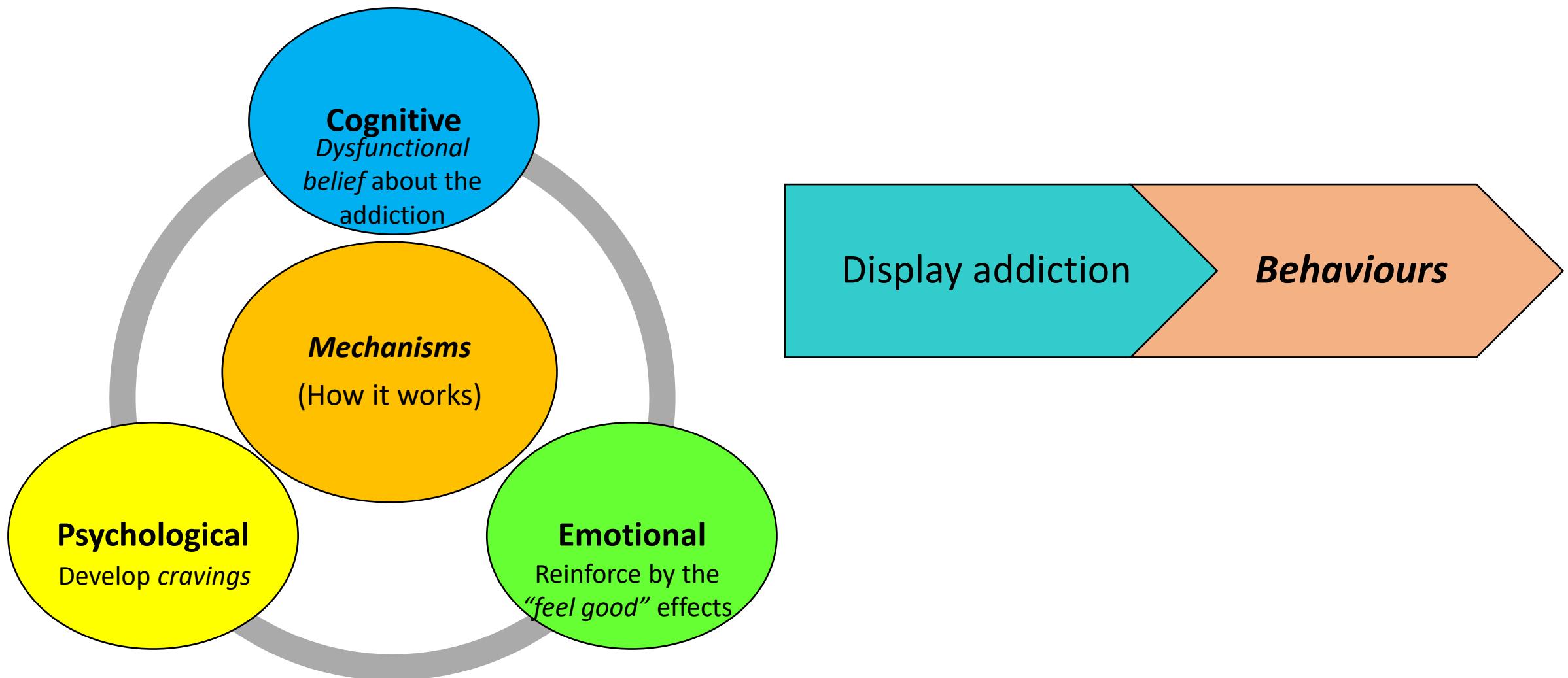
Nicotine

Sex

Others
(e.g., eating, shopping)



Mechanism



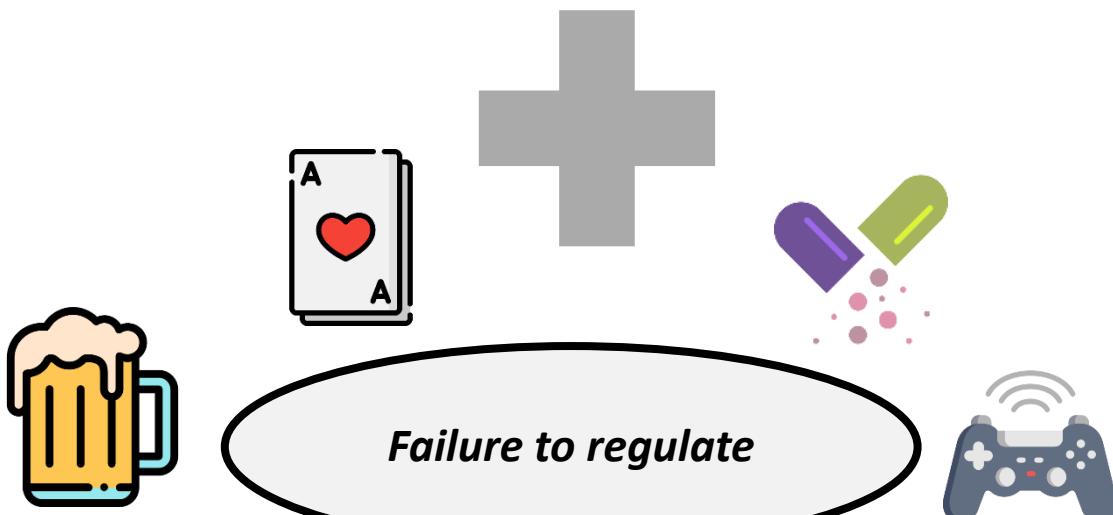


Addictive Behaviour

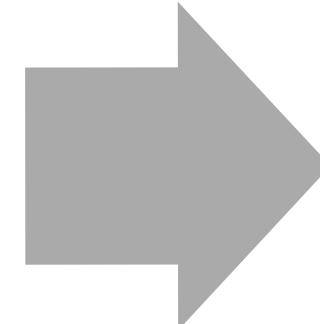


Strength of Reinforcement
(Reward-seeking behaviour is 'strong')

Withdrawal avoidance behaviour is 'weak'



Failure to regulate

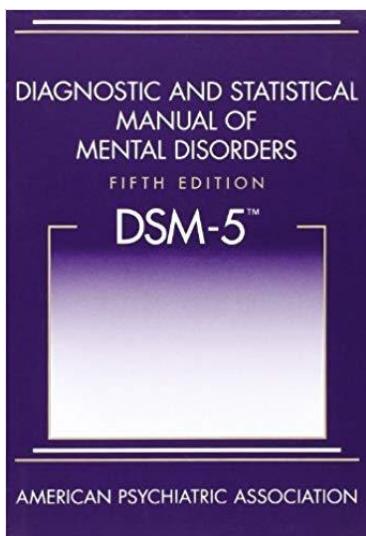
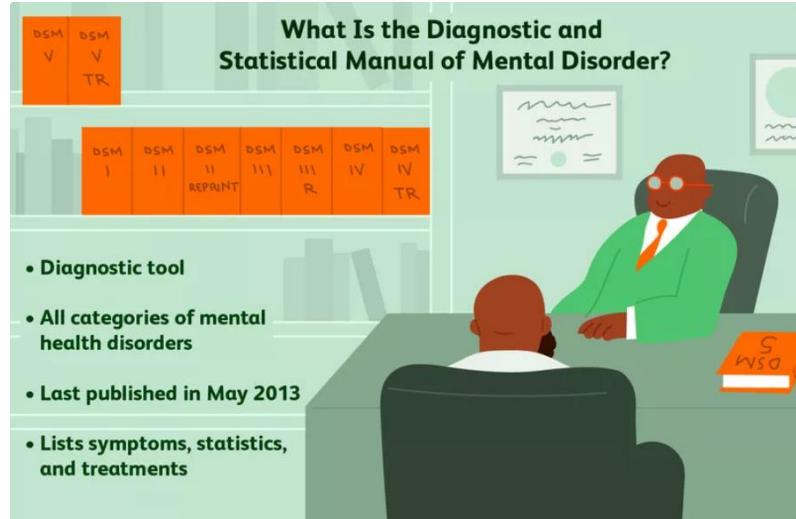


Addiction





Substance Use Disorder- Diagnosis & Symptoms



DSM-5 *is*

A summary of signs and symptoms which, when contextualized in a biopsychosocial framework ("case formulation") may point to an underlying mental disorder.

A heuristic framework providing sets of diagnostic criteria that are largely etiology-neutral; but which postulates that the convergence of biological, psychological, social, and cultural factors can account for the patient's current presentation and problems.

A rough, culturally attuned guide to detecting and classifying clinically significant disturbances in an individual's cognition, emotion regulation, or behavior; and attempting to distinguish such disturbances from expectable ("normal") or culturally acceptable responses to common stressors or losses.



Examples of Substance Use

DSM-5

Alcohol

Cannabis

Hallucinogens

Inhalants

Opioids

Sedatives,
hypnotics and
anxiolytics

Stimulants

Tobacco



Substances Assessed

11 classes of substances assessed, plus 2 additional categories

- Alcohol
- Amphetamine and similar sympathomimetics
- Caffeine (intoxication only)
- Cannabis (no withdrawal syndrome)
- Cocaine
- Hallucinogens
- Phencyclidine and similar arylcyclohexylamines
- Inhalants (no withdrawal syndrome)
- Nicotine (dependence only)
- Opioids
- Sedatives, hypnotics, and anxiolytics
- Other drug abuse/dependence
- Polysubstance dependence

*Substance Use does not apply to caffeine



Substance Use Disorder- Diagnosis & Symptoms

DSM-5

- **4 Areas of Assessment (11 criteria)**
 - *Impaired Control*
 - *Social Impairment*
 - *Risky Use*
 - *Pharmacological Criteria*
- **Graded Clinical Severity**
 - **Mild** level: 2 to 3 criteria are fulfilled
 - **Moderate** level: 4 to 5 criteria are fulfilled
 - **Severe** level: 6 or more criteria are fulfilled



* Symptoms must occur within a ***12-month period***.

* Substance use must constitute a ***maladaptive pattern of consumption*** leading to ***clinically significant impairment or distress*** as manifested in ≥ 2 areas of assessment within a 12-month period.

Substance Abuse and Mental Health Services Administration. Impact of the DSM-IV to DSM-5 Changes on the National Survey on Drug Use and Health [Internet]. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 2016 Jun. 2, Substance Use Disorders. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK519702/>

Dziegielewski, S. F. (2014). *DSM-5 in Action*. John Wiley & Sons.



11 Criteria

DSM-5: Substance Use Disorder- Diagnosis & Symptoms

Impaired Control

1. Substance taken in ***larger amounts*** or ***over a longer period*** than intended.
2. ***Persistent desire*** or ***unsuccessful efforts*** to reduce or control substance use.
3. A ***great deal of time*** is spent to obtain, use or recover from the effects of substance use.
4. ***Craving*** or ***strong desire/urge*** for substance use.



Substance Abuse and Mental Health Services Administration. Impact of the DSM-IV to DSM-5 Changes on the National Survey on Drug Use and Health [Internet]. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 2016 Jun. 2, Substance Use Disorders. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK519702/>

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11 Criteria

DSM-5: Substance Use Disorder- Diagnosis & Symptoms

Social Impairment

5. Recurrent substance use results in a ***failure to fulfill major role obligations*** at work, school, or home.
6. Continued substance use despite having ***persistent interpersonal problems caused by the effects of the substance***.
7. ***Social, occupational, or recreational activities are given up/reduced*** due to substance use.

Risky Use

8. Recurrent substance use in situations where it is ***physically hazardous***.
9. Substance use is continued ***despite knowledge of having a persistent or recurrent physical or psychological problem*** that is likely to have been caused by substance use.

Substance Abuse and Mental Health Services Administration. Impact of the DSM-IV to DSM-5 Changes on the National Survey on Drug Use and Health [Internet]. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 2016 Jun. 2, Substance Use Disorders. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK519702/>

Dziegielewski, S. F. (2014). *DSM-5 in Action*. John Wiley & Sons.



11 Criteria

DSM-5: Substance Use Disorder- Diagnosis & Symptoms

Pharmacological Criteria

10. Tolerance is defined by:

1. **Need for increased amounts of substance use** to achieve intoxication
OR
2. **Diminished effect with the continued amount** of substance use.



11. Withdrawal is:

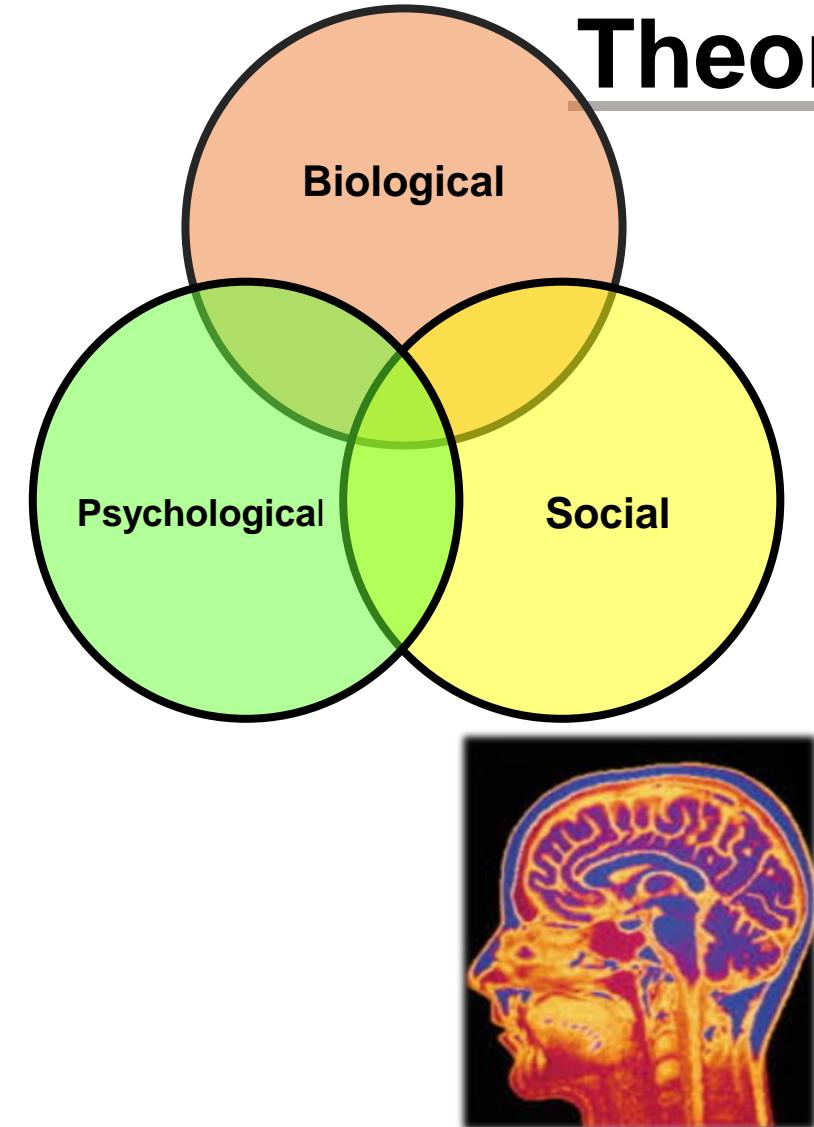
- (1) **withdrawal syndrome for substance use** (excludes Phencyclidine, other Hallucinogens, & Inhalants)
- (2) Substances are **taken to relieve** withdrawal symptoms.

Note: This criterion is not considered met for those taking opioids, sedatives, hypnotics or anxiolytics, or stimulant medications solely under appropriate medical supervision.

Substance Abuse and Mental Health Services Administration. Impact of the DSM-IV to DSM-5 Changes on the National Survey on Drug Use and Health [Internet]. Rockville (MD): Substance Abuse and Mental Health Services Administration (US); 2016 Jun. 2, Substance Use Disorders. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK519702/>



Theoretical Models of Addiction



Biopsychosocial Model

Biological, psychological, cognitive, social, developmental, & environmental variables to explain addiction in an individual.

Moral Model

Addiction is the **result of moral failure** & a **consequence of personal choice**.

Disease Model

Addiction is a **disease**, a **chronic & progressive condition**, over which the sufferer has no control.





Causes of Addiction

Theoretical Models

Psychological Models

The ***mind*** plays a crucial role in addicted persons.
e.g., Cognitive-behavioural model & the learning model.



Family Models

Individuals with addiction must consider their ***relationship with their families***.



Biological Models

Due to ***genetics & brain structure***, certain individuals are more inclined to use & develop an addiction.



Socio-Cultural Models

Family, peer & cultural influences play a huge role in substance abuse.





Why is Assessment Important?

Determine whether the individual **has a substance use** disorder.

Identify **other problems**.

Increase the **client's likelihood of entering & remaining** in treatment.

AUDIT-C Questionnaire			
1. How often do you have a drink containing alcohol?			
0 = Never			
1 = Monthly or less often			
2 = 2 to 4 times monthly			
3 = 2 to 3 times weekly			
4 = \geq 4 times weekly			
2. How many standard drinks containing alcohol do you have on a typical day?			
0 = 1 or 2			
1 = 3 or 4			
2 = 5 or 6			
3 = 7 to 9			
4 = \geq 10			
3. How often do you have 6 or more drinks on one occasion?			
0 = Never			
1 = Less than monthly			
2 = Monthly			
3 = Weekly			
4 = Daily or almost daily			
AUDIT, Alcohol Use Disorders Identification Test. Copyright © 1990 World Health Organization.			

DAST-10	No	Yes
1. Have you used drugs other than those required for medical reasons?	0	1
2. Do you abuse more than one drug at a time?	0	1
3. Are you always able to stop using drugs when you want to? (If never used drugs, answer Yes)	0	1
4. Have you had blackouts or flashbacks as a result of drug use?	0	1
5. Do you ever feel bad or guilty about your drug use? (If never used drugs, answer No)	0	1
6. Does your spouse (or parents) ever complain about your involvement with drugs?	0	1
7. Have you neglected your family because of your use of drugs?	0	1
8. Have you engaged in illegal activities in order to obtain drugs?	0	1
9. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?	0	1
10. Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding)?	0	1





Assessment – How it is done?



Standardized assessment tools, such as the DSM-5



Interview with family members & significant others

Interview with the client

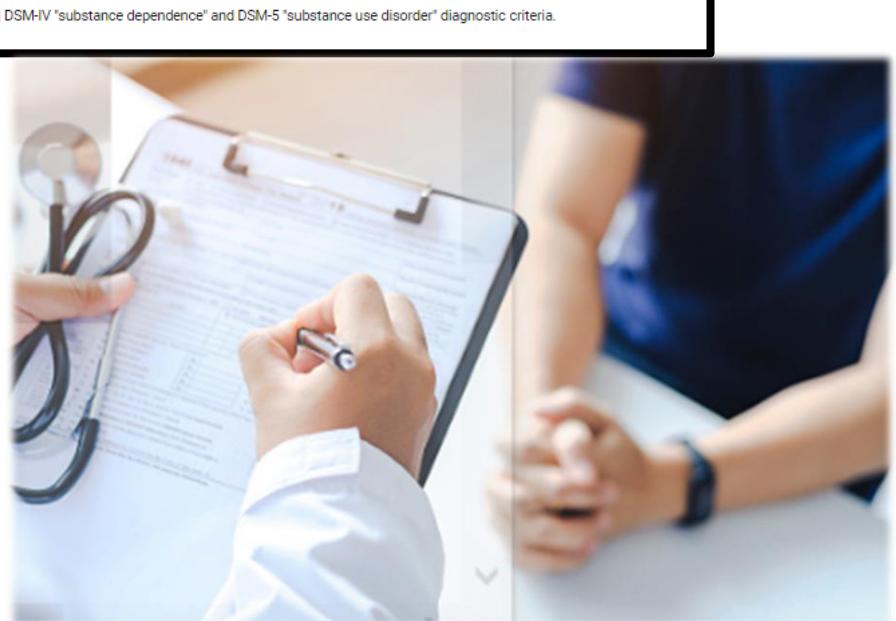




Assessment – Questions...

- **Age** at first use of the substance
- Heaviest **time of use**
- **Pattern** of use up to the present time
- **History** of convulsions/hallucinations
- Current **dose/ amounts** used
- Current **frequency**
- **Route** of use
- **Why** client is seeking help now
- **Current substances** being used e.g., legal & illegal drugs

Criterion	DSM-IV substance dependence	DSM-5 substance use disorder
Tolerance	✓	✓
Withdrawal	✓	✓
Taken more/longer than intended	✓	✓
Desire/unsuccessful efforts to quit use	✓	✓
Great deal of time taken by activities involved in use	✓	✓
Use despite knowledge of problems associated with use	✓	✓
Important activities given up because of use	✓	✓
Recurrent use resulting in a failure to fulfill important role obligations		✓
Recurrent use resulting in physically hazardous behavior (e.g., driving)		✓
Continued use despite recurrent social problems associated with use		✓





Addiction Interventions

Specify
*goal &
objectives*
**monitor &
evaluate**
progress.

Simple or
elaborate
objectives &
based on clear
**short-term or
long-term**
goals.

Specify
interventions
designed to meet goals.



<https://www.nams.sg/about-us/about-nams/Pages/default.aspx>

NATIONAL
ADDICTIONS
MANAGEMENT SERVICE

🔍 A⁻ A⁺ ☎

Contact Us Locate Us FAQ

The screenshot shows the NAMS website's navigation bar with links for About Us, Our Services, Helpseekers, Caregivers, Events, Addiction Recovery College, and Research. The 'Helpseekers' menu is open, showing 'Drug Use' as the selected category. The 'Drug Use' page content includes links for Alcohol, Gambling, Internet and Gaming, Women, and Others. The 'HELPSEEKERS' sidebar lists Drug Use, Video, Self-Assessment Tool, and Signs & Symptoms. The main content area features a collage of various drugs, syringes, and medical equipment.



Intervention

**Family
&
Significant Others**



**Cognitive
Behavioural Therapy**



**Solution-focused
Therapy**



Group Therapy





Family & Significant Others



Family systems influence the intervention outcome. There is a need to pay attention to ***family dynamics***.

Allied health professionals help the family ***interrupt rigid patterns of interaction*** & find a new ***equilibrium***.



IN FOCUS: Breaking the cycle of drug addiction passing from parent to child

<https://www.channelnewsasia.com/singapore/in-focus-singapore-inter-generational-drug-abuse-636611>



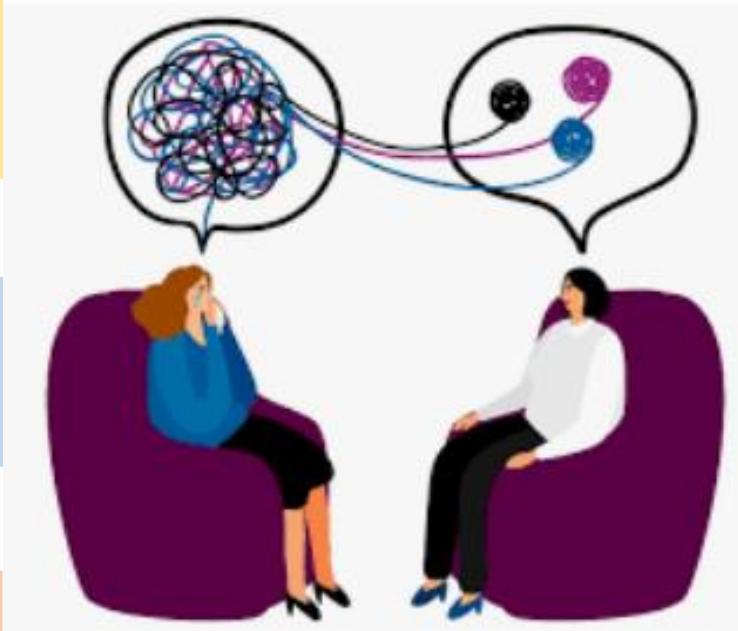
Cognitive Behavioural Therapy (CBT)

Maladaptive thinking & bad habits are the mechanisms that cause problems & keep them going

Provides **valuable skills** to assist people to reduce substance use or gain abstinence.

A form of “**talk therapy**”.

Teach, encourage, & support individuals to reduce/stop harmful substance use.





CBT



Introduction to Cognitive Behavioral Therapy for Substance Use Disorders

https://www.youtube.com/watch?v=Otu5Ajlo-_w



CBT - Dysfunctional Beliefs

Anticipatory

- **False expectations of drug use**
e.g., "I feel like a superman when I use."

Relief-oriented

- **Assume using drugs will remove** an uncomfortable state
e.g., "My urges & cravings will not go away unless I use."

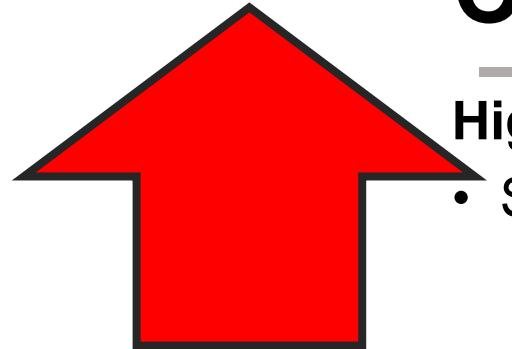
Facilitative
or
Permissive

- Think drug use is acceptable **despite potential consequences**
e.g., "I deserve it. I am a hard worker. There is nothing wrong with taking risks."

Associated with ***client's acute decision*** to engage in substance abuse

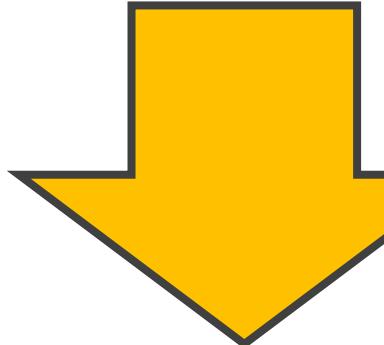


CBT - High & Low Risk Situation



High-risk Situation

- Situations involve **triggers** & highly associated with substance use



Low-risk Situation

- Places, people, & situations have less association with substance use

Strategy:

Teach clients to reduce time in high-risk situations
but increase time in low-risk situations.

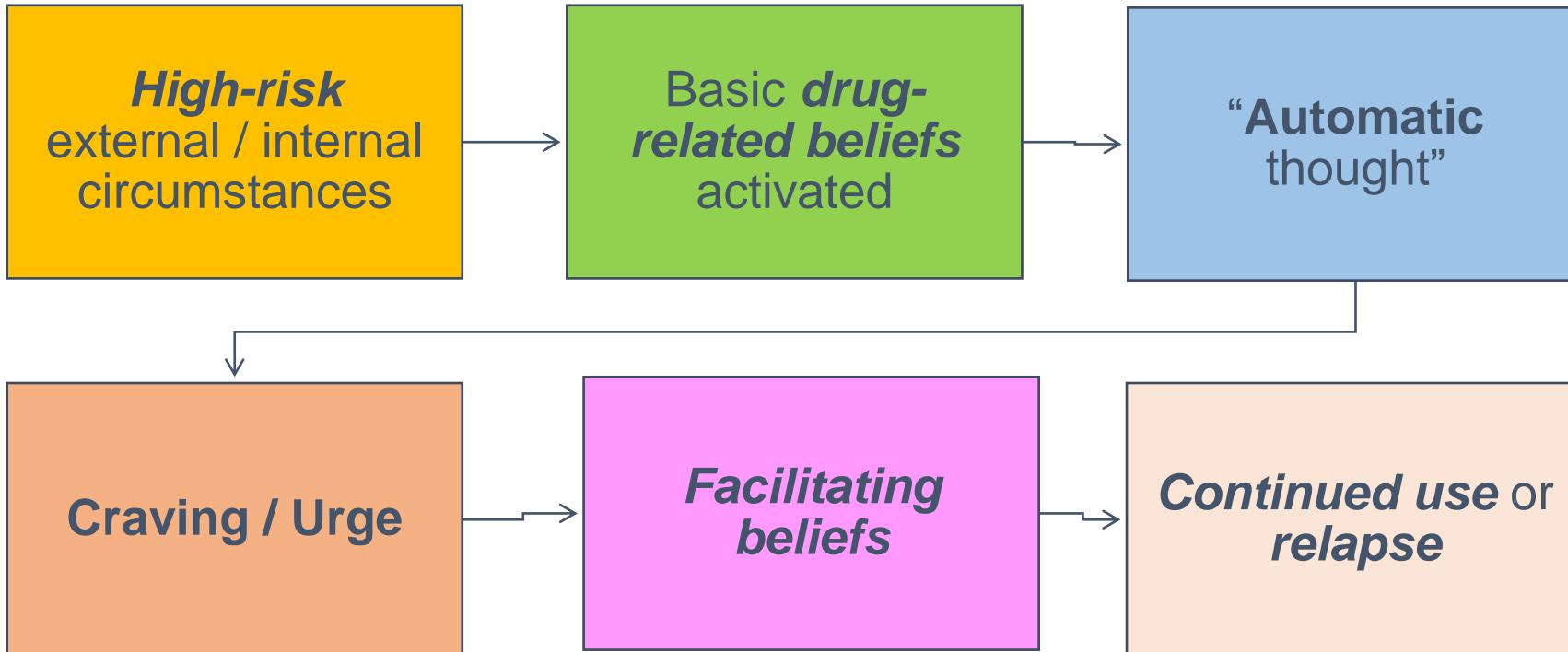


He spent his youth in jail, then got his life back. He now helps other 'special ones' fight addiction

<https://www.channelnewsasia.com/cna-insider/ex-addicts-helping-others-addiction-drugs-alcohol-peer-support-2655596>



Cognitive Model of Substance Abuse

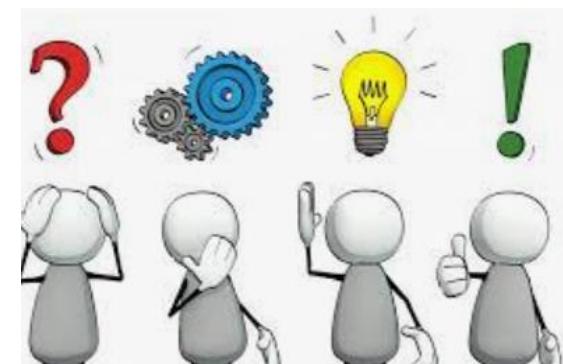
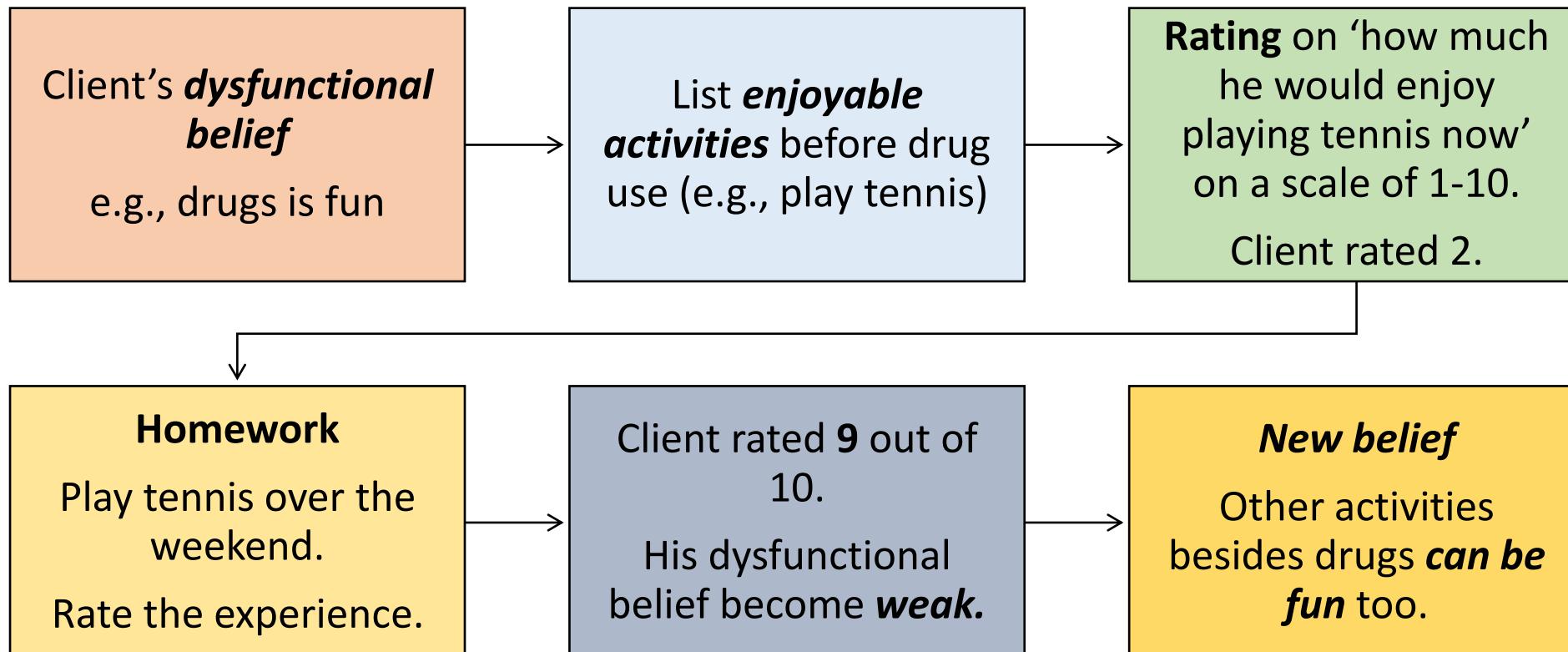




CBT - Development of Adaptive Beliefs

Socratic Method

- **Examine** drug-related beliefs, **modify** & **replace** them with adaptive beliefs.





CBT - Development of Adaptive Beliefs

Daily Thought Record (DTR)

Situation	Emotion (s)	Automative Thought (s)	Rational Response
Sitting at home due to wrist; with plenty of money in my pocket. 	Bored	There is nothing to do. I cannot stand the boredom. I need to do something, Should I go the casino?	I have tolerated boredom before in the past. There are plenty of things to do e.g., watch Netflix. 



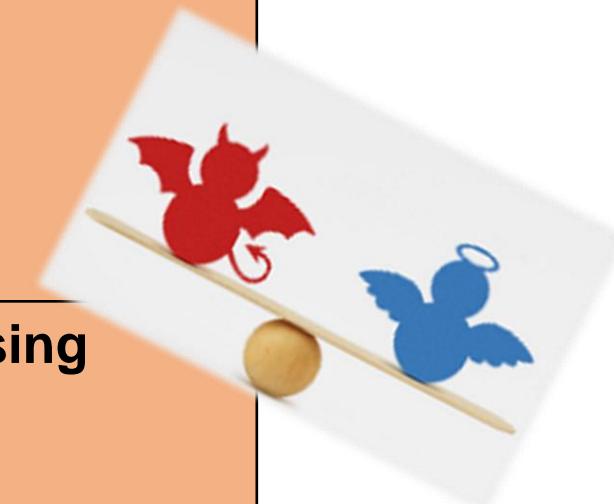
Wright, F. D., Beck, A. T., Newman, C. F., & Liese, B. S. (1993). Cognitive therapy of substance abuse: theoretical rationale. *NIDA research monograph, 137*, 123-146.



CBT - Development of Adaptive Beliefs

Analysis

Advantages <ul style="list-style-type: none">• “I feel like a superman.”• “It takes away my shyness &insecurity.”• “I feel like king of the mountain.”	Disadvantages for Using <ul style="list-style-type: none">• “I feel paranoid.”• “I will have a terrible relationship with my wife.”• “I feel bad.”
Advantages for Not Using <ul style="list-style-type: none">• “I save money.”• “I do not have to lie to my family.”• “I will feel physically great.”	Disadvantages of Not Using <ul style="list-style-type: none">• “I will be lonely.”• “I will lose friends.”



Wright, F. D., Beck, A. T., Newman, C. F., & Liese, B. S. (1993). Cognitive therapy of substance abuse: theoretical rationale. *NIDA research monograph*, 137, 123-146.



CBT - Homework

Apply **skills** learned in the therapy session to everyday life- a vital extension of therapy.

Get the client to **use probing questions and reflect** on their lives, e.g.

“**What evidence** do I have for this belief?”

“**How else** can I look at the situation?”

“What are the **consequences of my beliefs**?”

Is an opportunity to practice **applying adaptive beliefs** in the real world.



Client practice **activating adaptive beliefs** during tempting high-risk stimuli, since they may be confronted with such stimuli in life (outside of therapy).

Homework is **given at the end** of each session & **is reviewed** at the beginning of each following session.

Initially, homework is **structured** (e.g., complete DTRs daily).

Later, homework is **less formal & more creative** as the client demonstrates skill in applying adaptive patterns of thinking & action.





Solution-focused Therapy

Solve the problem

More
important
than

Find & elaborate on
the root “cause” of the
problem

- Client had the ability within themselves &/or their social system to ***bring about change***.
- Identify & use ***client's strengths & abilities***.
- ***Construct*** solutions.





Solution-focused Therapy

“Miracle” Question

- Asked deliberately & dramatically.
- Persistent questioning:
 - **What would the person do differently** on this new, problem-free day?
 - **Who** would notice the difference
 - **What effect** would this have on the client?



- A **rich picture** emerges that **provides momentum for a client** to start making changes.
- Seek **what small steps** the client could take to reach a little bit of the miracle picture.

E.g., Suppose one night while you are sleeping, you don't know that a miracle has happened.

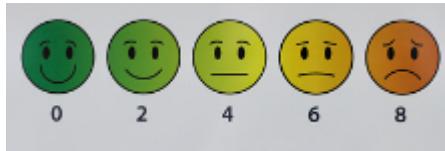
When you wake up tomorrow morning, what **will be different** that informs you that a miracle has happened & the problem that brought you here is solved?



Solution-focused Therapy

Scaling Question

- Help the client **assess the level of hope, determination, confidence, sadness, & how much change has occurred?**



ACTIVITY

E.g.

- ❖ On a scale of **1 to 8**, how upset are you today?"
8 = the worst upset you have ever felt
- ❖ What would it take for you to **move up by 1 point?**
- ❖ When you move up by 1 point, what would **your family & friends** notice that would tell him that you are doing a little bit better?"



Solution-focused Therapy

Coping Question

- Use **survival strategies** for clients who are managing their addictions.
- Helpful in ***building hope & self-efficacy*** (key 'change' ingredients)



E.g., "You've been through a lot in the last month with your gambling.

How in the world ***have you coped*** with so much while still holding down a job?"

"What else have you managed to do despite your addiction? ***How did you*** do this?"

Van Wormer, K., & Davis, D. R. (2016). *Addiction treatment*. Cengage Learning.



Group Therapy

Psychoeducational

Skills Development

Cognitive-behavioural

Support

Interpersonal Process





Psychoeducational Group

- ***Educate*** clients about substance abuse.
- Help client:
 - in **pre-contemplative** or **contemplative** stage of change to reframe the ***impact of drug use*** on their lives, develop an ***internal need to seek help***, & ***discover avenues*** for change.
 - ***Learn more*** about their disorders, ***recognise roadblocks*** to recovery, & ***deepen their understanding*** of the path they will follow toward recovery
 - Families ***understand the behaviour*** of a person with substance use disorder which allows them to ***support*** the individual in recovery & learn about their own needs for change.
 - Provide ***resources*** in recovery, e.g., relaxation training, anger management, spiritual development & nutrition.
- Is considered a ***useful & necessary***, but ***not sufficient***, component of most programmes
- May move clients from a pre-contemplative / contemplative stage ***to commit to treatment***, together with other forms of group therapy.



Skills Development Group



- Cultivate the **skills needed** to attain & sustain abstinence
 - e.g., manage anger or cope with urges to use substances.
- Directly related to substance use
 - e.g., refuse drug use, avoid triggers for use, or cope with urges or broader areas relevant to a client's continued sobriety
 - e.g., problem-solving or relaxation
- Clients who rely on substances of abuse as a **method of coping** with the world may not learn other important life skills or lost these abilities as a result of their substance abuse.
- Thus, the capacity to **build new skills** or **relearn old ones** is essential for recovery.



Cognitive-behavioural Group

- Conceptualise dependency as a learned behaviour subjected to modification using ***various interventions***
 - e.g., Identification of conditioned stimuli associated with addictive behaviours
 - Avoid stimuli
 - Develop contingency management strategies & response-desensitisation
- Change learned behaviour by ***changing thought patterns, beliefs, & perceptions***

Common beliefs of individuals entering recovery:

- “I’m a failure.”
- “I’m not strong enough to quit.”
- “I’m unlovable.”
- “I’m a (morally) bad person.”



The word “**morally**” carries the implication of a “**shame script**” & **feeling defective** as a person.

“**Bad**” alone refers more to behaviour or doing “bad things.”

Changing such beliefs may lead to greater opportunities to live more productively.



Support Group



- **Achieve abstinence & manage** day-to-day living.
- **Strengthen** clients' **efforts & ability** to manage their thinking & emotions to develop better interpersonal skills.
- Help each other with **pragmatic concerns**, e.g., maintain abstinence & manage day-to-day living.
- To improve the client's **self-esteem & self-confidence**.



Interpersonal Process - Group Psychotherapy



- Use **psychodynamics** i.e., knowledge of the way people function psychologically, to promote change & healing.
- Recognise that **conflicting forces** in the mind. Some of these thoughts may be outside one's awareness which affects a person's behaviour.
- Focus on the **present**.

Uses the **process of the group** as the primary change mechanism.

Center for Substance Abuse Treatment. Substance Abuse Treatment: Group Therapy. Treatment Improvement Protocol (TIP) Series, No. 41. HHS Publication No. (SMA) 15-3991. Rockville, MD: Substance Abuse and Mental Health Services Administration, 2005.



Protective & Risk Factors

Protective Factors

(Prevent addictive behaviour)

- Strong ***religious*** beliefs

- ***Moral*** beliefs

- ***Sociability***

- ***Social skills***

e.g., problem solving,
greater respect,
awareness of others &
better communication.

- ***Resilient temperament***

e.g., easy-going temperament &
recover quickly from emotionally
upsetting incidents



Individual



Risk Factors

(***Increase*** susceptible to addiction)

- ***Sensation-seeking***

(engage in risks and thrills)

- ***Impulsiveness***

- ***Psychological*** issues (e.g.,
depression)

- ***Alienation, rebelliousness***

- ***Behavioural*** problems

- ***Poor coping*** skills

- ***Major transitions*** in life



Protective & Risk Factors

Protective Factors

(Prevent addictive behaviour)

- **Strong** attachment
- Parental **monitoring**
- **Consistency** of parenting
e.g., set clear rules
- **Clear expectations & limits**
- **Involvement** of parents
- **Nurturing & supportive** members

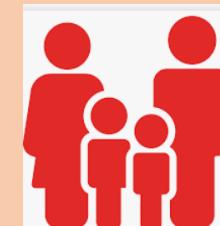


Risk Factors

(**Increase** susceptible to addiction)

- **Family history**
- **Parental approval**
- **Lack of** family involvement or support
- High family **conflict**
- **Ineffective** parenting

Family





Protective & Risk Factors

Protective Factors

(Prevent addictive behaviour)

- Prosocial **peer attachment**
e.g., stronger emotional attachment bonds to peers that engage in prosocial behaviour)
- **Success** in academic performance
- **Strong bonds** with the school mentor & teachers
- **Positive attitudes** toward school
- **Regular** school attendance



Risk Factors

(Increase susceptible to addiction)

Interpersonal

School

- Peer **pressure / influence**
- Peer **Rejection**
- **Poor** academic performance
- **Anti-social** behaviour
(misbehave in school, play truant)



Protective & Risk Factors

Protective Factors

(Prevent addictive behaviour)

- **Strong bonds** with institutions
e.g., church, mosque, temple
- **Strict & consistency** in
following law & policies
- **Community involvement**
- **Available resources**
e.g., housing, healthcare,
childcare, jobs, recreation



Risk Factors

(Increase susceptible to addiction)

Community

- **Availability & accessibility** to substance use
- Extreme **economic deprivation**.
- **Normative attitudes to** local laws & policies
e.g., legal drinking age & taxes on alcohol & tobacco products



Protective & Risk Factors



In Focus: A former serial drug offender tells how he finally broke the cycle of addiction
<https://www.youtube.com/watch?v=s3eKvAMLgQM>



References

- Ahmad Zhaki Abdullah (2020). *In focus: Breaking the cycle of drug addiction passing from parent to child.* <https://www.channelnewsasia.com/singapore/in-focus-singapore-inter-generational-drug-abuse-636611>
- Barlow, D. H., & Durand, V. M. (2002). *Abnormal psychology: An integrated approach* (3rd ed.). Belmont, CA: Wadsworth.
- Capuzzi, D., & Stauffer, M. D. (2011). *Foundations of addictions counselling* (2nd ed.). Upper Saddle River, NJ: Pearson.
- Health Promotion Board. *Substance Abuse and Addiction: An overview.* <https://www.hpb.gov.sg/article/substance-abuse-and-addiction-an-overview>
- Kadden, R. M. (2002). *Cognitive-behavior therapy for substance dependence: Coping skills training.* Connecticut: United States: University of Connecticut, School of Medicine. <http://www.bhrm.org/guidelines/CBT-Kadden.pdf>
- Lewis, J. A., Dana, R. Q., & Blevins, G. A. (2011). *Substance abuse counselling* (4th ed.). Belmont, CA: Brooks/ Cole.
- Lichtenstein, M.B., Christiansen, E., Bilenberg, N. & Stoving, R.K. (2012). Validation of the exercise addiction inventory in a Danish sport context. *Scandinavian Journal of Medicine & Science in Sports.* John Wiley & Sons Ltd.
- Lin, W. (2011, June 12). *Parents need to be flexible when they encourage their children to quit smoking.* The Sunday Times, pp. 6-7.
- National Institute on Drug Abuse [NIDA]. (2009). *Treatment approaches for drug addiction.* http://www.nida.nih.gov/PDF/InfoFacts/IF_Treatment_Approaches2009_to_NIDA_92209.pdf
- Neo Chai Chin. (2020). *He spent his youth in jail, then got his life back. He now helps other 'special ones' fight addiction.* <https://www.channelnewsasia.com/singapore/in-focus-singapore-inter-generational-drug-abuse-636611>
- Webb, T.L., Snihotta, F.F. & Michie, S. (2010). *Using theories of behaviour change to inform interventions for addictive behaviours.* *Addiction.* Society for the Study of Addiction.