

S2470

Behaviour Change

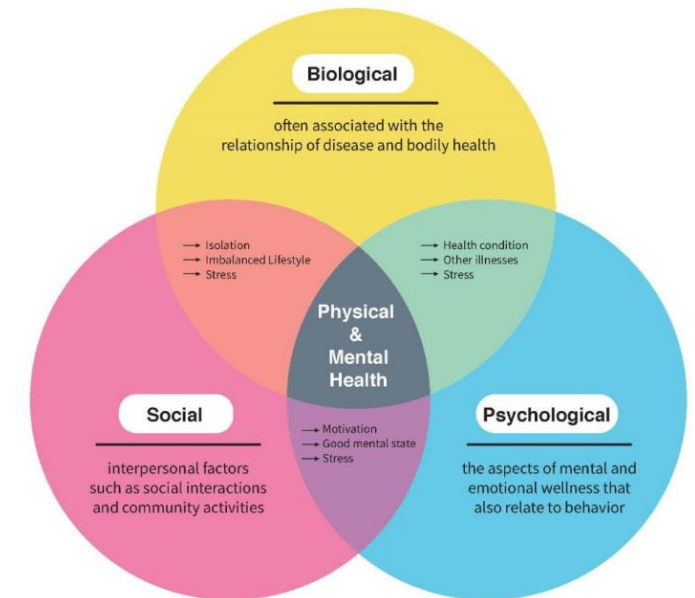
Lesson 01

Theories and Frameworks in Behaviour Change

Lecturer / Programme Chair: Dr Elaine Wong

Outline

- Definition of Health Behaviour
- Biopsychosocial Framework in Relation to Health Behaviour
- Health Behaviour, Lifestyle Diseases & Precursors
- Socio-demographic Influences on Health Behaviour
- Need for Theories
- Behaviour Change Theories
 - Transtheoretical Model & Motivational Interviewing
 - Health Belief Model
 - Social Cognitive Theory



Health Behaviour....



“World Health Organization (WHO) defines it as:

“any activity undertaken by an individual (or group), regardless of actual or perceived health status, for the purpose of promoting, protecting, or maintaining health.”

A ***health behaviour*** is an action—regardless of intention, status, or outcomes— that has a relationship with health.”



Targeting Health Behaviours

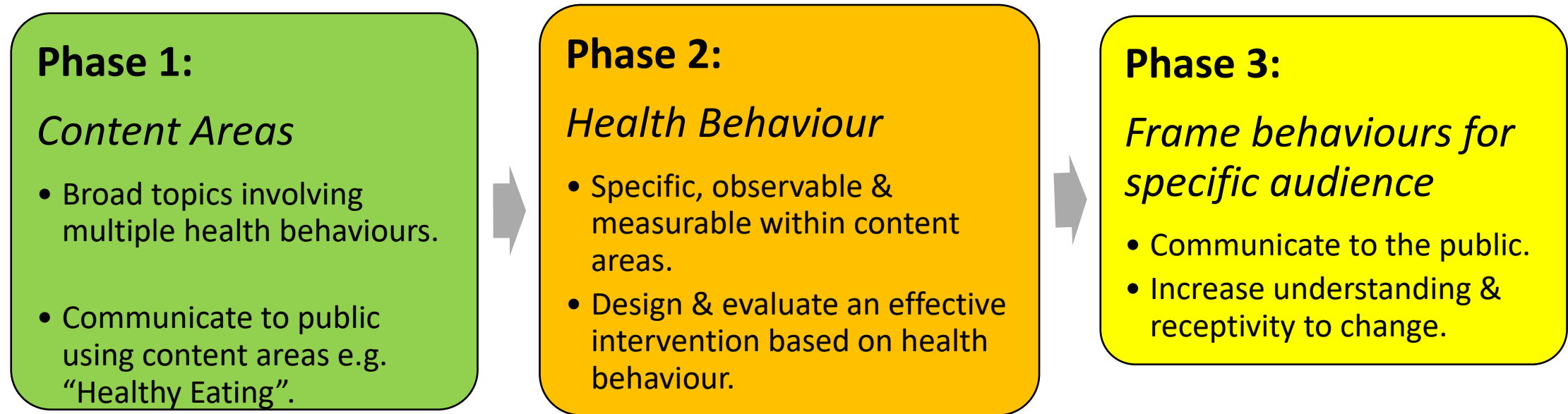


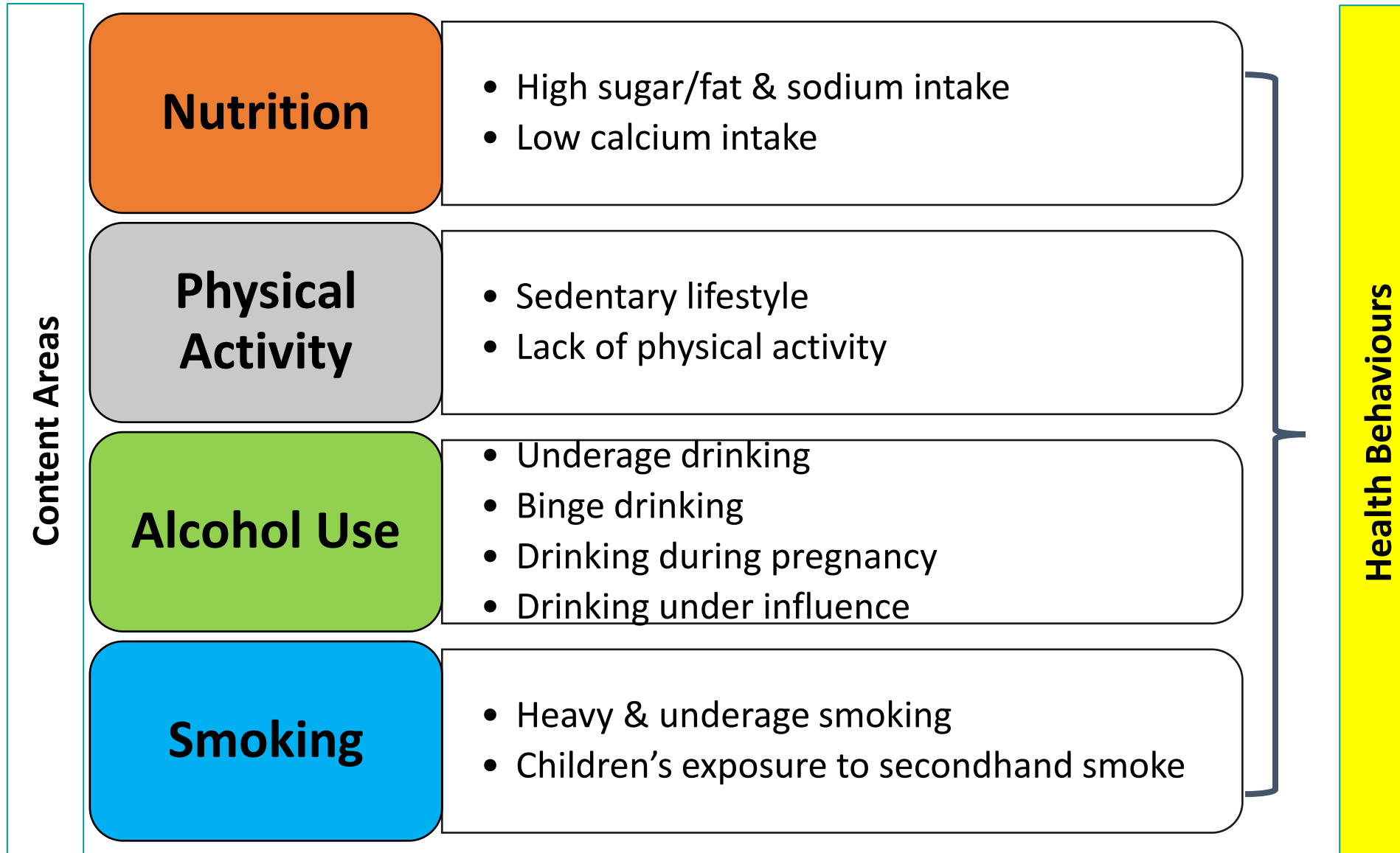
TABLE 2-4 Progression of a Health Behavior by Content Area

Content Area	Health Behavior	Tailored Message
Healthy eating	Consume five servings of fruits and vegetables a day	Make half your plate fruits and vegetables. ^a
Physical activity	Engage in a minimum of 60 minutes of activity a day	Play 60 ^b
Alcohol use	Zero alcohol consumption during pregnancy	Not a single drop. ^c

Sources: ^aUSDA and USDHHS, 2010; ^bNational Football League, n.d.; ^cOhio Department of Health, n.d.

Adapted from Orlowski, M. (2016). Introduction to health behaviors: A guide for managers, practitioners & educators. USA. Cengage Learning. Figure 4.1, pg. 84

Content Areas & Health Behaviours



Biopsychosocial Framework

e.g. Eating Behaviour:

Meal Size

Snacking



- Culture
- Family Influence



Biological

- Illness
- Genetic predisposition
- Gender
- Ageing

Studies found that some **genes** were associated with

- increased risk of extreme snacking behaviour.
- extreme meal size.

Grimm, E. R., & Steinle, N. I. (2011). Genetics of eating behavior: established and emerging concepts. *Nutrition reviews*, 69(1), 52-60.



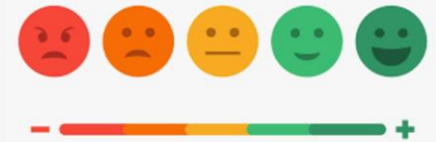
Social

- Life events
- Family Support
- Socio-economic status
- Culture

Psychological

- Personality/Attitude /Belief
- Cognitive
- Behaviour
- Emotion

- **Mood** affect eating behaviours.



Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine. *Science*, 196(4286), 129-136.
Engel, G. L. (1981, January). The clinical application of the biopsychosocial model. In *The Journal of Medicine and Philosophy: A Forum for Bioethics and Philosophy of Medicine*. Oxford University Press.

Lifestyle Diseases & Precursors

Lifestyle Diseases

- Cancer
- Stroke
- Heart Disease
- Hypertension
- Diabetes



Lifestyle diseases developed because of ***behavioural & social*** factors in one's life.

Precursors

- Overeating & poor diets
- Lack of physical activity
- Excessive drinking
- Smoking
- Drug abuse



Socio-demographic Influences

Gender

- Influence of gender over health is mediated through the *lifestyle choices* that men & women make.

Age

- Older people experience considerable *discrimination* which has implications for their health & well-being & lifestyle choices.

Socio-economic circumstances

- *Obesogenic environment* leading to a higher risk of obesity.

Compared to past generations:

- Modern life involves far less physical effort.
- Paid work is more likely to be sedentary.
- Housework is less demanding.
- Fewer people are physically active in the process of travelling (e.g. escalator, cars).
- Rising fast food outlets (high-calorie & decreased cost).
- Alcohol is cheaper.
- Increased cultural acceptance of heavy drinking.
- More liberal attitude towards sex.



Lifestyle Behaviours

Characteristics of Lifestyle

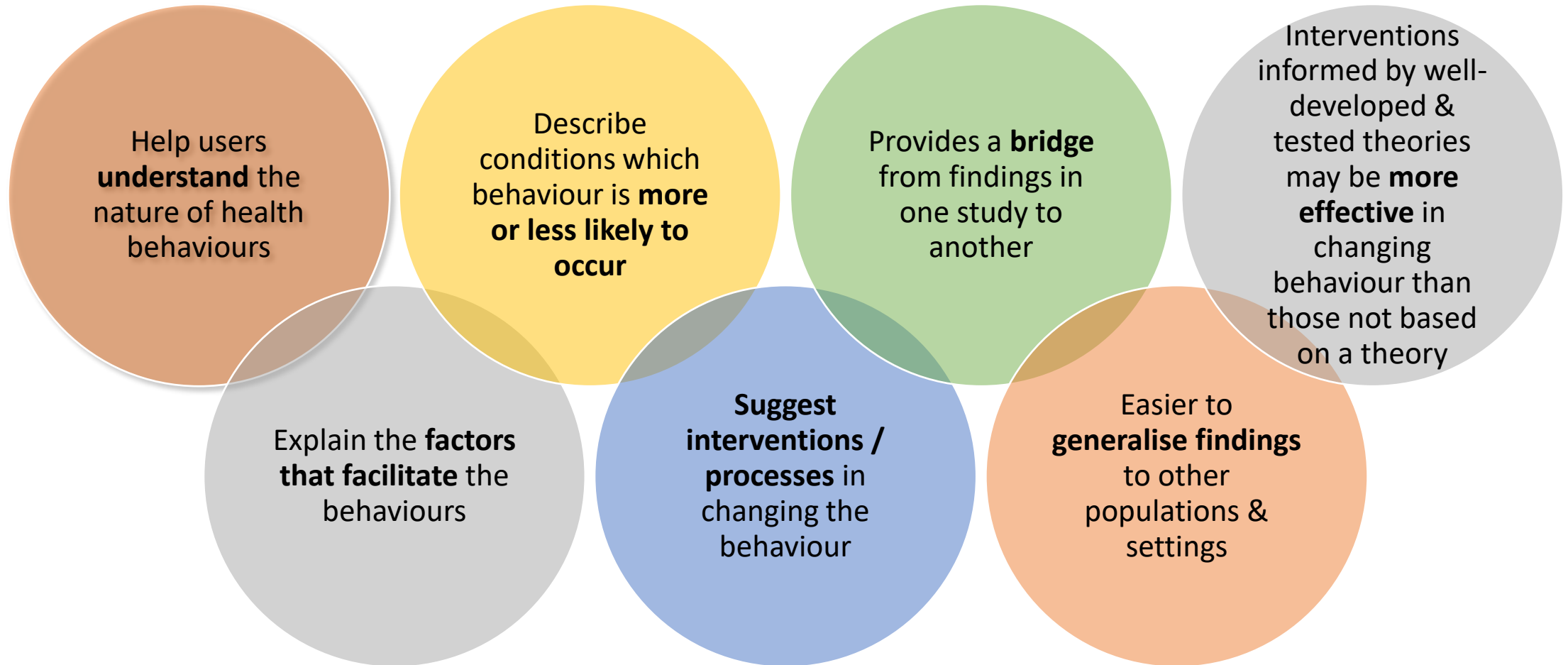
- Serve multiple functions e.g. for health, and mood enhancement, as a coping strategy.
- Often brings pleasure to one.
- Plays an important function in the development & maintenance of the social relationship
- Under some degree of volitional control.

Unhealthy Lifestyle Behaviours

- They are chronic rather than acute behaviours e.g. prolonged smoking
- Instant gratification of experiencing pleasure and positive consequences
- Delayed negative consequences in the future



Needs for Theories



Behaviour Change Theories

**Transtheoretical Model
+
Motivational
Interviewing**

Health Belief Model

Social Cognitive Theory

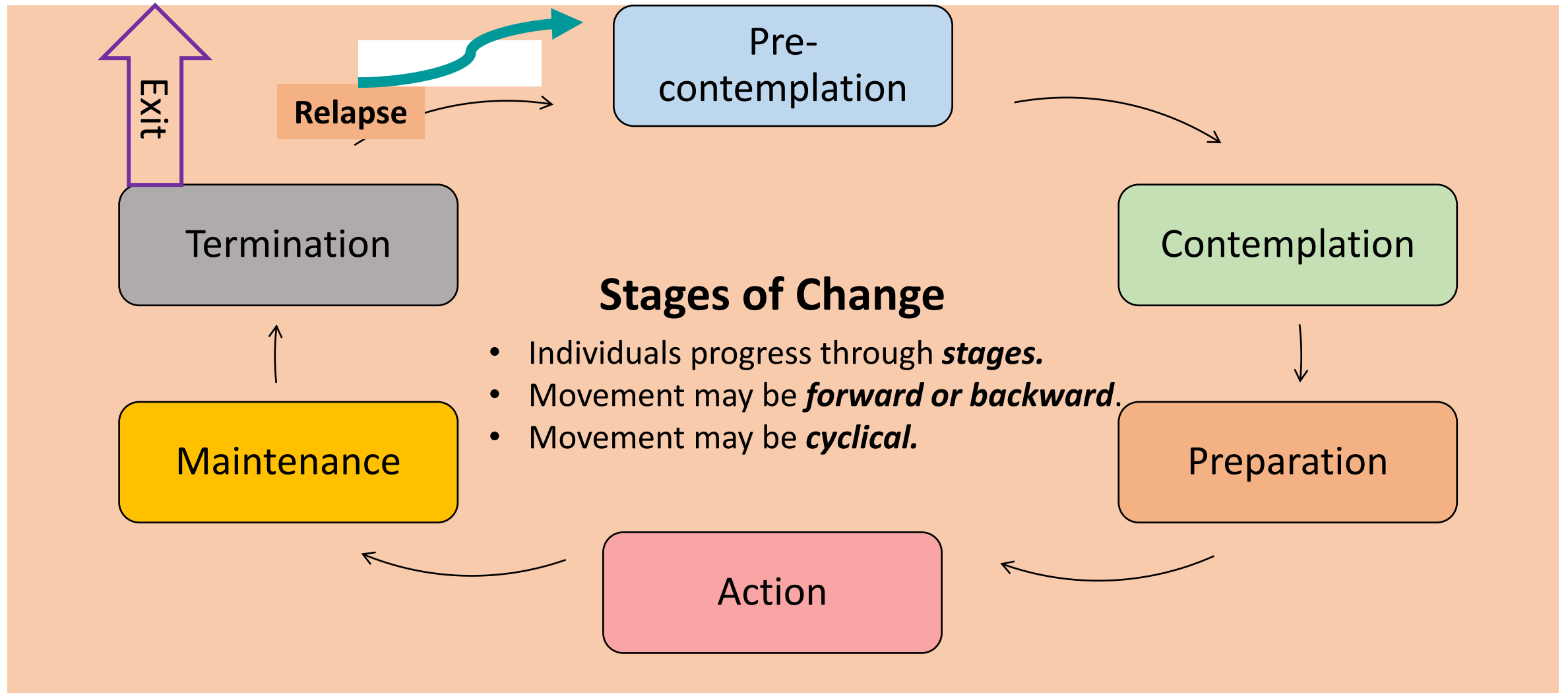
Transtheoretical Model



Transtheoretical Model and Stages of Change

<https://www.youtube.com/watch?v=VVyhhMzWkiU>





Transtheoretical Model









Transtheoretical Model - Stages of Change

Stage which Client is in	Health Practitioner Role (Motivational Tasks)
Pre-contemplation no intention to take action within the next 6 months	Raise doubt- Increase the client's perception of risks & problems with current behaviours.
Contemplation intends to take action within the next 6 months	Tip the balance. Evoke reasons to change, risks of not changing. Strengthen the client's self-efficacy for change of current behaviour.
Preparation intends to take action within the next 30 days and has take some behavioural steps	Support client to determine the best course of action to take in seeking change.
Action changed overt behaviour for less than 6 months	Support client to take steps towards change.
Maintenance changed overt behaviour for more than 6 months	Support client to identify and use strategies to prevent relapse.
Termination (no temptation to relapse)	Work towards supporting client's new healthy behaviour which becomes part of them. The old unhealthy behaviour no longer exists.
Relapse	Help the client to renew the process of contemplation, determination & action, without becoming stuck or demoralised because of relapse.

Constructs of Transtheoretical Model

Consciousness Raising	Increased awareness about the <i>causes, consequences & cures</i> for a particular health behaviour. 
Dramatic Relief	Initially produces increased emotional experiences, followed by reduced affect or anticipated relief if appropriate action is taken, the <i>experience of emotions moves</i> people to change. 
Self re-evaluation	Realising that the behavior change is an important part of <i>one's identity</i> as a person. 
Environmental re-evaluation	Realising how the <i>presence or absence</i> of a personal behavior affects <i>one's social / physical environment</i> . 

Constructs of Transtheoretical Model

Self-liberation	The belief that one can change & the commitment to act on that belief.	
Social Liberation	An increase in social opportunities or alternatives, especially for people who are relatively deprived or oppressed (e.g. underprivileged groups).	
Counterconditioning	Requires learning healthier behaviours that can substitute for problem behaviours.	
Stimulus Control	Removes cues for unhealthy habits & adds prompts for healthier alternatives.	
Contingency management	Provides consequences for taking steps in a particular direction.	
Helping Relationships	Combine caring, trust, openness, & acceptance, as well as support for healthy behavior change.	

Processes of Changes



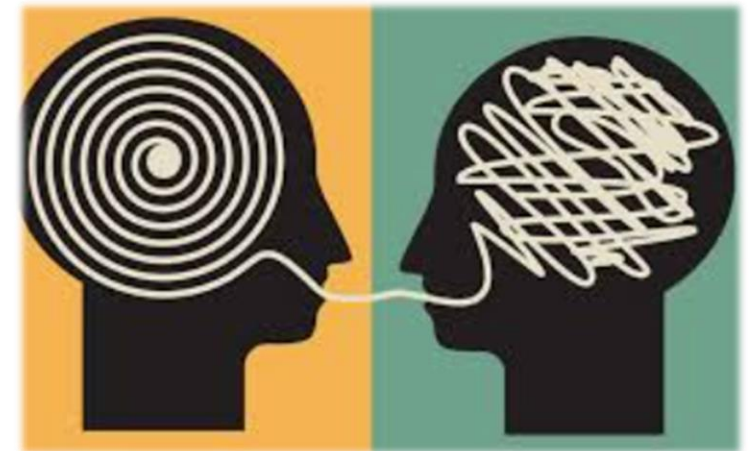
Note: Social liberation was omitted due to its unclear relationship to the stages.

Motivational Interviewing (MI)

MI takes its theoretical basis from the
Transtheoretical Model – Processes of Change

“A therapeutic style intended to help clinicians work with patients to address the patient’s fluctuation between opposing behaviours & thoughts.”

Miller and Rollnick, Motivational Interviewing, 1991



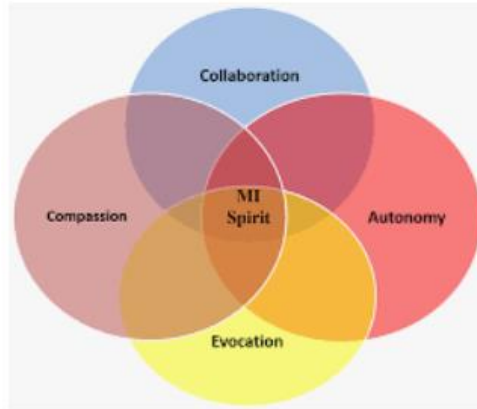
MI - *Increasing Level of Motivation*

Components to push the person towards changing a behaviour:

- ✓ Give advice
- ✓ Remove barriers
- ✓ Provide choice
- ✓ Decrease desirability
- ✓ Practise empathy
- ✓ Provide feedback
- ✓ Clarify goals
- ✓ Actively help



MI



Principles of MI

Express empathy

Support
self-efficacy

Roll with
resistance

Develop
discrepancy

To ***create*** the conditions for change

MI



Using Motivational Interviewing Approaches

<https://www.youtube.com/watch?v=PQzrx7JmUkM>

MI – Strategies / Skills

Open-ended Questions

- allows client to elaborate more

Assess client's readiness to change

- able to use appropriate intervention to move client forward

Affirmation

- builds client's confidence

Reflective Listening

- to check for accurate understanding

Information and Advice

- useful only when client does not know what to do

Transitional Summary + Key Questions + Negotiate a Change Plan

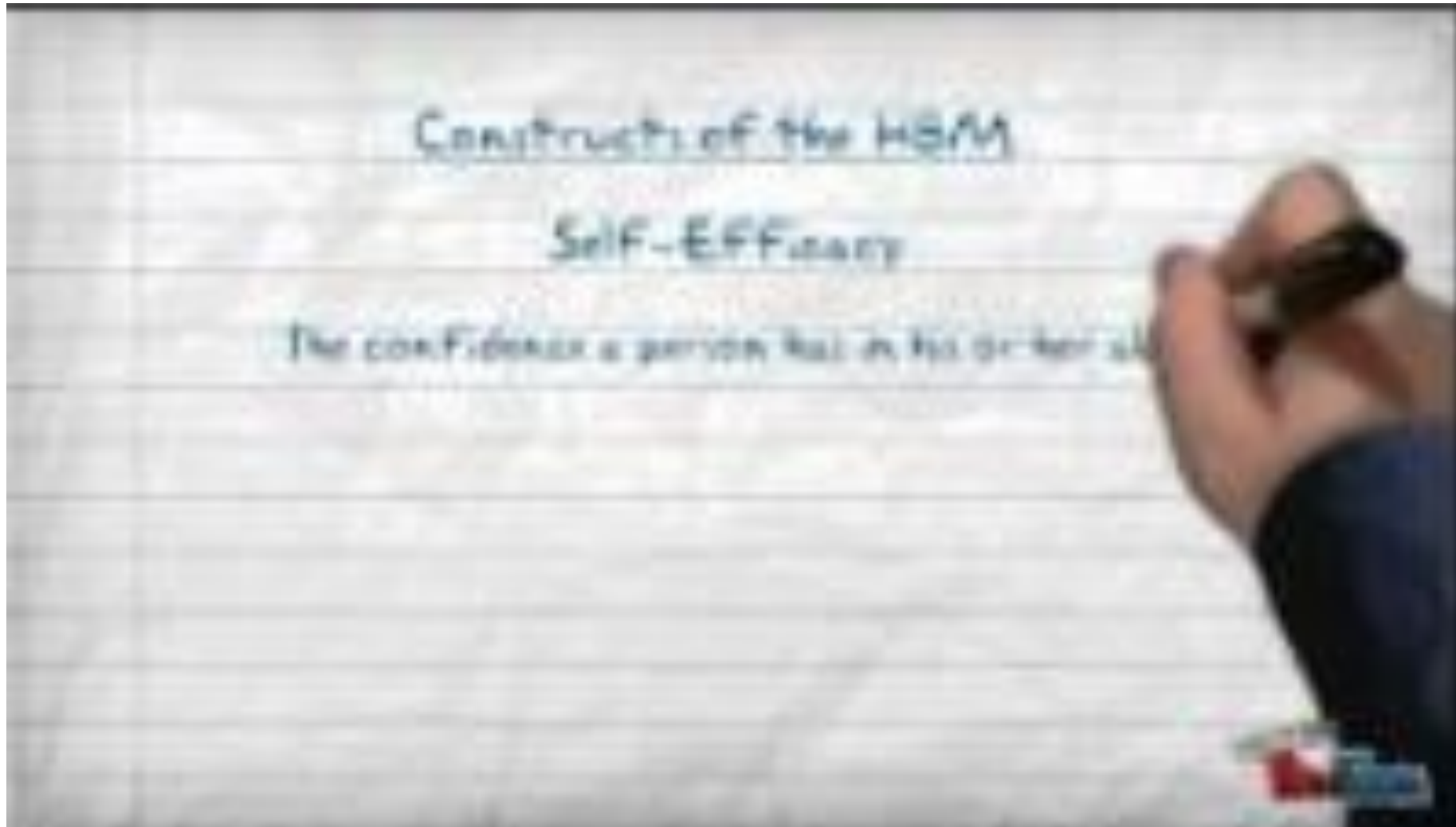
- to move client to the next stage of change e.g. What would you do next?

Health Belief Model [Rosenstock, 1974]

- Seeks to ***predict*** whether individuals choose to engage in healthy action to reduce or prevent the incidence of disease or premature death.
- Proposes two major factors that influence the likelihood that one will adopt preventive health action(s):
 1. Individual feels personally ***threatened by disease / susceptible to a disease*** with serious or severe consequences
 2. Individual believes that the ***benefits of taking the preventive action outweigh the perceived barriers to*** (and/or cost of)



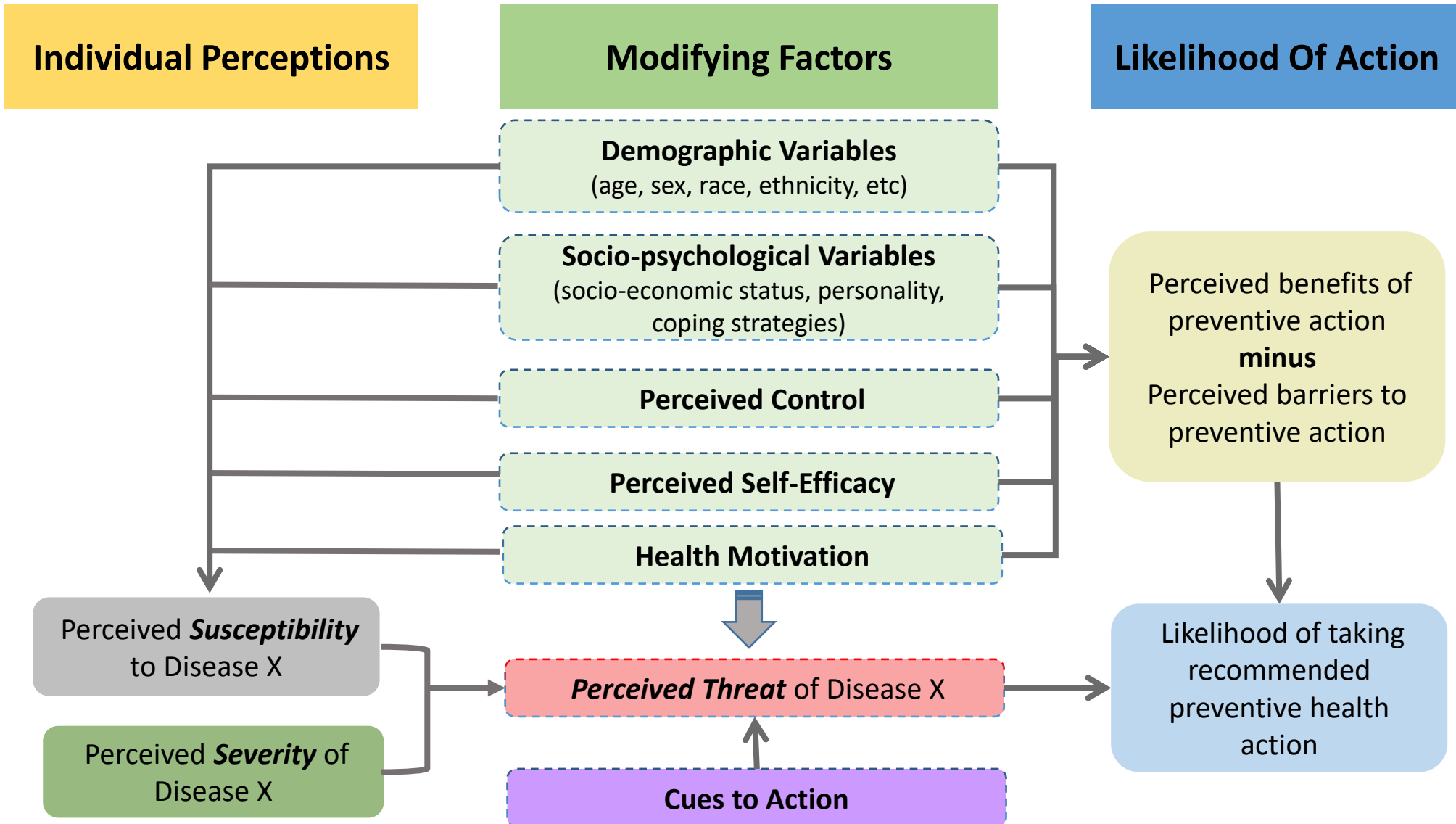
Health Belief Model



Health Belief Model

<https://www.youtube.com/watch?v=6SfTbTkEozA>

Health Belief Model [Adapted]



Health Belief Model [Rosenstock, 1974]

Concept	Definition	Application
Perceived Susceptibility	One's opinion of chances of getting a condition	Define population(s) at risk based on a person's features or behaviour. Heighten perceived susceptibility if it is too low.
Perceived Severity	One's opinion of how serious a condition & its consequence of a previous condition.	Specify consequences of risk & condition.
Perceived Benefits	One's opinion of the efficacy of the advised action to reduce risk or seriousness of the impact.	Define action to take: How, Where, When. Clarify the positive effects to be expected.
Perceived Barriers	One's opinion of the tangible & psychological costs of the advised action.	Identify & reduce barriers through reassurance, incentives, assistance etc.
Cues to Action	Strategies to activate "readiness".	Provide how-to information, promote awareness, & reminders.
Self-Efficacy	Confidence in one's ability to take action.	Provide training & guidance in performing action.

Health Belief Model (Obesity in African-American Women)

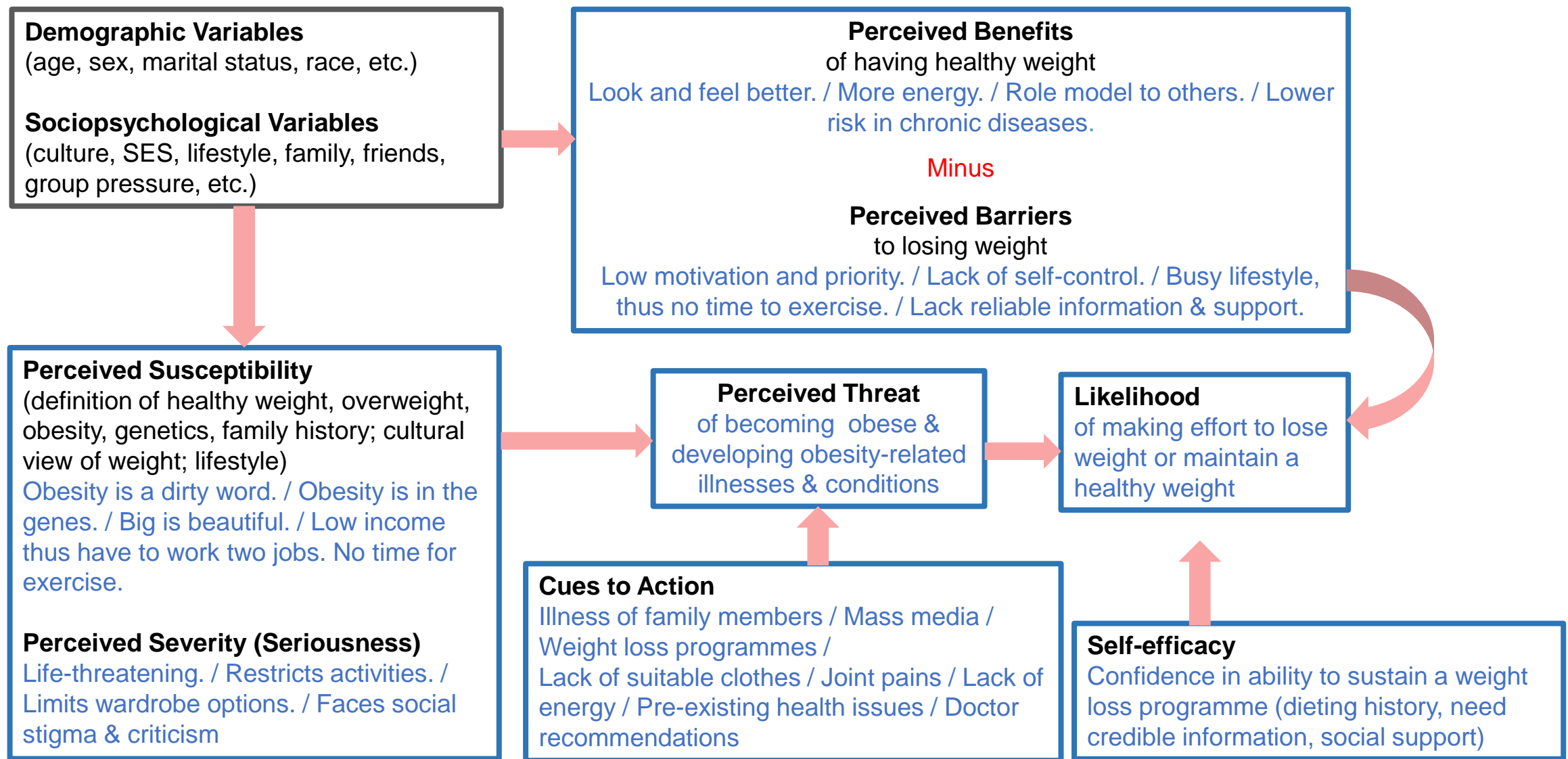
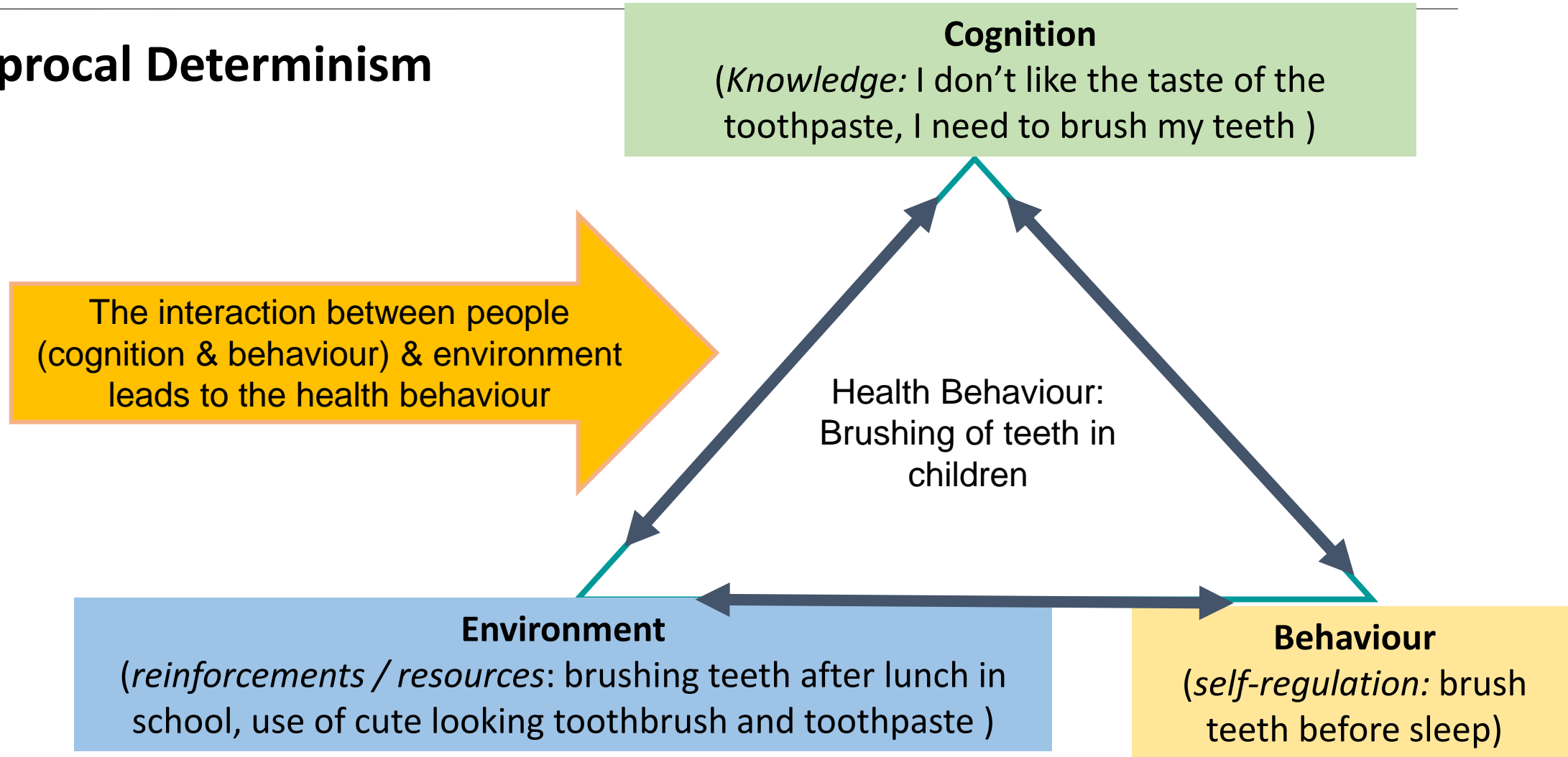


Figure 1. Health Belief Model theoretical framework applied to weight management.

Social Cognitive Theory

Reciprocal Determinism



Social Cognitive Theory



Social Cognitive Theory

<https://www.youtube.com/watch?v=ip9YVikig0w>

Social Cognitive Theory

**Reciprocal
determinism**

**Outcome
expectations**

Self-efficacy

**Collective
efficacy**

**Incentive
motivation**

Facilitation

**Observational
learning**

Self-regulation

**Moral
disengagement**



Social Cognitive Theory

Outcome expectations

- One's beliefs about the *likelihood & value of the consequences* of behavioural choices.

Self-efficacy

- Beliefs about *personal ability* to perform behaviours that bring desired outcomes.

Collective-efficacy

- Beliefs about *the ability of a group* to perform concerted actions that bring desired outcomes.



Social Cognitive Theory

Incentive Motivation

- Use and misuse of *rewards & punishments* to modify behaviour.

Facilitation

- Providing tools, resources, and/or environmental changes that make new behaviours easier to perform.



Social Cognitive Theory

Observational Learning

- Learn to perform new behaviours by exposure to interpersonal or media displays of them, particularly through *peer modelling*.

Self-regulation

- Control oneself through *self-monitoring, goal-setting, feedback, self-reward, self-instruction* & enlistment of social support.

Moral Disengagement

- Ways of thinking about harmful behaviours as acceptable, provide false justification that the harm behaviours are needed.



References

- Baranowski, T., Perry, C. L., & Parcel, G. S. (2002). How individuals, environments, and health behavior interact. *Health behavior: Theory, research, and practice*, 3, 165-184.
- Glanz, K., & Bishop, D. B. (2010). The role of behavioral science theory in development and implementation of public health interventions. *Annual Review of Public Health*, 31, 399-418.
- Orlowski, M. (2016). *Introduction to health behaviors: A guide for managers, practitioners & educators*. USA. Cengage Learning.
- Prochaska, J. O., Redding, C. A., & Evers, K. E. (2015). The transtheoretical model and stages of change. *Health behavior: Theory, Research, and Practice*, 125-148.
- Tomlin, K. M., & Richardson, H. (2005). *Motivational Interviewing and Stages of Change: Integrating Best Practices for Substance Abuse Professionals*. Hazelden Publishing.