

# S2470

# Behaviour Change

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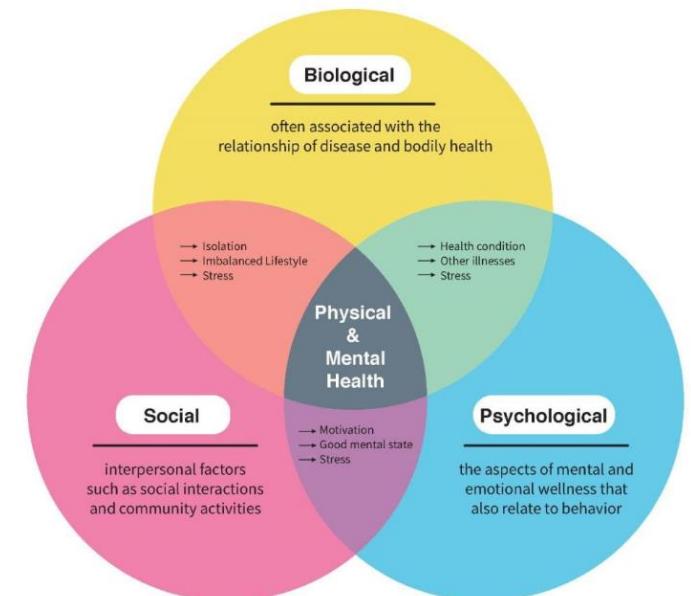
## **Lesson 01**

### **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....

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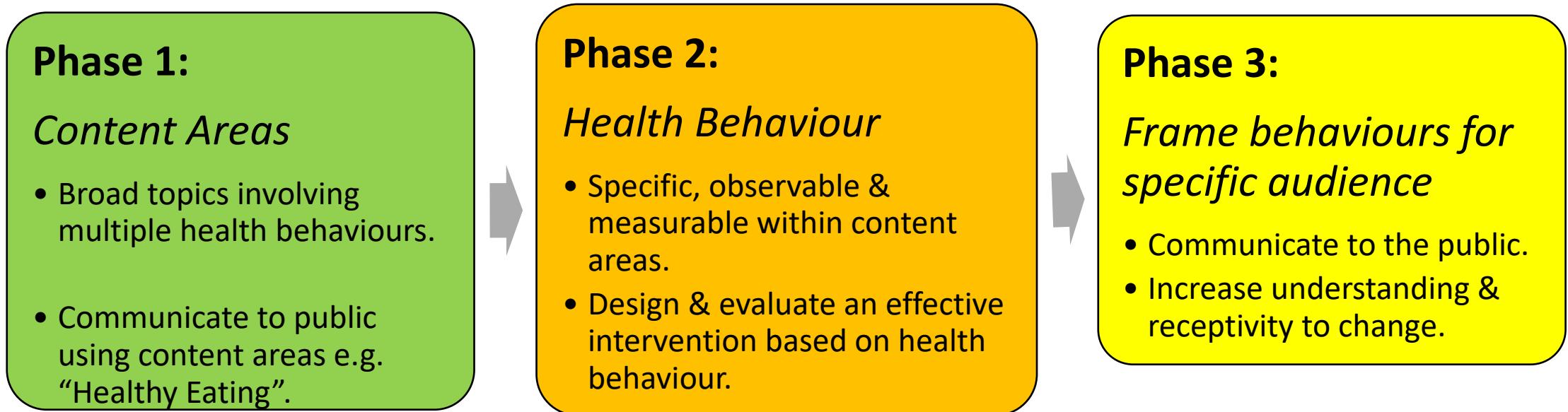


“World Health Organization (WHO) defines it as:  
“any activity undertaken by an individual (or group), regardless of actual or  
perceived health status, for the purpose of promoting, protecting, or  
maintaining health.”

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



# Targeting Health Behaviours



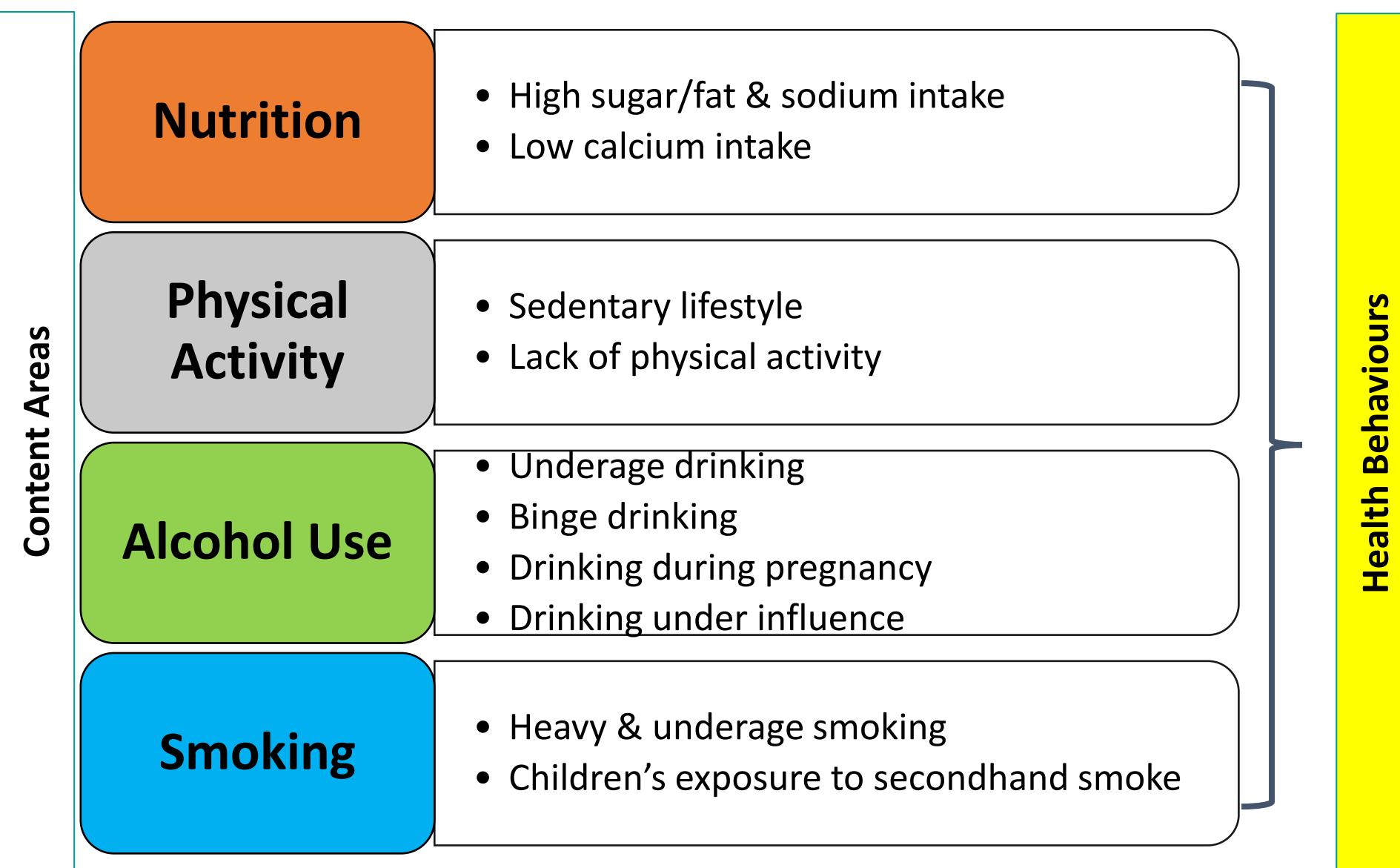
**TABLE 2-4** Progression of a Health Behavior by Content Area

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

Sources: <sup>a</sup>USDA and USDHHS, 2010; <sup>b</sup>National Football League, n.d.; <sup>c</sup>Ohio 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



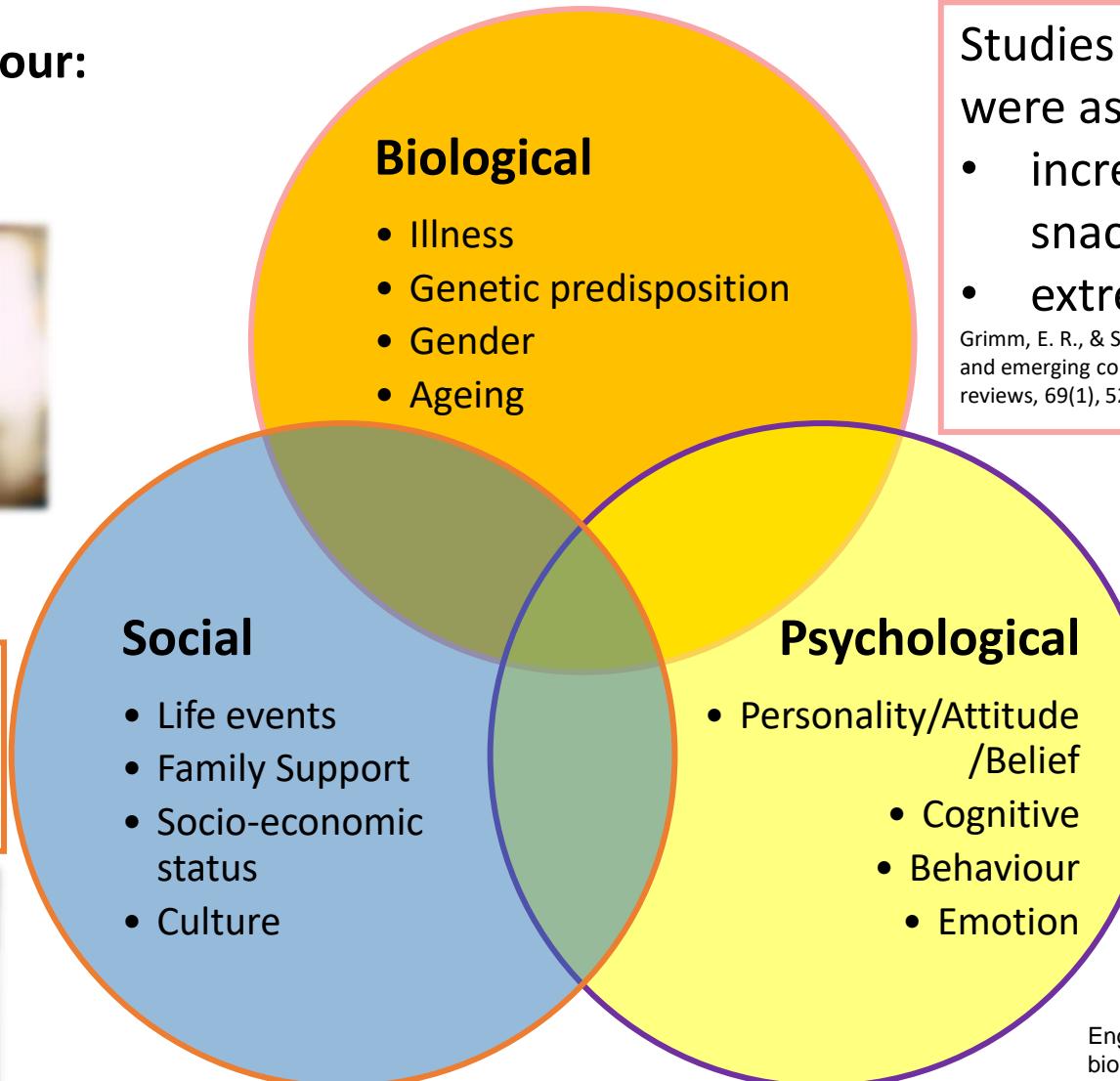
# Biopsychosocial Framework

e.g. Eating Behaviour:

Meal Size  
Snacking



- Culture
- Family Influence



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.



- **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



## Precursors

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



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

# Socio-demographic Influences

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## 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.

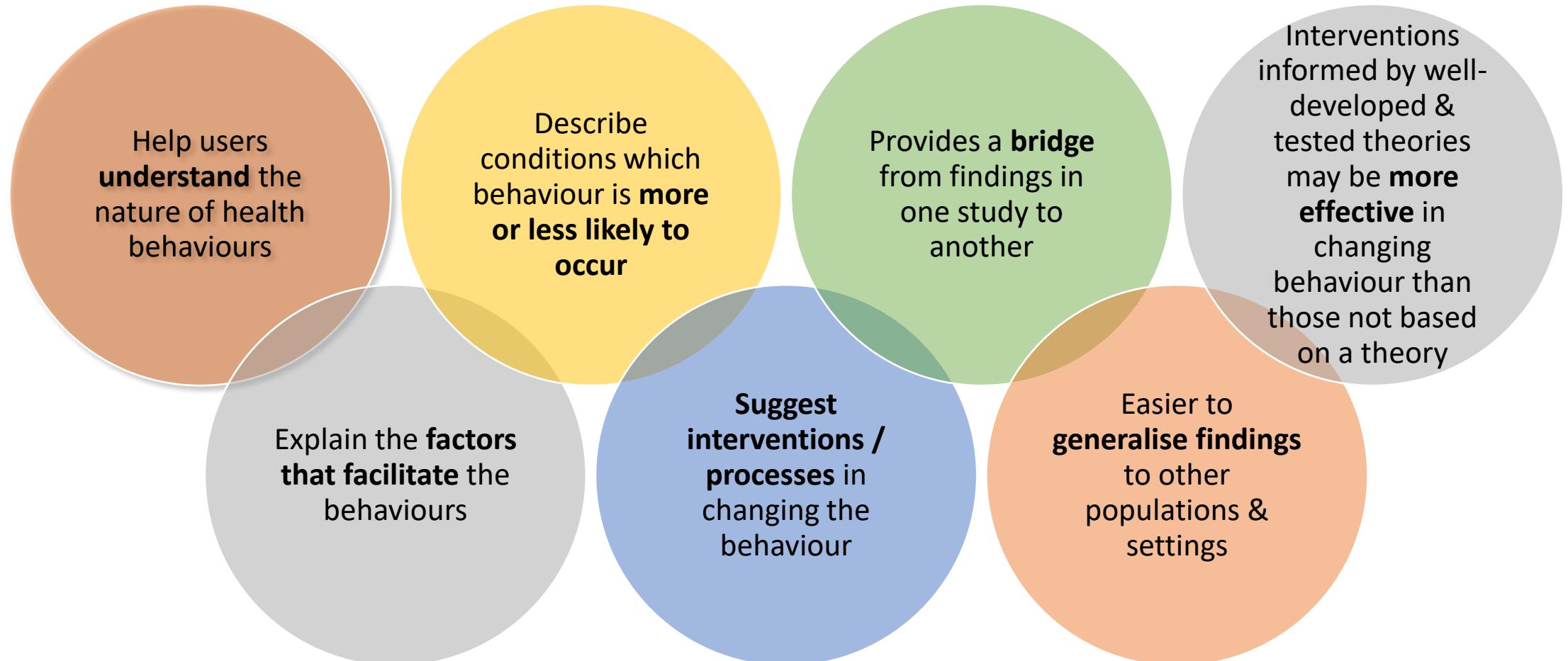
## Unhealthy Lifestyle Behaviours

- 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

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# Behaviour Change Theories

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**Transtheoretical Model**  
+  
**Motivational  
Interviewing**

**Health Belief Model**

**Social Cognitive Theory**

# Transtheoretical Model

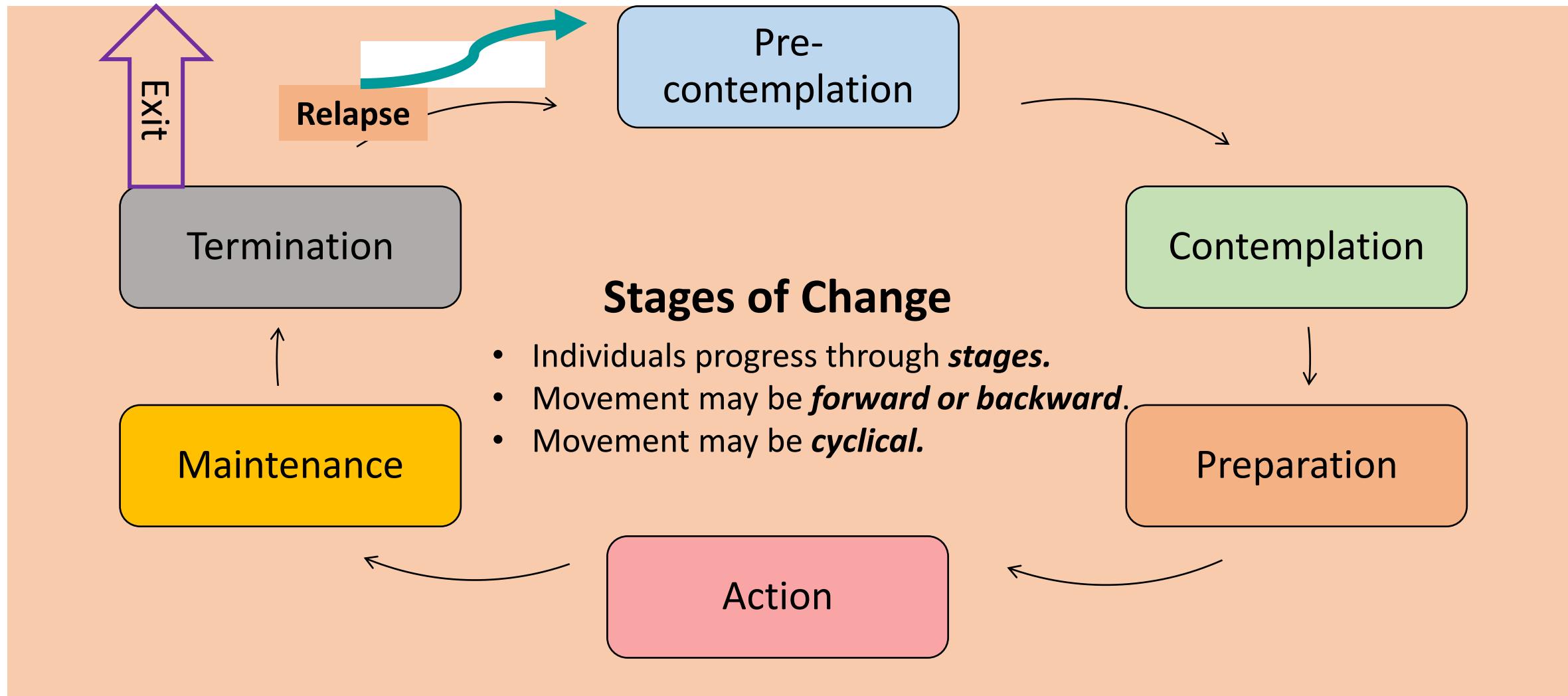
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Transtheoretical Model and Stages of Change

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

# Transtheoretical Model



Adapted from James O. Prochaska & Carolo c. DiClemente (1982) "Transtheoretical therapy: toward a more integrative model of change." *Psychotherapy: Theory, Research & Practice*, 19:276-288.

# Transtheoretical Model - Stages of Change

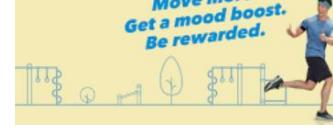
Stage which Client is in	Health Practitioner Role (Motivational Tasks)
<b>Pre-contemplation</b> no intention to take action within the next 6 months	Raise doubt- Increase the client's perception of risks & problems with current behaviours.
<b>Contemplation</b> intends to take action within the next 6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

# Constructs of Transtheoretical Model

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Consciousness Raising	Increased awareness about the <i>causes, consequences &amp; 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

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

# Processes of Changes

Precontemplation	Contemplation	Preparation	Action	Maintenance
Consciousness raising Dramatic relief Environmental re-evaluation				
	Self re-evaluation			
			Self-liberation Counterconditioning Helping relationships Reinforcement management Stimulus control	

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

# Motivational Interviewing (MI)

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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

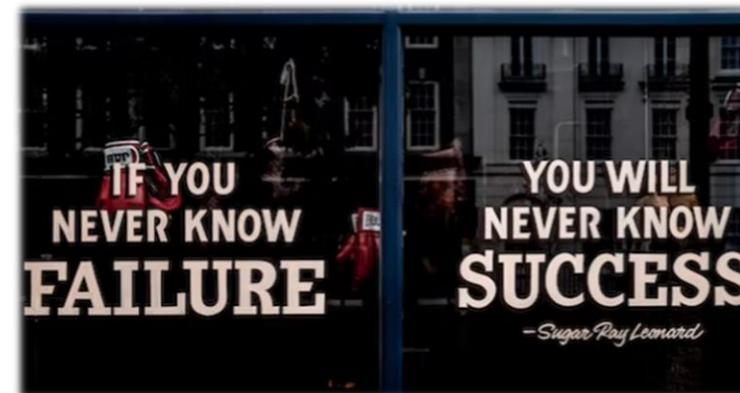


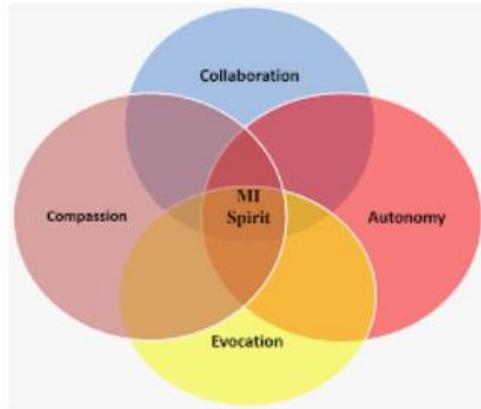
# MI - *Increasing Level of Motivation*

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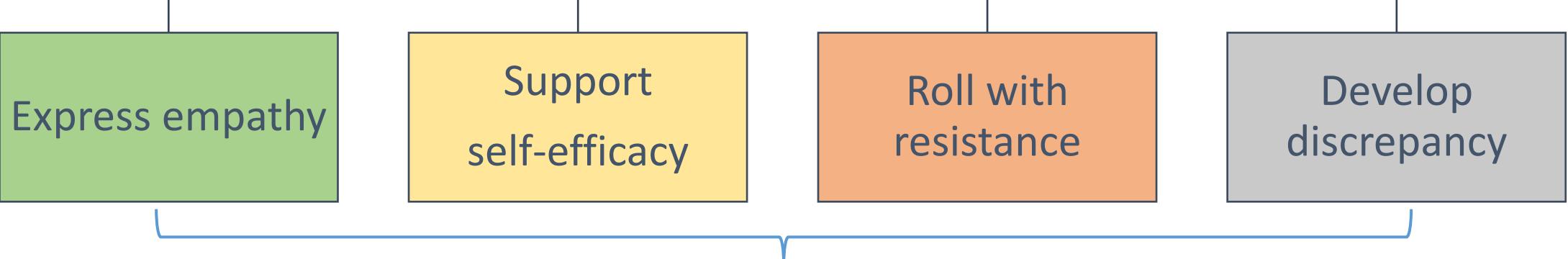
**Components** to push the person towards changing a behaviour:

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





## Principles of MI



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

# MI

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## Using Motivational Interviewing Approaches

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

# MI – Strategies / Skills

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## **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?

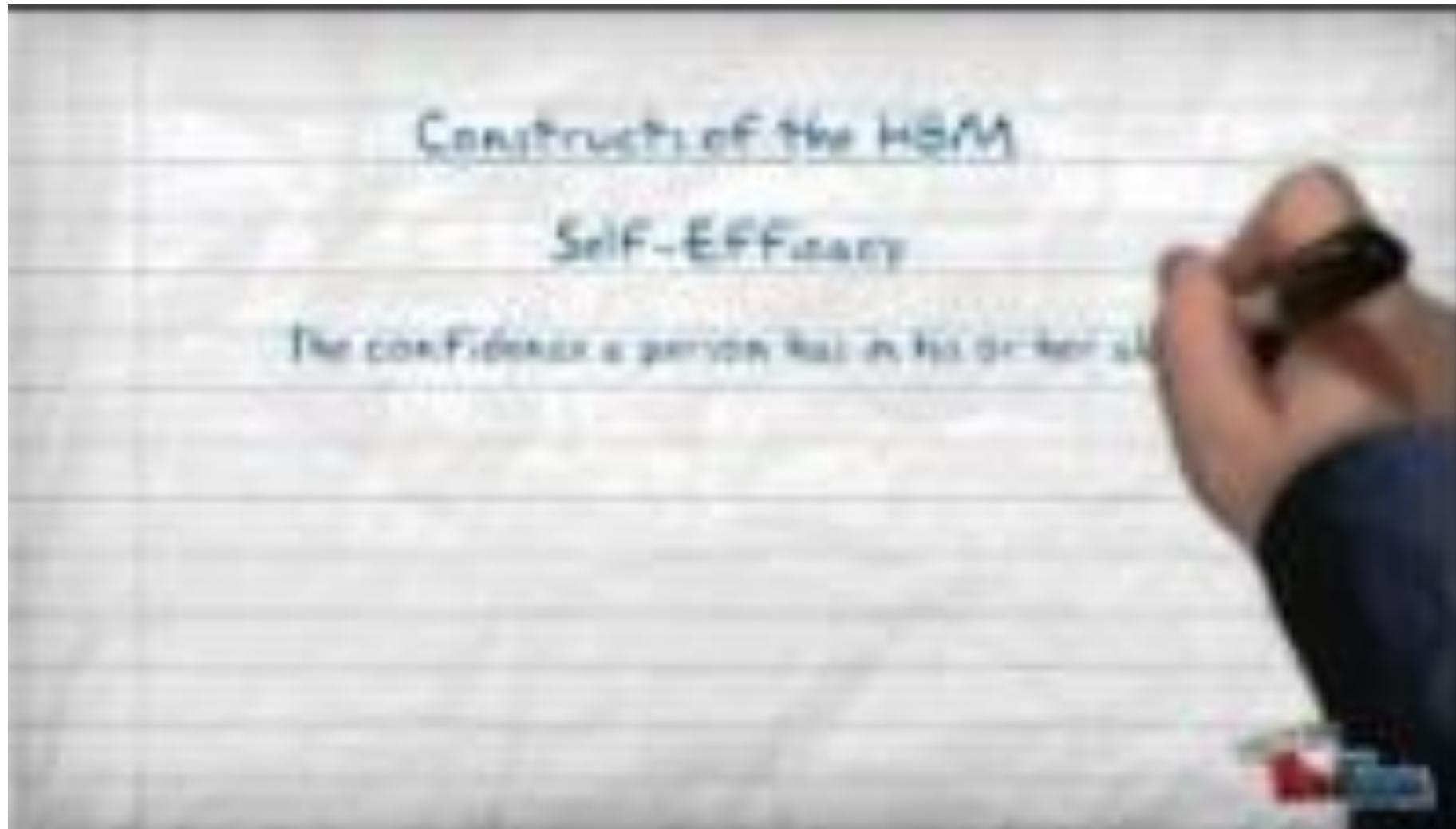
# Health Belief Model [Rosenstock, 1974]

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- 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)



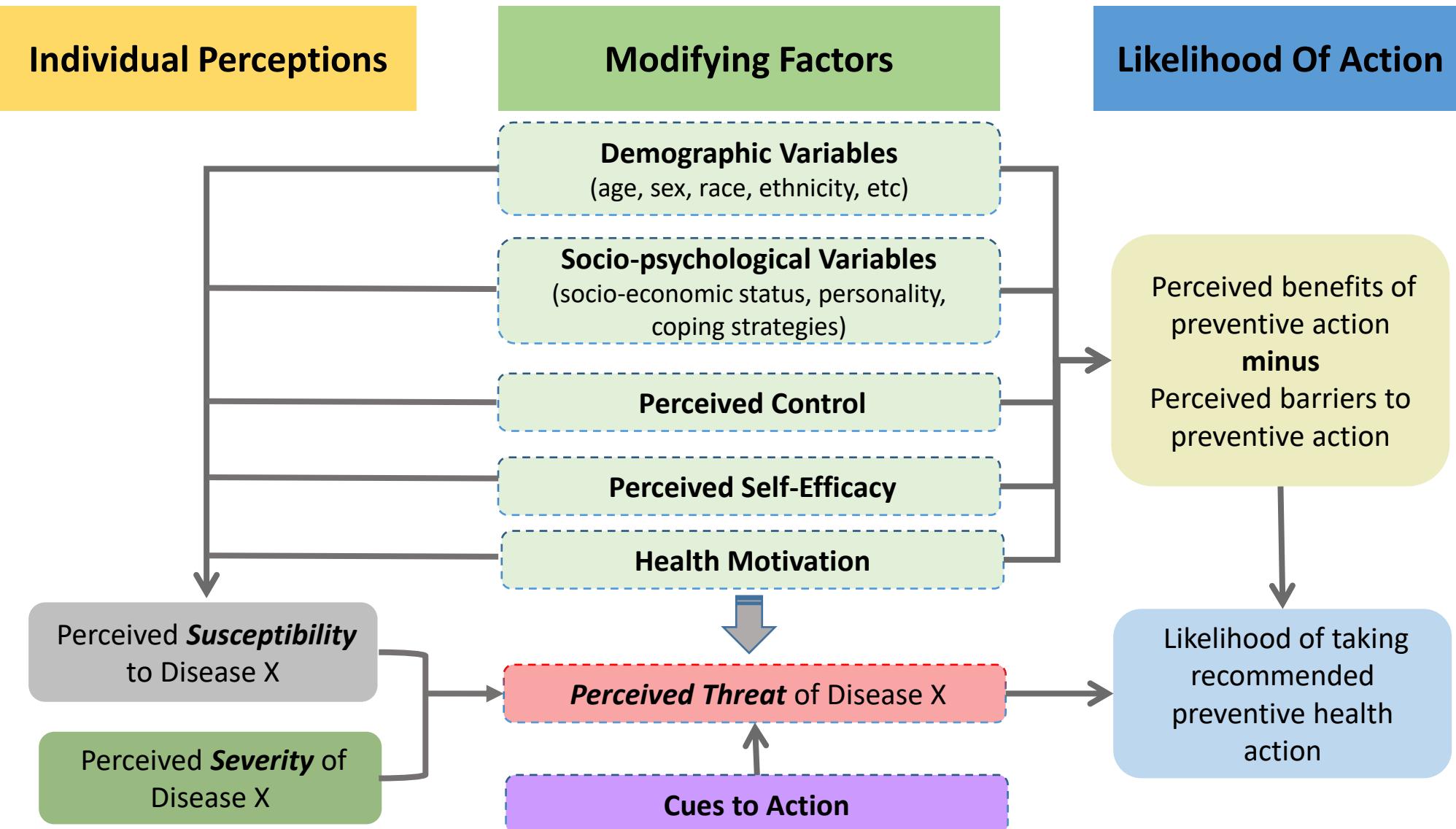
# Health Belief Model



## Health Belief Model

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

# 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 talk: 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)

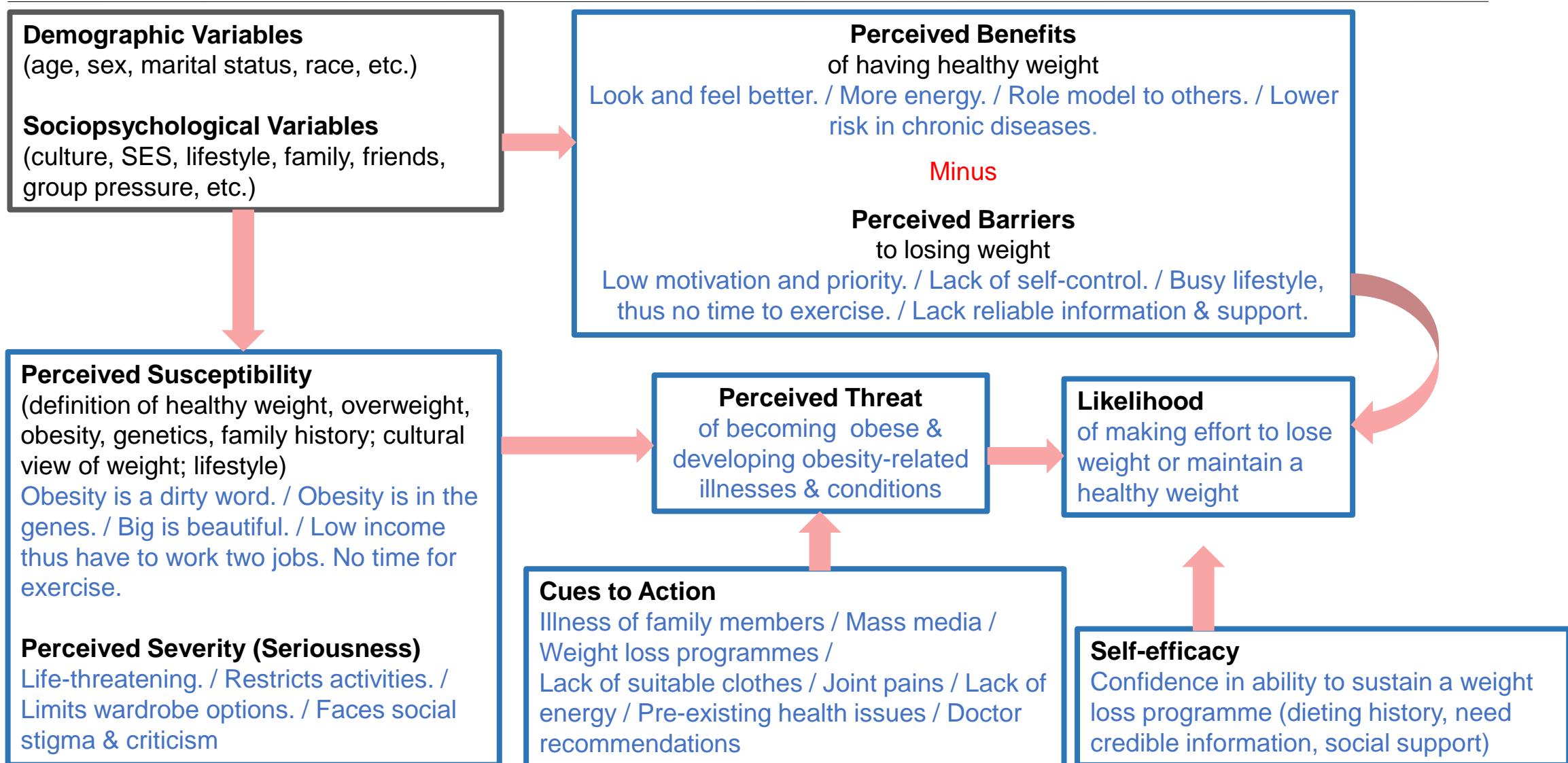
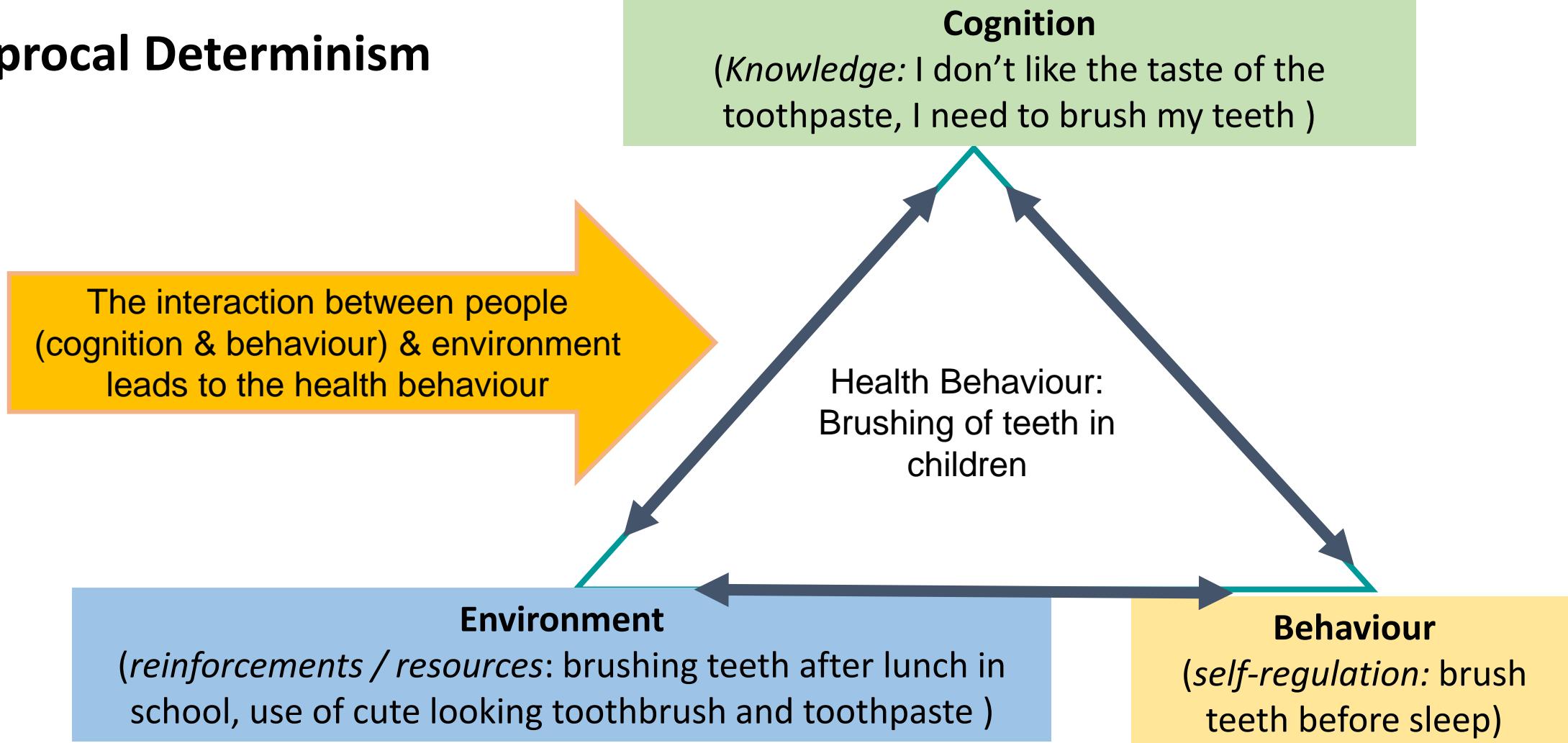


Figure 1. Health Belief Model theoretical framework applied to weight management

# Social Cognitive Theory

## Reciprocal Determinism



# Social Cognitive Theory

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**Social Cognitive Theory**

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

# Social Cognitive Theory



# Social Cognitive Theory

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## ***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

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## 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

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## 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

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