

Health and Behaviour

Please read Chapters 3 and 8

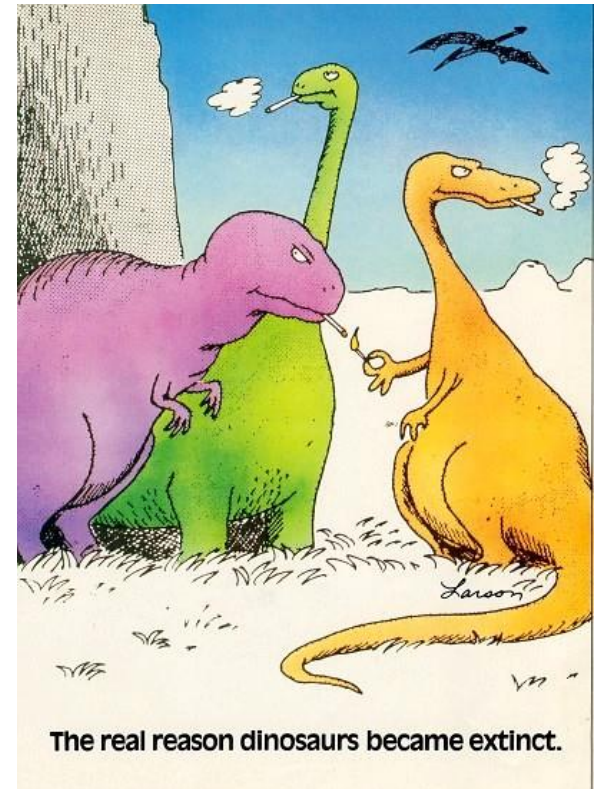
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Health and Behaviour

- This area of health psychology is driven by the fact that many **chronic illnesses** and **early mortality** can often be **prevented** by individual behaviours.

Health Behaviours

- Lifestyles, risk factors and health
 - **Health-protective behaviour** is any activity people perform to maintain or promote their health e.g. eating sensibly, getting enough sleep
 - **Risk factors** are characteristics or conditions that occur more often among persons who develop particular diseases than among those who do not



Health and Behaviour

Sarafino (2002) states that health behaviours:

- **Change** over time
- Depend on **motivation** of person
- Acquired through **experience & observation**
- Eventually become **habitual**
- Over time become **less dependent** on **reinforcement** than **environmental cues**
- Brushing teeth, wearing seat belt, applying sunscreen



Health Status and Behaviour

- Illness behaviour is **activity** by people who feel ill, with the purpose of **determining** the **state of their health or finding a remedy**
 - Problem solving mode
 - Involves **complaining** to friends, relatives,
 - seeking **help** from practitioner
- Sick-role behaviour is **activity** by individuals who consider themselves to be ill, for the purpose of **becoming well**
 - Gets **prescription** filled,
 - staying **home** to get better

Illness Prevention

Three levels of prevention:

- Primary Prevention – actions taken to **avoid** disease or injury
 - e.g. healthy eating,
 - immunisation,
 - wearing sunscreen
- Secondary Prevention – actions taken to **identify & treat** an illness **early**
 - e.g., cervical screening
 - mammograms,
 - blood pressure checked
- Tertiary Prevention – actions to **slow lasting damage**, prevent disability and rehabilitate
 - e.g. palliative chemotherapy,
 - doing exercises for physiotherapy,
 - taking medication to control arthritic inflammation

Problems with Promoting Wellness

Individual Factors

- Many health behaviours are less pleasurable than unhealthy alternatives
- Prevention requires change in long-standing behaviours
- Self-efficacy and motivation are needed

Factors influencing motivation:

- “person who” fallacy
 - (flaw in reasoning – won’t happen to me)
- inconvenience,
- delayed gratification vs. instant gratification,
- procrastination

Problems with Promoting Wellness

Interpersonal Factors

- Family, friends or work peers may **hinder** personal behavioural change
 - Sharing meals with flatmates,
 - smoke breaks at work,
 - living away from home



Community Factors

- Wide-spread behaviour change is often **dependent** on **community-based promotion**.
- Requires large amounts of **money**, and physicians are largely training in **treating**, **not preventing** illness
 - e.g. don't drink and drive commercials



Determinants of Health Behaviours

Learning

- **Reinforcement**
 - Positive reinforcement
 - e.g. physical exercise leads to increased energy throughout the day
 - Negative reinforcement
 - e.g. weight loss leads to less achy knee joints
- **Extinction**: When the **consequences** that maintain a behaviour are **eliminated**, the response tendency gradually weakens.
 - e.g. stopping exercise once you've reached the ideal weight
- **Punishment**: behaviour brings in an **unpleasant consequence**
 - e.g. injured self jogging
- **Modelling**: health behaviours can be **influenced** by parents, high status individuals (celebrities), peers

Determinants of Health Behaviours

1. **Social support & encouragement from others**
 - Social support vs. Loneliness...
2. **Personality**
 - Big Five (OCEAN)
3. **Stress**
 - Pathways to behavioural consequences



Loneliness and Health Behaviour

- **Loneliness**

- Defined as **perceived** social **isolation**
- the **discrepancy** between the individual's **desired & actual** social relationships
- Lonely people tend to report **poorer health**... But, **why?**

Cacioppo & Hawkley (2003) propose mechanisms for **impact** of loneliness on health behaviours:

1. Lonely individuals have **less** '**normative pressures**' to engage in healthy behaviours
2. Multiple social ties provide **multiple sources of information** about health behaviours (e.g., where to seek appropriate treatment)

However, research among university students found that lonely student and non-lonely students engaged in **similar health behaviours** in terms of exercise, tobacco use, caffeine & soda consumption...

But lonely students... also drank less alcohol!

Social Support and Health Behaviour

- **Social support** – how many people they could call on to support them in difficult situations

Allgower, Wardle & Steptoe (2001) found that:

- Individuals **low on social support** have been found to be more likely to
 - not eat **breakfast**, **sleep** irregular hours, lack regular **physical activity**
- Further, among **women**, social isolation was associated with
 - not eating **fruit** and not using **sunscreen**

Personality

- The **Big Five personality theory** has had a significant impact on the field of **health psychology**.
- Friedman and Booth-Kewley (1987) reviewed and meta-analysed personality (plus anxiety and depression) and chronic diseases (5 + heart disease)
 - Similar pattern across diseases – the same **personality predictors**

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Of the five personality factors, **conscientiousness, neuroticism, and extraversion** are **most relevant** to health.

Conscientiousness:

- a key variable in health behaviour models and longevity.

The Big Five and Health Behaviour

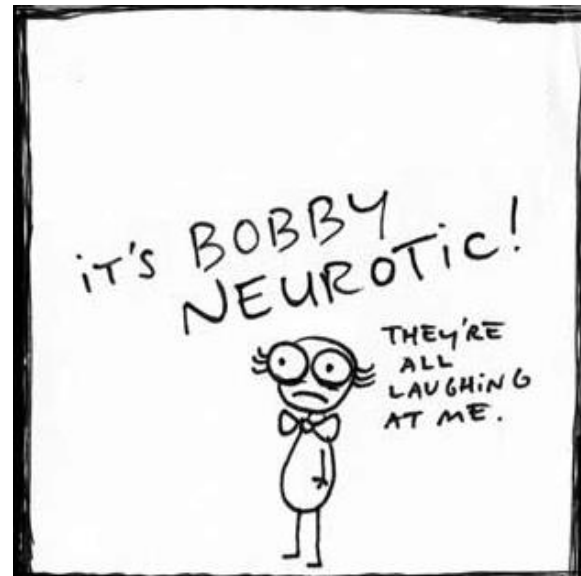
- **Extraversion** – linked to **drinking**, some **smoking** behaviour (often occasional smoking),
 - but it has also been linked to **screening** (self check)



- **Openness** – also linked to **willingness** to try new screening/treatment approaches

The Big Five and Health Behaviour

- **Neuroticism** —
 - characterised by **depression & anxiety**
 - linked to **heart disease**.
- Before Friedman and Booth-Kewley's (1987) review, neuroticism was believed to be more **related to health complaints** rather than **actual symptoms**
 - (i.e, neurotic people were just whiny).



The Big Five and Health Behaviour

- **Conscientiousness**

- What do we mean when someone is conscientiousness?

- Conscientiousness is believed to be composed of the following factors:

- **Self control** – the ability to **inhibit** impulsive thoughts, feelings, and behaviours
- **Traditionalism** – characteristic levels of **conventionality** and norm adherence
- **Responsibility** – **reliability** and socialization
- **Industriousness** – **achievement** and persistence
- **Order** – **organised**, efficient and regimented

Attachment and Health Behaviour

- An emerging topic in health psychology is the role that **attachment** plays in **health** behaviours and **healthcare-seeking** behaviours.
- **Attachment**: the **emotional bond** a child develops with caregiver
 - (established by John Bowlby and applied by Mary Ainsworth)
- The attachment patterns established within the **first few years** of life serve an **internal working model** for attachment relationships later in life
 - (i.e., boyfriends/girlfriends, spouse)



Attachment and Health Behaviours

Scharfe & Elderidge (2001) studied attachment and health behaviours in late **adolescence** (university students)

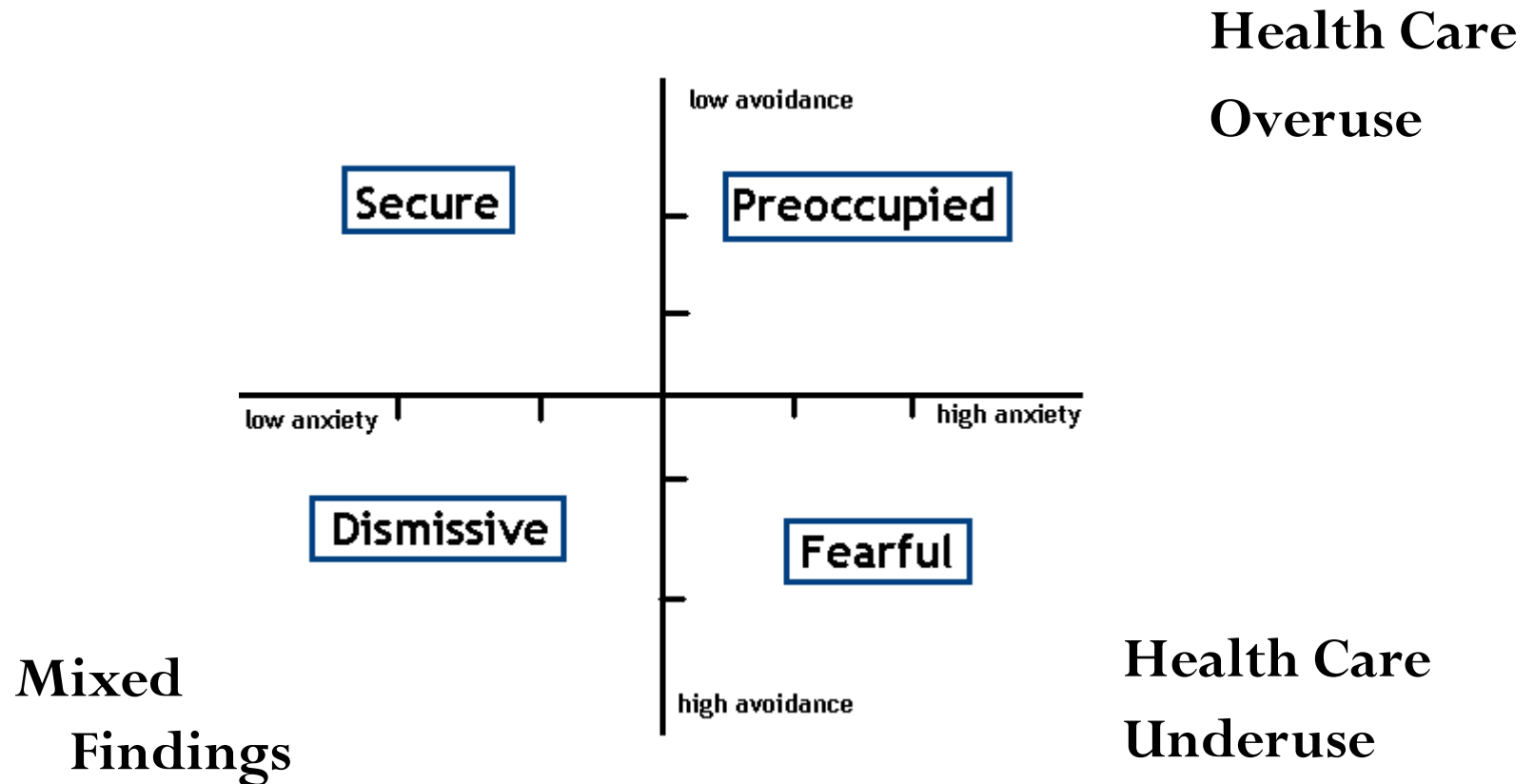
Health promotion behaviour examples:

- brush teeth, take vitamins, read books/magazines about health (??), routinely eat breakfast

Health risk behaviour examples:

- using tranquilisers, consuming 6 or more ounces of alcohol per week, not using seatbelt
- **Securely attached** individuals were more likely to report
 - **health promoting behaviours**, quality sleep, and less likely to report
 - **risk behaviours**
- **Dismissive** individuals were more likely to report
 - **sleep problems**

Attachment and Sick Behaviour



Attachment and Sick Behavior

		Model of Self	
		+	-
Model of Other	+	Secure <u>Characterized as:</u> • “trusting of others” • “feels worthy of other’s attention” <u>Clinical characteristics:</u> • ↑↓utilization/costs • ↓ symptom reporting	Preoccupied <u>Characterized as:</u> • “emotionally dependent on others” <u>Clinical characteristics:</u> • ↑ utilization/costs • ↑ symptom reporting
	-	Dismissing <u>Characterized as:</u> • “compulsively self-reliant” <u>Clinical characteristics:</u> • ↓ utilization/costs • ↑↓ symptom reporting	Fearful <u>Characterized as:</u> • “approach-avoidance behavior” • “fearful of intimacy” <u>Clinical characteristics:</u> • ↓ utilization/costs • ↑ symptom reporting



Attachment and Cervical Screening

- **Secure attachment** was associated with
 - lowered cervical screening barriers,
- **Fearful and preoccupied attachment** patterns were associated with
 - elevated barriers.
- However... When studying the **big 5** with **attachment theory**, **conscientiousness** consistently emerged as a the strongest predictor of screening behaviours/barriers



Determinants of Health Behaviour

Perception and Cognition

- *Perceived symptoms* of illness influence health behaviours
 - e.g., pain, fever, etc.
- *Cognitive factors* influence health behaviours
 - e.g., **knowledge** about the possible implications of behaviours
 - (will this behaviour put my health at risk or help me achieve better health?)
- *Unrealistic optimism* can impair health behaviour



++Models of Health Behaviour:

1. The Health Belief Model (HBM)

The Health Belief Model states that **preventive behaviours** are determined by two factors:

- (1) The **evaluation of the threat** of a health problem,
- (2) The **weighing of the pros & cons** of performing the behaviour

Perceived threat is composed of:

1. Perceived **seriousness** of the health problem
2. Perceived **susceptibility**
3. **Cues** to action
(e.g., reminders, public service announcements)

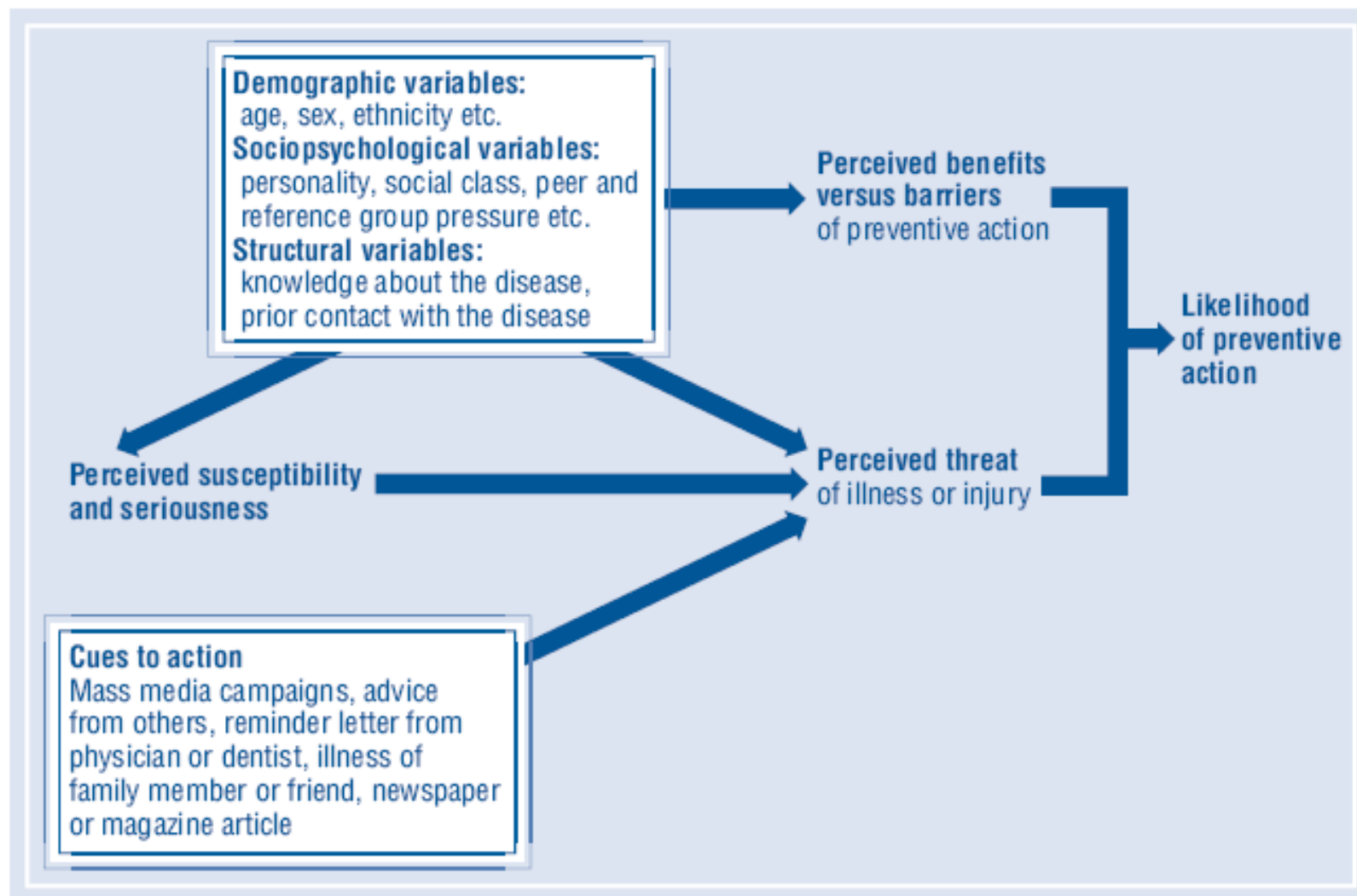


The Health Belief Model

- In weighing pros and cons, in order to perform the behaviour, people must feel that
 - the **perceived benefits outweigh** the **perceived barriers**.
- Barriers can be:
 - **Financial**
 - (can I pay for all organic food?)
 - **Psychosocial consequences**
 - (the doctor may find something serious, my doctor already thinks I'm a hypochondriac)
 - **Physical considerations**
 - (doctor's office is too far away)



The Health Belief Model



The Health Belief Model

Support for the HBM:

- People **who feel more susceptible to illness**
 - get more vaccinations, have regular dental visits, get regular breast and cervical tests, exercise,
 - than those who feel **less susceptible**

Lack of support for HBM:

- Habitual behaviours
- Are these really determined by weighing up pro's and con's,
- E.g. teeth brushing, healthy eating

Problems with the model:

- Difficult to **measure** perceived susceptibility and perceived seriousness (varies across studies)

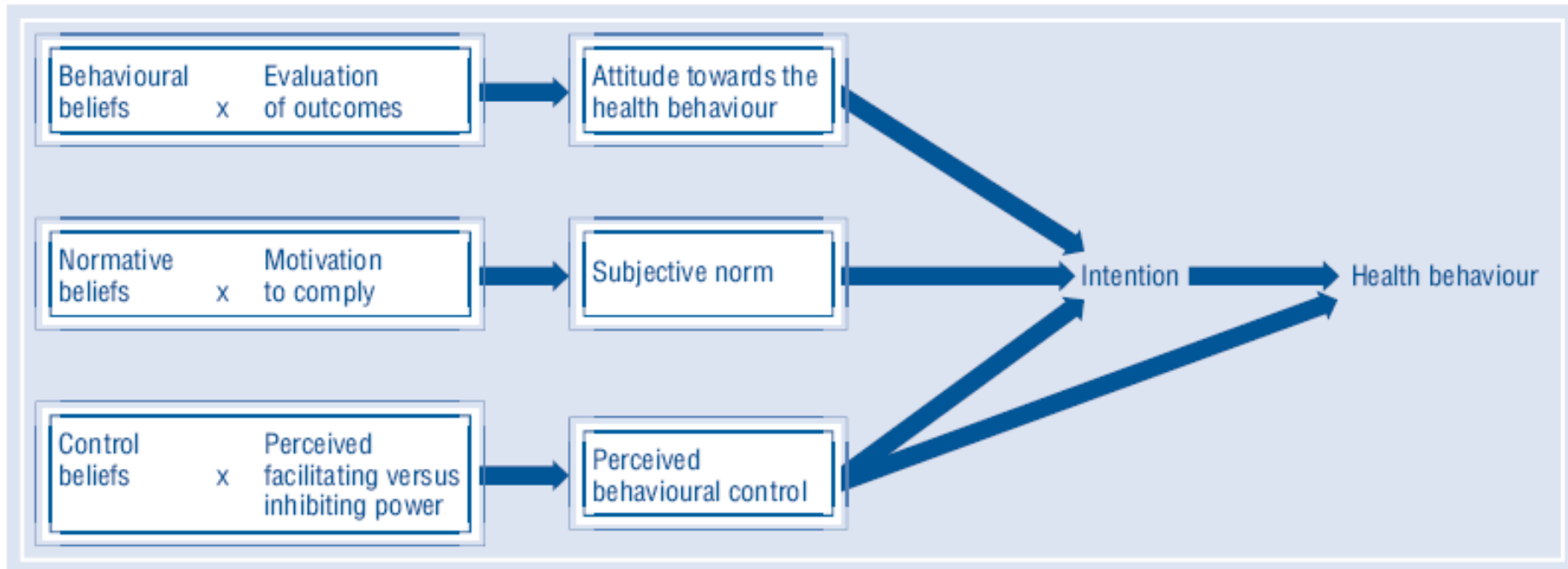
2. The Theory of Planned Behaviour (TPB)

- The Theory of Planned Behaviour posits that **intentions** determine health behaviours.

Determinants of intentions:

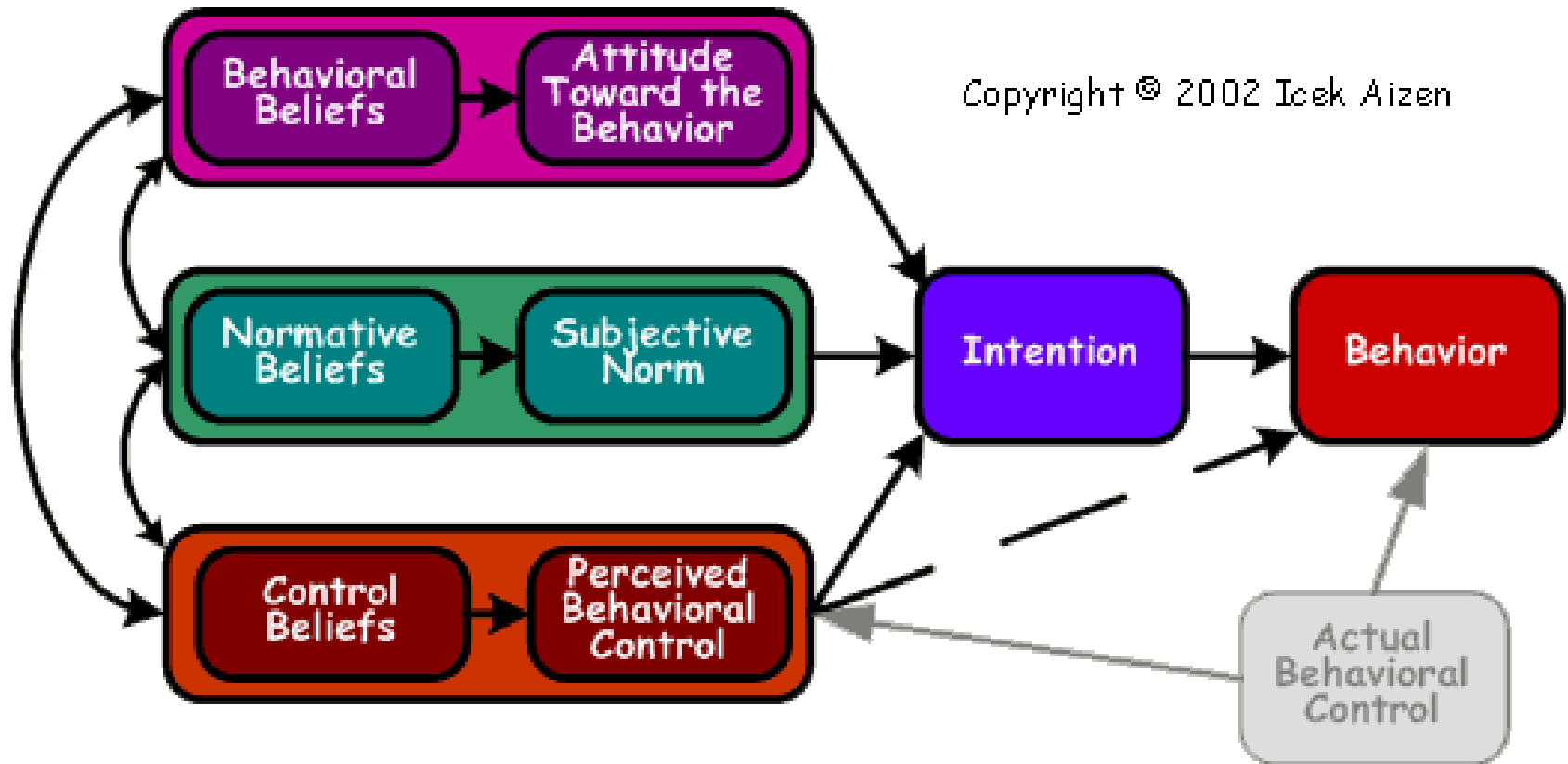
1. **Attitude** regarding the **behaviour**
 - The **likely outcome** of the behaviour,
 - the **value** of the outcome
2. **Attitude** about **subjective norm**
 - **Expectations** of others (family, friends),
 - **motivation** to comply
3. **Perceived** behavioural **control**
 - The **ease** of performing the behaviour (is it dependent on specific factors?)
 - Also linked to **self-efficacy**

Theory of Planned Behaviour



Theory of Planned Behaviour

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Beliefs of Personal Control

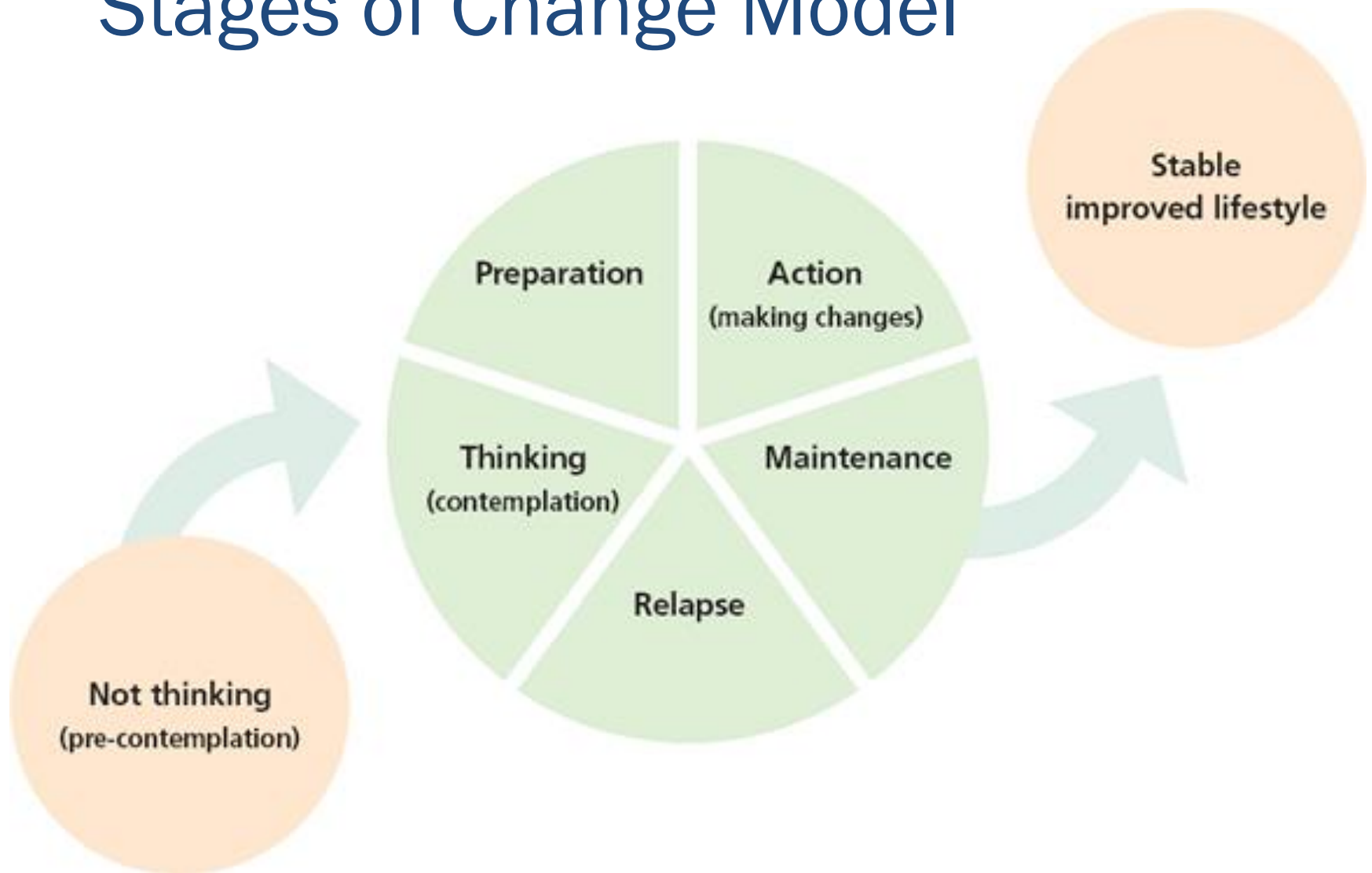
- **Health behaviour** can be influenced by:
 - Locus of Control
 - Internal vs. External
 - Self-efficacy
 - Defined as: the belief that they can **succeed** at something
 - When deciding to perform a health behaviour, people **appraise** their **efficacy** – how much **effort** is required, how **complex** is the task



3. Stages of Change Model

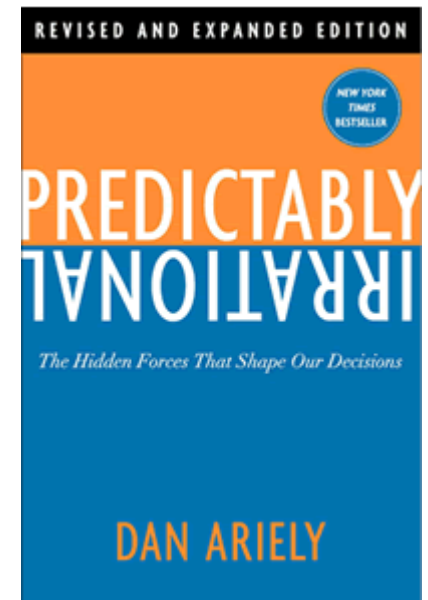
- Focus of this model is **readiness**
- **Transtheoretical model** – because it incorporates factors from other models
 1. **Precontemplation** – *no* consideration of behaviour change
 2. **Contemplation** – *considering* change
 3. **Preparation** – making *small* changes
 4. **Action** – *actively* engaging in new behaviour
 5. **Maintenance** – *sustaining* change over time

Stages of Change Model



Less-Rational Processes

- We're **not rational** people, as evidenced by behavioural economist **Dan Ariely**... and it affects our health.
- Life or Death Decision Making
- (Ralph Keeny – public risk expert)
 - **44.5%** of all **premature deaths** in the US are caused by **personal decisions**
 - smoking, exercise, crime, drugs, unsafe sex (2008)
 - Using the same method, only **10%** of premature deaths were caused by personal decisions in **1900**



Less-Rational Processes

- Motivated Reasoning – process by which people's desires and preferences influence the **judgments** they make about the **validity and utility** of new information
 - Searching for information to **support** their reasoning
 - e.g., my friend smokes and she ran a half marathon – it can't be that bad for your health
- False Hope – believing that you will **succeed** at a health behaviour without a **rational basis**

FYI, there's a romaine lettuce recall going on so make sure to keep eating the unhealthy crap you always do.

someecards



Development and Health-Behaviour

During Gestation and Infancy

- **substances** are passed from mother to child through the **placenta & umbilical cord**.
- **malnourishment** may lead to **low** birth weight
- **infections** may be passed
 - e.g., rubella
- harmful substances may be passed, alcohol leading to **foetal alcohol syndrome**



A child with Fetal Alcohol Syndrome
(O'Rahilly 1996).

Development & Health-Behaviour:

Childhood & Adolescence

- **accidental injury** is the leading cause of death
- Cognitive development
- passes through stages of **explanations** of illness:
 - **Phenomenism** – illness - **single** symptom
 - **Contagion** – a bit more knowledge about **cause** (e.g., proximity)
 - **Contamination** – **dirt or germs** cause illness
 - **Internalisation** – illness - problem **inside** body
 - **Physiological** – knowledge about **internal function**
 - (e.g., cancer cells grow too fast)
 - **Psycho-physiological** – illness can result from **psychological** and **physical** problems

Development and Health: Old Age

Adulthood and Old Age

- **increased** health behaviours with age
- Why?
 - Those who perform the health behaviours **outlive** their less-active peers?
 - Or – perceived **susceptibility** and perceived **severity** increase with age?
- exercise **decreases** with age
 - The elderly tend to **exaggerate** the danger that exertion poses to health
 - **Underestimate** their physical abilities



Gender, SES and Health

- **women's biology** *protect* from certain health problems
 - **Blood pressure** increase and **catecholamine** (e.g. **adrenaline**) release during stress is **greater in men**
- **males** have **shorter life expectancies** than females
- **males** have a **higher rate of accidents**
- **males** engage in **more exercise**
- **females** have a higher rate of **acute illnesses**
- health correlates with socioeconomic status from birth (from conception?)
- lower SES have poorer health habits, behaviours and knowledge



Methods for Promoting Health

- **Fear-arousing warnings** – gain vs. loss-framed messages
- Providing **information** e.g. mass media
- http://www.youtube.com/watch?v=8EHBA5JHd0E&list=PL3B17AED777180AC7&index=8&feature=plpp_video

Methods for Promoting Health

- **Motivational interviewing** - a counselling style designed to help individuals **explore & resolve their ambivalence** in changing a behaviour
- **Behavioural methods** manipulate the consequences, or **reinforcements**, teach new skills
 - Behaviour-dependent
 - Material rewards can be *helpful* when interest is **low**, but may *reduce* motivation if interest is **high**
- **Community Approaches**
 - School-based
 - Workplace-based

Community Approaches: Precede/Proceed Model

The PRECEDE/PROCEED model by Green & Kreuter (1991) provides guidelines for designing, implementing and evaluating health programs.

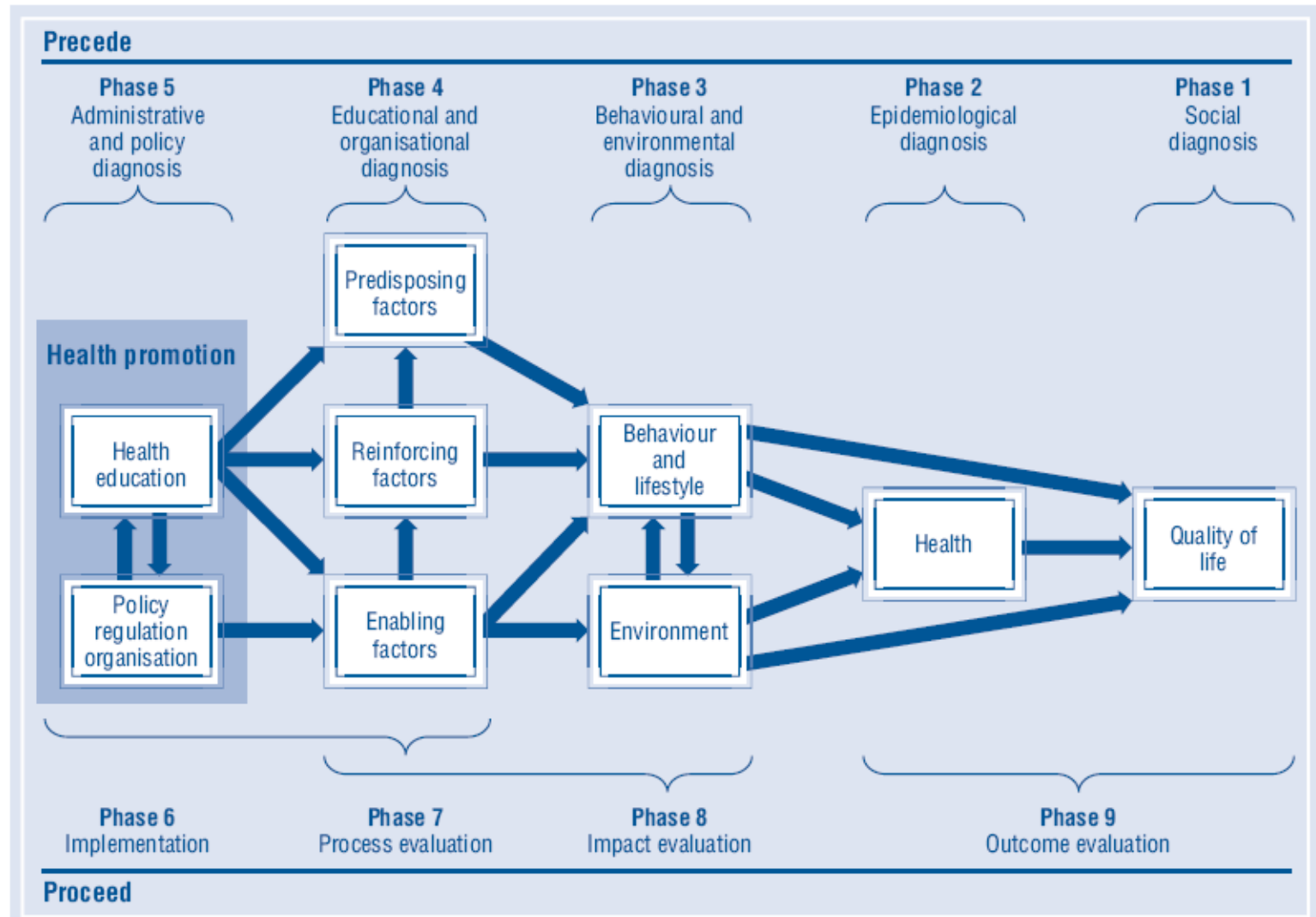
- Program design phases
 - Phase 1, Social diagnosis
 - (What's the **problem**?)
 - Phase 2, Epidemiological diagnosis
 - (What diseases/conditions **contribute** to the problem?)
 - Phase 3, Behavioural and environmental diagnosis
 - (What's **causing** the diseases/conditions?)
 - Phase 4, Educational and organisational diagnosis
 - (What can **facilitate** behaviour change?)
- Phase 5, Administrative and Policy diagnosis
 - (**feasible** project?)
- Phase 6, Implementation
- Program Evaluation: Phases 7-9

4. Community Approaches: Precede/Proceed Model

Program Evaluation

- **Process evaluation** is concerned with the **activities** of the program
 - i.e. how **well** the program was delivered
- **Impact evaluation** determines whether the program achieved its **objectives**
- **Outcome evaluation** determines whether the program achieved its **goal**

Community Approaches: Precede/Proceed Model



Community Health Promotion

Example: SunSmart Program

- Australia and New Zealand have the highest rates of melanoma skin cancer in the world? Why?
- You are 7 times more likely to get melanoma in AUS/NZ than in the UK
- Slip! Slop! Slap! Campaign initiated in 1980
- Incidence of skin cancer – started to decline
- (though, vitamin D deficiency has increased!)

Are you at increased risk for melanoma?

These are important risk factors:

- skin colour (light versus medium or dark skin)
- hair colour (red or blond hair versus black hair)
- skin type (burn easily, never tan)
- skin damage due to sunburn.

