



Understanding the Self

Individual Differences in Health and Illness

Stacey Coleman



Lecture Outline

- Defining health
- Proposed links between personality and health
- Further personality 'types' and health research
- Introduction to stress
- Anxiety and depression as reactions to illness stress



Defining 'Health'



Defining 'Health'

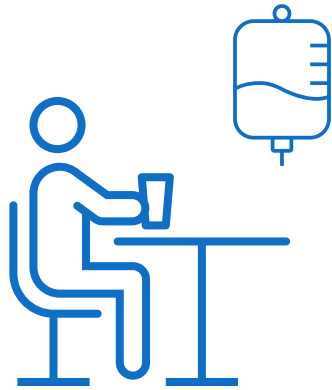
- Dictionary definition – “The state of being free from illness or injury”
- Common sense definitions equate absence of illness to health
- What about mental health and social well-being?
- World Health Organisation (WHO, 1948) definition:

“Health is a state of complex physical, mental and social well-being, and not merely the absence of disease or infirmity”



Defining 'Health'

- There is a subjective, evaluative element to assessments of health and illness
- Attitudes of individuals are important; and these often depend upon individual differences



Assessing Health

- Complexities in health perceptions have led to many measures of health being developed.

General Health
Questionnaire (GHQ,
Goldberg & Williams,
1988)

Satisfaction with Life
Scale (Diener et al.,
1985)

Flourishing and SPANE
scales (Diener et al.,
2010)

WHO Quality of Life
Scale (WHOQOL
Group, 1995)

- Reflect importance of perceived health status and QOL, including psychological, social, occupational and physical domains



Proposed links between personality and health

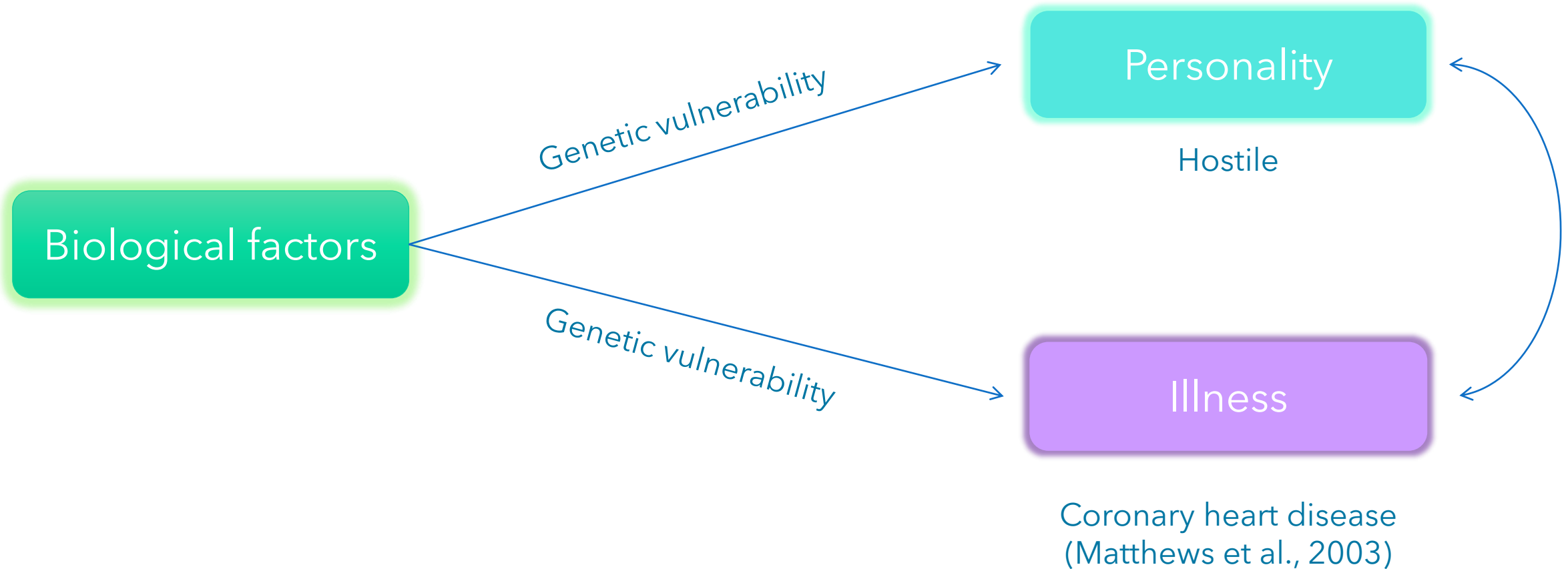
- Four proposals re: the link between personality and health according to Suls and Rittenhouse (1990) and Smith and Williams (1992)
 1. There may be a direct link if personality traits are considered to be biologically based
 2. There may be a correlational link between personality or health, or personality and illness
 3. Having certain personality traits may lead to engagement in behaviours that influence health/illness
 4. Having an illness produces changes in personality

1. Direct link between personality and health IF biological basis is assumed



- Conditions where psychological factors are said to play a major role in the development of illness or ailment e.g., ulcers
- Stress proneness, coping ability, and genetic factors implicated
- Specific personality types play causal role - e.g., heart disease
 - Type A

2. Correlation between personality and health/illness



3. Personality influences engagement in behaviours which influence health/illness



4. Illness can cause changes in personality

Illness

e.g., severe arthritis

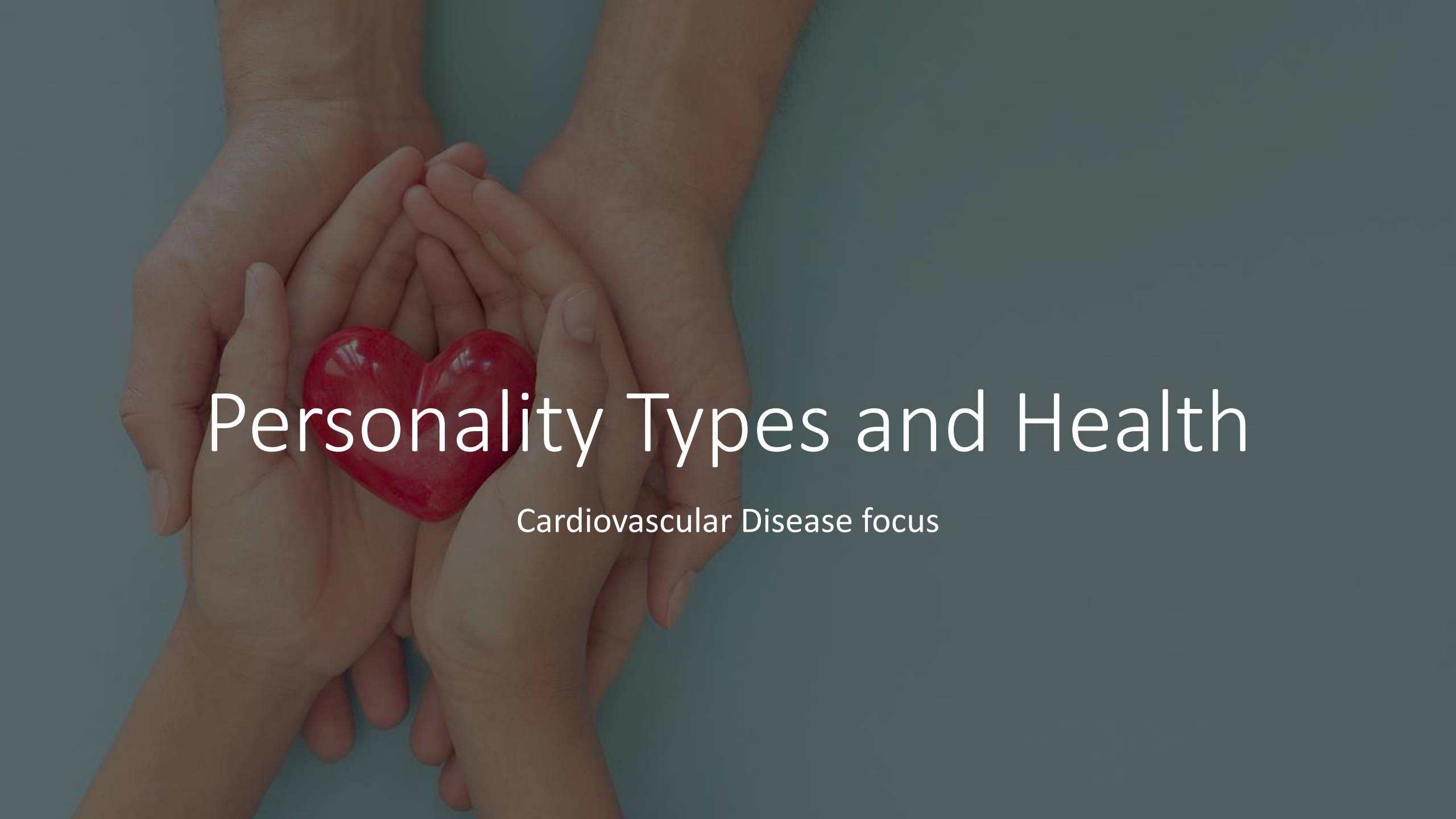
Constant pain leading to
less inclination to go out,
worry about day-to-day
functioning

Personality

Low extraversion, high
neuroticism

Considerations

- Links between personality and health can be open to many different interpretations
- Research studies need to be designed very carefully, and be highly robust and controlled
- A strong correlation between health and personality doesn't necessarily mean anything – simply the first step in the explanation
- Ideal situation = personality assessment pre- and post-onset of illness
 - But difficult, expensive and therefore rare

A photograph of four hands of different skin tones cupping a single, glossy red heart. The hands are positioned with fingers pointing towards the center, creating a protective and nurturing gesture. The background is a solid, muted teal color.

Personality Types and Health

Cardiovascular Disease focus



Personality Types and Health

- Already explored personality types (Jungian theory)
- 'Types' here referring to clusters of characteristics/behaviour patterns that make up a profile of types of people
 - Type A - coronary prone
 - Type B - non-coronary prone
 - Type D - distressed



Cardiovascular Disease

- UK (BHF, 2022) – 25% of all deaths caused by heart and circulatory diseases
- CHD most common type – single biggest killer of men and women worldwide in 2019
- Long history of research into heart disease and personality
 - Osler (1910) – Angina sufferers are keen, ambitious and always run at full speed
 - Friedman and Rosenman (1959) – two types of behaviour patterns related to heart disease

TYPE A

Coronary Prone

TYPE B

Non-coronary
Prone

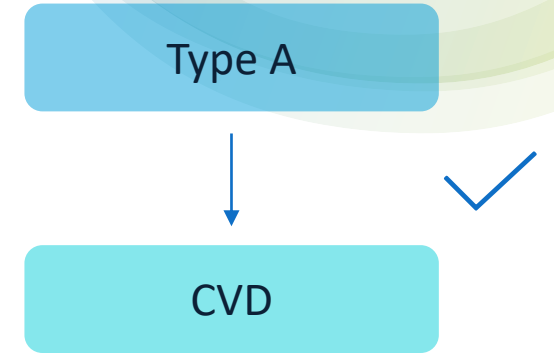
Type A behaviour

- 'Stress-prone behaviour pattern'
- Type A Behaviour is a multidimensional concept combining action and emotion and manifests in individuals showing the following:
 - Competitiveness
 - Time-urgent behaviours (trying to do too much in too little time)
 - Easily annoyed – roused to hostility and anger
 - Impatience
 - Achievement-oriented behaviour
 - Exhibit a vigorous speech pattern

Research: Type A and Health

1. Friedman and Rosenman (1964/1975)

- Study on men in 1960 (aged 39-59)
- 8 year follow up; Type A men twice as much CVD as Type B men
- Ragland and Brand (1988) - 22 year follow up - no effect of Type A on mortality, but marked effects on mortality from other health factors (BP, smoking and age)



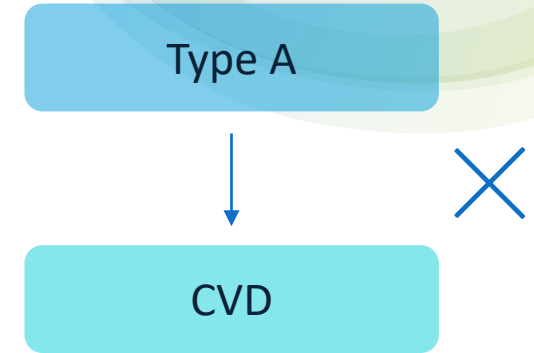
2. Haynes et al. (1978)

- Men and women assessed between 1965-1967. in 1978, follow up (aged between 45 and 77).
- Incidence of CVD was significantly higher in Type As than Type Bs
- But - 1980 study suggested that CVD women scored higher on Type A behaviour than men, and Type A behaviour increased risk of CVD only in men who were white-collar workers and were aged between 55 and 64.

Research: Type A and Health

3. Cohen and Reed (1985)

- 2187 men, eight year assessment
- No relationship between Type A behaviour and incidence of CVD



4. Johnston et al. (1987); Shaper et al. (1991); Wannamethee et al. (1997)

- Men (6177) living in 19 towns across the UK
- Self-reported Type A behaviour
- No significant relationships between CVD and Type A behaviour pattern

Research: Type A and Health

- Chida and Steptoe (2009) meta-analysis; 45 studies
 - Exploration of specific components that make up Type A behaviour
 - Striving competitively
 - Sense of urgency
 - High levels of hostility
 - Hostility, in particular, associated with 20% increase in risk of coronary heart disease in healthy people, and poorer outcomes in those with coronary heart disease

Industrial health: Shiozaki et al. (2017)

- Type A behaviour predicts CHD risk factors in Japanese policemen

Bai and Wang (2020) - risk factors of CHD in women

- Type A behaviour leads to long-term psychological stress, causing changes in lipid behaviour in the body
- Changes can lead to formation of blood clots, and this is directly related/has a direct impact on CHD
 - Clots lead to or aggravate CHD

Type B behaviour

- Type B behaviour characterised by:
 - Relaxed and patient
 - Easy-going nature
 - Less anxious
 - Resilient to stress
 - Reflective

Type D behaviour

- Lack of consistent findings re: Type A lead to exploration of other individual differences
 - Researchers interested in looking at differences in prognosis in heart disease patients, how long they lived and whether they had subsequent heart attacks
 - Dickens et al. (2007) – depression, low social support, hostility and anger are risk factors for CHD
- Razanski et al. (1999) – psychological risk factors **cluster** together; there is an effect of these clusters, but only when also experiencing chronic stress
- Denollet (2000) – Type D personality (D = Distressed)
 - Tendency towards negative affectivity; negative emotions are their baseline, consistent and across all situations.
 - Irritable, miserable, socially inhibited

Research: Type D and Health

Individuals with CHD classified as Type D:

- Higher emotional stress
- Higher anger and tension
- Low self-assessed well-being
- Do less well during treatment(s)
- Are more likely to have further heart-related problems

(Denollet, 2000; 2008; Denollet & Conrads, 2011; Denollet & Pederson, 2009)



Stress



What is stress?

A natural reaction to excessive pressure

Not a disease, but excessive/prolonged stress can lead to mental and physical ill health

Stress

When perceived demands exceed the individual's ability to cope

No such thing as positive stress – only positive pressure. Stress is **always** negative

Stress Response

- Hans Selye (1956) suggests that stress is a non-specific response to any threatening stimuli
- Selye's most famous works in relation to stress comes in his research into the body's defensive activity in response to stress
- The General Adaptation Syndrome

Stress Response

- General Adaptation Syndrome (GAS) consists of three consecutive stages:

1. ALARM REACTION
2. RESISTANCE
3. EXHAUSTION

Alarm Reaction

- Initial lowered resistance followed by activation of defence mechanisms (e.g., adrenalin)
- Fight or flight response
 - Body preparing for extreme physical demands
- Physical changes and changes in nervous system
 - Increased heart rate, breathing, etc
- If stress continues, body moves to second stage

Stress Response

- General Adaptation Syndrome (GAS) consists of three consecutive stages:

1. ALARM REACTION
2. RESISTANCE
3. EXHAUSTION

Resistance

- Stage of maximum adaptation and (hopefully) successful return to equilibrium
- Obvious physical arousal dies down but other processes are kickstarted
- If stressor continues, move to next stage occurs
- Health implications:
 - HPB; stomach ulcers; immune deficiencies; asthma; etc

Stress Response

- General Adaptation Syndrome (GAS) consists of three consecutive stages:

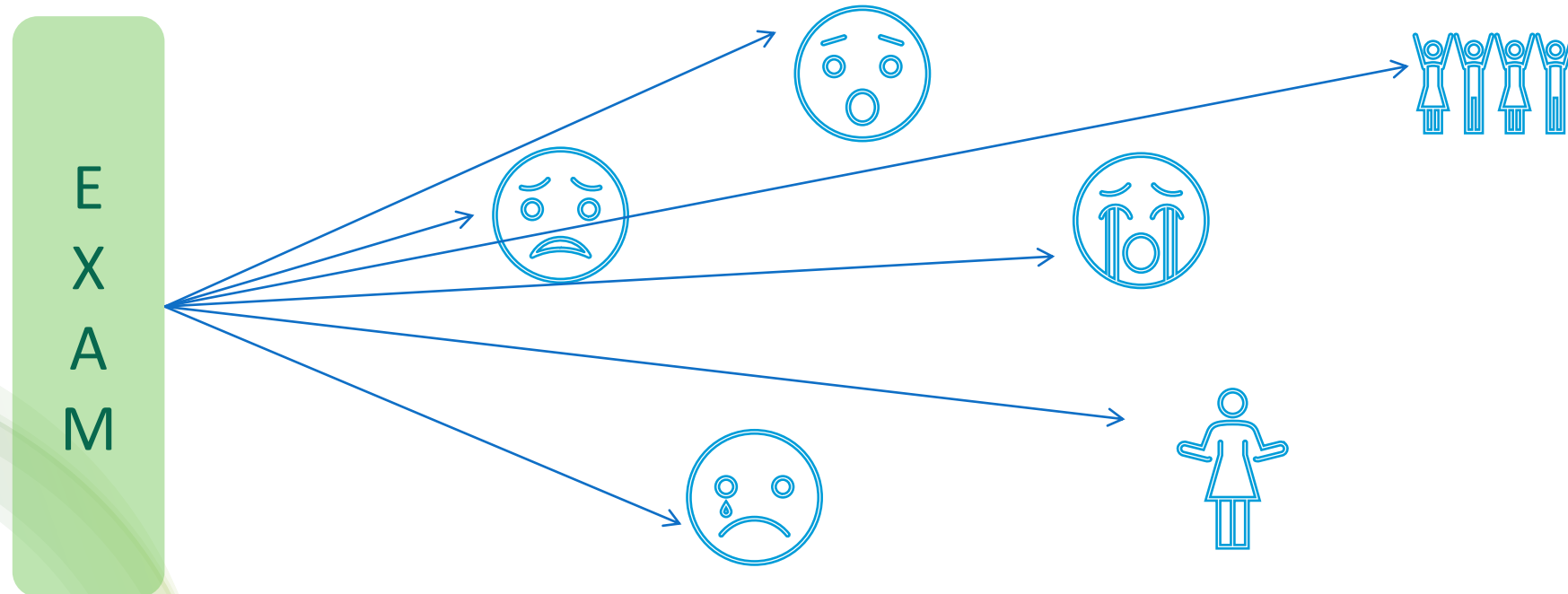
1. ALARM REACTION
2. RESISTANCE
3. EXHAUSTION

Exhaustion

- Body's capacity becomes exhausted; failure of defence mechanisms
- Physical and/or psychological illness occurs
- Sometimes referred to as **burnout** (Maslach & Jackson, 1982)

Stress Response

- Repeated exposure to stress is bad for our health
- Every individual deals with stressful situations differently, e.g.,



Transactional Model of Stress and Coping

- Stress is a result of an interaction between an individual's characteristics and appraisals, the external or internal event (stressor) environment, and the internal or external resources a person has available to them.
- Lazarus's initial model maintained that when individuals confront a new or changing environment they engage in a process of appraisal, which is of two types: Primary and Secondary

Transactional Model of Stress and Coping

- Stress is not a stimulus or a response; viewed as a transaction between person and situation
- According to the transactional model, the stress and coping process involves two main elements:

an **evaluation** of a situation
that produces negative
emotions

coping efforts which
attempt to reduce these
negative emotions

This process of evaluation is known as **Cognitive Appraisal**

- an individual's evaluation of the meaning of a particular encounter for well-being

Transactional Model of Stress and Coping

- Stress arises from an imbalance between perceived demands and perceived capabilities/resources
 - Perceived demands = subjective appraisal of situation (primary)
 - Perceived resources = subjective appraisal of ability to deliver (secondary)

1. Primary Appraisal

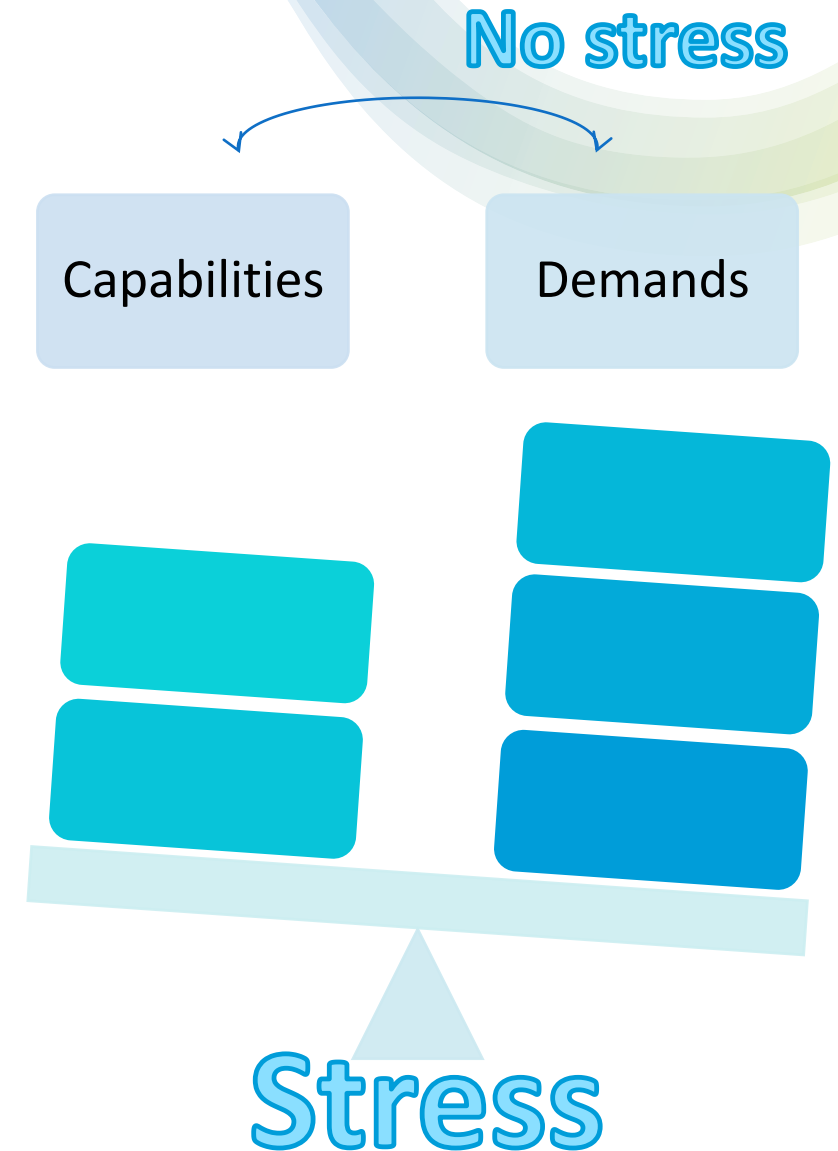
- What is at stake in this encounter? What does this mean to me?
- The interpretation of the stressor

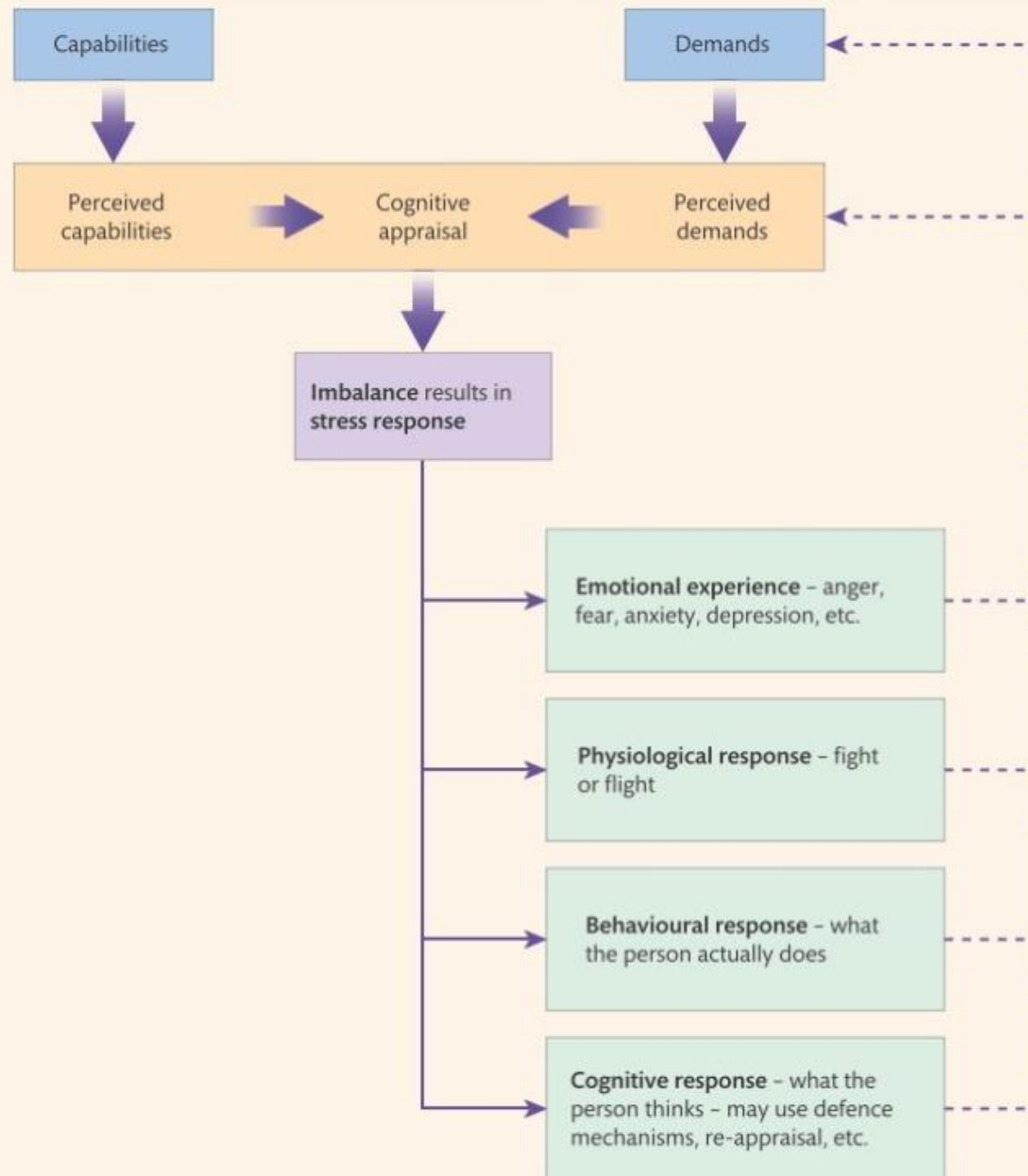


Transactional Model of Stress and Coping

1. Secondary Appraisal

- What can I do to cope and how effective will this be?
 - Emotion-focused coping potential
 - Problem-focused coping potential
- Comparison of perceived capabilities and perceived demands
- If mismatch where demands are greater than capabilities, stress results





Coping

- Coping is a response to negative events or emotions, and involves cognitive and/or behavioural efforts to manage to adapt to the stressful situation
- Psychological theories of coping attempt to identify the mechanisms through which individuals cope with events that are perceived to be stressful or threatening
- Emotions and coping are often considered to be part of the same adaptational system

Emotion-Focused Coping

- Focus is on regulating the negative emotional reactions to stress
 - E.g., anxiety, fear, sadness, anger.
- EF coping is sometimes the only realistic option when the source of stress is outside the person's control
- Drug therapies can be seen as EF coping strategies
- EF coping strategies are generally not beneficial or helpful in the long term



Problem-Focused Coping

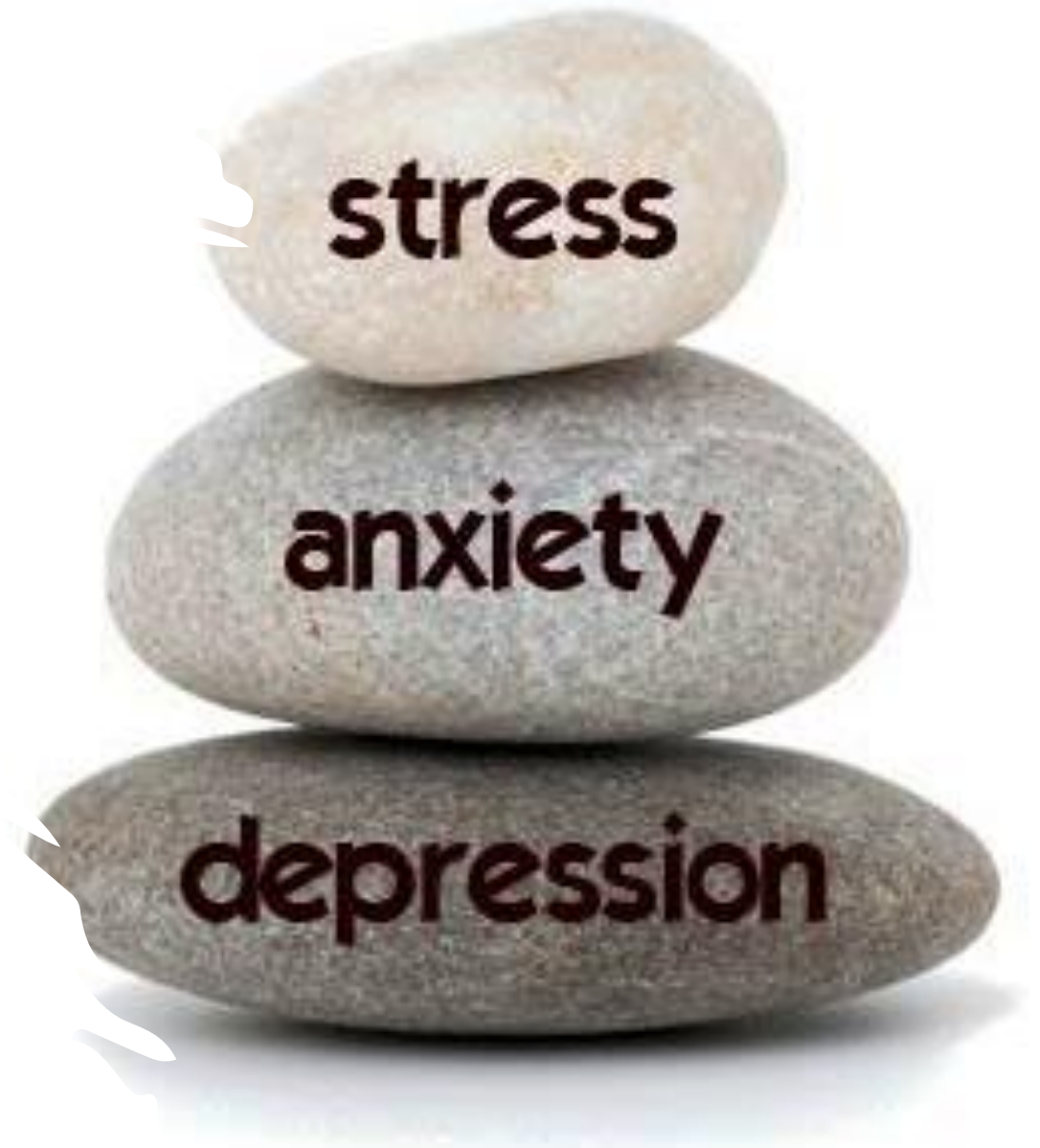
- Aim to eliminate the source of stress or work with the stressor itself
- Stress is targeted in practical ways which tackles the problem/situation that is causing stress, thus directly reducing stress



Effectiveness of coping strategies

- Problem-focused coping is considered to be the most beneficial strategy – but only if the stressor **can** be removed
- If the problem cannot be removed or escaped from (e.g., diagnosis of illness), other forms of coping are considered more helpful, at least in the short term

Anxiety and Depression



Anxiety and Depression

- Illness as a stressor can lead to anxiety or depression (as a reaction to illness)
 - Oltmans and Emery (2006)
- Symptoms of anxiety and depression often occur together
- Depression is noted as having the greatest impact on health globally
- Distinction needs to be considered between depressed mood and clinical depression
 - No clear indication of when mood becomes clinically diagnosable disorder
 - But – DSM-5 diagnostic criteria

Anxiety and Depression

- DSM-5 = Diagnostic and Statistical Manual (5th edition) by the American Psychological Association (APA)
 - Classification of mental disorders used by mental health professionals
- Link between depression and health?
 - Depressed patients have been shown to be less compliant with treatment
 - Depression is associated with slower cardiac recovery and increased likelihood of further heart attacks
 - Depressed patients cope less well with pain

Anxiety and Depression

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 - Classification of mental disorders used by mental health professionals
- Link between depression and health?
 - Depressed patients have been shown to be less compliant with treatment, and therefore have poorer health outcomes (Wing et al., 2002)
 - Depression is associated with slower cardiac recovery and increased likelihood of further heart attacks (Hughes, 2006)
 - Depressed patients cope less well with pain
 - E.g., fibromyalgia (Tennen et al., 2006)

Anxiety and Depression

- Anxiety can be a motivating factor in the context of health
 - Usually, worry leads to people being motivated to get symptoms checked
 - Can lead to reduction in unhealthy behaviours; drinking, smoking, eating healthier foods, engaging in more exercise
- However, anxiety is just as likely to **prevent** people having their symptoms checked
 - Fear about possible diagnoses of illnesses
- So - anxiety can be both adaptive and maladaptive
- Consideration (as with depression) between anxious mood and clinical anxiety-based disorders
 - Many types of anxiety disorder; panic disorder, OCD, GAD, PTSD, etc

Anxiety and Depression

- Link between anxiety and health?
 - High anxiety linked to greater risk of developing further physical illnesses (Contrada & Goyal, 2004)
 - Highly anxious heart attack patients are at greater risk of developing complications while in hospital (Moser et al., 2007)
 - Anxiety is linked to lower health-related quality of life in cancer patients (Brown et al., 2010) and patients with COPD (Blakemore et al., 2014).
- Excessive anxiety can lead to hypochondria
 - Anxiety and hypochondria are associated with high neuroticism, which is also associated with higher levels of somatic complaints

Summary

- Common sense definitions of health are problematic; focus is not only on absence of illness but should encompass mental and physical well-being, too
- Type A behaviour is associated with a variety of poor health outcomes, particular in heart disease patients
- Stress is a natural reaction to any pressure
- Three stages of stress response; alarm reaction, resistance, and exhaustion
- Stress occurs when perceived capabilities outweigh perceived demands
- Anxiety and depression are often the result of illness-related stress