

# Chapter 15:

## Stress, Coping and Health

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### The Nature of Stress

- Psychologists have viewed stress in three different ways: as a stimulus, a response, and an organism-environment interaction
- Some define stress in terms of eliciting stimuli, or events that place strong demands on us – these situations are termed **stressors**
- Stress has also been viewed as a response that has cognitive, physiological and behavioural components
- A third way of viewing stress is as a person-situation interaction – **stress** is a pattern of cognitive appraisals, physiological responses, and behavioural tendencies that occurs in response to a perceived imbalance between situational demands and the resources needed to cope with them

### Stressors

- Specific kinds of eliciting stimuli
- Place demands on us that endanger well-being, requiring us to adapt in some manner
- Can range in severity from microstressors (daily hassles and everyday annoyances we encounter at school, work, or in family relations) to very severe stressors
- Catastrophic events often occur unexpectedly and typically affect large numbers of people – natural disasters, acts of war, concentration camp confinement, etc.
- Major negative events also require major adaptation – victims of crime or sexual abuse, death or loss of a loved one, academic or career failure, major illness, etc.
- To study linkages between life events and well-being, researchers use **life event scales** to quantify the amount of life stress that a person has experienced over a given period of time

### The Stress Response

- Starting point for the stress response is our appraisal of the situation and its implications – there are four aspects of the appraisal process:
  - Primary appraisal – appraisal of the **demands** of the situation
  - Secondary appraisal – appraisal of the **resources** available to cope with it
  - Judgments of what the **consequences** of the situation could be
  - Appraisal of the **personal meaning**, that is, what the outcome might imply about us

### Chronic Stress and the Gas

- **General adaptation syndrome (GAS)** – Hans Selye’s description of the body’s responses to a stressor, which includes successive phases of alarm reaction, resistance and exhaustion
- In response to a physical or psychological stressor, animals exhibit a rapid increase in physiological arousal – this alarm reaction occurs because of the sudden activation of the sympathetic nervous system and the release of stress hormones by the endocrine system
- There is also an endocrine, or hormonal, stress response – the adrenal glands produce a number of different hormones, but during a period of stress, the most important is **cortisol**, which triggers an increase in blood sugars, by acting on the liver

- During the stage of resistance, the body's resources continue to be mobilized so that the person can function despite the presence of the stressor – can last for a relatively long time, but the body's resources are being depleted
- If the stressor is intense and persists for too long, the body may reach the stage of exhaustion, in which the body's resources are dangerously depleted – increased vulnerability to disease, collapse and even death

## **Stress and Health**

### Post-Traumatic Stress Disorder (PTSD)

- **Post-traumatic stress disorder (PTSD)** represents what can happen to victims of extreme stress and trauma – it is a severe anxiety disorder that is caused by exposure to traumatic life events
- Four major groups of symptoms occur with PTSD:
  - Severe anxiety, physiological arousal and distress
  - Painful, uncontrollable reliving of the event(s) in flashbacks, dreams, and fantasies
  - Emotional numbing and avoidance of stimuli associated with the trauma
  - Intense "survival guilt" in instances where others were killed but the individual survived
- Traumas caused by human perpetrators, such as war, rape assault and torture, tend to cause more severe PTSD than do natural disasters

### Stress and Illness

- Stress can combine with other physical and psychological factors to influence the entire spectrum of physical illness from a simple cold to even death

## **Vulnerability and Protective Factors**

- **Vulnerability factors** increase people's susceptibility to stressful events – lack of support network, poor coping skills, tendencies to become anxious or pessimistic, and other factors that reduce stress resistance
- **Protective factors** are environmental or personal resources that help people cope more effectively with stressful events – social support, coping skills, and personality factors such as optimism

### Social Support

- Social support is one of the strongest protective factors against stress
- Social networks reduce exposure to risk factors such as loneliness and having the backing of others can increase feelings of control over stressors

### Cognitive Protective Factors: The Importance of Beliefs

- **Hardiness** – the stress-resistant personality pattern that involves the factors of commitment, control and challenge
- **Coping self-efficacy** – the conviction that we can perform the behaviours necessary to cope successfully – this is an important protective factor
- **Optimism** – positive affect is linked to better health and longer life

- **Personality Factors:**
  - **Type A** people tend to live under great pressure and are demanding of themselves and others
    - behaviours include rapid talking, moving, walking, and eating
    - exaggerated sense of time urgency, become very irritated at delays or failures to meet deadlines
    - high levels of competitiveness and ambition, as well as aggressiveness and hostility
  - **Type B** people stand in sharp contrast to Type A people
    - more relaxed, more agreeable
    - have far less sense of time urgency
  - Type A people are more prone to coronary heart disease than Type B people

### Psychological Reactivity

- **Physiological toughness**, a particular stress hormone pattern that appears to be a protective factor, involves relations between two classes of hormones secreted by the adrenal glands in the face of stress
- Both catecholamines and corticosteroids mobilize the body's fight-or-flight response in the face of stressors, but have different effects on the body – corticosteroids' arousal effects last much longer and seem to be more damaging
- People who exhibit strong and prolonged arousal responses are more susceptible to negative psychological and health effects
- Physiological toughness consists of:
  - a low resting level of cortisol, low levels of cortisol secretion in response to stressors and a quick return to baseline level of cortisol after the stress is over
  - a low resting level of catecholamines but a quick and strong catecholamine response when the stressor occurs, followed by a quick decline in secretion and arousal

### Coping with Stress

- Coping strategies can be divided into three broad classes:
  - **Problem-focused coping** strategies attempt to confront and deal directly with the demands of the situation, or to change the situation so that it is no longer stressful (e.g. studying for a test, direct confrontation to clear up a misunderstanding, etc.)
  - **Emotion-focused coping** strategies attempt to manage the emotional responses that result from it (e.g. avoidance or acceptance of the stressful situation)
  - **Seeking social support** is turning to others for assistance and emotional support in times of stress (e.g. student seeks help in preparing for a test)

### Controllability and Coping Efficacy

- Effectiveness depends on the characteristics of the situation, the appropriateness of the technique, and the skill with which it is carried out

### Bottling Up Feelings: The Costs of Constraint

- Denise Sloan and Brian Marx (2004) – concluded that cues that accompany trauma become conditioned stimuli that trigger distress
- Writing or talking about the traumatic event provides exposure to these cues and the exposure allows extinction to occur

## Health Promotion and Illness Prevention

- **Health psychology** studies psychological and behavioural factors in the prevention and treatment of illness and in the maintenance of health
- Health-related behaviours fall into two main categories:
  - **Health-enhancing behaviours** serve to maintain or increase health – exercise, healthy dietary habits, safe sexual practices, regular medical checkups, etc.
  - **Health-compromising behaviours** are those that promote the development of illness – smoking, fatty diets, a sedentary lifestyle, unprotected sexual activity, etc.

### How People Change: The Transtheoretical Model

- The **transtheoretical model** identifies a series of phases through which people pass as they modify their behaviour
  1. **Precontemplation** – problem is unrecognized or unacknowledged
  2. **Contemplation** – recognition of problem, contemplating change
  3. **Preparation** – preparing to try to change behaviour
  4. **Action** – implementing change strategies
  5. **Maintenance** – behaviour change is being maintained
  6. **Termination** – permanent change; no maintenance efforts required
- People may move up and down through the stages several times before they reach the final stage of termination
- The transtheoretical model is important because it helps us understand how people change and it has important applied implications – stage matched interventions have been developed to move individuals toward the action, maintenance and termination stages

## Combatting Substance Abuse

### Psychological Approaches to Treatment and Prevention

- The technique of **motivational interviewing** leads people to their own conclusions by asking questions that focus on discrepancies between the current state of affairs and individuals' ideal self-images, desired behaviours, and desired outcomes
- **Multimodal treatment** is a set of substance abuse interventions that combine a number of treatments – often include biological measures together with physiological measures such as:
  - Aversion therapy – undesired behaviour is associated with an aversive stimulus, such as electric shock or a nausea-producing drug, in an attempt to create a negative emotional response to the currently pleasurable substance
  - Relaxation and stress-management training – helps person adapt to and deal with stressful situations
  - Self-monitoring procedures – help person identify the antecedents and consequences of the abuse behaviours
  - Coping and social skills training
  - Marital and family counseling to reduce conflicts and increase social support
  - Positive reinforcement procedures to strengthen change
- Intervention known as **relapse prevention** has been developed – Research with substance abusers show that most **relapses** (a return to the undesirable behaviour pattern) tends to occur after the person has suffered a

**lapse** (a one-time “slip”) when confronted with a high-risk situation such as stressful events, interpersonal conflicts, social pressure, etc.

- **Abstinence violation effect** – a reaction that can occur when substance mis-users fail to remain abstinent and view the lapse as proof that they will never be strong enough to resist temptation; may result in total relapse
- **Harm reduction** is a prevention strategy that is designed not to eliminate a behaviour, but rather to reduce the harmful effects of a behaviour when it occurs
  - Examples of harm reduction approaches in the area of drug abuse, include needle and syringe exchange programs to reduce the spread of HIV infections or methadone maintenance programs to reduce need to engage in criminal activity for heroin addicts