Section 1: Hunger and Eating

Biological Factors

♦ The Brain
  • Scientists used to believe that parts of the hypothalamus were on and off switches for hunger.
  • Current research indicates that there is not an anatomical center of hunger, but neural networks. For example, a part of the hypothalamus increases hunger through neurotransmitters.

♦ Glucose
  • Food is converted into glucose, a simple sugar that is a source of energy.
  • The glucostatic theory proposed that changes in glucose levels were monitored in the brain by glucostats, thus triggering hunger.
    • One problem is that glucose levels do not fluctuate significantly.
  • Although the glucostatic theory doesn’t provide the entire answer to hunger, there are glucostats in the liver which send messages to the hypothalamus.

♦ The Stomach
  • After you have eaten, your stomach sends two types of information to the brain. The first is about stretching in the stomach walls; the second is information about how nutritious the contents of the stomach are.

♦ Hormones
  • Insulin is created by the pancreas and extracts glucose from the blood. Insulin secretions help regulate hunger.
  • Leptin is produced by fat cells and provides the hypothalamus with information about the body’s fat stores.

Environmental Factors

• Learned Preferences: What, when, and how much people eat is determined in part by classical conditioning (e.g., taste aversion, associating a food with a social activity) and by observational learning (e.g., children eat what they see their parents eat).
• Food-Related Cues: This may include, for example, smells and visual stimuli.
• Stress: Stress seems to be linked with increases in eating (e.g., a person who eats chocolate after a stressful day at work).
Obesity

- Obesity is the condition of being overweight. Measures of obesity vary (e.g., the body mass index or BMI), but many North Americans are obese and this causes considerable health problems.
- There is a genetic predisposition to body weight. Adoption studies and twin studies have indicated that people tend to resemble their biological parents in body weight.
- Psychologists believe there is a set point for body weight, i.e., a natural point of stability for body weight. For example, people who lose weight often gain it back quickly.
- Changes in diet affect people’s weight. Many people have an all-or-none approach to diet.

Section 2: Sexual Motivation and Behavior

Determinants of Sexual Desire

Hormones secreted by the gonads (ovaries or testes) affect sexual desire.
- The principal gonadal hormones for women is estrogen, for men is androgen. Both genders have these hormones, but in different levels.
- Testosterone, an androgren, correlates with high levels of sexual activity in both men and women.

Pheromones are chemicals secreted by one animal that affect the behaviour of another.
- Though there is some evidence that humans respond to pheromones, it isn’t linked to sexual desire.

Erotic material (e.g., literature, photographs, films) can increase sexual desire in both men and women.
- Though laboratory studies has indicated that erotic material increases sexual desire in both men and women, women are more likely to report a dislike of erotic material. This is probably because the pornography industry primarily targets men and often portrays women in degrading roles.
- Though there is no link between erotic materials and sex crimes, aggressive pornography (i.e., pornography that depicts violence against women or that promotes the “rape myth”) has been linked to aggression against women.
  o This may be important to research on rape, especially date rape. For example, in one study of male university students, 1 in 12 reported forcing or attempting to force a woman to have sex against her will, but none of the men considered themselves rapists.
- Though erotic materials only increase sexual desire for a short period of time, they do seem to alter attitudes about sexual behaviour. Studies have indicated that both men and women who view erotic films become more accepting of pre-marital sex and extra-marital sex. They also become less satisfied with their own sexual relations.

Attraction to a partner is a factor in sexual desire.
• Evolutionary theory suggests that men tend to seek young, attractive women (who are most likely to reproduce) while women seek men who are able to provide (for the woman and the child).
• **Parental Investment:** Evolutionary theory also suggests that because the male contribution to reproduction requires a short period of time whereas the female contribution requires years, women have become more selective about choosing sex partners on the basis of long term commitment.
• This would explain why men tend to want to have more sexual partners than women and tend to be more willing to pursue casual sex.
• This also support’s Buss’s theory that women are more concerned with emotional fidelity, whereas men are more concerned with sexual fidelity.

**Human Sexual Response**
• The pioneering research in human sexuality was done by William Masters and Virginia Johnson in the 1960s.
• Masters and Johnson determined the physiological stages of sexual activity in both men and women.

**Sexual Orientation**
• **Sexual orientation** refers to a person’s emotional/sexual preference for individuals of the opposite sex (**heterosexual**), the same sex (**homosexual**), or both (**bisexual**).
• **Gay** and **straight** are the terms usually used to differentiate between homosexuals and heterosexuals, though most homosexual women prefer the term **lesbian**.
• People tend to understand sexual orientation as an either/or distinction. However, research indicates that sexual orientation is actually a continuum.
• This makes it difficult assessing how common homosexuality is. Probably about 5-10% of the population can be considered homosexual.

**Nature and Nurture in Theories of Sexual Orientation**
• Research into the development of sexual orientation strongly supports a biological (nature) basis for homosexuality.
  o Twin studies and other research has indicated a strong link between genetics and homosexuality. Family studies and genetics also support this.
  o Some brain research has indicated that a part of the hypothalamus is more similar between gay men and women than between gay men and straight men.
  o Extremely feminine behaviour in young boys and extremely masculine behaviour in young girls is correlated to homosexuality in adulthood.
  o Research has indicated that many men who display characteristics of **homophobia** (irrational fear of or aggression towards homosexuals) may in fact be latent homosexuals.
• Environmental (nurture) theories haven’t offered convincing explanations of homosexuality.
• Daryl Bem’s **interactionist theory** combines both nature and nurture.
  o Bem holds that biology doesn’t determine sexual orientation, but rather a **temperament** or predisposition that is shaped by experience into sexual orientation.
Section 3: Affiliation & Achievement

- The **affiliation motive** is the need to associate with others and maintain social bonds.
  - People vary in their affiliation need, e.g., people with a higher need tend to devote more time to social activities and are more concerned with social acceptance than people with a lower affiliation need.

- The **achievement motive** is the need to master difficult challenges, to outperform others, and to meet high standards.

Individual Differences in the Need for Achievement

- The need for achievement is a stable aspect of personality.
- The need for achievement can be measured with the **Thematic Apperception Test**.
- People with high TAT scores tend to be persistent, hard workers who are future oriented.
- A person with a high need for achievement tends to choose moderately difficult tasks.

Situational Determinants of Achievement Behavior

- The strength of motivation to achieve success.
- The probability of success.
- The incentive value of success.

The Fear of Failure

- People are motivated to avoid failure.
- Emotion (fear) can cause motivation; motivation can cause emotion (e.g. anxiety).

Section 4: Emotional Experience

Emotion involves a subjective conscious experience, physiological arousal, and overt expressions.

The Cognitive Component of Emotion

- Emotions are highly subjective.
- An individual assessment of a situation influences emotion.
- People evaluate emotions as pleasant, unpleasant, or mixed.

The Physiological Component of Emotion

- Emotions are accompanied by physiological arousal, e.g. heart rate, blood pressure, respiration, galvanic skin response (GSR is an increase in the electrical conductivity of the skin caused by sweat).
- Much of the physiological arousal is caused by the autonomic nervous system, e.g. the fight-or-flight response which is regulated by the adrenal hormones.
Polygraphs ("lie detectors") work by monitoring autonomic reactions.

- The limbic system (including the hypothalamus & amygdala) regulates emotion.
- Current theory is that sensory inputs arrive in the thalamus and then go to two places: the amygdala and the cerebral cortex.
  - If the sensory input conveys a threat, the amygdala sends a signal to the hypothalamus, which activates the autonomic and endocrine reactions.

The Behavioral Component of Emotion

- Emotions are expressed in non-verbal behaviour.
- The facial-feedback hypothesis holds that emotion doesn’t just influence expression, but that expression can influence emotion (i.e., if you smile you’ll be happier).
- The facial expressions that accompany emotions are natural, not learned.
- There are some cultural differences in emotional expression.

Theories of Emotion

James-Lange Theory

- William James and Carl Lange proposed that the conscious experience of one’s emotions resulted from one’s perception of autonomic arousal.
- For example, fear doesn’t cause a physiological response, the physiological response causes fear.
- A person interprets different patterns of autonomic arousal as different emotions.

Cannon Bard Theory

- Walter Cannon and Phillip Bard rejected the James-Lange theory because different emotions may have identical patterns of autonomic arousal and because autonomic arousal can occur without being accompanied by emotion.
- They argue that the thalamus sends messages simultaneously to the cortex (cognitive component) and to autonomic nervous system (physiological component).

Schachter’s Two-Factor Theory

- Stanley Schachtor tried to reconcile these theories.
- He argues that people look at external cues (the situation) to interpret emotion, not internal cues like the James-Lange theory because the patterns of autonomic arousal may be identical, as pointed out in the Cannon-Bard theory.
- For example, “if I’m aroused and you’re obnoxious, I must be angry.”

Evolutionary Theories:

- Evolutionary theorists as early as Darwin believe that emotion developed because of its adaptive value. Emotion developed before thought.
- Recent evolutionary psychologists have identified primary emotions, i.e., all emotions are combinations of eight to ten primary emotions.
Section 5: Stress

- **Stress** is any circumstance which threatens one’s well-being and taxes one’s coping ability.
- Stress is an everyday event.
- The experience of stress is highly subjective.

Types of Stress

- **Frustration** occurs in any situation in which the pursuit of some goal is thwarted.
- **Conflict** is when two incompatible motivations occur (Should I or shouldn’t I?).
  - Approach-Approach Conflict: choice between two attractive goals.
  - Avoidance-Avoidance Conflict: choice between two unattractive goals.
  - Approach-Avoidance Conflict: choice about whether or not to pursue a goal that has both attractive and unattractive elements.
- **Change**: any noticeable changes in lifestyle (e.g., death, divorce, Christmas)
- **Pressure**: expectations that one behaves a certain way

Responses Stress

**Emotional responses** to stress tend to be negative. Common reactions include anger, anxiety, and sadness.

- Inverted U: task performance increases with emotional arousal up to a point, then decreases.

**Physiological Response** to stress is the fight-or-flight response.

- **General Adaptation Syndrome**: a model of the body’s reaction to prolonged stress. It was identified by Canadian psychologist Hans Selye.
  1. **Alarm**: initial fight-or-flight response to deal with threat
  2. **Resistance**: physiological response stabilizes, but is higher than normal
  3. **Exhaustion**: body’s resistance declines

Behavioural Responses

- **Coping** refers to active efforts to master, reduce, or tolerate the demands created by stress.
- **Aggression** is any behaviour designed to hurt someone.
  - Displacement: People tend to direct their aggression at targets other than the source of the stress (e.g., a teacher may cause stress to a student and the student later strikes out a friend).
  - Catharsis: Freud believed releasing emotional tension would reduce stress.
    Some research supports this, but often releasing aggression leads to more stress.
- Indulging Oneself: eating, drinking, drugs, spending money, gambling, TV, internet addiction, etc.
- **Defensive Mechanisms**: unconscious reactions to unpleasant emotions, especially anxiety and guilt.
The image contains a page from a document discussing various coping mechanisms and stress management strategies. Here is the text in a plain text format:

- **Denial**: refusing to perceive or face the situation
- **Fantasy**: imagining better situations
- **Intellectualizing**: cutting off emotional reaction to the situation
- **Overcompensation**: making up for deficiency in one area by over-gratifying another
- **Repression**: burying distressing thoughts in the subconscious
- **Projection**: attributing one’s thoughts to another
- **Displacement**: diverting emotion from the original source
- **Reaction Formation**: behaving in a way that is opposite to one’s true feeling
- **Regression**: reversion to immature patterns of behaviour
- **Rationalization**: creating false excuses for a situation
- **Identification**: identifying with a person or group

**Constructive Coping**: healthy efforts to deal with stressful events.
- Confront the problem directly
- Be realistic about the situation and your coping skills
- Recognize and rectify negative coping as it occurs
- Make sure you are not especially vulnerable to stress

**Stress Management**
- Avoid **catastrophic thinking**, i.e., giving unrealistically negative appraisals of stressful events.
- Use humour to reduce stress.
- Release pent-up emotions.
- Learn to relax.
- Minimize vulnerability to stress (have fun, sleep well, get some exercise)

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**Section 6: Effects of Stress on Psychological and Physical Health**

**Effects of Stress on Psychological Functioning**

**Impaired Task Performance**
- Stress can decrease performance.
- This may be because people under pressure to perform become self-conscious and divide their attention.

**Burnout**
- Burnout is the physical, mental, and emotional exhaustion caused by long-term stress.
- Physical exhaustion includes low energy and chronic fatigue.
- Mental exhaustion includes very negative attitudes.
- Emotional exhaustion includes feelings of hopelessness or of being trapped.
Post-Traumatic Stress Disorder

- Post-traumatic stress disorder involves a chronic psychological disturbance caused by a major traumatic event.
- PTSD is caused by traumatic events (disasters, combat, rape, violent death).
- Common symptoms include nightmares, flashbacks, emotional numbing, anxiety, guilt, social problems, depression, substance abuse, poor health, and suicide.
- Social support is a key factor in avoiding PTSD.

Psychological Problems and Disorders

- Chronic, everyday stress can lead to insomnia, nightmares, sexual dysfunction, substance abuse, and general unhappiness.
- More serious problems include depression, schizophrenia, anxiety disorders, and eating disorders.

Effects of Stress on Physical Health

Psychosomatic diseases are physical illnesses caused in part by psychological factors (e.g., emotional distress). This includes hypertension, ulcers, headaches, and skin disorders.

Type A Behaviour and Heart Disease

- Type A Personality includes a strong competitive nature, impatience, and anger.
- Type B Personality is a more relaxed, patient, easygoing, and friendly.
- People with Type A Personality are at a higher risk for coronary heart disease.
- This is probably because Type A’s have frequent increases in heart rate and blood pressure, are more competitive, have less social support, and are more cynical, work harder, relax less, and eat more poorly than Type B’s.

Emotional Reactions, Depression, and Heart Disease

- Mental stress and emotions may affect the heart.
- Depression is a risk factor for heart disease.
- People with depression tend to smoke more.

Stress, Disease, and the Immune System

- The body’s immune response is a defence reaction against bacteria and viruses.
- Stress can reduce the effectiveness of the body’s immune response.
- The correlation between stress and illness, however, is only moderate.

Factors Moderating the Impact of Stress

- Social Support: social support correlates to good health.
- Optimism: optimists deal with stress better than pessimists.
- Autonomic reactivity: some people have a more sensitive autonomic nervous system, and so respond in a fight-or-flight more readily than other people.
Health Impairing Behaviour

- Smoking (e.g., cancer, heart disease, lung disease)
- Poor nutrition (e.g., hypertension, heart disease, cancer, obesity, osteoporosis)
- Lack of exercise (heart disease, cancer, obesity and related illnesses like diabetes).
- Alcohol & drug use: (cancer, heart & lung disease, addiction, infectious diseases)
- High risk behaviours for AIDS (promiscuity, unprotected sex, intravenous drug use)
- People develop health impairing behaviour because
  o it develops slowly
  o it is attractive or offers immediate rewards
  o people underestimate the risks involved
  o risks are not immediate