

Psychology 101: Motivation & emotion



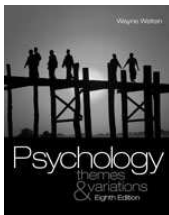
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2012

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What is motivation?

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Reading
Weiten
(Chapter 10):
Motivation and emotion



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What is motivation?
What made you get out
of bed this morning?



What is the **cause** of behaviour?

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Overview

1. What is motivation?
2. Motivation theories
3. Eating motivation
4. Sexual motivation
5. Achievement motivation
6. Emotion
7. Summary & conclusion



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What is motivation?

- What makes us **act** the way we do?
- Theorised **cause** for
 - starting,
 - directing,
 - maintaining and
 - stopping**behaviour.**

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What is motivation?

- **Needs or desires** that **energise** and **direct** behaviour.
- Human behaviours are motivated by a variety of needs, including
 - biological,
 - psychological and
 - social needs.

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Motivational theories and concepts

- **Motives** – needs, wants, desires leading to goal-directed behaviour
- **Evolutionary theories** – maximizing reproductive success

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Five functions of motivational concepts (Gerrig et al., 2008)

1. Relate biology to behaviour
2. Account for behavioural variability
3. Infer private states from public acts
4. Assign responsibility for actions
5. Explain perseverance despite adversity

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Sources of motivation

- **Drive theories**
 - **Internal states** that arise in response to a disequilibrium; we seek homeostasis
- **Incentives**
 - **External stimuli** or rewards that motivate behaviour
- **Instincts & evolutionary theory**
 - Pre-programmed tendencies which maximise reproductive success

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Motivation theories

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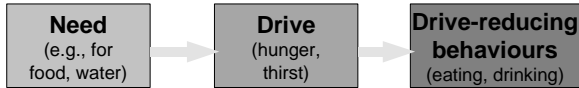
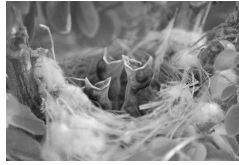
Sources of motivation

- **Expectations & cognitive approaches**
 - Motivation arising from subjective interpretations of reality.
- **Social learning theory**
 - Role of observation and the imitation of behaviours observed in others.
- **Hierarchy of needs**
 - Organisation of physiological, psychological, social & higher needs

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Drives and incentives

- **Physiological needs** create aroused state of **tension** (drive).
- This **drive** motivates an organism to satisfy the need (Hull, 1951).



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Instincts & evolutionary theory

Instinct:

- A complex behaviour which must have a fixed pattern throughout a species that is not learned (Tinbergen, 1951)
- e.g., sexual arousal, aggression, sleep

Evolutionary theory:

- Emphasises the influence of biology on human behaviour and deemphasises the importance of environmental and cultural factors.

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Drives and incentives

- The aim of **drive reduction** is to restore equilibrium or homeostasis.
- **Homeostasis**: tendency to maintain a balanced or constant internal state.



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To what extent is human behaviour instinctual?

- James (1890): humans are more reliant on "instinct" than other animals
- Freud (1915): human drive states, or psychic energy, arise from life and death instincts.
- However, enormous variation in behaviour exists across cultures and between individuals, undermining the argument that human behaviour results greatly from inborn instincts.

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Incentives

- Positive or negative environmental stimuli that motivate behaviour.
- We are **pushed by internal drives**, whereas we are **pulled by incentives**.
- What if we experience both an internal push and an external pull?
 - We are **driven** more strongly.

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Expectations and cognitive approaches

- **Expectation**: An idea about the future likelihood of getting something that is wanted.
- Significant human motivation derives from the individual's subjective interpretation of reality.

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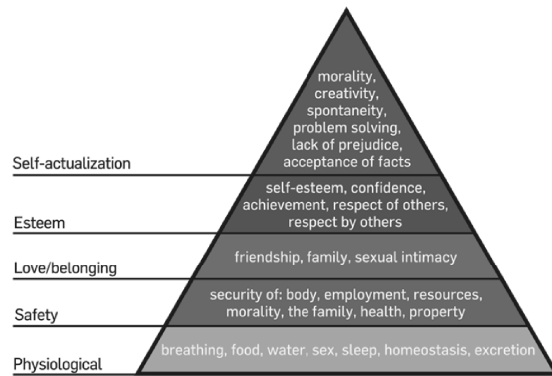
Social learning theory

Rotter and others hypothesised that the probability of engaging in a given behaviour is determined by:

- Expectation of goal attainment following the activity
- Personal value of that goal to the individual
- A discrepancy between expectations and reality can motivate the individual to perform corrective behaviour.

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Maslow's hierarchy of needs



Attributions (Fritz Heider)

Proposed that behaviours can be attributed to:

- **Dispositional forces (intrinsic)**, such as intelligence, personality, or effort
- **Situational forces (extrinsic)**, such as the task, situation, influence of environment and other people

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Motivation of hunger and eating

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Maslow's hierarchy of needs

- Abraham Maslow (1970) suggested that human needs can be organised hierarchically.
- **Physiological needs** (e.g., breathing, hunger) come first
- Then **psychological needs** (e.g., self-esteem) are pursued.



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Regulation of food intake

Requires that organisms be equipped with mechanisms that:

- Detect internal food need
- Initiate & organise eating behaviour
- Monitor quantity & quality of food eaten
- Detect when sufficient food has been eaten & stop eating

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Motivation of hunger & eating: Biological factors

- Brain regulation
 - Lateral and ventromedial hypothalamus
 - Paraventricular nucleus
 - Ghrelin –neurotransmitter and hormone
- Glucose & digestive regulation
 - Glucostatic theory
- Hormonal regulation
 - Insulin and leptin

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The brain and hunger

There are two important hypothalamic centres which help control eating:

- **Lateral hypothalamus**
(stimulates hunger)
- **Ventromedial hypothalamus**
(depresses hunger)

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Motivation of hunger & eating: Peripheral responses

- **Walter Cannon (1934)** proposed that gastric activity in an empty stomach was the basis for hunger, an unsupported position on discovery that stomach contractions are not a necessary condition for hunger.
- **Gastric distension** caused by ingestion of food causes the individual to stop eating.

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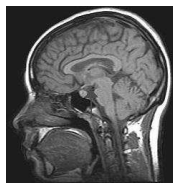
Motivation of hunger & eating: Environmental factors

- Learned preferences and habits
 - Exposure
 - When, as well as what
- Food-related cues
 - Appearance, odour, effort required
- Stress
 - Link between heightened arousal/negative emotion and overeating

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The brain and hunger

- The brain monitors the body's internal state.
- Experience of “**hunger**” is controlled in the **hypothalamus**.



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Eating and weight: The roots of obesity

- Evolutionary explanations
- Genetic predisposition
 - Body Mass Index and adoption study
- The concept of set point/settling point
- Dietary restraint
 - Mortality rates among people who are moderately overweight are not elevated in today's population

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The physiology of hunger

- What we eat and when we eat is influenced by body chemistry and environmental factors.

Carbohydrates → ↑ Serotonin → Calming

- Food aversions may develop via classical conditioning.

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Eating disorders



- 10 x more likely in females
- More likely in Caucasians more than African Americans.

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Set point theory

- A weight that the body seeks to maintain by influencing an individual's basal metabolic rate (body's resting rate of energy expenditure) and desire to eat.
- Individuals differ in their set points



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Eating disorders & body image

- **Anorexia Nervosa:** weighs less than 85% of expected weight however stills feel fat and continues to starve.
- **Bulimia Nervosa:** binges - periods of intense, out-of-control eating - followed by excessive exercise, vomiting, fasting or laxative use.
- Various contributing factors have been identified for both disorders (genes, familial influences, low self-esteem, societal pressures).

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The psychology of hunger

- There are other influences on hunger. These include the memory of our last meal
- Due to difficulties with retention, amnesia patients eat frequently if given food (Rozin et al., 1998).

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Summary of motivational influences on eating behaviour

- **Biological:** stomach pangs, appetite hormones, blood glucose/fat, role of hypothalamus, set point
- **Psychological:** memory of last meal, mood, sight and smell of food
- **Social-cultural:** taste preferences, cultural ideals of thinness

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Sexual motivation

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Human sexual motivation and behaviour: Determining desire

- Aphrodisiacs
- Erotic materials
- Attraction to a partner
- The Coolidge effect
- Evolutionary factors

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Non-human sexual behaviours

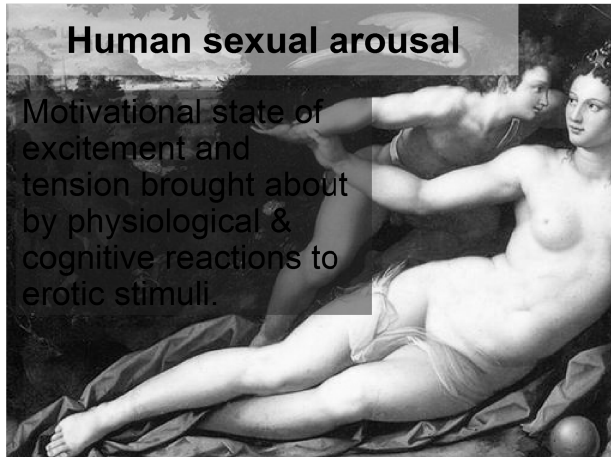
- Androgens
- Estrogen
- Pheromones



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Human sexual arousal

Motivational state of excitement and tension brought about by physiological & cognitive reactions to erotic stimuli.



Human sexual motivation and behaviour: Determining desire

- Hormonal regulation
 - Estrogens
 - Androgens
 - Testosterone
- Pheromones
 - Synchronised menstrual cycles

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The psychology of sex

- **External stimuli**, such as sexually explicit materials, can trigger sexual arousal in both men and women.
- **Imagined stimuli** can influence sexual arousal and desire. People who have a spinal cord injury and experience no genital stimulation can still experience sexual desire (Willmuth, 1987).
- Dreams are also associated with sexual arousal.

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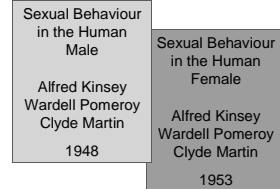
Masters and Johnson (1966, 1970)

- Men and women have similar patterns of sexual response.
- Women are more variable, tending to respond more slowly but often remaining aroused longer.
- Many women can have multiple orgasms, while men rarely do so in a comparable time period.

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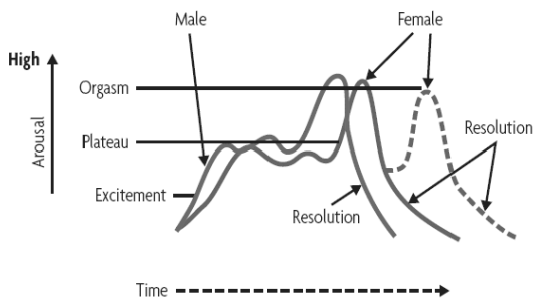
Evolution of sexual behaviours & norms

- Evolution of sexual behaviours
 - Parental investment theory
 - David Buss
- Sexual norms
 - Alfred Kinsey
 - Sexual scripts
 - Date rape

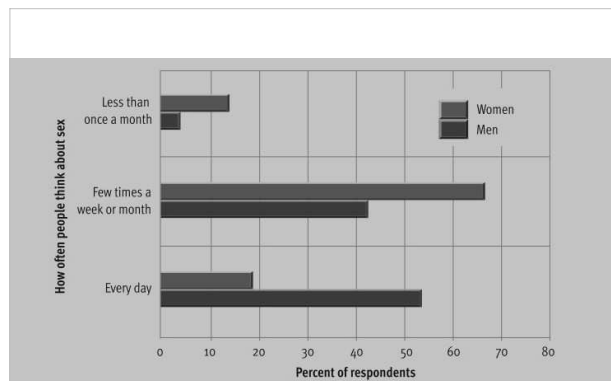


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Human sexual response cycle



Masters and Johnson
Excitement – Plateau – Orgasm - Resolution



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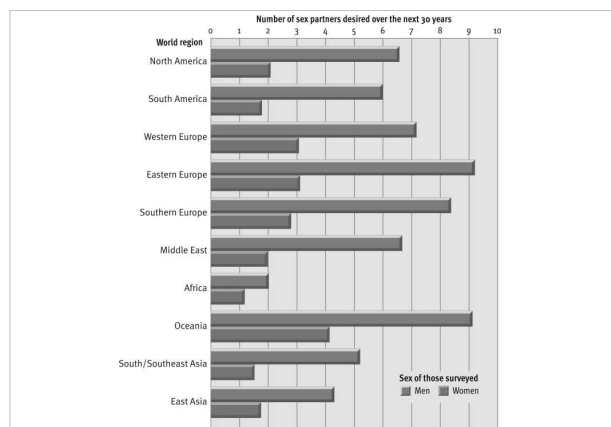
Figure 10.9 The gender gap in how much people think about sex (Weiten, 2010)

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The physiology of sex

Masters and Johnson (1966) described the human sexual response to consist of four phases:

Phase	Physiological Response
Excitement	Genitals become engorged with blood. Vagina expands, secretes lubricant. Penis enlarges.
Plateau	Excitement peaks as breathing, pulse and blood pressure continue to increase.
Orgasm	Contractions all over the body. Further increase in breathing, pulse and blood pressure. Sexual release.
Resolution	Body returns to its unaroused state. Male goes through refractory period.



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Figure 10.10 The gender gap in desire for a variety of sexual partners (Weiten, 2010)

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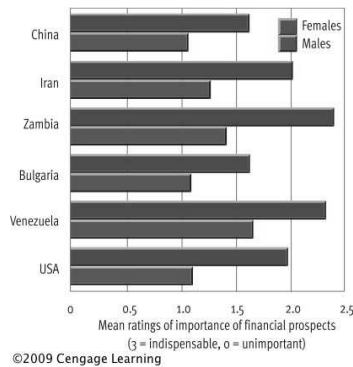


Figure 10.11 Gender and potential mates' financial prospects (Weiten, 2010)

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Adolescence & sexuality

- Great variability across cultures (and across time) in terms of sexual activity during adolescence.
- Factors that reduce sexual activity during adolescence include high intelligence and religiosity (among others).

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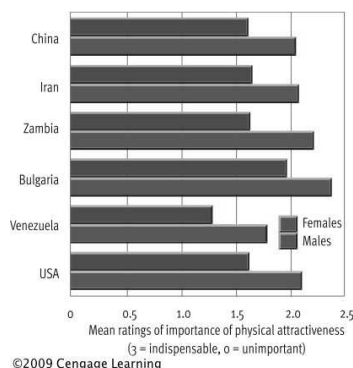


Figure 10.12 Gender and potential mates' physical attractiveness (Weiten, 2010)

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Sexual orientation

- Sexual orientation refers to a person's preference for emotional and sexual relationships with individuals of the same sex, the other sex, and/or either sex.
- Homosexual – Bisexual – Heterosexual (a continuum)



Homosexual



Bisexual



Heterosexual

Sexual disorders & therapy

- Problems which consistently impair sexual functioning, e.g.,
 - Erectile dysfunction (men)
 - Premature ejaculation
 - Orgasmic disorders
- Treatment for sexual disorders includes behaviour therapy which assumes that people learn and can modify their sexual responses.

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Theories explaining homosexuality

- Environmental
- Biological
- Interactionist

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Homosexuality

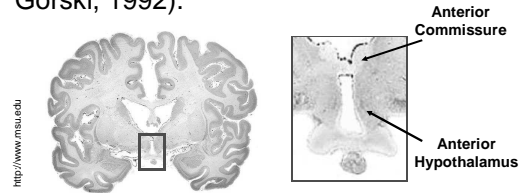
- Nature and nurture of homosexuality
 - Daryl Bem
- Society and homosexuality
 - Homophobia

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Homosexuality & biological factors

Brain structures: In homosexual men

- the size of the anterior hypothalamus is smaller (LeVay, 1991) and
- the anterior commissure is larger (Allen & Gorski, 1992).



Homosexuality & biological factors

- Homosexuality is more likely based on biological factors like differing brain centers, genetics, and parental hormone exposure rather than environmental factors.

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Summary of influences on sexual motivation

- **Biological:** i.e. sexual maturation, sex hormones, sexual orientation
- **Psychological:** i.e. exposure to stimulating conditions, sexual fantasies
- **Social-cultural:** i.e. family, societal and personal values, religion, cultural expectations

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Homosexuality & biological factors

- Prenatal hormones may affect sexual orientation during critical stages of fetal development (between the 2nd and 5th months after conception).
- Evidence suggesting a genetic influence stems from family and twin studies and from fruit fly research where sexual attraction can be genetically manipulated.

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Achievement motivation

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Achievement motivation

- Achievement motive = need to excel.
- Desire for accomplishment, mastery of tasks, people or ideas, attaining a high standard.
- High in achievement motivation:
 - Work harder and more persistently
 - Delay gratification
 - Pursue competitive careers
- Situational influences on achievement motives

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Elements of emotional experience

- **Cognitive**
 - Subjective conscious experience
 - Positive psychology
- **Physiological**
 - Bodily (autonomic) arousal
- **Behavioural**
 - Characteristic overt expressions

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Achievement motivation

- **Henry Murray**: Basic need to strive for achievement of goals
- **David McClelland**:
 - nAch (Achievement),
 - nPow (Power),
 - nAff (Affiliation)
 - Thematic Apperception Test (TAT)

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Culture and elements of emotion

- Cross-cultural similarities found in cognitive and physiological elements of emotional experience
- Also many cultural disparities in how people perceive, think about, and express their emotions
 - socially engaging emotions
 - socially disengaging emotions

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Thematic Apperception Test

Tell a dramatic story including what:

1. led up to the event
2. is happening at the moment
3. the characters are feeling & thinking, &
4. the outcome of the story was



Country	Agreement in judging photos (%)			
	Fear	Disgust	Happiness	Anger
United States	85	92	97	67
Brazil	67	97	95	90
Chile	68	92	95	94
Argentina	54	92	98	90
Japan	66	90	100	90
New Guinea	54	44	82	50

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Figure 10.23 Cross-cultural comparisons of people's ability to recognise emotions from facial expressions (Weiten, 2010)

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Theories of emotion

- **James-Lange**
 - Feel afraid because pulse is racing
- **Cannon-Bard**
 - Thalamus sends signals simultaneously to the cortex and the autonomic nervous system

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Happiness

- Common sense notions incorrect - income, age, parenthood, intelligence, and attractiveness largely uncorrelated
- Physical health, good social relationships, religious faith, and culture modestly correlated
- Love, marriage, work satisfaction, and personality strongly correlated

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Theories of emotion

- **Schacter's Two-Factor Theory**
 - Look to external cues to decide what to feel
- **Evolutionary theories**
 - Innate reactions with little cognitive interpretation

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Subjective well-being

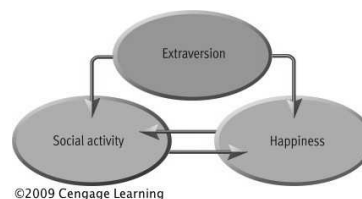
- Objective realities not as important as subjective feelings
- When it comes to happiness everything is relative
- People are surprisingly bad at predicting what will make them happy
- People often adapt to their circumstances
 - Hedonic adaptation

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Core emotions

- Fear
- Joy
- Anger
- Surprise
- Disgust
- Interest
- Contempt
- Shame
- Sadness

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Figure 10.30 Possible causal relations among the correlates of happiness

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Summary & Conclusion

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You should now be able to...

4. Explain Maslow's hierarchy of needs
5. Explain the brain, physiological, and cultural pathways and mechanisms for the regulation of hunger and eating
6. Describe the four phases of human sexual response for males and females (Masters & Johnson);

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Conclusion

- We have considered **motives** underlying hunger, sexual behaviour and personal achievement.
- While they are all different, each is unified by their effect: the **energising and directing of behaviour**.
- We have also considered elements of **emotion** (cognitive, physiological, and behavioural).

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You should now be able to...

7. Explain the evolution of sexual behaviours and sexual norms, including the different reproductive strategies that may be employed by males and females (Parental Investment Theory - Buss)
8. Identify the nature and nurture aspects of homosexuality

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You should now be able to...

1. Describe five functions of motivational concepts
2. Explain these sources of motivation: drives, incentives, instinct, and expectations
3. Compare and contrast James' and Freud's conceptions of instinctual behaviours

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You should now be able to...

9. Explain the concept of need for achievement and discuss how it relates to motivation
10. Explain cognitive, physiological, and behavioural aspects of emotion

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Next unit on this topic: Motivation & Emotion (7124/6665)

- 3rd yr psych unit, Semester 2
- Prereqs: Psy 101 & Psy 102
- ~6 weeks each on Motivation and Emotion



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References

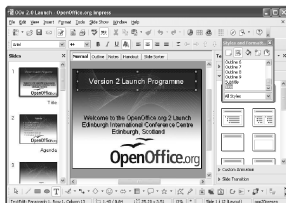
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