

Introduction to psychology: Motivation & emotion



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Reading

Burton, Westen & Kowalski (2012)
Chapter 10:
Motivation and emotion



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Learning objectives

1. Distinguish among different **theoretical perspectives on motivation**
2. Describe how **eating** is regulated
3. Describe how **sexual** motivation is influenced by hormones and social and cultural factors
4. Distinguish between the **psychosocial** motives of agency and relatedness
5. Distinguish between different **theories of emotion**

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Overview

Motivation

1. What is motivation?
2. Perspectives
 1. Psychodynamic
 2. Behaviourist
 3. Cognitive
 4. Humanistic
 5. Evolutionary
3. Eating
4. Sexual
5. Psychosocial

Emotion

1. What is emotion?
2. Perspectives
 1. Physiological
 2. Subjective
 3. Neural

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What is motivation?

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What is motivation?

"motivation"
and
"emotion"
derive from the
same Latin verb
movere
(to move)

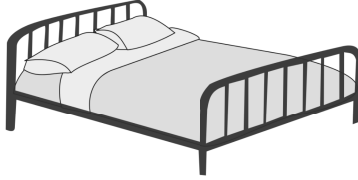


Image source: http://commons.wikimedia.org/wiki/File:Running_Samburu_Boy.jpg, CC-by-A 2.0

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What is motivation?

What made you
get out of bed
this morning?



What was the cause of this behaviour?

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Image source: https://commons.wikimedia.org/wiki/File:3ASteel_double_bed.svg. CC by-SA 3.0

What is motivation?

Motivation is what makes us:

- act the way we do
- start, direct, maintain, and stop our behaviours

Motivation is the:

- needs, wants, interests, and desires that energise & direct behaviour.

Motives reflect:

- biological needs
- psychosocial needs

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Major origins of motives

■ Two major origins of human motives:

- **Biological:** Limited in range, but shared by all; related to survival and reproduction – e.g., need for oxygen, hydration, food, comfortable temperature, excretion, sleep
- **Psychosocial:** Wide variety between individuals and across cultures – e.g., autonomy, affiliation, dominance, exhibition, order

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We are all “naive psychologists”

We are all “naive psychologists”

i.e., we are constantly trying to figure out other people's motives and to predict their behaviour

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

Summary: The nature and causes of human motives and emotions

1. Everything we do is rooted in biology and shaped by culture and experience.
2. Thoughts provide the direction or goals of a motive
3. Feelings provide the strength or force behind motives
4. Both motivation and emotion work together to influence behaviour

Perspectives on motivation

Image source: http://commons.wikimedia.org/wiki/File:12_Minutes_to_Heaven_Teaser.png, Public domain

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Perspectives on motivation

- Evolutionary
- Psychodynamic
- Behaviourist
- Cognitive
- Humanistic

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Evolutionary perspective

- Early theorists suggested behaviour was governed by instincts: fixed patterns of behaviour produced without learning
- Motivational systems evolved independently in response to particular evolutionary pressures
- Contemporary theorists argue that there are multiple motivational systems related to:
 - Survival
 - Reproduction

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Psychodynamic perspective

- Emphasises biological basis of motivation, reflecting evolutionary heritage
- Freud argued that we are motivated by internal tension states (drives) that build up until satisfied
- Two basic drives:
 - Sex (love, lust, intimacy)
 - Self-protection / Aggression (control, mastery)
- Subsequent psychodynamic theorists argue for:
 - Need for relatedness to others
 - Need for self-esteem

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Unconscious motivation

- Freud argued that a person can be unaware of their own motives for their behaviour.
- Motivation can be unconscious (implicit) and conscious (explicit) at the same time.
- Unconscious motivation can be assessed using projective tests in which a person is asked to describe a vague stimulus.

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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



Motives coded from TAT are highly predictive of long-term behaviour patterns.

Behaviourist perspective

- Behaviours are governed by the environment.
- Needs reflect requirements such as food and water.
- Drives are states of arousal that accompany an unfulfilled need (e.g., hunger, thirst).
- Drive reduction theory argues that we behave in order to satisfy needs and reduce drives.
- Drives can be primary (innate) or secondary (learned).

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Drives and homeostasis

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



Image source: [http://commons.wikimedia.org/wiki/File:William-Adolphe_Bouguereau_\(1825-1905\)_-_Thirst_\(1886\).jpg](http://commons.wikimedia.org/wiki/File:William-Adolphe_Bouguereau_(1825-1905)_-_Thirst_(1886).jpg), Public domain

- Useful for survival behaviours; less useful for “higher” behaviours

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Cognitive perspective

- Expectancy-value theory: motivation is a function of the:
 - value people place on an outcome
 - likelihood that they can achieve it.
- Goals are established through social learning.
- Conscious goals regulate much of human behaviour.

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Cognitive perspective

- Intrinsic motivation refers to the enjoyment of and interest in a behaviour for its own sake.
- Self-determination theory: 3 innate needs:
 - competence
 - autonomy
 - relatedness
 - fulfillment of these needs increases intrinsic motivation
- Implicit motives are those which are activated and expressed outside of conscious awareness.

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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.



Image source: http://commons.wikimedia.org/wiki/File:Abraham_maslow.jpg, GFDL

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Maslow's hierarchy of needs

Lower level needs
must be fulfilled first

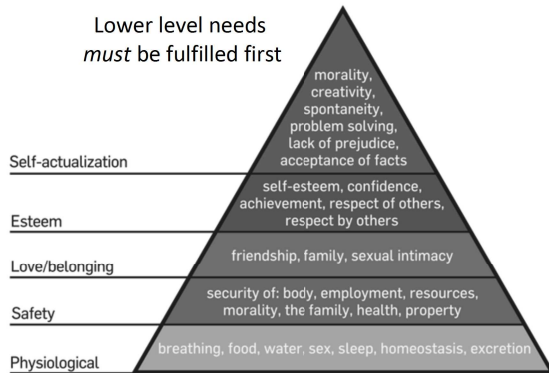


Image source: http://commons.wikimedia.org/wiki/File:Maslow%27s_Hierarchy_of_Needs.svg, CC-SA 3.0

Motivation of hunger and eating

Image source: http://commons.wikimedia.org/wiki/File:Bundesarchiv_Bild_183-J15784_Italien_Verpflegung_F%C3%BCr_Faltschirmj%C3%A4ger.jpg CC-BY

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Eating

- Eating is a behaviour which involves consumption of food.
- Food ingestion leads to metabolic reaction. There are two phases:
 - Absorption. Food energy is extracted and stored as either glycogen or fat.
 - Fasting. Energy stores are converted to glucose for use by the body.

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Regulation of food intake

Regulating food intake is a complex system that equips organisms with mechanisms that:

- Monitor & 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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Regulation of food intake

Eating is part of a complex homeostatic process with:

- Set points: Biologically optimal level system tries to maintain
- Feedback mechanisms: e.g., receptors to monitor level of sugar in blood
- Corrective mechanisms: these restore the system back to set point when needed

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What turns hunger on?

- Physiological hunger is caused by dropping levels of glucose and lipids in the bloodstream (detected by brain and liver)
- Hypothalamus plays a central role:
 - Lateral (outside edge) plays role in switching 'on' eating behaviour
 - Ventromedial (bottom, middle) plays role in switching 'off' eating



Image source: http://commons.wikimedia.org/wiki/File:Hypothalamus_small.gif
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What turns hunger on?

Mice with damage to the ventromedial hypothalamus can become obese.



Image source: <https://pantheffile.uwm.edu/plen2/www/introFlesF07/chapter10.html>

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External cues in eating

- **Food palatability:** tasty foods can motivate eating.
- **Food variety:** exposure to the same food day after day can reduce intake.
- **Time of day:** if eating is at same time each day then conditioning can occur.
- **Presence of others:** meal size increases as the group size increases.
- **Memory of last meal:** people with short-term memory loss (e.g., dementia) eat more often

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Obesity

- Defined as $\geq 15\%$ ideal body weight for one's height and age
- Prevalent in industrialised cultures (~25% of Australian population)
- Consequences:
 - Physical: Heart disease, diabetes or stroke, early mortality
 - Psychological: Negative stereotypes, discrimination, difficulty in relationships, low self-esteem

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Eating disorders & body image

- Anorexia Nervosa: $< 85\%$ of expected weight, yet feels fat and continues to starve. (~5% of Australian population)
- Bulimia Nervosa: Binges - periods of intense, out-of-control eating followed by excessive exercise, vomiting, fasting or laxative use. (~5% of Australian population)
- Various contributing factors have been identified:
 - Genes, familial influences, low self-esteem, societal pressures

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Sexual motivation

Image source: http://commons.wikimedia.org/wiki/File:Warning_Sex_in_progress_Do_not_disturb.jpg, CC-by-SA

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Non-human sexual behaviours

- Androgens
- Estrogen
- Pheromones

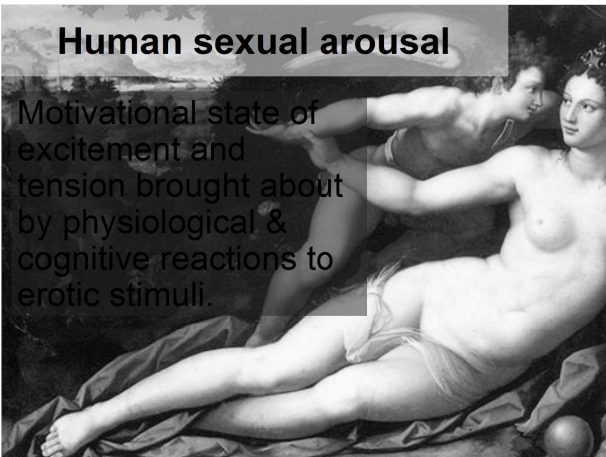


Image source: http://commons.wikimedia.org/wiki/File:Grasshopper_at_MGSP.jpg, GFDL

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Human sexual arousal

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



The psychology of sex

- **External stimuli** (e.g., 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.

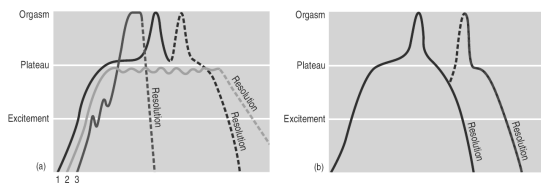
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Masters and Johnson (1966, 1970)

- Men and women have similar **patterns** of sexual response:
 - **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.
- 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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Human sexual response cycle Masters and Johnson (1966)



Female sexual response cycle

Male sexual response cycle

Image source: Burton et al. (2012), Figure 10.6 Sexual response cycles. Original source: Masters and Johnson (1966, p. 5)

Biology and sexual motivation

- Hormones have two effects on the nervous system and behaviour:
 - Organisational effects: prenatal exposure to androgens alters the neural circuits in brain and spinal cord
 - Activational effects: alteration of adult levels of hormones can alter the intensity of a behaviour that is modulated by that hormone

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Culture and sexual motivation

- Anthropological studies show wide cultural variation in sexual norms and what behaviour is considered appropriate.
- For example, Western cultures view males as having greater sexual needs whereas other cultures hold the opposite view.

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Sexual orientation

- Sexual orientation: Enduring direction of attraction for a sexual partner on a continuum (Kinsey):



- Twin studies document a biological basis for sexual orientation.
- Hormonal responses differ between homosexual and heterosexual men.

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Biological theories of homosexuality

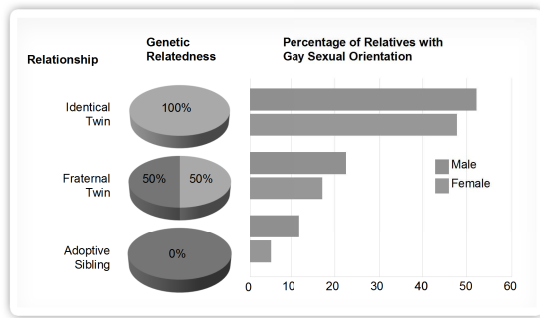


Figure 10.18 Genetics and sexual orientation (Weiten, 2013)
Data from Bailey & Pillard, 1991; Bailey et. al. 1993

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Sexual disorders & therapy

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

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Summary of influences on sexual motivation

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

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Psychosocial motives

Image source: <https://commons.wikimedia.org/wiki/File:Rebecca1917version.jpg>, Public domain

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Psychosocial motives

- Personal and interpersonal motives (e.g., achievement, intimacy, etc)
- Less biological but rooted in evolution
- Two major clusters of psychosocial goals:
 - Agency: motives for self-oriented goals
 - Relatedness: connectedness with others

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Need for achievement

- Achievement motivation refers to the need to do well, to succeed, and to avoid failure
- Persons who have a high level of need for achievement tend to:
 - Choose moderately difficult tasks
 - Enjoy being challenged
 - Work more persistently
 - Delay gratification
 - Pursue competitive careers

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Performance vs. mastery goals

- Performance goals are motives to achieve a particular outcome:
 - Performance-approach goals: motivated to attain goal
 - Performance-avoidance goals: motivated by fear of not attaining goal
- Mastery goals are motives to increase skills and competencies
- These different types of goals predict different outcomes

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Need for relatedness

- Attachment motivation refers to the desire for physical and psychological proximity to another (comfort and pleasure).
- Intimacy is closeness characterised by self-disclosure, warmth and mutual caring (adult relationships).
- Affiliation is interaction with friends or acquaintances (communication and support).

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Emotion

Image source: http://commons.wikimedia.org/wiki/File:Flickr_-_Sukanto_Debnath_-_A_happy_man.jpg, CC-by-A 2.0

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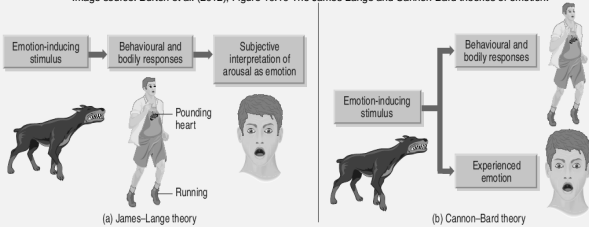
What is emotion?

- An evaluative response to a situation that typically involves:
 - **Cognition:** Subjective, conscious experience
 - **Physiology:** Bodily arousal
 - **Behaviour:** Overt expression
- Can be a “positive” or “negative” feeling or response

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Theories of emotion

Image source: Burton et al. (2012), Figure 10.10 The James-Lange and Cannon-Bard theories of emotion.



James-Lange theory

Conscious experience of emotion results from one's perception of automatic arousal

Cannon-Bard theory

Thalamus sends simultaneous signals to the cortex (conscious experience) and the autonomic nervous system (visceral arousal).

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Schachter-Singer theory of emotion

- Emotion involves two factors:
 - physiological arousal
 - cognitive interpretation
- A cognitive judgement or attribution is crucial to emotional experience.

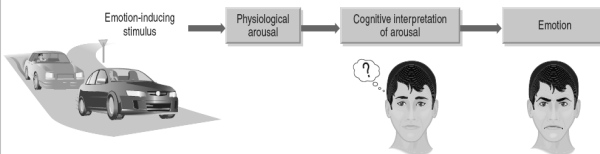


FIGURE 10.18 The Schachter-Singer theory of emotion. According to Schachter and Singer, people must interpret their arousal (e.g. when cut off by a speeding car) in order to experience a specific emotion. Image source: Burton et al. (2012), Figure 10.18

Emotion as attribution of arousal

Misattribution of arousal can occur when people misinterpret their autonomic arousal.

- Dutton and Aron (1974) conducted a study where they arranged for young men to meet an attractive female while crossing a bridge.
 - Half the men crossed a bridge which was 10 feet above a stream, while the other half crossed a swaying, 230 foot suspension bridge.
 - The 230 foot suspension bridge men called the woman for a date significantly more often than the low bridge men, suggesting misattribution of arousal as attraction rather than fear.



Image source: https://commons.wikimedia.org/wiki/File:Capilano_suspension_bridge_-_g.jpg

Facial expression and emotion

- There is an evolutionary link between the experience of emotion and facial expression of emotion:
- Facial expressions serve to inform others of our emotional state.
- Different facial expressions are associated with different emotions.
- Facial expression can alter emotional experience.

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Creating fear in the face

Participants who were instructed to:

- (a) raise their eyebrows and pull them together
- (b) raise their upper eyelids
- (c) stretch their lips back towards their ears

showed physiological changes consistent with fear.

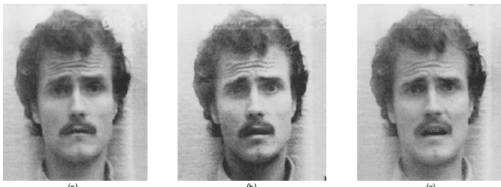


Image source: Burton et al. (2012), Figure 10.10, Ekman, Levenson & Friesen, 1983

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Culture and facial expressions

- Cross-cultural studies have identified six facial expressions which are recognised by people of every culture:
 - surprise
 - fear
 - anger
 - disgust
 - happiness
 - sadness
- Display rules: There are norms about when emotional displays are considered appropriate within a specific culture



Image source: Burton et al. (2012), Figure 10.10, From Ekman, Levenson & Friesen, 1983 **58**

Gender and emotional expression

- Women
 - Report more intense emotional states
 - Are better able to read emotional cues in others
 - Express emotions more intensely and openly than do men
- Gender differences in emotional expression may reflect differing socialisation patterns.

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Taxonomy of emotions

Psychology has identified between 5 and 9 basic emotional states.

- | Common 5 include: | Additional emotions: |
|-------------------|----------------------|
| ■ anger | ■ contempt |
| ■ fear | ■ shame |
| ■ sadness | ■ guilt |
| ■ disgust | ■ surprise |
| ■ happiness | ■ interest |
| | ■ anticipation |
| | ■ joy |
| | ■ trust |

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Positive and negative affect

- Positive affect: pleasant emotions, drives approach type behaviour
- Negative affect: unpleasant emotions, drives avoidant type behaviour
- These are separate constructs rather than opposite ends of the same continuum.
- Within these two factors, emotions are substantially inter-correlated e.g., people who experience one negative emotion (e.g. anxiety) tend to experience others (e.g. sadness, guilt).

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Happiness

- An emotional state characterised by a positive valence
- Happiness is strongly related to:
 - love, marriage, work satisfaction, and personality
- Happiness is moderately related to:
 - physical health
 - religious faith
 - cultural values (highest in individualistic, lowest in collectivist culture)
 - number of uninterrupted years of democracy
 - quality of social relationships
- Happiness is not related to:
 - gender, age, wealth, intelligence, attractiveness

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Happiness

- Objective realities are 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 (Happiness set/settling point)

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Evolutionary perspective

- Emotions are innate reactions to specific stimuli with little cognitive interpretation
- Emotions serve an adaptive purpose (Darwin). They evolved:
 - because of their adaptive value (serve as important signals to ourselves and others)
 - before thought
- Basic emotional expressions are wired into the organism and are recognised cross-culturally.

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Neuropsychology of emotion

Three important areas:

- Hypothalamus – link in circuit that converts emotional signals into autonomic and endocrine responses
- Limbic system – Amygdala plays central role in linking sensory stimuli with feelings
- Cortex – allows assessment of whether stimulus is safe or not, interpretation of meaning of peripheral responses (e.g., dry mouth) and regulation of facial displays

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Psychodynamic perspective

- People can be unconscious of their own emotional experience.
- Unconscious emotional processes can influence thought, behaviour & health.
- We regularly delude ourselves about our abilities & attributes to avoid unpleasant emotional experiences.

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Cognitive perspective

- Schachter and Singer (1962): Cognitive judgements (attributions) are a critical part of emotional experience.
- Cognitive appraisals influence emotion.
- Mood and emotion can affect thought and memory.

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Summary & Conclusion

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Summary

- Motivation refers to forces that energise behaviour and includes two components:
 - what people want to do
 - how strongly they want to do it
- Different theoretical perspectives (e.g., evolutionary, cognitive) suggest different reasons for motives.
- Emotion is an evaluative response that typically involves subjective experience, physiological arousal and behavioural expression.

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

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



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Honours in Psychology

- 4th year (1 year FT or 2-3 years PT)
- Can start Semester 1 or Semester 2
- Requires DI-average in 2nd and 3rd year core psychology units
- **Honours in Psychology Information Evening** - Wednesday 9 September 2015, 5:30-7:00pm at the Ann Harding Conference Centre (Building 24)
- More info: See **Honours in Psychology Handbook** on UC psychology homepage

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References

- Burton, L., Westen, D., Kowalski, R. (2012). Chapter 10: Motivation and emotion. In L. Burton, D. Westen, & R. Kowalski, *Psychology* (3rd ed.) (pp. 371-420). Milton, Queensland, Australia: Wiley.
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