

MOTIVATION

Motivation

A need or desire that energizes and directs behavior

Bodily conditions (low blood sugar)

Cue in the environment (AP Test/College Success)

Emotion - Feeling, such as fear, joy, or surprise, that underlies behavior

Perspectives on Motivation

Four perspectives to explain motivation include the following:

1. Instinct Theory
2. Drive-Reduction Theory
3. Arousal Theory
4. Hierarchy of Motives

I. Instincts & Evolutionary Psychology

Instincts are complex behaviors that have fixed patterns throughout the species and are not learned—(wired genetically)



© Ariel Skelley/ Masterfile



Tony Brandenburg/ Bruce Coleman, Inc.

Humans are flexible, animals who follow strict instincts are not.
Most significant human behaviors are learned

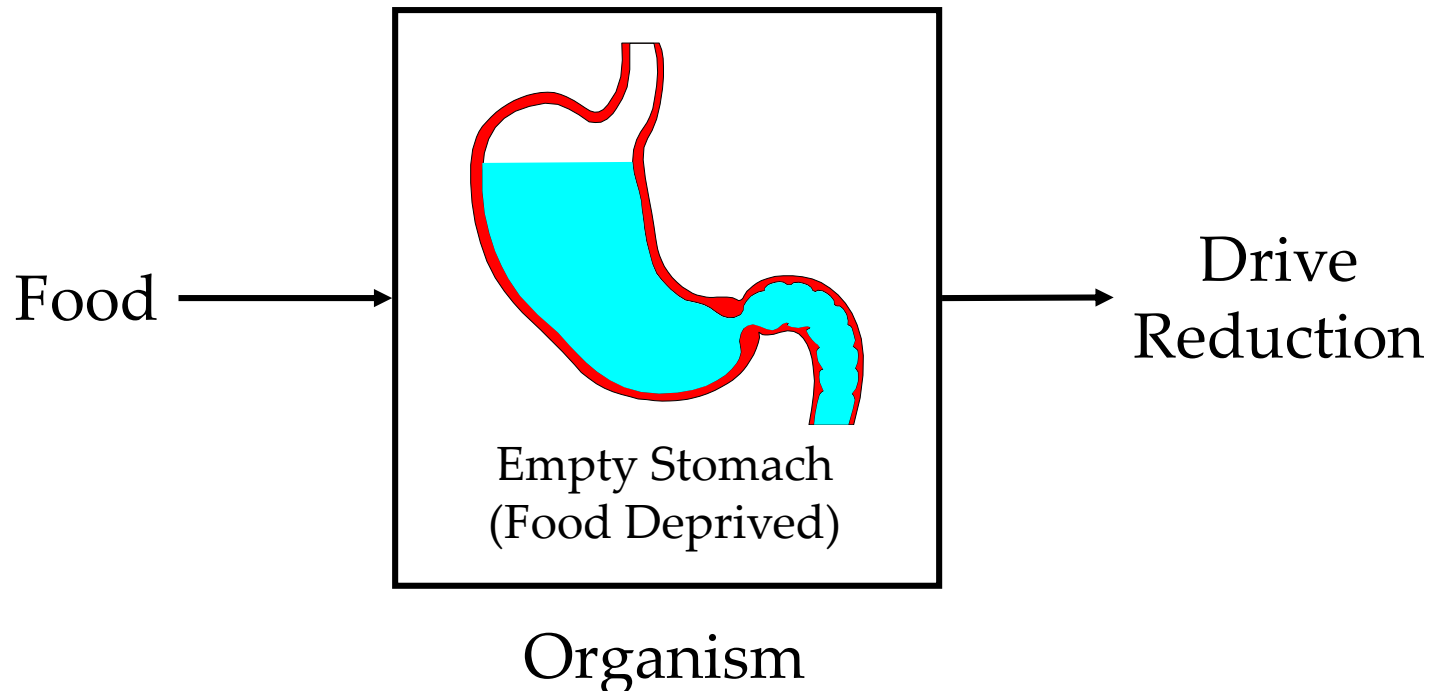
II. Drive-Reduction Theory (Bodily Needs)

When the instinct theory of motivation failed it was replaced by the drive-reduction theory. A physiological need creates an aroused tension state (a drive) that motivates an organism to satisfy the need.



Drive Reduction

The physiological aim of drive reduction is **homeostasis**, the maintenance of a steady internal state – balance. The regulation of any aspect of body chemistry around a particular level



Drive Reduction

Incentives—positive or negative stimuli (from the environment) that lure or repel us.

Criticism—if the needs are met, then we would not do anything. Not all motives are driven by need

III Optimum Arousal

Human motivation aims to seek optimum levels of arousal, not to eliminate it.

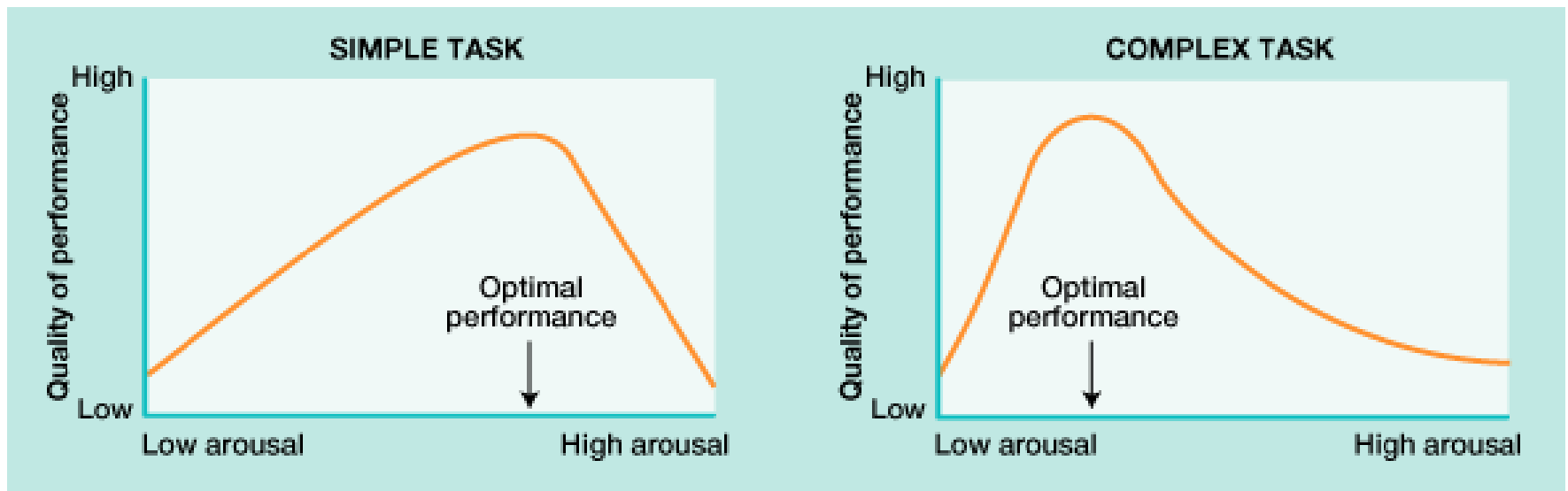


Young monkeys and children are known to explore the environment in the absence of a need-based drive.

Arousal Theory

- People are motivated to seek an **optimal level of arousal** for a given moment
- Yerkes-Dodson law
 - States that there is an optimal level of arousal for best performance on any task
 - The more **complex/difficult** the task, the **lower** the level of arousal that can be tolerated without interfering with performance
 - With **simple/easy** task, **high** level of arousal is needed

Yerkes-Dodson Law



IV. Hierarch of Needs

Abraham Maslow (1970) suggested that certain needs have priority over others. Physiological needs like breathing, thirst, and hunger come before psychological needs such as achievement, self-esteem, and the need for recognition.



(1908-1970)

Hierarch of Needs



Self-actualization needs
Need to live up to one's
fullest and unique potential

Esteem needs
Need for self-esteem, achievement,
competence, and independence;
need for recognition and respect
from others

Belongingness and love needs
Need to love and be loved, to
belong and be accepted; need
to avoid loneliness and alienation

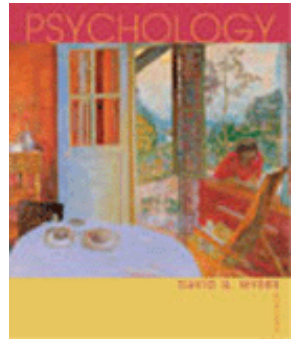
Safety needs
Need to feel that the world is
organized and predictable;
need to feel safe, secure, and stable

Physiological needs
Need to satisfy hunger and thirst

Two types of drives

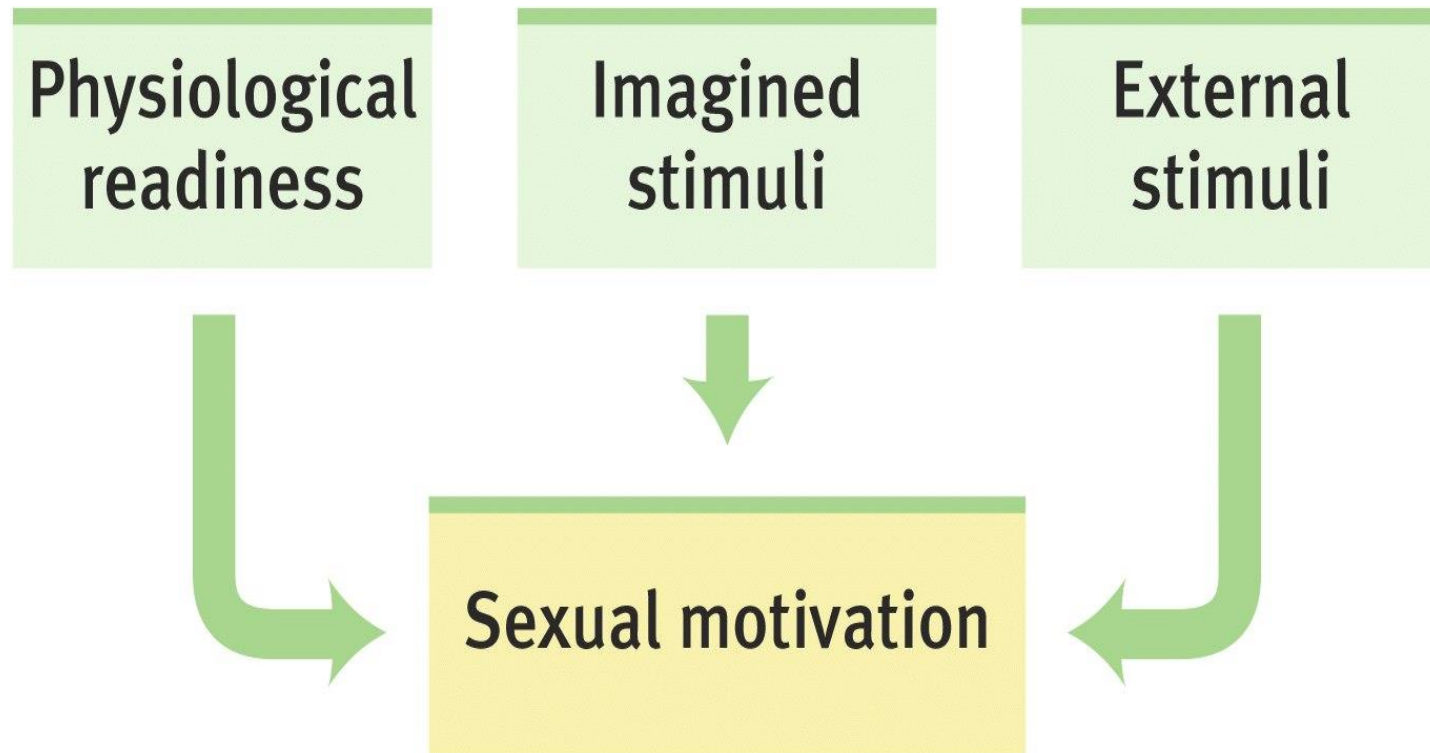
- Primary drive
 - Unlearned drive based on a physiological state found in all animals
 - Motivate behavior necessary for survival
 - Hunger, thirst and sex
- Secondary drive
 - Learned drive – wealth or success
- Problem with Drive-Reduction – once homeostasis is achieved we'd never do anything
- Not just balance we're looking for

Sexual Motivation

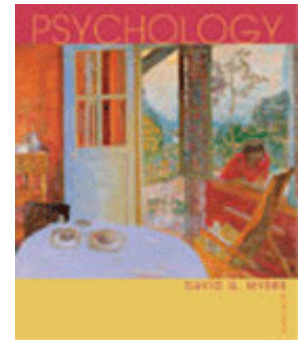


■ Sex

- a physiologically based motive (testosterone, limbic system, pheromones)
- but it is more affected by learning and values

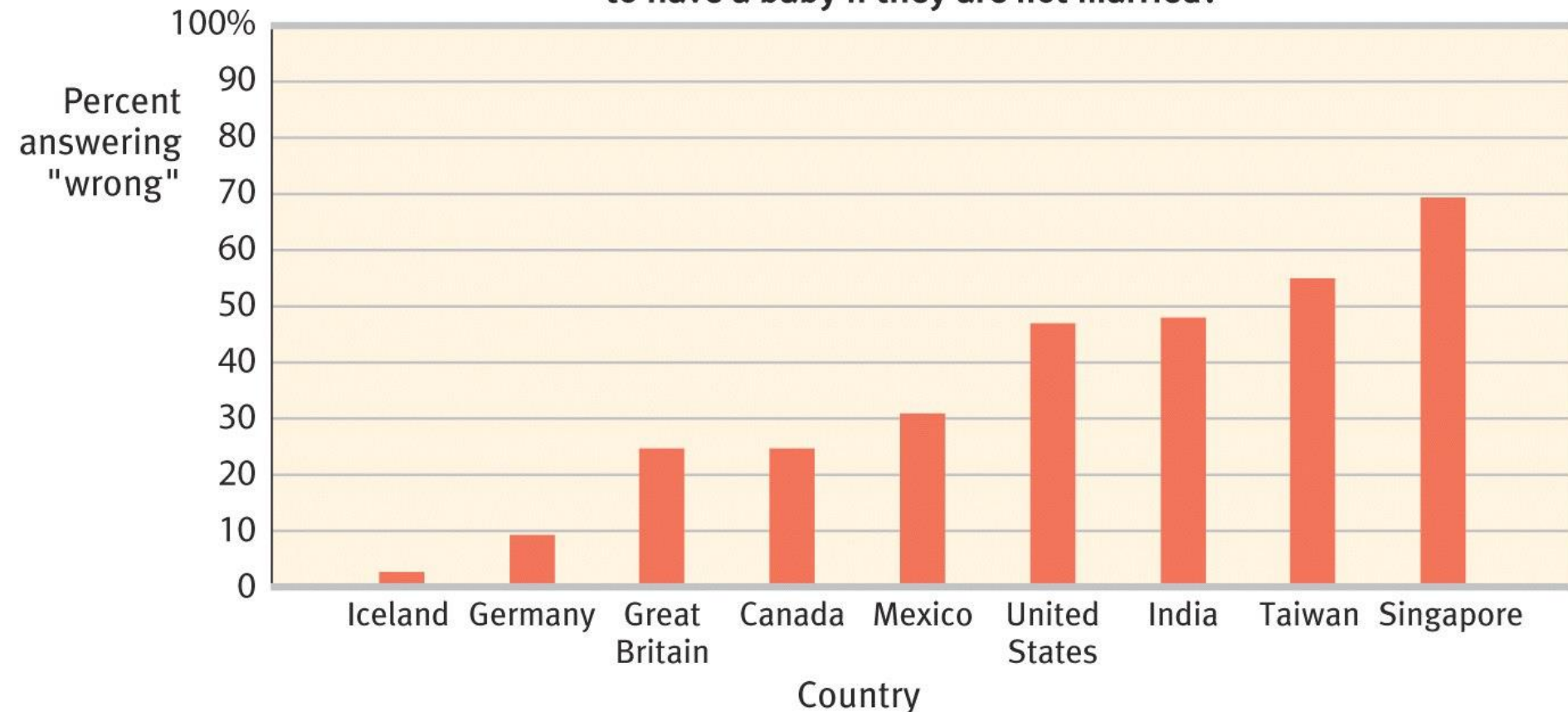


Sexual Motivation

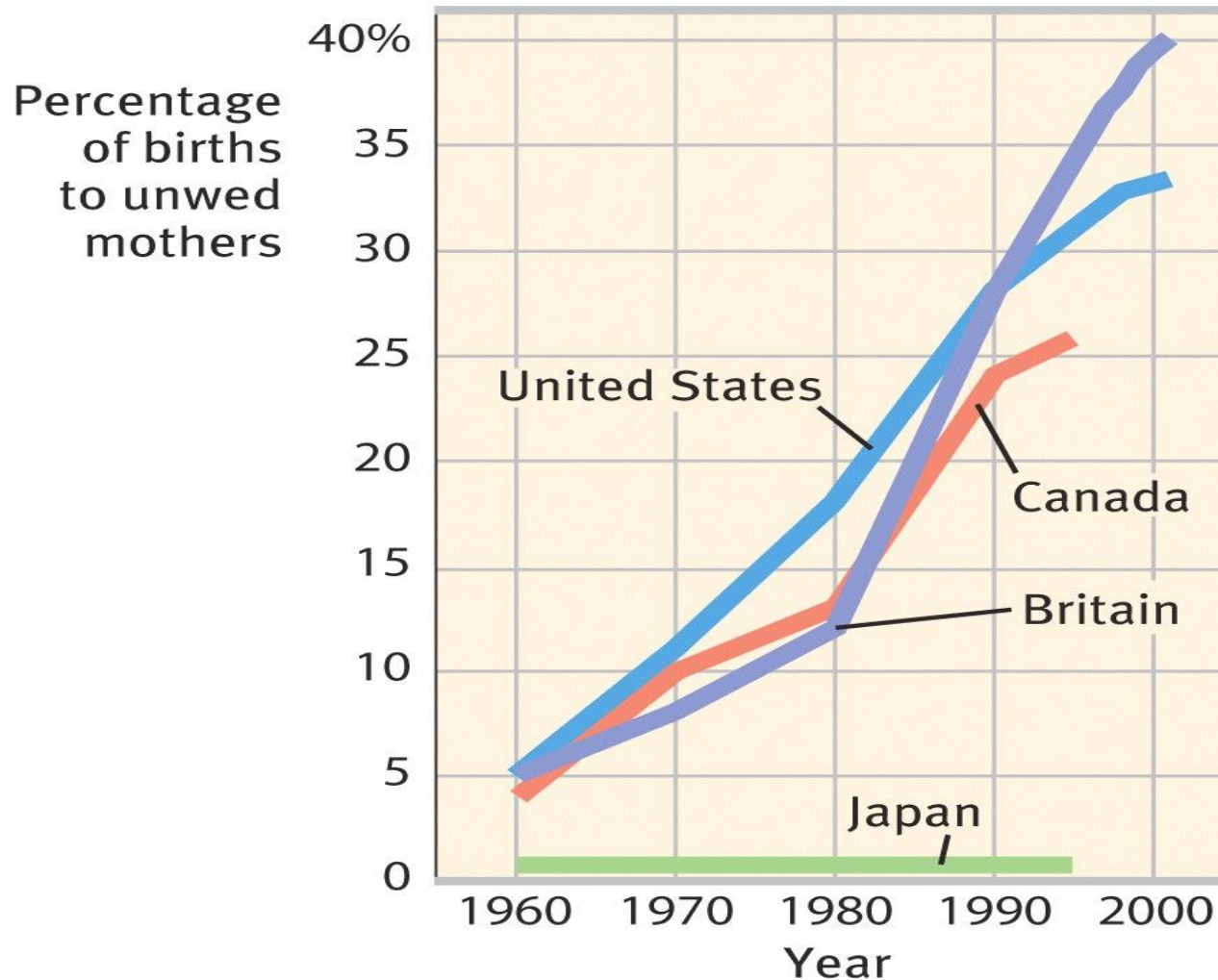
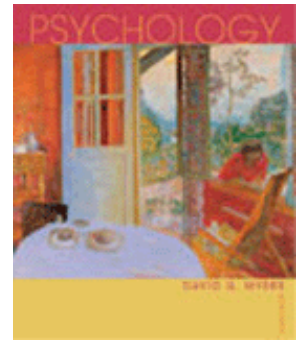


- Same drives, different attitudes

"Do you think it is, or is not, morally wrong for a couple to have a baby if they are not married?"



Sexual Motivation



- Births to unwed parents

Intrinsic and Extrinsic Motivation

- Intrinsic motivation
 - Motivation for a behavior is the behavior itself
 - Children playing is an example
- Extrinsic motivation
 - Behavior is performed in order to obtain a reward or to avoid punishment
 - A bonus program is an example

Social Conflict Situations

- Conflict – torn in different directions by opposing motives that block you from attaining a goal
- Approach-Approach Conflict – involves two positive options, only one of which you can have.
- Approach-Avoidance Conflict – involves both a positive and negative consequences.

EMOTION

I. Theories

Emotions are a mix of

- 1) physiological activation
- 2) expressive behaviors
- 3) conscious experience.



Controversy

- 1) Does physiological arousal **precede or follow** your emotional experience?
- 2) Does cognition (thinking) **precede** emotion (feeling)?



Commonsense View

When you become happy, your heart starts beating faster.

First comes conscious awareness, then comes physiological activity.

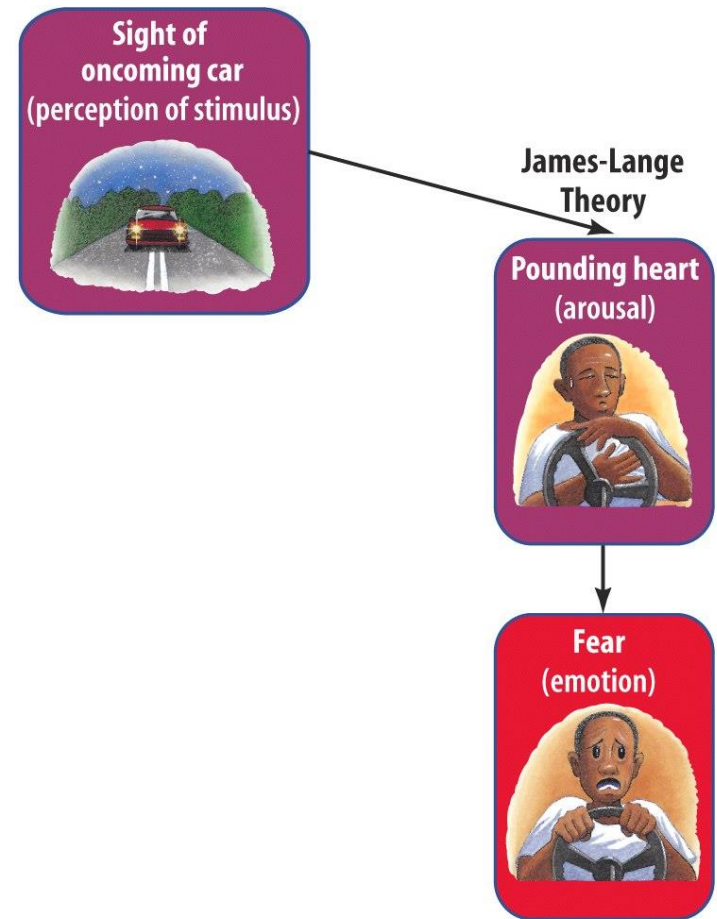


James-Lange Theory

William James & Carl Lange proposed an idea that was diametrically opposed to the common-sense view.

The James-Lange Theory

- Physiological activity **precedes** the emotional experience.
- Our awareness of our physiological arousal leads to conscious experience of emotion

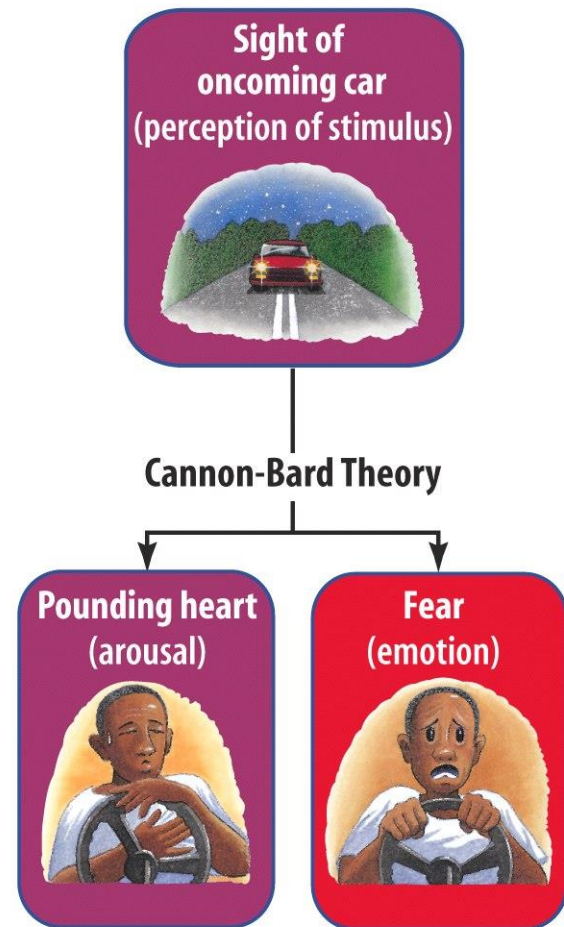


Cannon-Bard Theory

Walter Cannon &
Phillip Bard

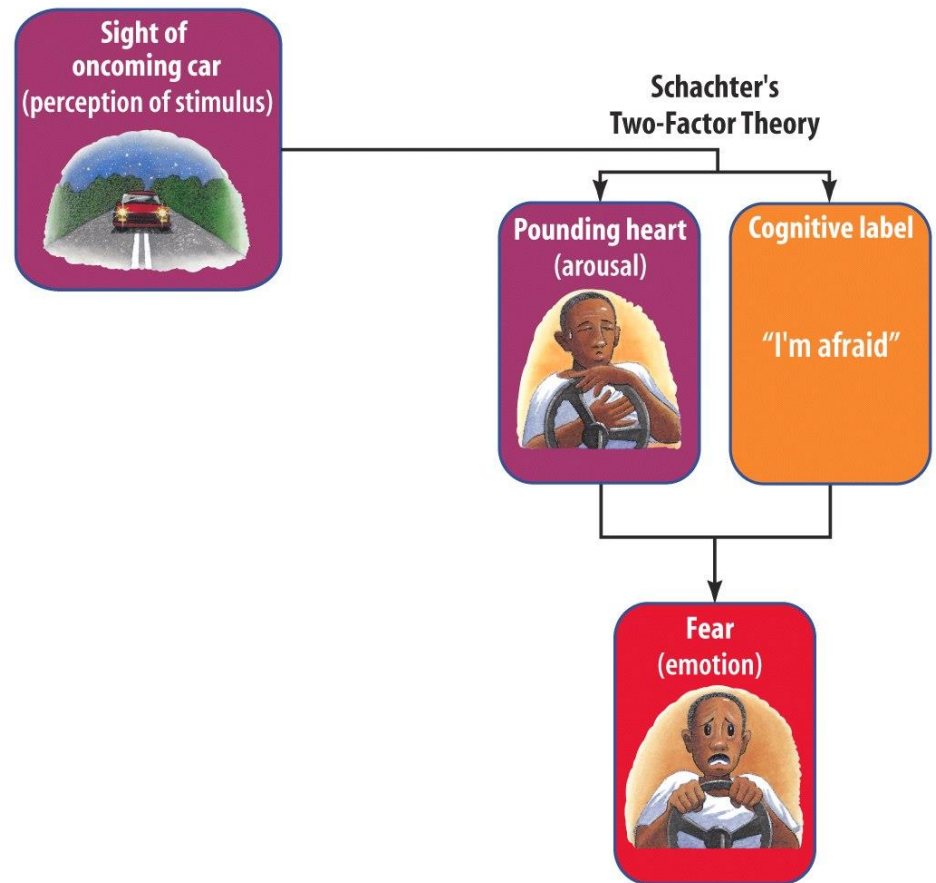
**emotion-triggering
stimulus & the body's
arousal take place
simultaneously.**

One Does Not cause
the other.



Two-Factor Theory (Schechter & Singer)

Stanley Schachter & Jerome Singer proposed yet another theory which suggests **our physiology and cognitions create emotions**. Emotions have two factors—physical arousal and cognitive label (interpretation).



Facial Feedback Theory

- Charles Darwin
- Sensations from facial expressions and becoming aware of them is what lead to emotional experience
- We can improve our mood by simply smiling
- Most connected to James-Lange

II. Embodied Emotion

We know that emotions involve bodily responses

Example:

- butterflies in our stomach when fear arises
- neurons activated in the brain.

Emotions and the Autonomic Nervous System

During an emotional experience, our autonomic nervous system mobilizes energy in the body that arouses us.

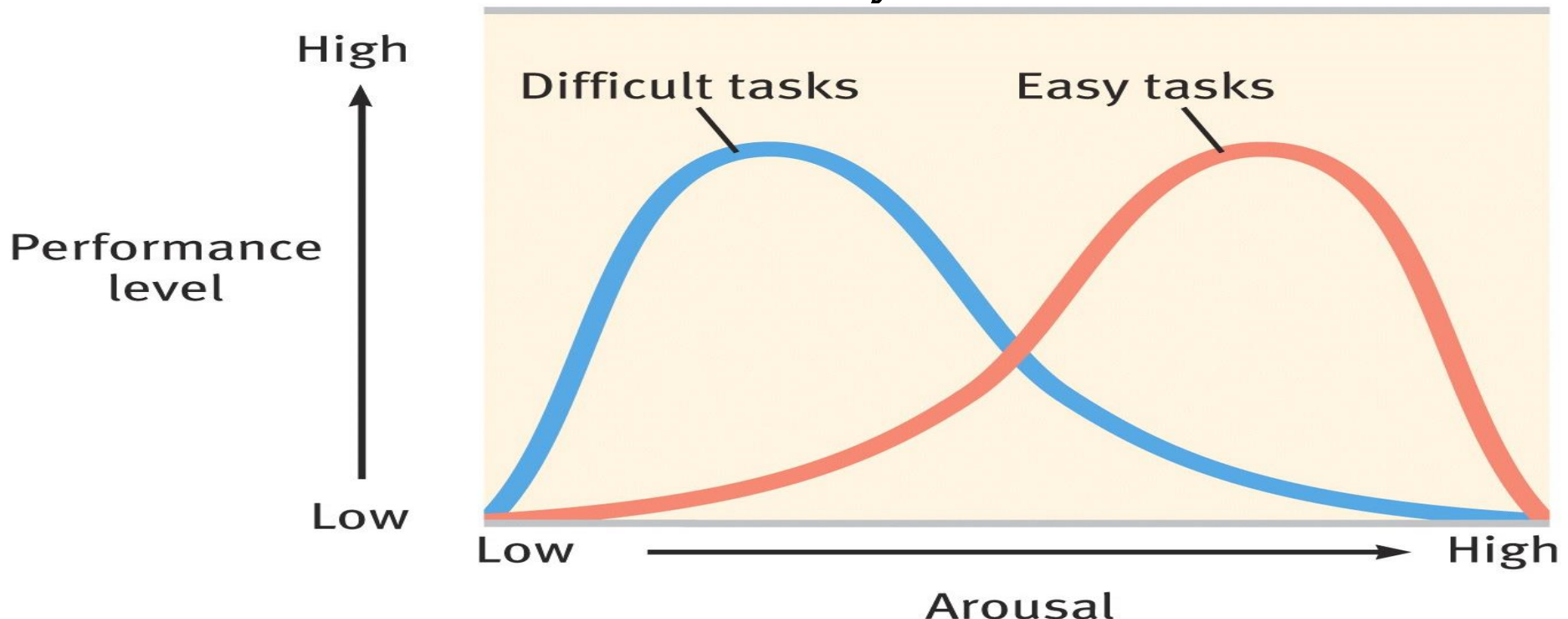
Autonomic Nervous System Controls Physiological Arousal

Sympathetic division (arousing)		Parasympathetic division (calming)
Pupils dilate	EYES	Pupils contract
Decreases	SALIVATION	Increases
Perspires	SKIN	Dries
Increases	RESPIRATION	Decreases
Accelerates	HEART	Slows
Inhibits	DIGESTION	Activates
Secrete stress hormones	ADRENAL GLANDS	Decrease secretion of stress hormones



Arousal and Performance

Arousal in short spurts is adaptive. We perform better under moderate arousal, but optimal performance varies with task difficulty.



Physiological Similarities

Physiological responses related to the emotions of fear, anger, love, and boredom are very similar.

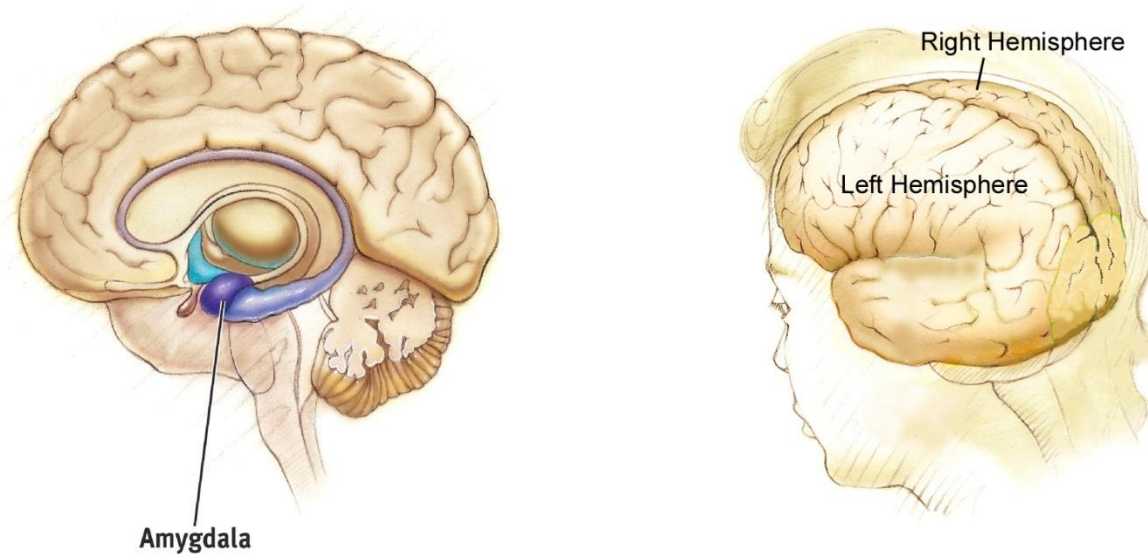


M. Grecco/ Stock Boston

Excitement and fear involve a similar physiological arousal.

Physiological Differences

Physical responses -- like finger temperature and movement of facial muscles, change during fear, rage, and joy.



Brain activity -- The amygdala shows differences in activation during the emotions of anger and rage. Activity of the left hemisphere (happy) is different from the right (depressed) for emotions.

III. Cognition and Emotion

What is the connection between how we *think* (cognition) and how we *feel* (emotion)?

Can we change our emotions by changing our thinking?

A. Cognition Can Define Emotion

An arousal response to one event spills over into our response to the next



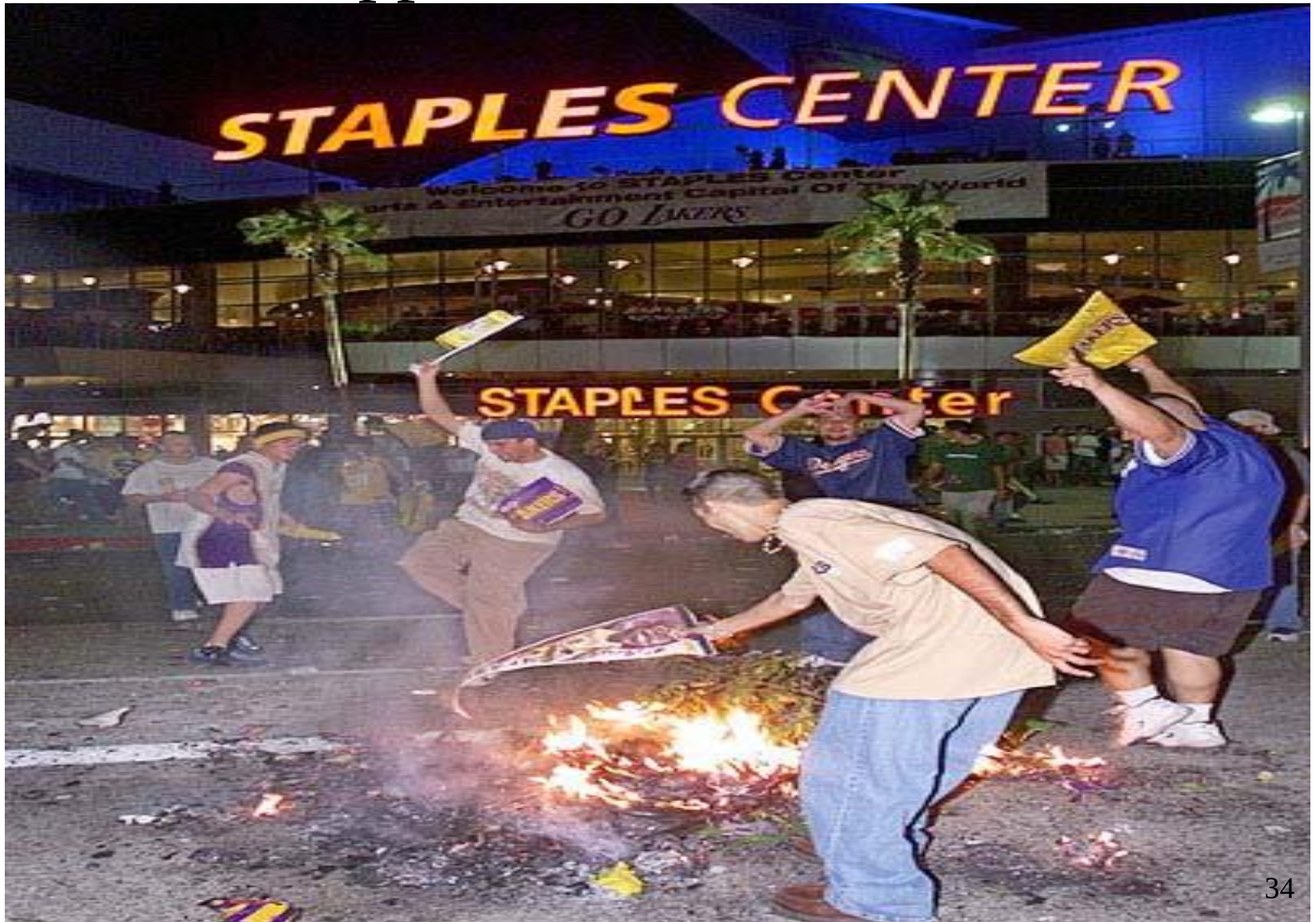
AP Photo/ Natu Harnik



Reuters/ Corbis

Arousal from a soccer match can fuel anger, which may lead to rioting.

What happens after a Lakers Game?



- **Spillover Effect** — physical reactions & cognition (to things around us) impact how we feel
 - Schachter-Singer experiment
 - (2 factor Theory) ***arousal + label = emotion***
 - ***Injected with hormones***
 - ***Told to expect such arousal participants felt little emotion***
 - ***When told it would not have any effect they felt greater emotions***
- **Arousal fuels emotions, cognition**

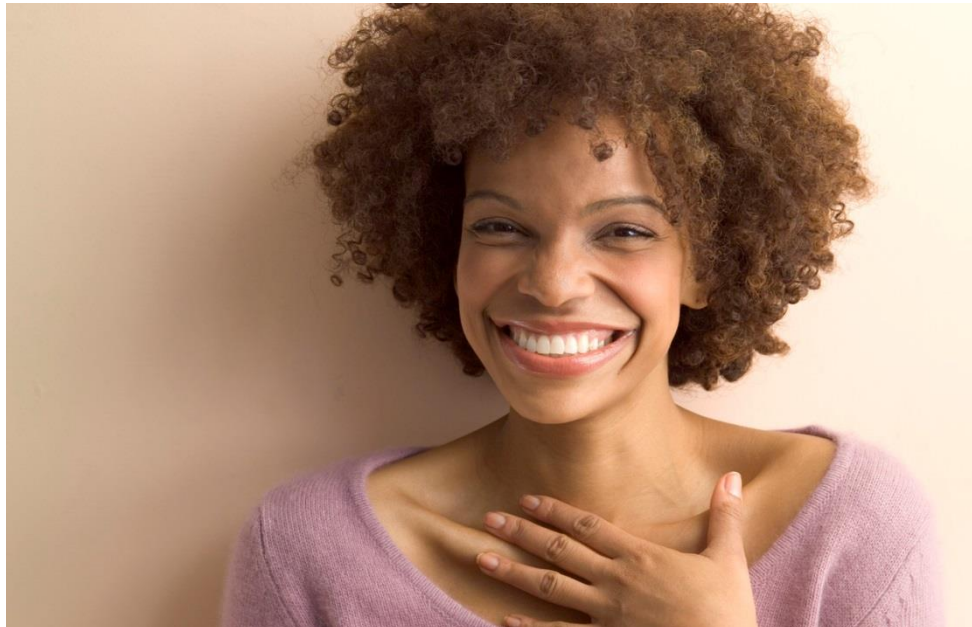
Spillover Effect

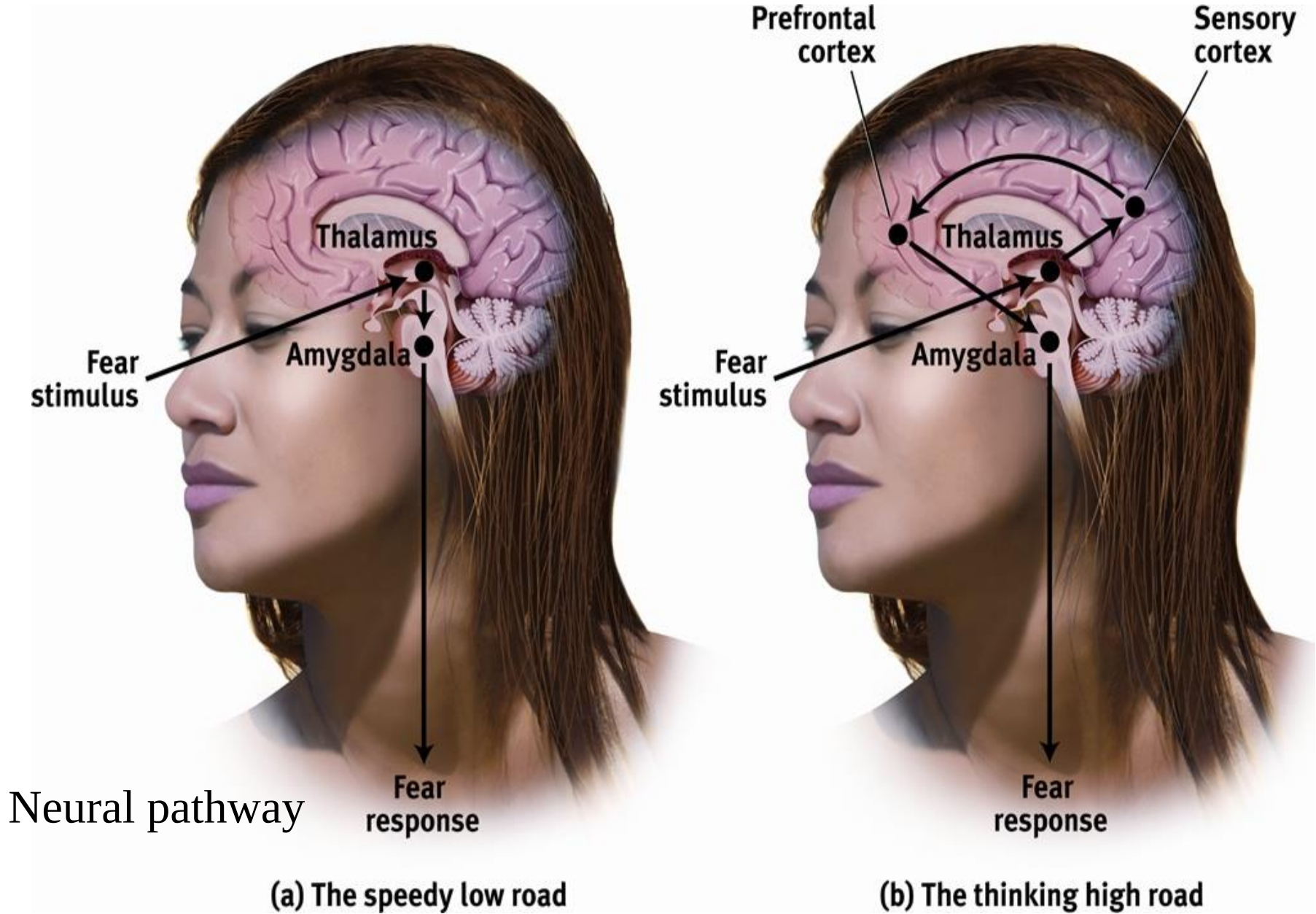
- Sexually aroused individuals tend to act more hostile in anger-provoking situations (Teenagers in school)
- Arousal that lingers after an intense argument may lead to intense passion (“Make-up” Sex)

B. Cognition Does Not Always Precede Emotion

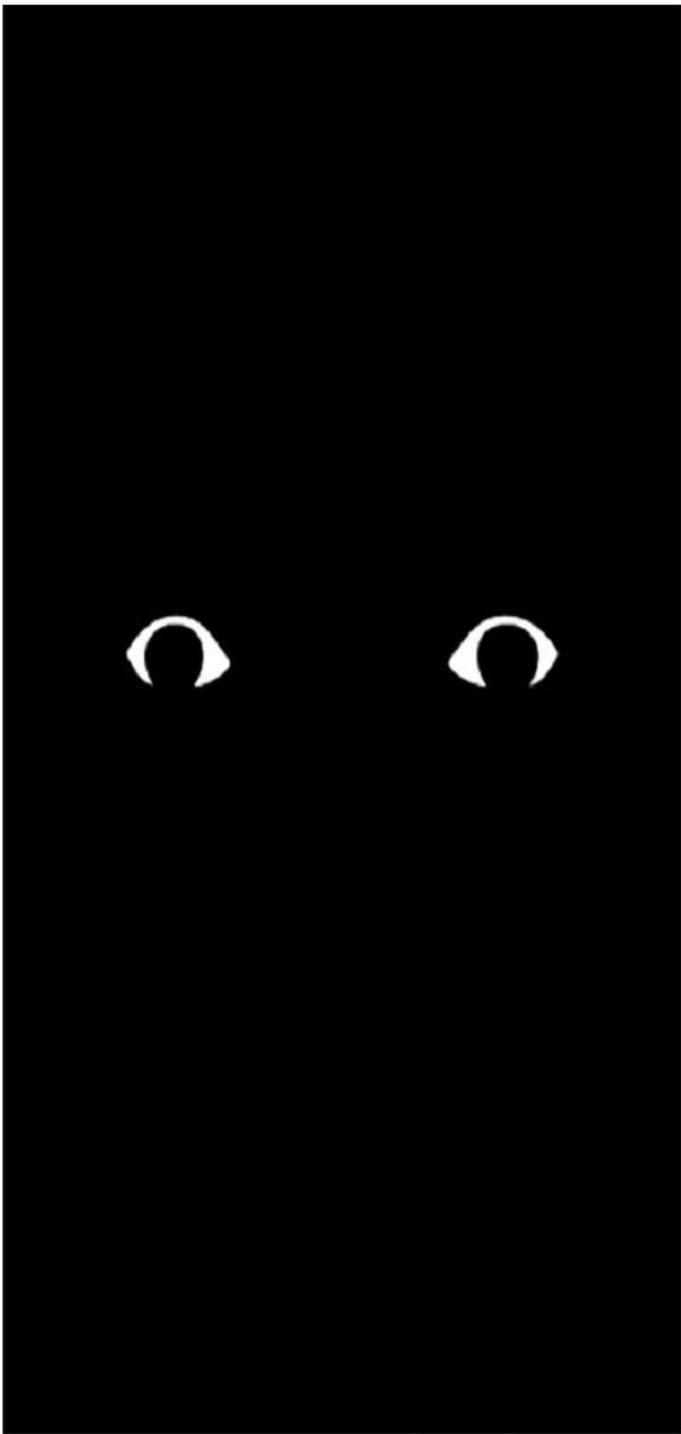
Without complicated cognition emotions can be primed

A subliminally presented happy face can encourage subjects to drink more than when presented with an angry face (Berridge & Winkeilman, 2003).

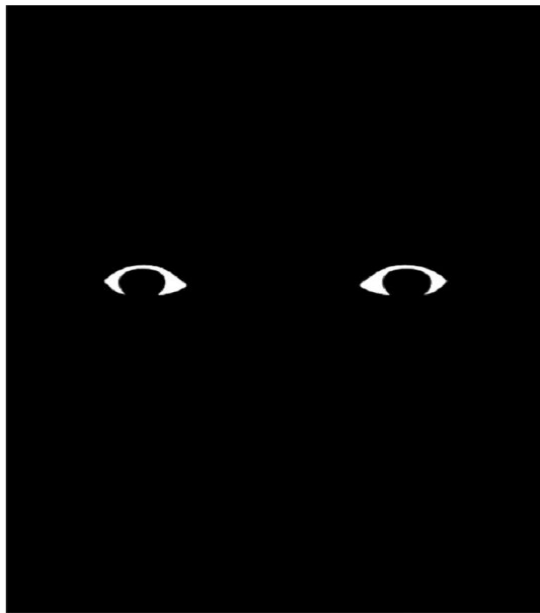




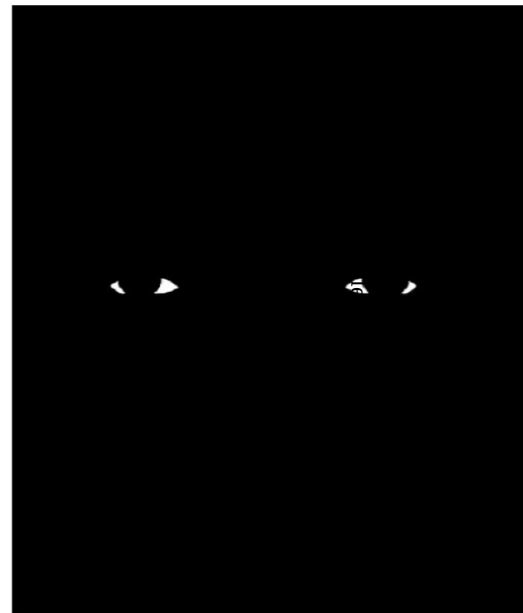
Emotions are felt directly through the amygdala (a) or through the cortex (b) for analysis.



When fearful eyes were subliminally presented to subjects, fMRI scans revealed higher levels of activity in the amygdala (Whalen et al. 2004).



Fear

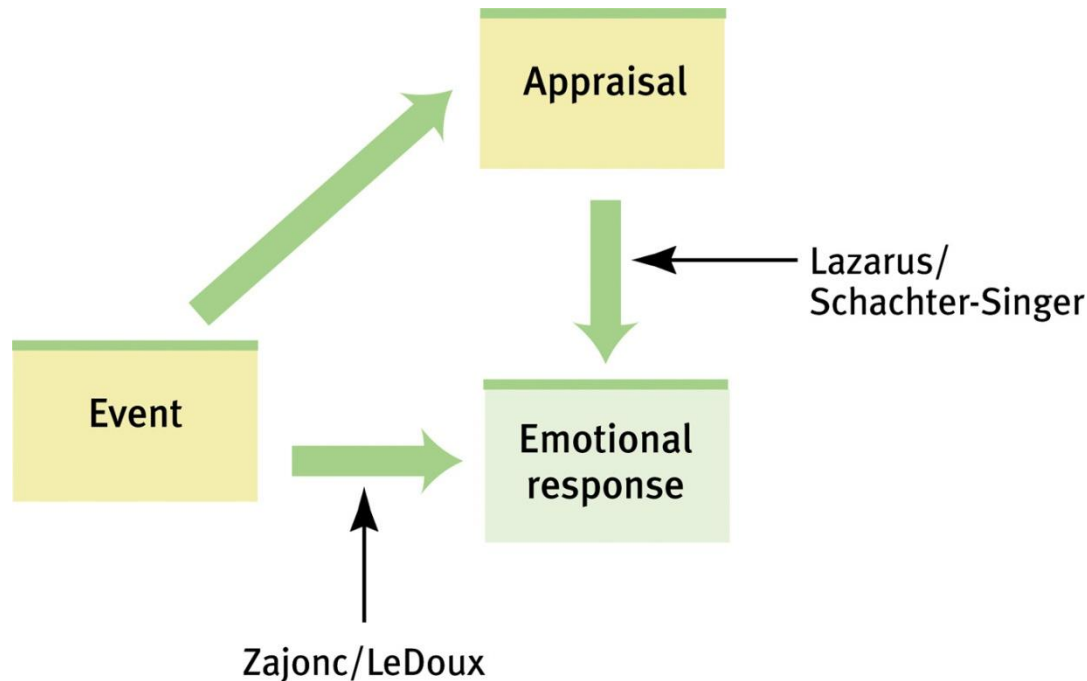


Happy

mouth

Two Routes to Emotion

Cognitive Appraisal Theory



- Zajonc and LeDoux emphasize that some emotions are immediate, without conscious appraisal.
- Lazarus, Schachter, and Singer emphasize that appraisal also determines emotions.

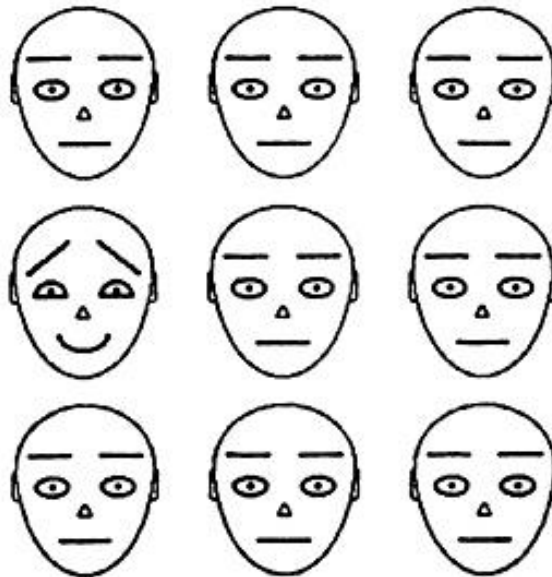
Expressed Emotion

Emotions are expressed on the face, by the body, and by the intonation of voice. Is this nonverbal language of emotion universal?



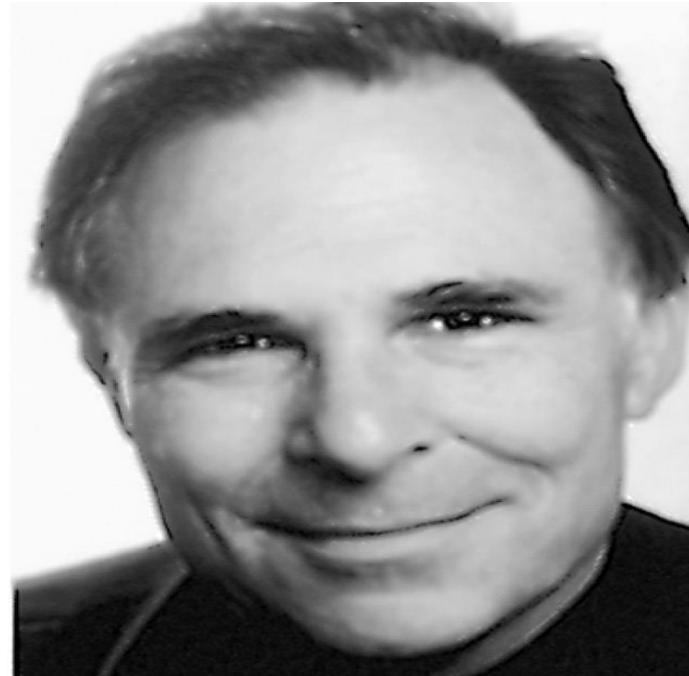
Detecting Emotion

Most of us are good at deciphering emotions through nonverbal communication. In a crowd of faces a single angry face will “pop out” faster than a single happy face (Fox et al, 2000).



Detecting Emotion

Hard-to-control facial muscles reveal signs of emotions you may be trying to conceal. A forced smile may continue for more than 4-5 seconds while a genuine smile will have faded by then.



Which of Paul Ekman's smiles is genuine?

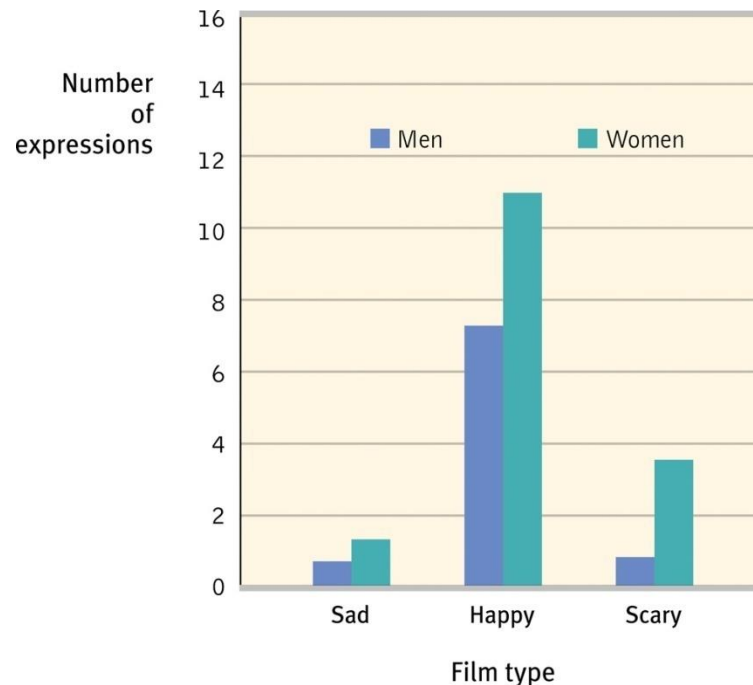
Hindu Dance

In classical Hindu dance, the body is trained to effectively convey 10 different emotions.



Gender, Emotion, and Nonverbal Behavior

Women are much better at discerning nonverbal emotions than men. When shown sad, happy, and scary film clips women expressed more emotions than men.



Culture and Emotional Expression

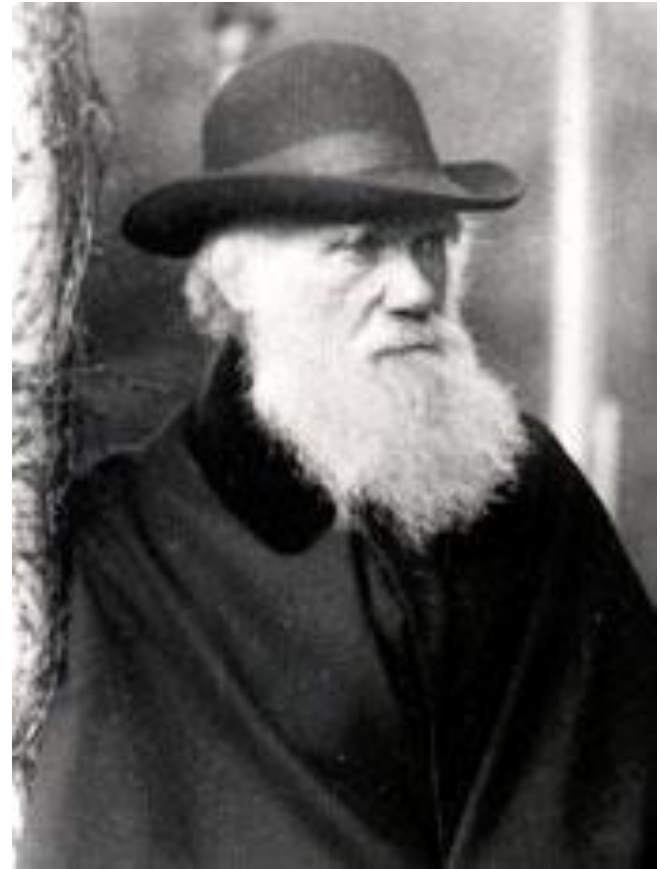
When culturally diverse people were shown basic facial expressions, they did fairly well at recognizing them (Matsumoto & Ekman, 1989).



Ekman & Matsumoto, Japanese and Caucasian Facial Expression of Emotion

Emotions are Adaptive

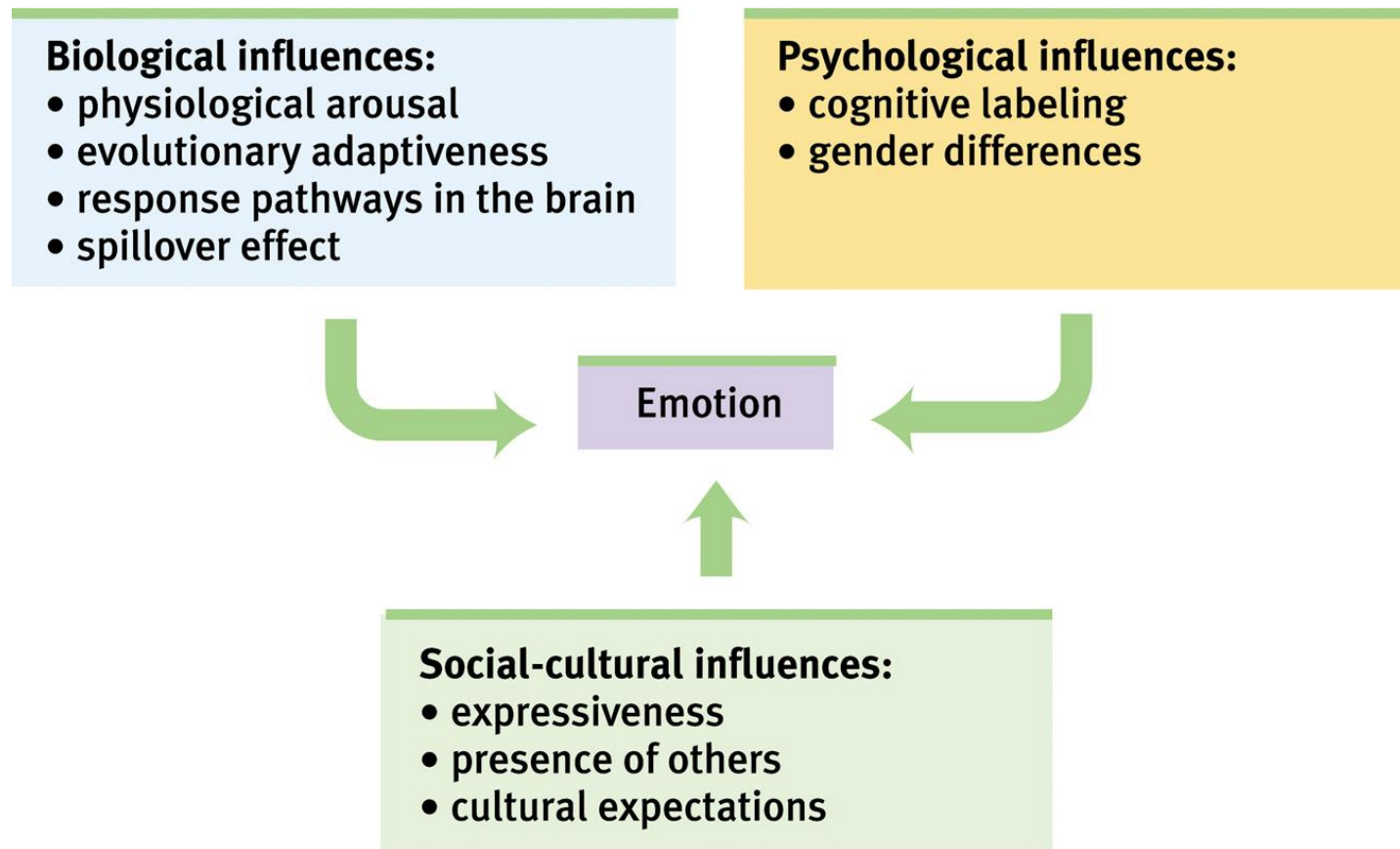
Darwin speculated that our ancestors communicated with facial expressions in the absence of language. Nonverbal facial expressions led to our ancestor's survival.



Charles Darwin (1809-1882)

Analyzing Emotion

Analysis of emotions are carried on different levels.



The Effects of Facial Expression

If facial expressions are manipulated, like furrowing brows, people feel sad while looking at sad pictures.



Courtesy of Louis Schake/ Michael Kauffman/
The New York Times Pictures

Attaching two golf tees to the face and making their tips touch causes the brow to furrow.

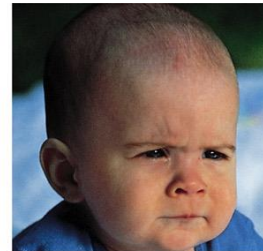
Experienced Emotion

Izard (1977) isolated 10 emotions. Most of them are present in infancy, except for contempt, shame, and guilt.



Tom McCarthy/ Rainbow

(a) Joy (mouth forming smile, cheeks lifted, twinkle in eye)



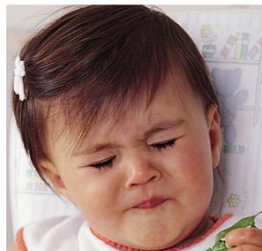
Patrick Donahue/ Photo Researchers, Inc.

(b) Anger (brows drawn together and downward, eyes fixed, mouth squarish)



Bob Daemrich/ The Image Works

(c) Interest (brows raised or knitted, mouth softly rounded, lips may be pursed)



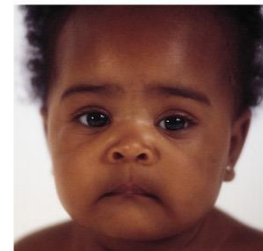
Lew Merritt/ Photo Researchers, Inc.

(d) Disgust (nose wrinkled, upper lip raised, tongue pushed outward)



Nancy Brown/ The Image Bank

(e) Surprise (brows raised, eyes widened, mouth rounded in oval shape)



Marc Gribberg/ The Image Bank

(f) Sadness (brow's inner corner raised, mouth corners drawn down)



Michael Newman/ PhotoEdit

(g) Fear (brows level, drawn in and up, eyelids lifted, mouth corners retracted)

Anger

Anger “carries the mind away,” (Virgil, 70-19 B.C.), but “makes any coward brave,” (Cato 234-149 B.C.).



Causes of Anger

1. People generally become angry with friends and loved ones who commit wrongdoings, especially if they are willful, unjustified, and avoidable.
2. People are also angered by foul odors, high temperatures, traffic jams, and aches and pains.

Catharsis Hypothesis

Venting anger through action or fantasy achieves an emotional release or “catharsis.”

Expressing anger breeds more anger, and through reinforcement it is habit-forming.

Cultural & Gender Differences

1. Boys respond to anger by moving away from that situation, while girls talk to their friends or listen to music.
2. Anger breeds prejudice. The 9/11 attacks led to an intolerance towards immigrants and Muslims.
3. The expression of anger is more encouraged in cultures that do not promote group behavior than in cultures that do promote group behavior.



Wolfgang Kaehler

Happiness

People who are happy perceive the world as being safer. They are able to make decisions easily, are more cooperative, rate job applicants more favorably, and live healthier, energized, and more satisfied lives.



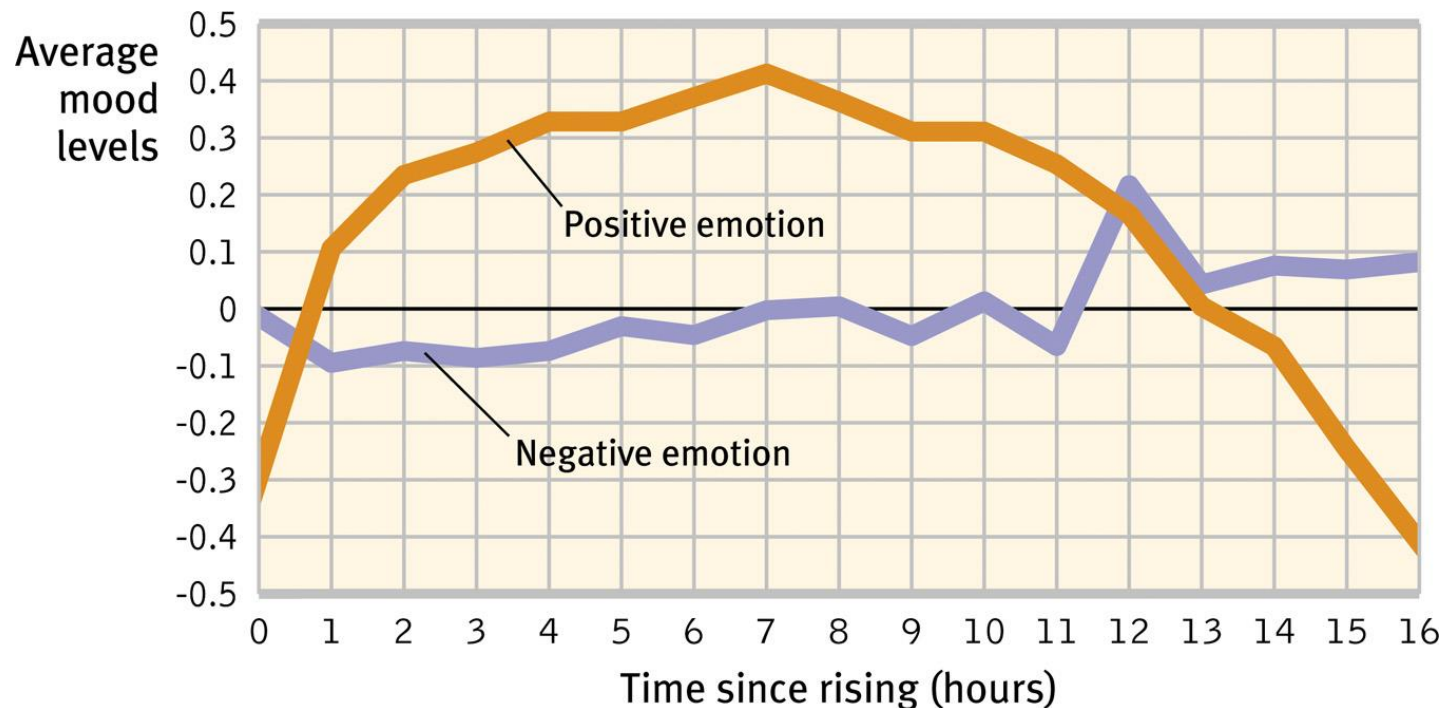
Feel-Good, Do-Good Phenomenon

When we feel happy we are more willing to help others.



Emotional Ups and Downs

Our positive moods rise to a maximum within 6-7 hours after waking up. Negative moods stay more or less the same throughout the day.



Emotional Ups and Downs

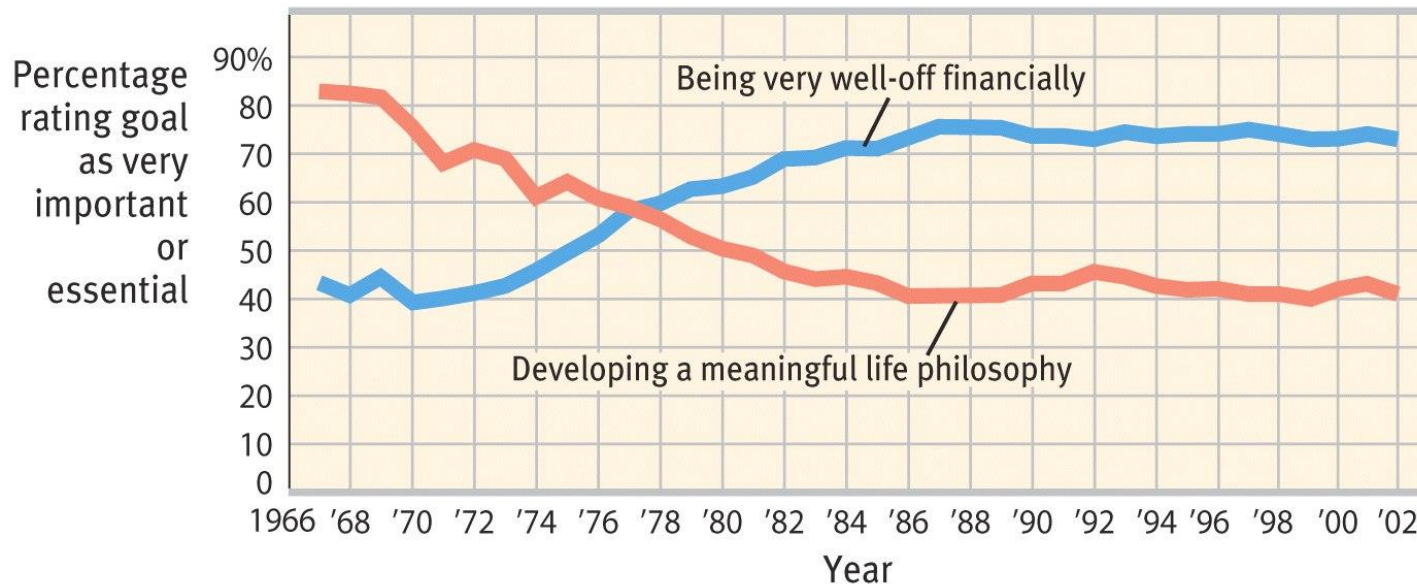
Over the long run, our emotional ups and downs tend to balance. Although grave diseases can bring individuals emotionally down, most people adapt.



Courtesy of Anna Putt

Wealth and Well-being

Many people in the West believe that if they were wealthier, they would be happier. However, data suggests that they would only be happy temporarily.



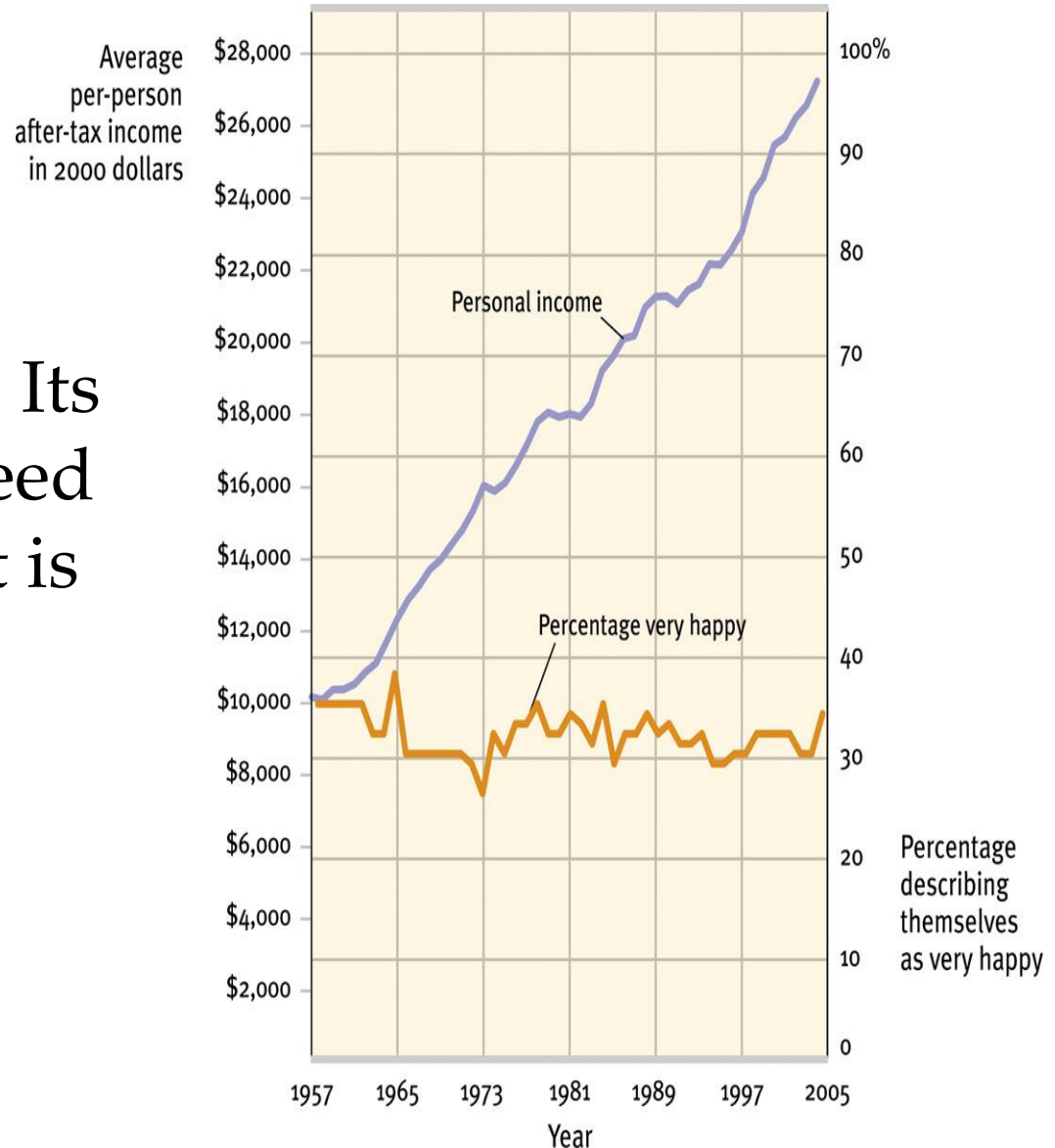
Wealth and Well-being

1. In affluent societies, people with more money are happier than people who struggle for their basic needs.
2. People in rich countries are happier than people in poor countries.
3. A sudden rise in financial conditions makes people happy.

However, people who live in poverty or in slums are also satisfied with their life.

Does Money Buy Happiness?

Wealth is like health: Its utter absence can breed misery, yet having it is no guarantee of happiness.



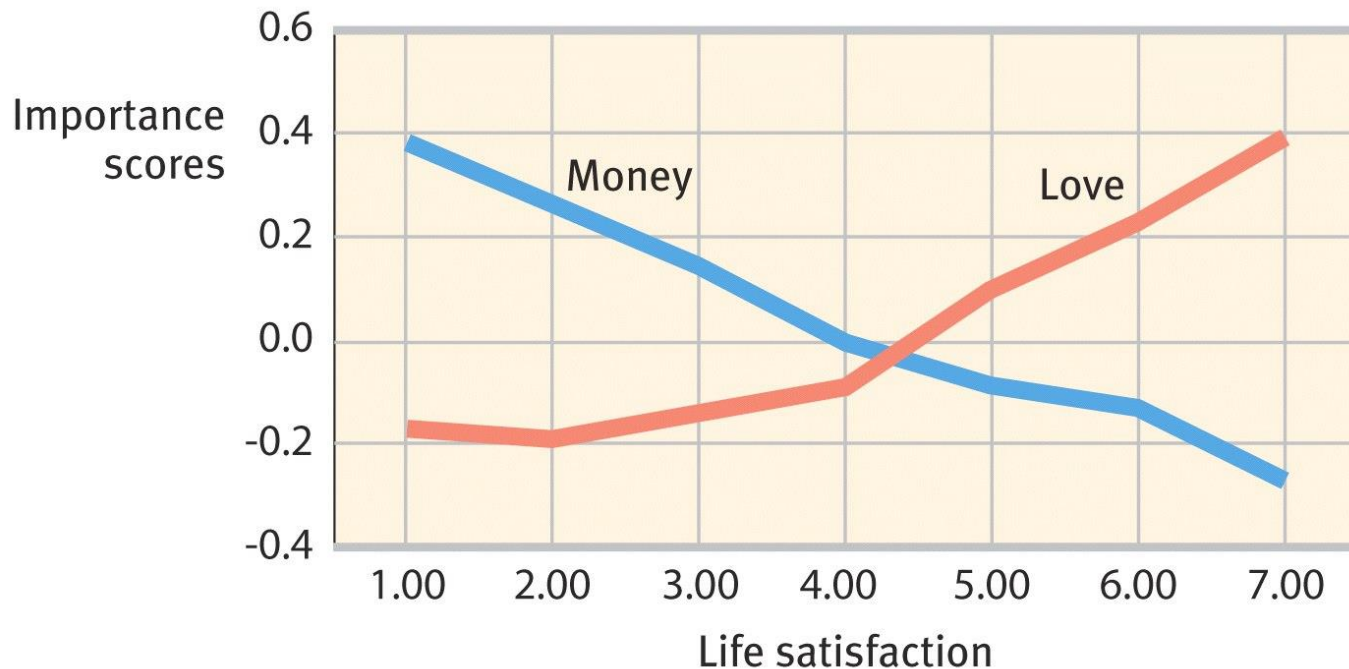
Happiness & Satisfaction

Subjective well-being (happiness + satisfaction) measured in 82 countries shows Puerto Rico and Mexico (poorer countries) at the top of the list.

The Top 10	The Bottom 10
1. Puerto Rico	73. Bulgaria
2. Mexico	74. Belarus
3. Denmark	75. Georgia
4. Ireland	76. Romania
5. Iceland	77. Moldova
6. Switzerland	78. Russia
7. Northern Ireland	79. Armenia
8. Colombia	80. Ukraine
9. Netherlands	81. Zimbabwe
10. Canada	82. Indonesia

Values & Life Satisfaction

Students who value love more than money report higher life satisfaction.



Happiness & Prior Experience

Adaptation-Level Phenomenon: Like the adaptation to brightness, volume, and touch, people adapt to income levels. “Satisfaction has a short half-life” (Ryan, 1999).

Happiness & Others' Attainments

Happiness is not only relative to our past, but also to our comparisons with others. **Relative Deprivation** is the perception that we are relatively worse off than those we compare ourselves with.

Predictors of Happiness

Why are some people generally more happy than others?

Researchers Have Found That Happy People Tend To	However, Happiness Seems Not Much Related to Other Factors, Such As
Have high self-esteem (in individualistic countries).	Age.
Be optimistic, outgoing, and agreeable.	Gender (women are more often depressed, but also more often joyful).
Have close friendships or a satisfying marriage.	Education levels.
Have work and leisure that engage their skills.	Parenthood (having children or not).
Have a meaningful religious faith.	Physical attractiveness.
Sleep well and exercise.	

Stress & Health

[..\Consciousness\Fight and flight response.mp4.flv](#)

Psychological states cause physical illness.

Stress is any circumstance (real or perceived) that threatens a person's well-being.



Lee Stone/Corbis

When we feel severe stress, our ability to cope with it is impaired.

Stress & Health

Stress can be adaptive.

In a fearful or stress- causing situation, we can run away and save our lives. Stress can be maladaptive.

If it is **prolonged** (chronic stress), it increases our risk of illness & health problems.

Stress & Stressors

stress stimulus vs. response

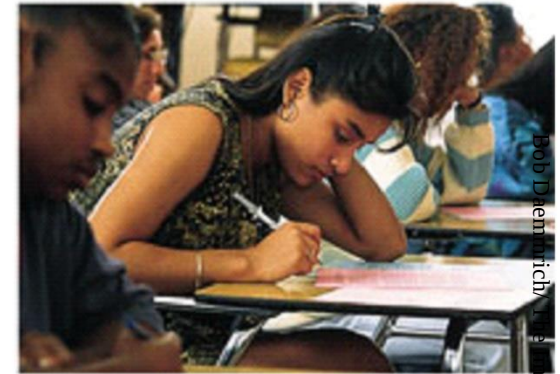
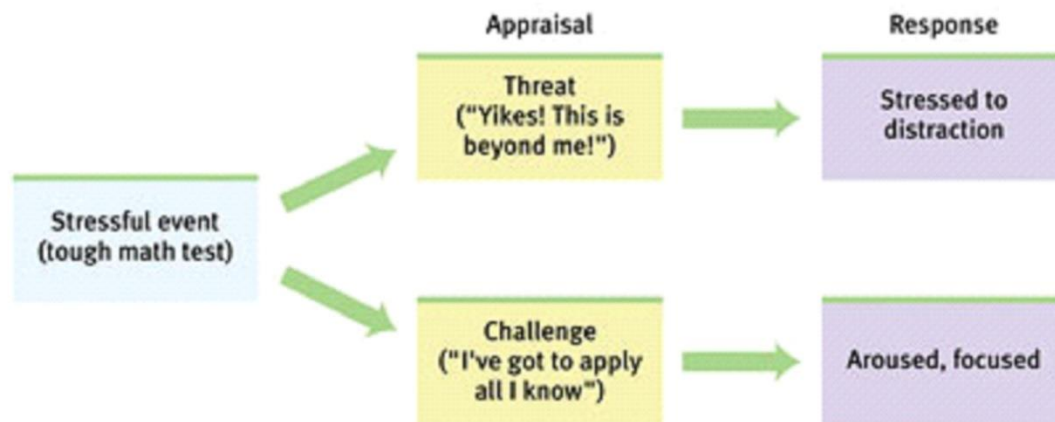
Stress is a slippery concept.

At times it is the **stimulus** (missing an appointment) & at other times it is a **response** (sweating while taking a test).

Stress & Stressors

Stress is not merely a stimulus or a response.

It is a **process** by which we appraise & cope with environmental threats & challenges.



When short-lived or taken as a challenge, stressors may have **positive effects**.

Prolonged or threatening stress can be harmful.

The Stress Response System

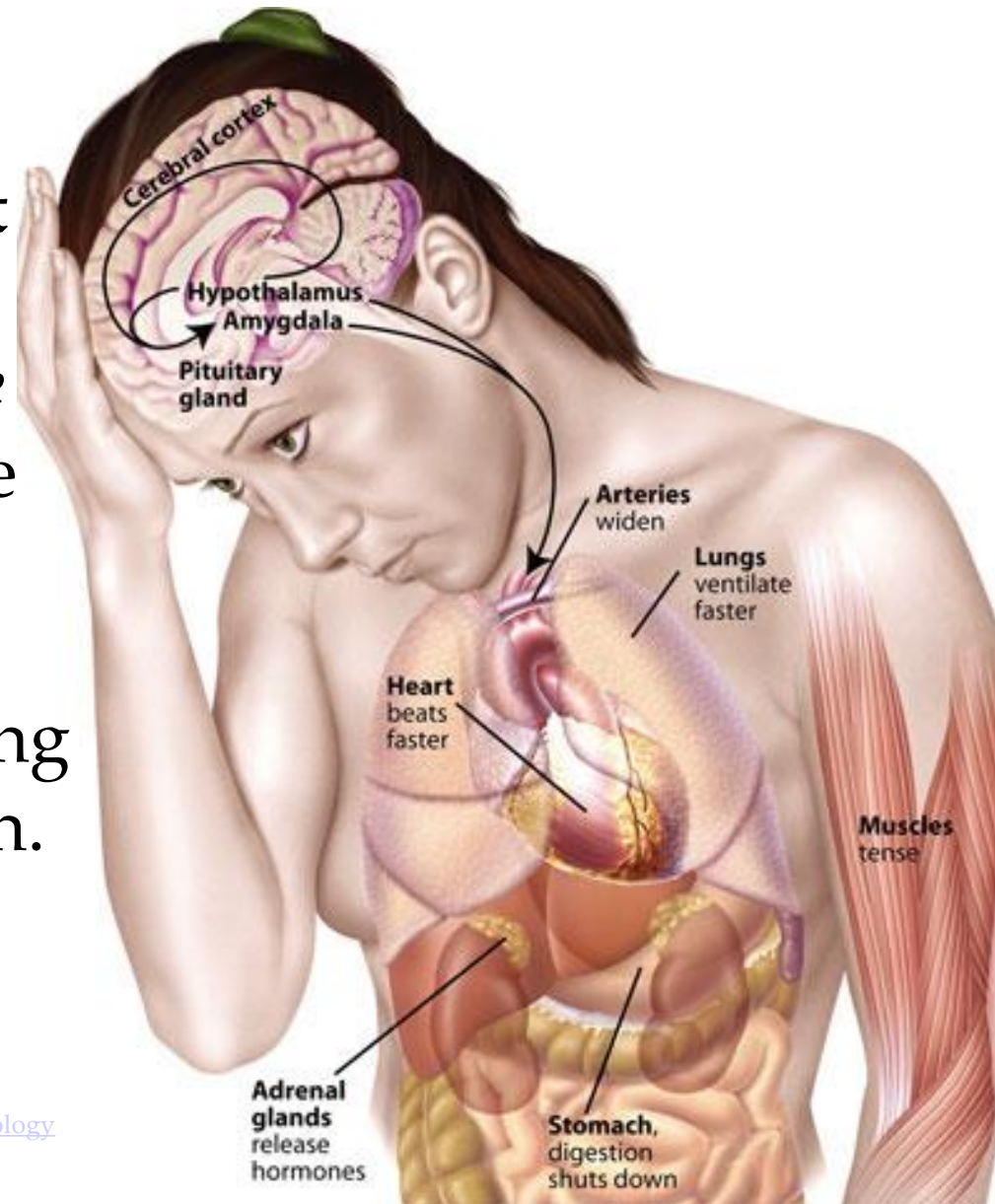
[..\Consciousness\Managing Stress - Fight or Flight clip.flv](#)

Cannon (1920s) proposed that the stress response (fast) was a **fight-or-flight** response marked by the outpouring of *epinephrine* & *norepinephrine* from the inner adrenal glands, increasing heart & respiration rates, mobilizing sugar & fat, & dulling pain.

Alternatives to Stress-
Withdrawal / Tend &
befriend

[..\Consciousness\The Science of Stress Physiology](#)

[Emotions Fight Flight.flv](#)

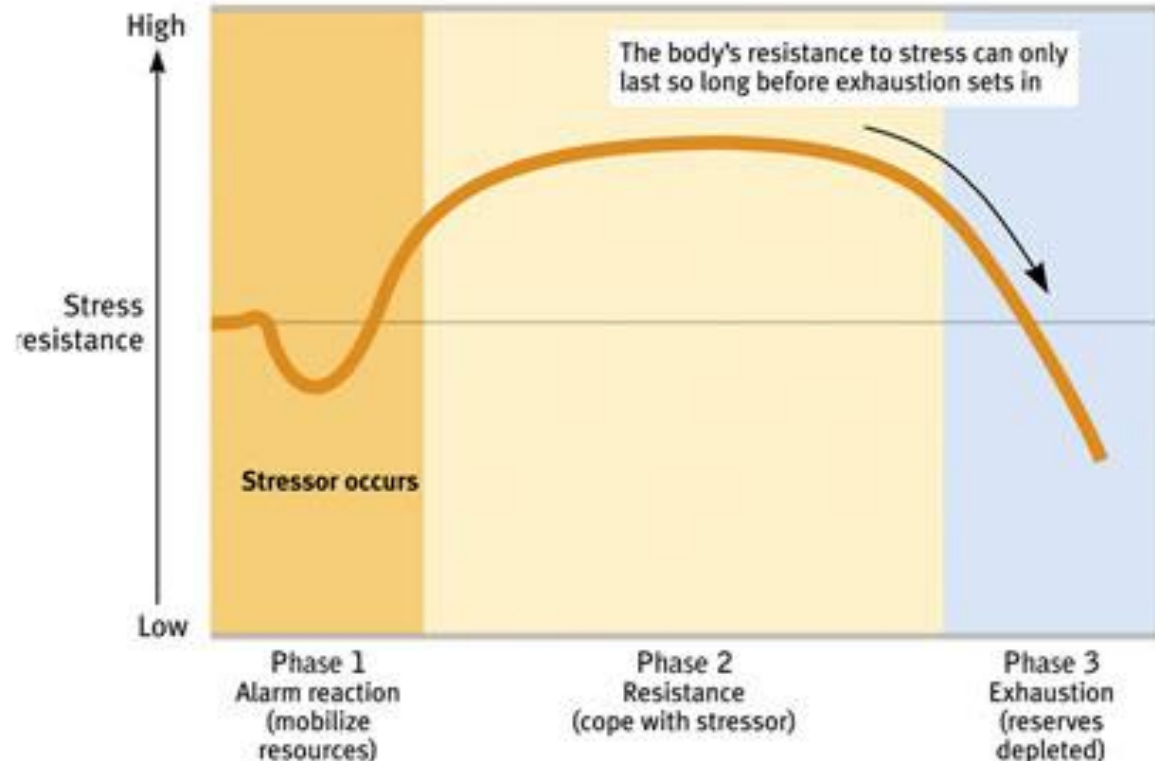


General Adaptation Syndrome

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According to Selye, a stress response to any kind of stimulation is similar.

The stressed individual goes through **three phases**.



Stressful Life Events

Catastrophic Events:

earthquakes, combat
stress, floods etc.

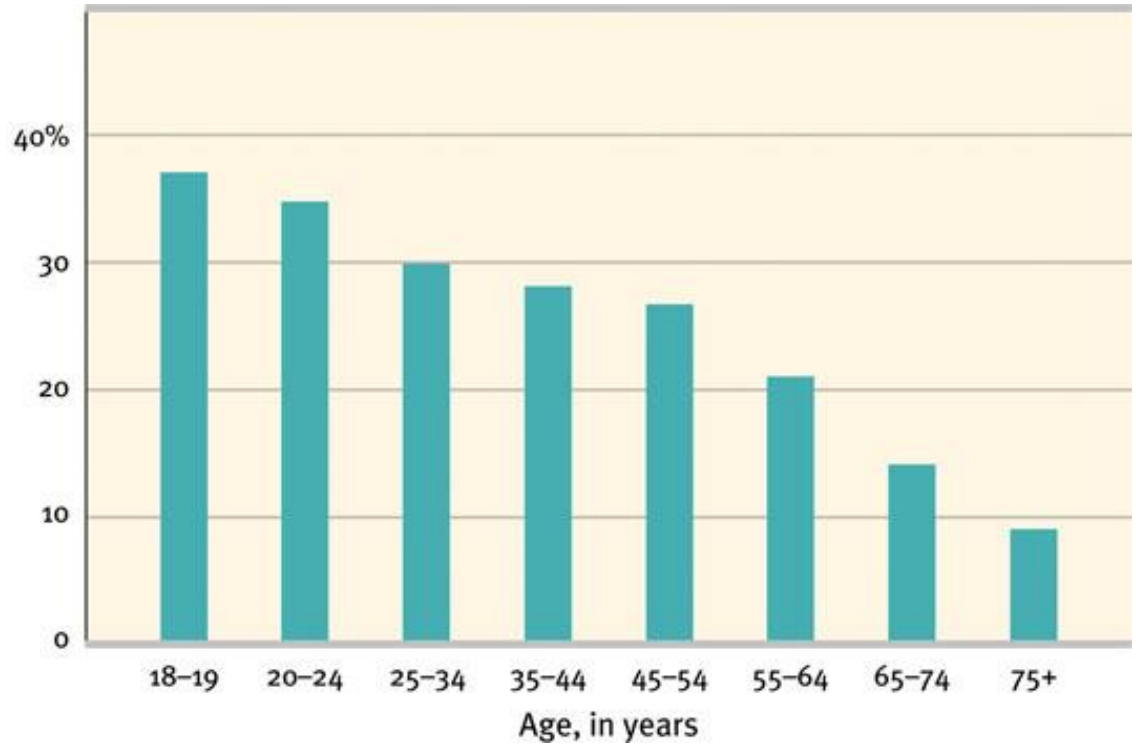
lead individuals to
become depressed,
sleepless, & anxious.

Significant Life Changes

Loved one's death,
Divorce,
Jobloss
Home purchase ,
A promotion,
Marriage,

may leave
individuals
vulnerable to
disease.

Percentage of
people
experiencing
high stress



Daily Hassles

MOST significant sources of stress
& can damage health ...

Rush hour traffic,
long lines,
job stress,
burnt-out

It's the **response that matters**

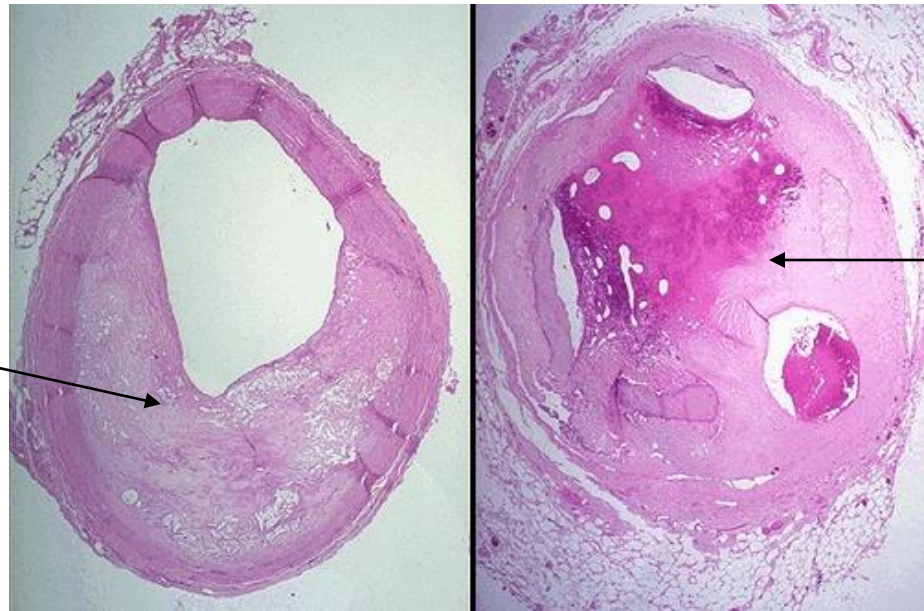
Others:

Poverty, unemployment, solo parenting, overcrowding
etc. <http://video.nationalgeographic.com/video/science/health-human-body-sci/human-body/science-stress-sci/>

Stress & the Heart

Stress that leads to elevated blood pressure may result in **coronary heart disease**, a clogging of the vessels that nourish the heart muscle.

Plaque in
coronary artery



Artery
clogged

Personality Types

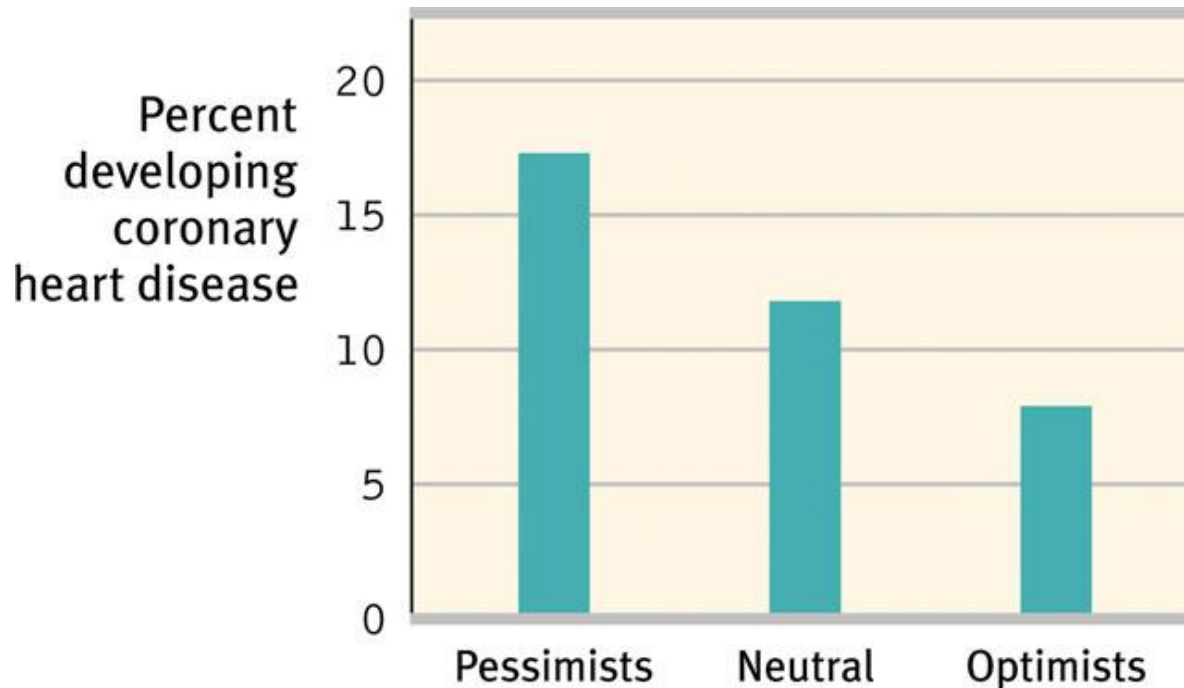
Type A - term used for competitive, hard-driving, impatient, verbally aggressive, and anger-prone people. [What Is a Type A Personality .mp4](#)

Type B refers to easygoing, relaxed people (Friedman and Rosenman, 1974). [Type A vs. Type B.mp4](#)

Type A personalities are more at risk for coronary heart disease.

Pessimism and Heart Disease

Pessimistic adult men are twice as likely to develop heart disease over a 10-year period (Kubzansky et al., 2001).



Stress & Susceptibility to Disease

A **psychophysiological illness** is any stress-related physical illness such as **hypertension & some headaches**.

Psychoneuroimmunology (PNI) is a developing field in which the health effects of-
psychological, neural, & endocrine processes on the immune system are studied.

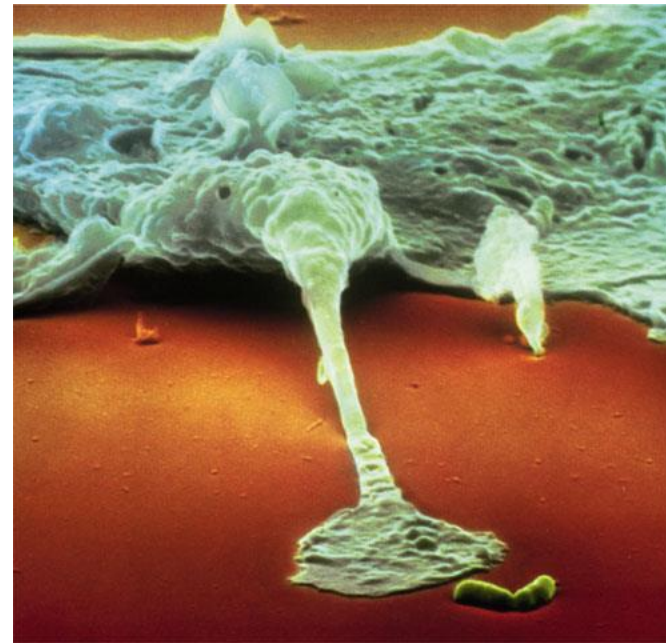
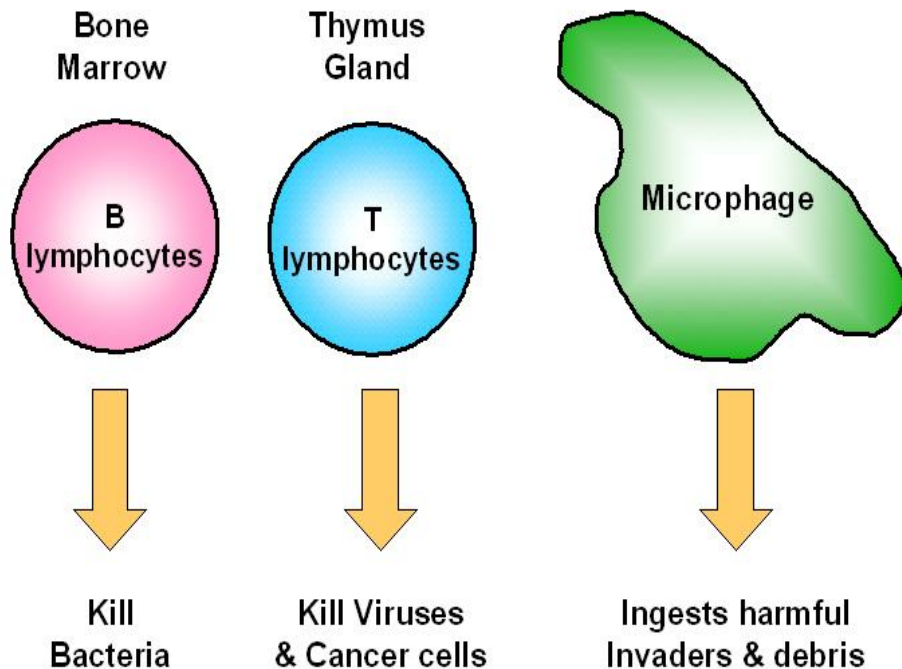
Stress effects our resistance to disease

Psychoneuroimmunology

B lymphocytes fight bacterial infections,

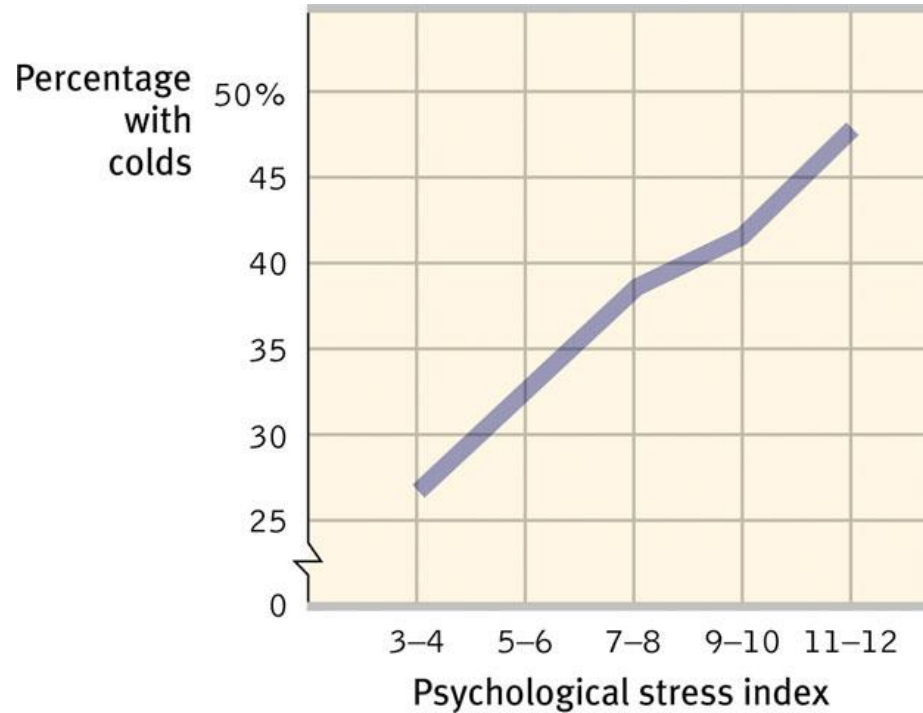
T lymphocytes attack cancer cells & viruses, & **microphages** ingest foreign substances.

During stress, energy is mobilized away from the immune system making it vulnerable.



Stress & Colds

People with the highest life stress scores were also the most vulnerable when exposed to an experimental cold virus.



Stress and AIDS

Stress & negative emotions may accelerate the progression from human immunodeficiency virus (HIV) to acquired immune deficiency syndrome (AIDS).

Stress and Cancer

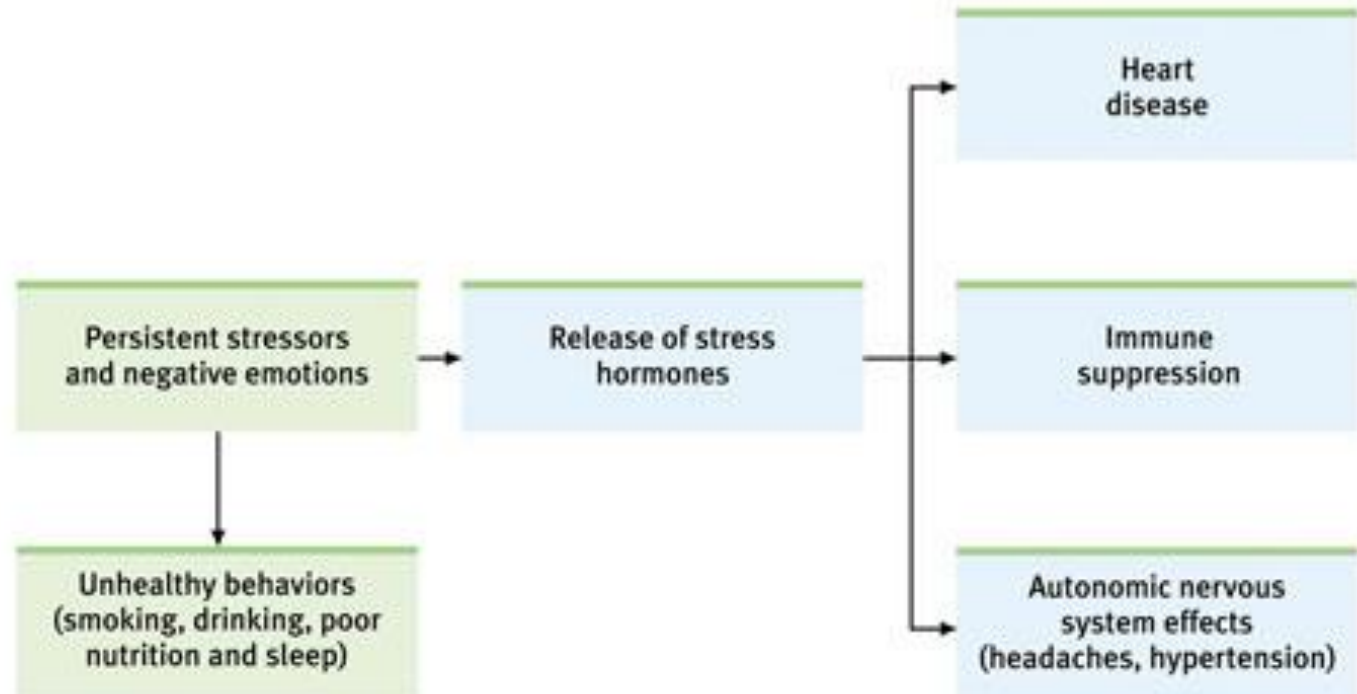
Stress does not create cancer cells.

Researchers disagree on whether stress influences the progression of cancer.

However, they do agree that avoiding stress & having a hopeful attitude cannot reverse advanced cancer.

Health-Related Consequences

Stress can have a variety of health-related consequences.



Behavioral Medicine

Psychologists and physicians have developed an interdisciplinary field of **behavioral medicine** that integrates behavioral knowledge with medical knowledge.

Mind and body interact; everything psychological is simultaneously physiological.

Promoting Health

Promoting health is generally defined as the absence of disease.

We only think of health when we are diseased.

However, **health psychologists** say that promoting health begins by preventing illness & enhancing well-being, which is a constant endeavor.

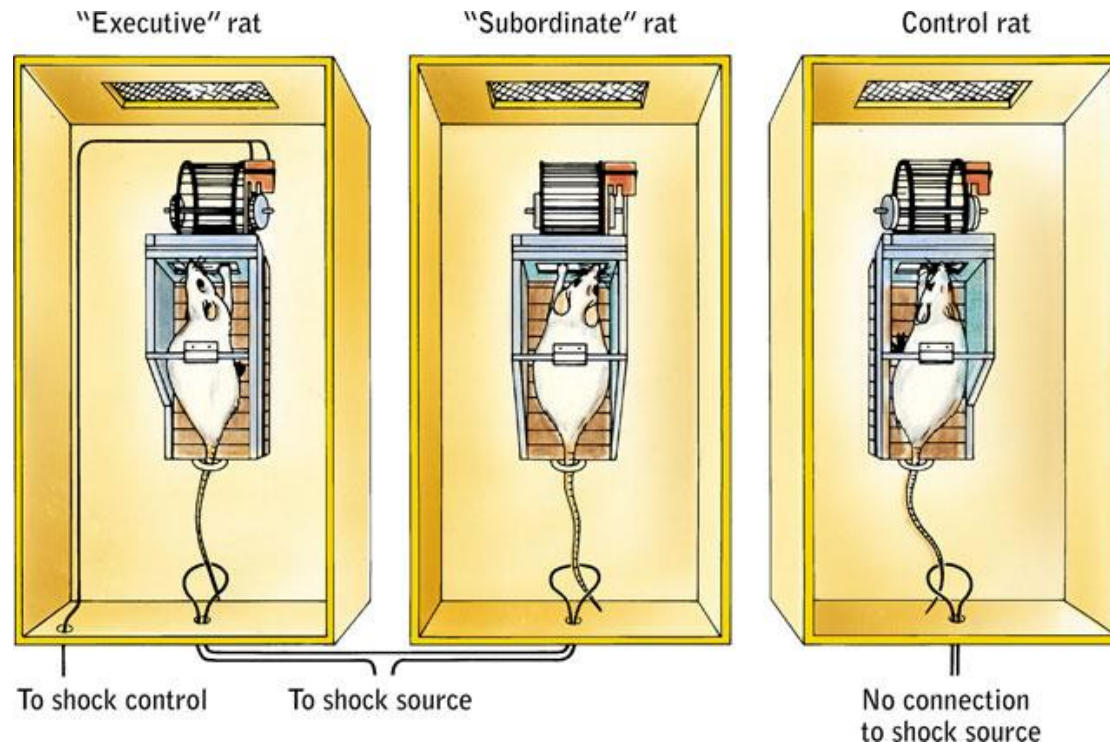
Coping with Stress

Reducing stress by changing events that cause stress or by changing how we react to stress is called **problem-focused coping**.

Emotion-focused coping is when we cannot change a stressful situation, and we respond by attending to our own emotional needs.

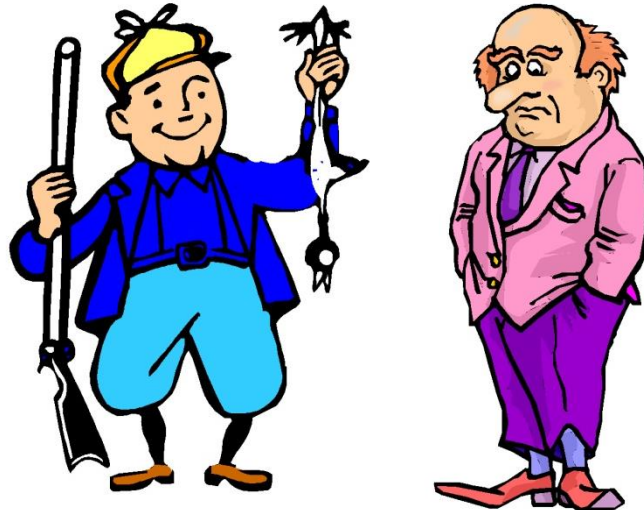
Perceived Control

Research with rats & humans indicates that the absence of control over stressors is a **predictor** of health problems.



Explanatory Style

People with an **optimistic** (instead of pessimistic) **explanatory style** tend to feel they have more control over stressors, **cope better** with stressful events, have better moods, & have a stronger immune system.



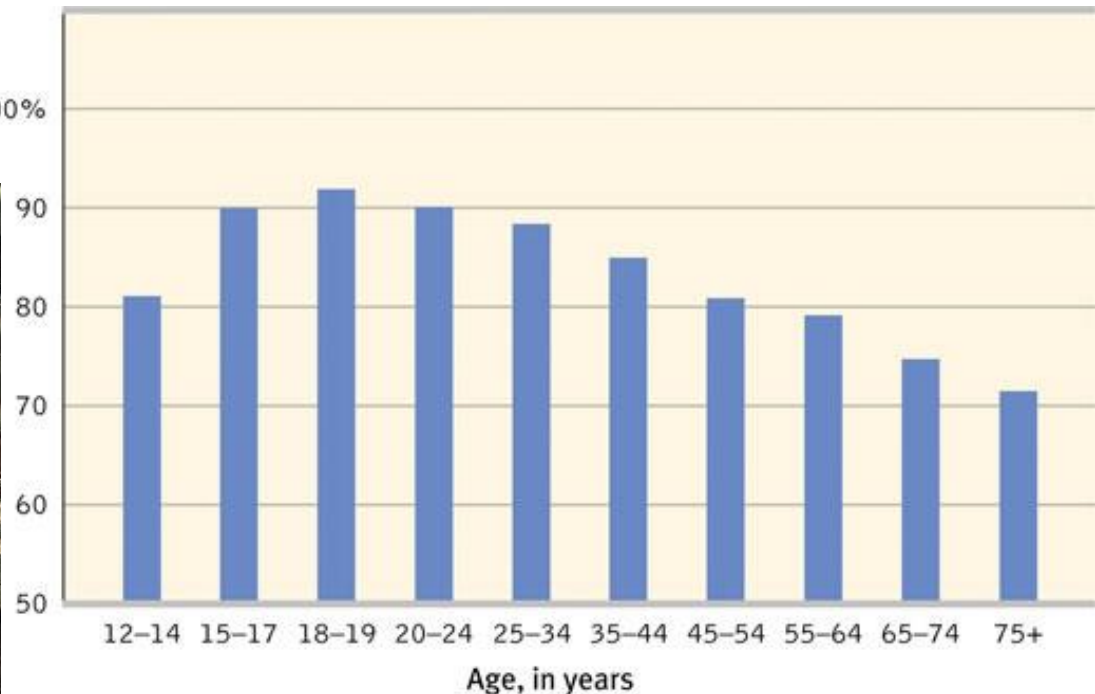
Social Support

Supportive family members, marriage partners, & close friends help people **cope with stress**.

Their immune functioning calms the cardiovascular system & lowers blood pressure.



Percentage with high support 100%



Managing Stress Effects

Having a sense of control,
an optimistic explanatory style, &
social support
can reduce the experience of stress & improve health

But there are other ways to MANAGE STRESS

Aerobic Exercise

Many studies suggest that aerobic exercise can elevate mood & well-being.

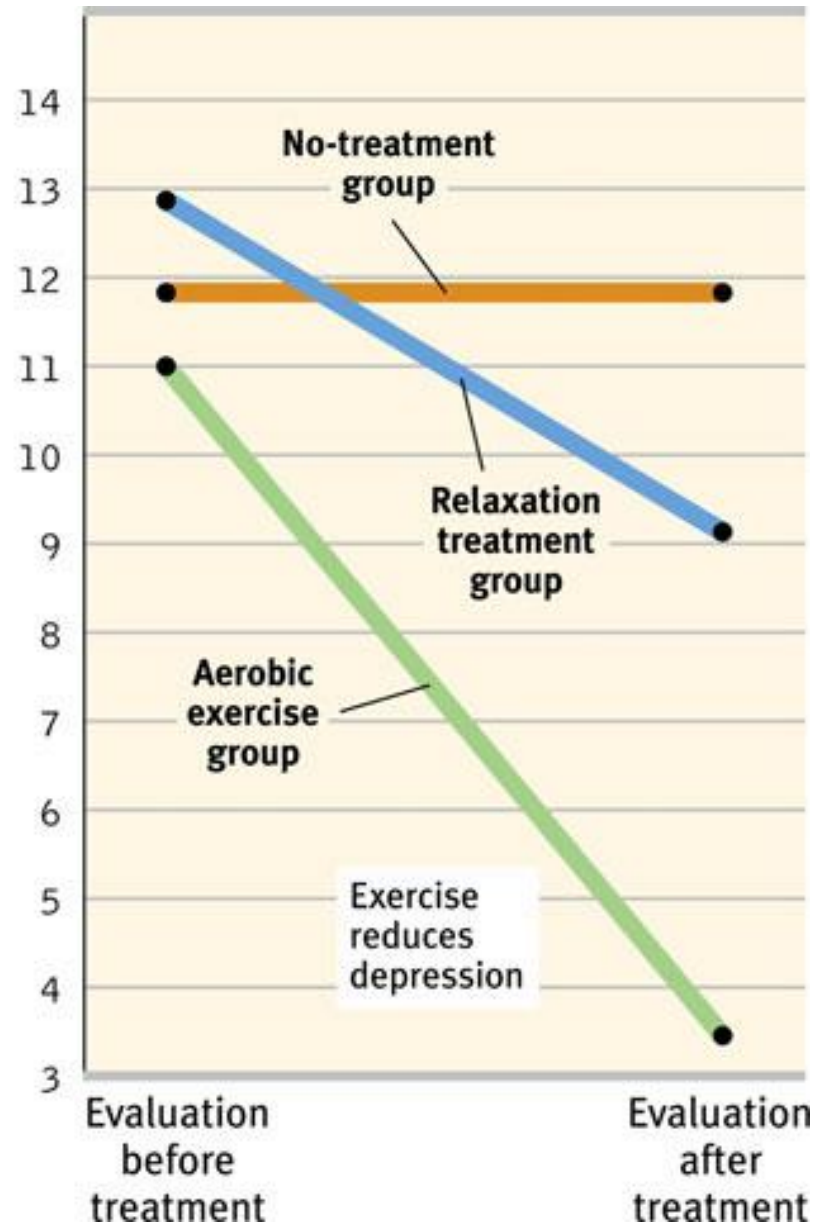
10 min = 2 hrs. of increased well being

- raises energy (vigor)
- increases self-confidence,
- lowers tension, depression, & anxiety.

Sustained Exercise that increases heart rate & lung function strengthens the body

Heart, increases blood flow, keeps blood vessels open, lowers BP & BP reaction to stress

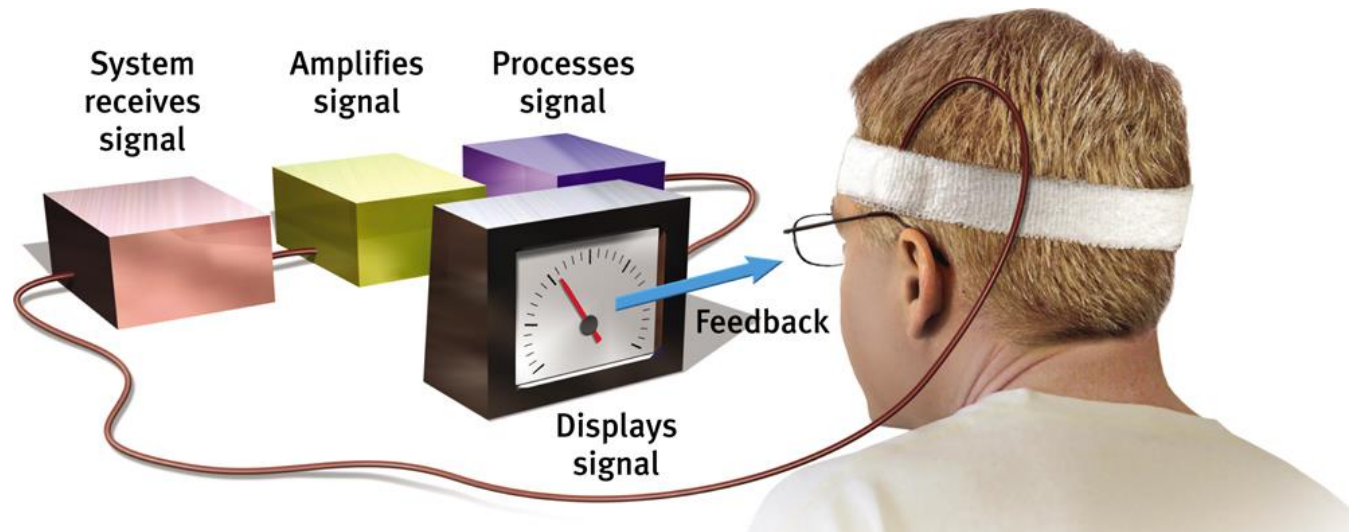
Depression
score



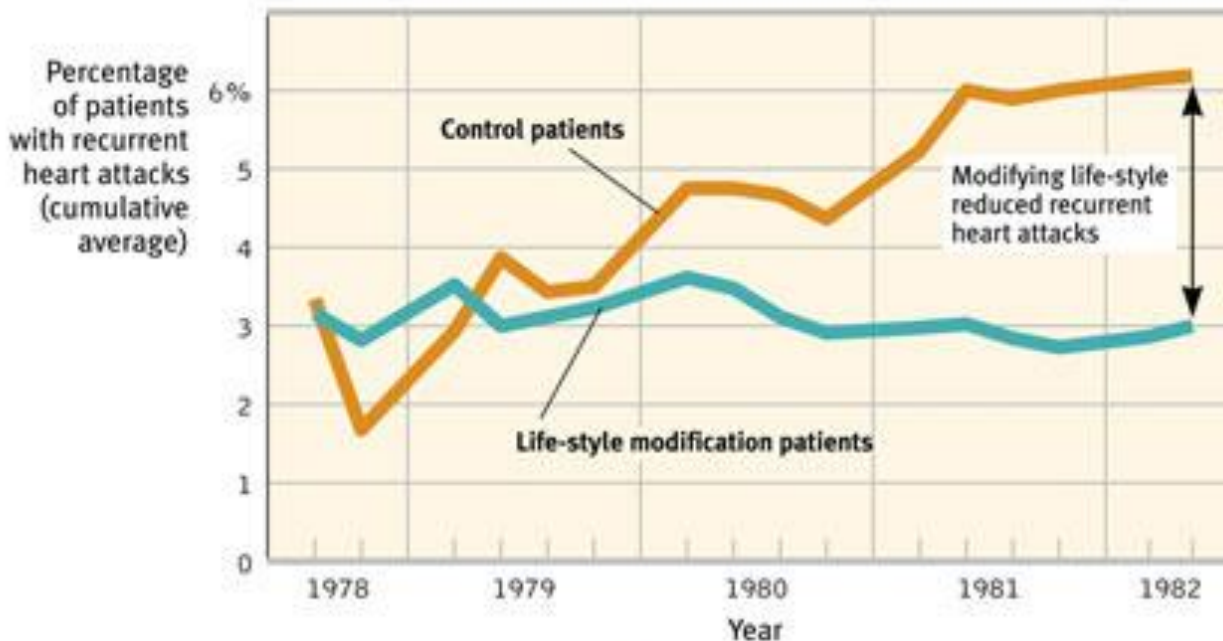
Biofeedback, Relaxation, & Meditation

Biofeedback systems use electronic devices to inform people about their **physiological responses** & gives them the chance to bring their response to a healthier range. **Not found to be particularly effective.**

Relaxation & meditation have proven effects in reducing tension & anxiety. Walking, talking, laughing, smiling, spirituality can reduce stress.
RELAXATION RESPONSE



Life-Style Modification

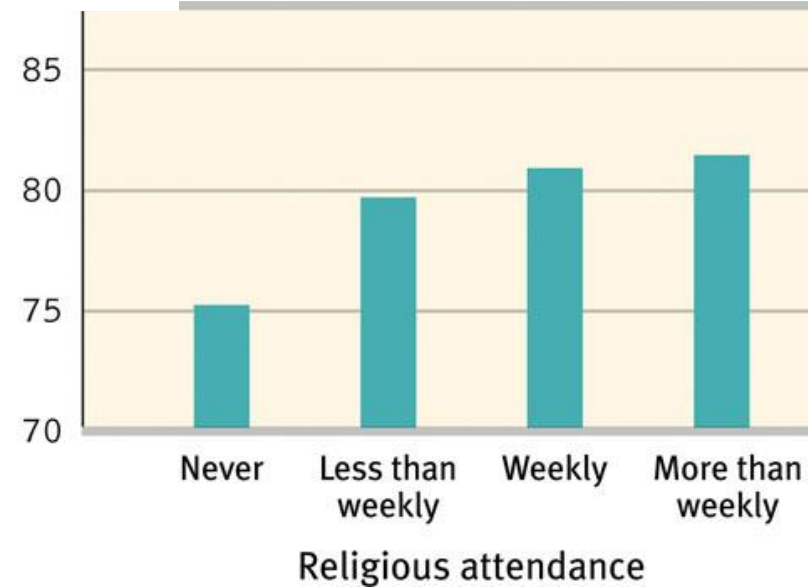


Modifying a **Type-A** lifestyle may reduce a second heart attack.

Spirituality & Faith Communities

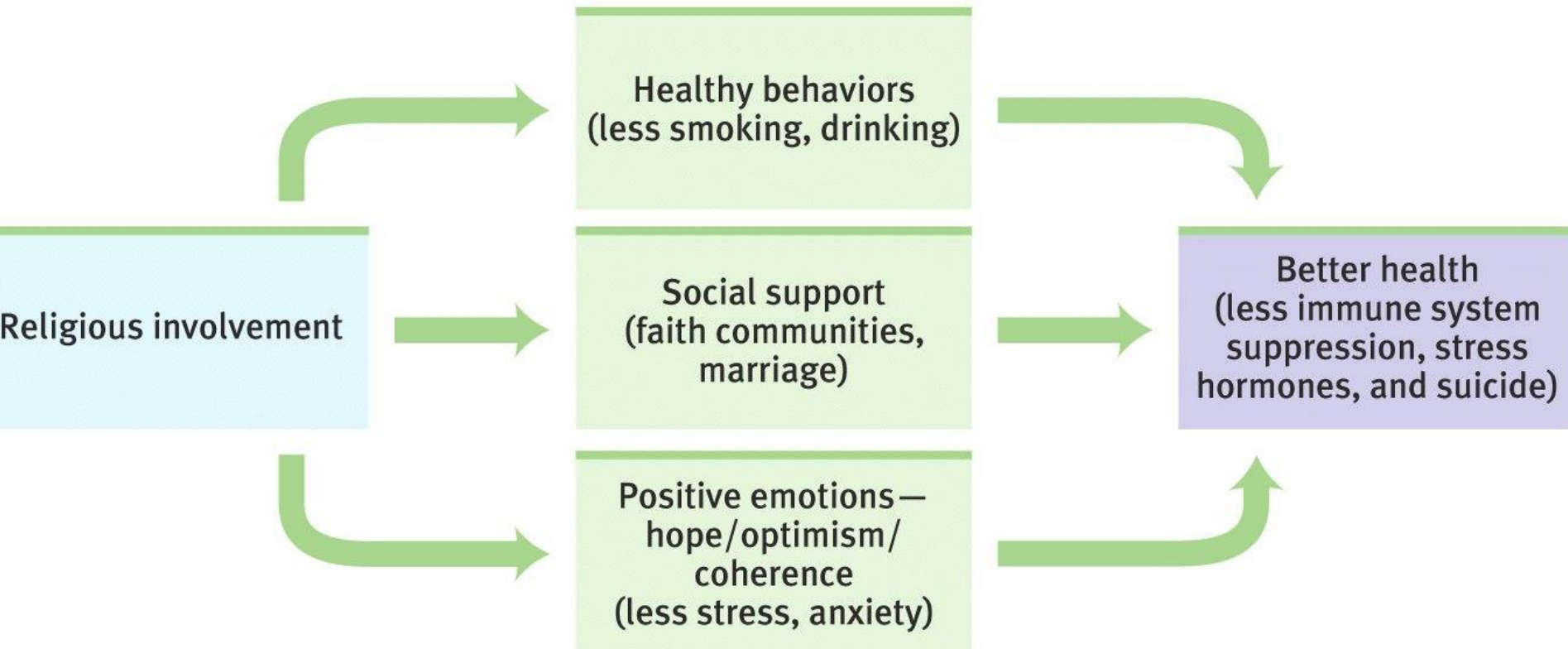
Regular religious attendance has been a reliable predictor of a longer life span with a reduced risk of dying.

Life expectancy, in years



Intervening Factors

Investigators suggest there are three factors that connect religious involvement & better health.



Modifying Illness-Related Behaviors

- Smoking
 - Social
 - Cultural
 - Biological
- Weight control & Obesity
 - Healthy diet
 - Exercise
 - Physiology
 - Metabolism

