

MODULE 37 – Motivational Concepts

<p>Instincts and Evolutionary Psychology</p>	<ul style="list-style-type: none"> - Motivations come from the interplay between nature and nurture. There are four perspectives for viewing motivated behaviors: <ul style="list-style-type: none"> - Instinct theory/evolutionary: focuses on genetically predisposed behaviors - Drive-reduction theory: how inner pushes and external pulls interact - Arousal theory: focuses on finding the right level of stimulation - Hierarchy of needs: some needs take priority over others - An instinct is a complex, unlearned behavior that has a fixed pattern throughout a species
<p>Drives and Incentives</p>	<ul style="list-style-type: none"> - Drive-reduction theory is the idea that a physiological need creates an aroused state that drives the organism to reduce the need <ul style="list-style-type: none"> - when a need increases, so does a drive – an aroused, motivated state - The aim of drive reduction is homeostasis, the maintenance of a steady internal state - We are pushed by the need to reduce drives, and pulled by incentives, positive or negatives stimuli that lure or repel us <ul style="list-style-type: none"> - this is one way our individual learning histories influence our motives
<p>Optimum Arousal</p>	<ul style="list-style-type: none"> - <i>Optimal arousal theory</i> holds that some motivated behaviors actually <i>increase</i> arousal <ul style="list-style-type: none"> - e.g, well-fed animals leave their shelter to explore and gain information in the absence of any need-based drive - Those who enjoy high arousal are most likely to seek out intense music, novel foods and risky behaviors. They are “sensation-seekers” - Motivation aims not to eliminate arousal, but to seek optimum levels of arousal - Lacking stimulation, we feel bored and look for a way to increase arousal to some optimum level <ul style="list-style-type: none"> - with too much stimulation comes stress, and we then look for a way to decrease arousal - Yerkes and Dodson studied the relationship of arousal to performance, identifying what we now call the Yerkes-Dodson law, which suggests that moderate arousal would lead to optimal performance <ul style="list-style-type: none"> - optimal arousal depends on the task, and more difficult tasks require lower arousal for best performance <div data-bbox="479 1669 820 1890"> <p>The graph illustrates the Yerkes-Dodson law, plotting Performance level (Y-axis, from Low to High) against Arousal (X-axis, from Low to High). Two inverted U-shaped curves are shown: a blue curve for 'Difficult tasks' and a red curve for 'Easy tasks'. The blue curve peaks at a lower arousal level than the red curve, indicating that difficult tasks require moderate arousal for optimal performance, while easy tasks can tolerate higher arousal levels before performance declines.</p> </div>

A Hierarchy of Motives

- Some needs take priority over others
- Abraham Maslow described these priorities as a **hierarchy of needs**
 - at the base are our physiological needs (food, water, etc)
 - once these needs are met, we're prompted to meet needs for safety, then needs to give and receive love and enjoy self-esteem
 - beyond this lies the need to actualize one's full potential
- Maslow proposed that some people reach a level of self-transcendence where they strive for meaning, purpose and communion that is beyond the self, that is *transpersonal*
- His hierarchy is somewhat arbitrary, the order of such needs is not universally fixed

Table 37.1

Motivational Theory	Strength	Weakness
<i>Instinct Theory and Evolutionary Psychology</i>	Evolutionary psychology helps explain behavioral similarities due to adaptations from our ancestral past.	Instinct theory explains animal behavior better than human behavior; humans have few true instincts.
<i>Drive-Reduction Theory</i>	Explains our motivation to reduce arousal by meeting basic needs, such as hunger or thirst.	Does not explain why some motivated behaviors <i>increase</i> arousal.
<i>Optimal Arousal Theory</i>	Explains that motivated behaviors may decrease or increase arousal.	Does not explain our motivation to address our more complex social needs.
<i>Maslow's Hierarchy of Needs</i>	Incorporates the idea that we have various <i>levels</i> of needs, including lower-level physiological and safety needs, and higher-level social, self-esteem, actualization, and meaning needs.	The order of needs may change in some circumstances. Evolutionary psychologists note the absence in the hierarchy of the universal human motives to find a mate and reproduce.

MODULE 38 – Hunger Motivation

<p>The Physiology of Hunger</p>	<ul style="list-style-type: none"> - Ancel Keys conducted a study of semistarvation which demonstrated how activated motives can hijack our consciousness: when we're hungry, thirsty, fatigued, etc, little things seem to matter - We have stomach contractions whenever we feel hungry, but hunger can exist without stomach pangs (when stomachs are removed, we still feel it) - The blood sugar glucose is a major source of energy in your body – if your blood glucose level drops, your stomach/intestines/liver will signal your brain to motivate eating, and your brain will then trigger hunger - The brain's <i>arcuate nucleus</i> secretes appetite-stimulating hormones and appetite-suppressing hormones (when destroyed, starving animals won't eat) - The hypothalamus monitors levels of appetite hormones, like <i>ghrelin</i>, a hunger-arousing hormone secreted by an empty stomach and <i>insulin</i>, <i>leptin</i>, <i>orexin</i> and <i>PYY</i> <div data-bbox="703 1476 1166 1766"> <p>The appetite hormones</p> <ul style="list-style-type: none"> • <i>Insulin</i>: Hormone secreted by pancreas; controls blood glucose. • <i>Ghrelin</i>: Hormone secreted by empty stomach; sends "I'm hungry" signals to the brain. • <i>Orexin</i>: Hunger-triggering hormone secreted by hypothalamus. • <i>Leptin</i>: Protein hormone secreted by fat cells; when abundant, causes brain to increase metabolism and decrease hunger. • <i>PYY</i>: Digestive tract hormone; sends "I'm not hungry" signals to the brain. </div> <ul style="list-style-type: none"> - The brain has a "weight thermostat" which causes us to hover around a stable weight, or set point, influenced in part by heredity - Humans vary in our basal metabolic rate, how much energy we use to
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	<p>maintain basic body functions when our body is at rest</p> <ul style="list-style-type: none"> - when food intake decreases, our basal metabolic rate drops - Some researchers suggest that a <i>fixed</i> set point is too rigid – slow, sustained changes in body weight can alter a person's set point
The Psychology of Hunger	<ul style="list-style-type: none"> - Carbohydrates boost levels of the neurotransmitter serotonin, which has calming effects - Preferences for sweet/salty tastes are genetic and universal, but conditioning can intensify or alter those preferences - Culture teaches us that some foods are acceptable but others are not - Environment can influence the human genetics that affect diet and taste (in places where milk is produced, survival patterns favored people who can tolerate lactose) <ul style="list-style-type: none"> - pregnant women's food dislikes, and therefore nausea, peak around week 10 when developing embryos are most vulnerable to toxins - Our <i>neophobia</i> (dislike of new things) was adaptive for our ancestors by protecting them from potentially toxic substances - Situations also control our eating to a certain extent <ul style="list-style-type: none"> - we eat more when with others - we eat more when our environment offers larger portions (america vs france) - we eat more when there's a variety of food
Obesity and Weight Control	<ul style="list-style-type: none"> - Fat is an ideal form of stored energy – a high-calorie fuel reserve to carry the body through periods when food is scarce - In the US, obesity rates have more than doubled in the last 40 years - Obesity increases the risk of diabetes, high blood pressure, heart disease, gallstones, arthritis and some cancers <ul style="list-style-type: none"> - in women, it also increases risk of late-life cognitive decline - When an overweight person's body drops below its previous set point, their hunger increases and metabolism decreases - Our weights resemble those of our biological parents, and identical twins have closely similar weights - Those who suffer from sleep loss are more vulnerable to obesity b/c sleep deprivation causes levels of leptin and ghrelin to rise - If an obese friend is a close friend, our own odds of becoming obese are almost tripled - Genes determine why one person is heavier than another. Environment determines why people today are heavier than their counterparts 50 years ago

MODULE 39 – Sexual Motivation

The Physiology of Sex	<ul style="list-style-type: none"> - The sexual response cycle identifies four stages: <ul style="list-style-type: none"> - <i>excitement phase</i>: genital areas become engorged with blood - <i>plateau phase</i>: breathing, pulse and blood pressure rates increase - <i>orgasm</i>: muscle contractions and further increases in breathing, pulse and blood pressure rates - <i>resolution phase</i>: body returns to unaroused state (more quickly if an orgasm has occurred) <ul style="list-style-type: none"> - male enters refractory period which can last from a few minutes to a day or more, during which he is incapable of
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	<ul style="list-style-type: none"> - another orgasm - females have a shorter refractory period - The feeling of orgasm is the same between the sexes - Sexual dysfunctions are problems that impair sexual arousal or functioning <ul style="list-style-type: none"> - they can often be helped through therapy - problems with arousal or sexual functioning - people with <i>paraphilias</i>, like exhibitionism, fetishism and pedophilia, experience sexual arousal in unusual ways - Sex hormones direct physical development of sex characteristics, and activate sexual behaviors <ul style="list-style-type: none"> - in most mammals, nature synchronizes sex with fertility - When estrogens peak during ovulation, females become more aroused - The male sex hormone testosterone increases their sexual interest - In humans, hormones more loosely influence sexual behavior - Women's natural testosterone level effects their sexuality (it lowers when testosterone drops) - In men, fluctuations in testosterone levels have little effect on sexual drive, and they often occur as a <i>response</i> to sexual stimulation - Interest in dating and sexual stimulation usually increases with the pubertal surge in sex hormones - Compare human sex hormones to gas: without gas, cars won't run, With gas, more gas won't make them run better
The Psychology of Sex	<ul style="list-style-type: none"> - Sex is not a need, but there are similarities between hunger and sexual motivation - Men become aroused when they see, hear or read erotic material – women report as much arousal to the same stimuli - With repeated exposure, response to an erotic stimulus often lessens - Sexually explicit material can have adverse effects <ul style="list-style-type: none"> - (e.g. descriptions of women being sexually coerced can increase viewers' acceptance of the false idea that women enjoy rape) - it can lead women and men to devalue their own partners and relationships - Stimuli inside our heads (our imagination) can influence sexual arousal and desire - Genital arousal accompanies all types of dreams, even though most dreams have no sexual content - "Wet dreams" are more likely in men when orgasm hasn't occurred recently - Men fantasize about sex more often, and less romantically (about 95% of both men and women say they have sexual fantasies)

MODULE 40 – Social Motivation: Affiliation Needs

The Benefits of Belonging	<ul style="list-style-type: none"> - Social bonds boosted our early ancestors' chances of survival, as did cooperation - The need to belong runs deeper than the need to be rich - The need to belong colors our thoughts and emotions - When our need for relatedness is satisfied in balance with our <i>autonomy</i> (sense of personal control) and <i>competence</i>, we experience a deep sense of well-being - Much of our social behavior aims to increase our feelings of belonging – we conform to group standards
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	<ul style="list-style-type: none"> - Feelings of love activate brain reward and safety systems - Pictures of our loved ones activate a brain region associated with safety – the prefrontal cortex – that dampens feelings of physical pains - Children in foster care who feel insecurely attached to others during childhood will display this behavior in two forms later in life: <ul style="list-style-type: none"> - <i>Insecure anxious attachment</i> – constantly craving acceptance but remaining vigilant to signs of possible rejection - <i>Insecure avoidant attachment</i> – feeling so much discomfort over getting close to others that they employ avoidant strategies to maintain their distance - Life's worst moments happen when close relationships end
The Pain of Being Shut Out	<ul style="list-style-type: none"> - <i>Ostracism</i>, or social exclusion, is used to punish, and therefore control, social behavior - Feelings of loneliness can spread from person to person like a disease - Being shunned threatens one's need to belong - People often respond to ostracism with depressed moods, initial efforts to restore their acceptance, and then withdrawal - Ostracism elicits increased activity in brain areas like the <i>anterior cingulate cortex</i>, which also activate in response to physical pain - The pain-reliever acetaminophen lessens <i>social</i> as well as physical pain - Pain focuses our attention and motivates corrective action - Rejection interferes with our empathy for others and makes us more likely to act in disparaging or aggressive ways against those who have excluded us
Connecting and Social Networking	<ul style="list-style-type: none"> - Cell phones have been history's most rapidly adopted technology - Texting and emailing have been displacing phone talking - The Internet serves as a social amplifier by connecting like-minded people - Social networks connect us, but they can also become gigantic time and attention sucking diversions - Texting and emailing are rewarding, but eye-to-eye conversation with family and friends is even more so - Social networks tend to reveal people's personalities rather than hide them, so your online profiles may indeed reflect the real you - <i>Narcissism</i> is self-esteem gone awry <ul style="list-style-type: none"> - narcissistic people are self-important, self-focused and self-promoting - Those who score high on narcissism are especially active on social networking sites - What unifies all motives is their common effect: the energizing and directing of behavior

MODULE 41 – Theories and Physiology of Emotion

Cognition and Emotion	<ul style="list-style-type: none"> - Emotions are a mix of bodily arousal, expressive behaviors, and conscious experience (thoughts and feelings) - To figure out how these pieces fit together, we need to answer two big questions: <ul style="list-style-type: none"> - Does bodily arousal come before, after or at the same time as your emotional feelings? - How do thinking and feeling interact? Does cognition always come before emotion?
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	<ul style="list-style-type: none"> - The James-Lange theory - our experience of emotion is our awareness of our physiological responses to emotion-arousing stimuli <ul style="list-style-type: none"> - flaws: the body's responses are too similar, and they change too slowly, to cause the different emotions - The Cannon-Bard theory - an emotion-arousing stimulus simultaneously triggers physiological responses <i>and</i> the subjective experience of emotion <ul style="list-style-type: none"> - flaws: people who are paralyzed often experience less intense emotional reactions, but increases in reactions which involve non-paralyzed parts of their bodies - The two-factor theory - emotions have two ingredients: physical arousal and cognitive appraisal <ul style="list-style-type: none"> - Spillover effect: arousal spills over from one event to the next - Schacter/singer - An aroused state can be experience as one emotion or another, depending on how we interpret and label it <ul style="list-style-type: none"> - arousal fuels emotion, cognition channels it - We have a sensitive automatic radar for emotionally significant information, such that even a subliminally flashed stimulus can prime us to feel better/worse about a follow-up stimulus - Complex emotions like hatred and love travel a "high road" <ul style="list-style-type: none"> - a stimulus on this path travels through the thalamus to the brain's cortex, where it would be analyzed and labeled before a command is sent out via the amygdala - Simpler emotions (likes, dislikes, fears) travel a "low road" <ul style="list-style-type: none"> - a stimulus on this path bypasses the cortex, enabling our emotional responses before our intellect intervenes - Amygdala sends more neural projections up to the cortex than it receives back, making it easier for our feelings to hijack our thinking than for our thinking to rule our feelings - Zajonc/Ledoux - some embodied responses happen instantly, without conscious appraisal - Lazarus - cognitive appraisal, sometimes without our awareness, defines emotion - Richard Lazarus - our brain processes vast amounts of info without our conscious awareness, and some emotional responses do not require conscious thinking <ul style="list-style-type: none"> - emotions arise when we appraise an event as harmless or dangerous, whether we truly know it is or not - highly emotional people are intense partly because of their interpretations: they may personalize events as being directed at them, and generalize their experiences by blowing an incident out of proportion
Embodied Emotion	<ul style="list-style-type: none"> - In a crisis, the sympathetic division of your autonomic nervous system mobilizes your body for actions <ul style="list-style-type: none"> - adrenal glands release epinephrine and norepinephrine - liver pours extra sugar into bloodstream - respiration increases to supply needed oxygen - heart rate and blood pressure increase - digestion slows, blood from internal organs is diverted to muscles - pupils dilate, and you perspire - blood clots more quickly - It pays to be aroused, but too much arousal can be disruptive

	<ul style="list-style-type: none"> - When crisis passes, the ANS's <i>parasympathetic division</i> gradually calms your body as stress hormones slowly leave your bloodstream - Discerning physiological differences among fear, anger and sexual arousal is very difficult (diff. emotions don't have sharply distinct biological signatures) <ul style="list-style-type: none"> - they also engage similar brain regions - the brain's <i>insula</i> is activated when we experience lust, pride, and disgust - however, these emotions appear different to others - Positive moods trigger more left frontal lobe activity, while negative ones show more right frontal lobe activity
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MODULE 42 – Expressed Emotion

Detecting Emotion in Others	<ul style="list-style-type: none"> - Most of us read nonverbal cues well, and we are especially good at detecting nonverbal threats - Experience can sensitize us to particular emotions (abused children are quicker to spot the signals of anger) - Facial muscles reveal signs of emotions you may be trying to conceal <ul style="list-style-type: none"> - activated muscles under eyes + raised cheeks suggest a natural smile called a <i>Duchenne smile</i> which is briefer and fades less abruptly - We find it difficult to detect deceiving expressions and discern truth from lies - Some of us are more sensitive than others to physical cues - Gestures, facial expressions and voice tones convey important information
Gender, Emotion and Nonverbal Behavior	<ul style="list-style-type: none"> - Women generally surpass men at reading people's emotional cues when given "thin slices" of behavior <ul style="list-style-type: none"> - helps explain their greater emotional literacy and greater emotional responsiveness - The perception of women's emotionality is also fed by people's attributing women's emotionality to their disposition and men's to their circumstances (she's emotional vs. he's having a bad day) <ul style="list-style-type: none"> - exception: anger is seen as masculine - Women are more likely to call themselves empathic <ul style="list-style-type: none"> - physiological measures of empathy confirm a gender gap, but a smaller one than indicated in survey self-reports - females are also more likely to express empathy - women tend to experience emotional events more deeply, with more brain activation in areas sensitive to emotion
Culture and Emotional Expression	<ul style="list-style-type: none"> - The meaning of gestures varies with culture, however facial expressions are much more universal <ul style="list-style-type: none"> - however, people show slightly enhanced accuracy when identifying facial expressions from their own culture - people blind from birth spontaneously exhibit common facial expressions - Smiles aren't just emotional, they're social - Cultures differ in how <i>much</i> emotion they express <ul style="list-style-type: none"> - those that encourage individuality display mostly visible emotions - those that encourage people to adjust to others tend to have less visible displays of personal emotions

	<ul style="list-style-type: none"> - Cultural differences also exist <i>within</i> nations
The Effects of Facial Expressions	<ul style="list-style-type: none"> - Expressions not only communicate emotion, they also amplify and regulate it - The facial feedback effect is the tendency of facial muscle states to trigger corresponding feelings such as fear, anger or happiness - Your face is more than a billboard that displays your feelings, it also feeds your feelings - <i>Behavior feedback</i> - going through the motions awakens the emotions - People perceive ambiguous behaviors differently depending on which finger they move up and down while reading a story - thumb up = positive, middle finger = more hostile - Acting as another helps us feel what another feels - Health psychology is a subfield of psychology that provides psychology's contribution to behavioral medicine

MODULE 43 - Stress and Health

Stress: Some Basic Concepts	<ul style="list-style-type: none"> - Stress is the process of appraising and responding to a threatening or challenging event <ul style="list-style-type: none"> - arises less from events themselves and more from how we appraise them - When short-lived or perceived as challenges, stressors can have positive effects <ul style="list-style-type: none"> - they can mobilize the immune system to fend off infections and heal wounds - they can arouse and motivate us to conquer problems - some stress early in life is conducive to later emotional resilience - Extreme or prolonged stress can harm us - Catastrophes are unpredictable large-scale events, like wars, earthquakes, floods, wildfires and famines <ul style="list-style-type: none"> - nearly everyone appraises them as threatening - the trauma of uprooting and family separation can combine with the challenges of adjusting to a new culture, causing those who move to a new place to experience culture shock and deteriorating well-being - Life transitions are often keenly felt <ul style="list-style-type: none"> - people recently widowed, fired or divorced are more vulnerable to disease - experience a cluster of crises puts one even more at risk - Stress can also come from <i>daily hassles</i> - rush hour traffic, annoying siblings, long lines, too many things to do, etc <ul style="list-style-type: none"> - they can add up and take a toll on health and well-being - prolonged stress takes a toll on our cardiovascular system - The sympathetic nervous system increases heart rate and respiration, diverts blood from digestion to the skeletal muscles, dulls feelings of pain, and releases sugar and fat from the body's stores <ul style="list-style-type: none"> - this all prepares the body for <i>fight or flight</i> - On order from the cerebral cortex (via the hypothalamus and pituitary gland) the outer part of the adrenal glands secretes <i>glucocorticoid</i> stress hormones like <i>cortisol</i> - General adaptation syndrome (GAS) is Selye's concept of the body's
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	<p>adaptive response to stress in three phases: alarm, resistance and exhaustion</p> <ul style="list-style-type: none"> - <i>alarm reaction</i>: your sympathetic nervous system is suddenly activated - <i>resistance</i>: temperature, BP and respiration remain high. Adrenal glands pump hormones into your bloodstream, you're fully engaged - <i>exhaustion</i>: as time passes, your body's reserves begin to run out and you become more vulnerable to illness, collapse and death <ul style="list-style-type: none"> - Increased stress can cause telomere shortening - There are multiple ways to deal with stress: withdraw, become paralyzed with fear, or tend-and-befriend: providing support to others and bonding with/seeking support from others (more common in women) - During stress, women's brains become more active in areas important for face processing and empathy. Men's become less active
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MODULE 44 – Stress and Illness

How Does Stress Make us More Vulnerable to Disease?	<ul style="list-style-type: none"> - Psycho-physiological illnesses are mind-body illnesses like hypertension and some headaches - The field of psychoneuroimmunology studies mind-body interactions <ul style="list-style-type: none"> - feelings influence your brain which affects your immune system - Lymphocytes are white blood cells <ul style="list-style-type: none"> - B lymphocytes mature in the bone marrow and release antibodies that fight bacterial infections - T lymphocytes form in the thymus and other lymphatic tissues and attack cancer cells, viruses and foreign substances - <i>Macrophages</i> identify, pursue and ingest harmful invaders and worn-out cells - <i>Natural killer cells</i> pursue diseased cells - If the immune system responds too strongly, it may attack the body's own tissues - If the immune system underreacts, it may allow dormant viruses to erupt or cancer cells to multiply - Women are immunologically stronger than men, but this makes them more susceptible to self-attacking diseases like lupus and MS - Surgical wounds heal more slowly in stressed people - Stressed people are more vulnerable to colds - The stress effect on immunity makes physiological sense: it takes energy to track down invaders, produce swelling and maintain fevers. Stress is a competing energy need - Stress doesn't make us sick, but it alters our immune functioning, which leaves us less able to resist infection
Stress and Susceptibility to Disease=	<ul style="list-style-type: none"> - AIDS is an immune disorder caused by HIV - Diseases like AIDS, which are spread by human contact, can be lethal to more people, since those who acquire it often spread it before they know they are infected - AIDS causes people to have difficulty fighting off other diseases such as pneumonia - Stress can't give people AIDS, but it can speed the transition from HIV to AIDS, and predict a faster decline in those with AIDS <ul style="list-style-type: none"> - efforts to reduce stress can help control the disease, but the

	<p>benefits are small compared with available drug treatments</p> <ul style="list-style-type: none"> - Stress doesn't create cancer cells, but in healthy immune systems, lymphocytes, macrophages and NK cells search out and destroy cancer cells and cancer-damaged cells - The stress-cancer link isn't as strong in humans as it is in other animals - Stress is much more closely linked to coronary heart disease - blood vessels that nourish the heart muscle gradually close <ul style="list-style-type: none"> - risk is increased by hypertension and a family history of the disease, as it is by behavioral, psychological and physiological factors - Mellow and laid-back people experience far fewer heart attacks - Negative emotions, especially anger, increase risk of heart attacks - Stress can trigger altered heart rhythms, which can cause sudden death in people with weakened hearts - Pessimism can be similarly toxic - pessimists can be more than twice as likely as optimists to develop heart disease - Depression can also be lethal and substantially increase risk of death by unnatural causes and cardiovascular disease <ul style="list-style-type: none"> - depressed people tend to smoke more and exercise less, but stress is also disheartening - Heart disease and depression may both result when chronic stress triggers persistent inflammation <ul style="list-style-type: none"> - persistent inflammation can produce problems like asthma or clogged arteries, and worsen depression - Mind and body interact, everything psychological is simultaneously physiological
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