

Unit 8A: Motivation

I. Introduction

- A. People can receive **motivation** in many ways. Motivation is the need or desire that propels a behavior toward a goal.
- B. For example, after being trapped while rock-climbing, Aron Ralston was motivated to cut off his arm in order to live.
- C. There are four main ways psychologists approach motivation...
 1. *Instinct theory* (today known as the *evolutionary perspective*) – focuses on how genetics dictates behavior.
 2. *Drive-reduction theory* – focuses on how our inner and external motivations interact.
 3. *Arousal theory* – focuses on finding the right level of stimulation.
 4. *Hierarchy of needs* – Abraham Maslow's idea that we satisfy the most basic needs first then move up.

II. A hierarchy of motives

- A. The **instinct/evolutionary theory** gained popularity about a hundred years ago, when Charles Darwin's ideas were fresh. It tried to explain human behavior in terms of instincts. There was, supposedly, an instinct for everything.
- B. An **instinct** is a complex behavior within a species that is unlearned. For example, a salmon instinctively returns to its birthplace to spawn; a bird instinctively makes a nest in its own specie's style.
- C. People also have instincts (though they may be less obvious than a bird building a nest).

III. Drives and incentives

- A. After the instinct and evolutionary theory fell out of fashion, the **drive-reduction theory** replaced it. This theory says that physical drives make an aroused state and thus moves us to satisfy that drive.
 1. For instance, the physical drive/need for water creates thirst and the desire to satisfy that thirst by drinking water.
- B. The theory also says that, as well as being pulled by internal factors, we're pushed by external factors.
 1. For instance, we may not be physically hungry, but if we smell some hot cookies and see them, we want to eat them!
- C. This is nature-nurture in action—nature gives us physical hunger and urges us to eat, nurture sells us yummy-looking desserts.

IV. Optimum arousal

- A. The **arousal theory** says we do more than react only to our bodies and the environment. We are curious and have an inner drive to "go further."
 1. For example, the young man who cut off his arm to live. Or the first man to climb Mt. Everest simply, "Because it is there."
- B. From toddlers to adults, after satisfying basic needs, we crave more information and more learning.

V. A hierarchy of motives

- A. This theory says we satisfy basic needs first, then move on to achieve great things.
 1. For instance, air is a very basic need. We rarely think of it, but if your air supply was somehow cut off, you'd be very motivated to get it back. The same for water and for food.
- B. **Abraham Maslow** identified a **hierarchy of needs**. It's usually shown as a pyramid. He says we start at the bottom of the pyramid, satisfy those basic needs, then move up. Maslow's needs are (just FYI, this list is upside down as compared to the pyramid)...
 1. *Physiological needs* – hunger and thirst
 2. *Safety needs* – to feel the world is organized and predictable

3. *Belongingness and love needs* – the need to love and be loved, to be accepted and avoid loneliness
4. *Esteem needs* – we need self-esteem, achievement, competence, independence, recognition, respect from others
5. *Self-actualization needs* – to live up to our full potential
6. *Self-transcendence needs* – to find meaning beyond ourselves

VI. The physiology of hunger

- A. The need for food and the hunger it creates forces us to drastic action. For example, in Nazi concentration camps, family members fought over food. When partially-starved, we react a couple of ways...
 1. Our bodies adjust by slowing down and conserving energy.
 2. Our minds adjust by making food and eating the #1 thing on our mind all the time. At this time, little else matters.
- B. A. L. Washburn studied how we feel hunger. He swallowed a balloon, inflated it, and recorded whenever he felt hunger. His conclusion was that stomach contractions cause the feeling of hunger.
 1. Studies on rats showed they still had hunger even without stomachs.
- C. Body chemistry and the brain play a part in hunger as well.
- D. People and animals also have a built-in balance system – we innately try to maintain the balance between energy and weight.
- E. Our blood sugar glucose level is monitored and managed by the brain and insulin. This affects our storage of fat and feelings of hunger.
- F. The hypothalamus is key to managing feelings of hunger.
 1. Animals have had their hypothalamuses electrically stimulated – they get hungry.
 2. The hypothalamus gives out orexin, a hormone that triggers hunger.
 3. The lower mid-hypothalamus does the opposite. Stimulating it will decrease hunger. Damage to this area can lead to excessive eating and weight-gain.
- G. There are many hormones at work dealing with hunger...
 1. Insulin – regulates blood sugar level.
 2. Leptin – causes brain to alter metabolism.
 3. Orexin – hunger hormone from hypothalamus.
 4. Ghrelin – “I’m empty” hormone from stomach.
 5. Obestatin – “I’m full” hormone from stomach.
 6. PYY – “I’m not hungry” hormone from intestines.
- H. Animals have a **set point** which is a stable weight. Set point is influenced by heredity and body type.
- I. Our weight is influenced by (1) how much we eat, (2) how active we are, and (3) **basal metabolic rate**. This is the rate that we burn energy when at rest.
 1. When semi-starved, people will see their basal metabolic rate drop by about a quarter. And thus, their weight drops then stabilizes at about 75% of their normal weight.
- J. The idea of a biologically pre-established set point has been questioned recently. Now the movement is toward a “settling point” where the body settles. This is because environmental factors, like all-you-can-eat buffets tend to see us over-eat.

VII. The psychology of hunger

- A. There’s more to eating than just hunger.
 1. Two researchers studied people who could not remember beyond 20 minutes. Since they couldn’t remember eating a full meal, say 30 minutes ago, they ate another, and then another.
 2. We crave some foods depending on our mood or what we’re doing.
 3. We crave some foods naturally, like sweets and salty foods.
- B. Different cultures yield different cravings too. People across the world eat some crazy, and gross, things when viewed from a different culture.

1. Hotter cultures use more spices because food spoils easier there but spices help preserve it.
 2. People naturally are slow to try unusual foods, perhaps as a biological defense mechanism.
- C. The situation that we're in also matters.
1. People eat more when together with others.
 2. Portion-size matters in a big way. People eat more when given bigger portions. And they eat more when given big plates and utensils.
- D. There are three main eating disorders...
1. **Anorexia nervosa** – This usually starts as a weight-loss diet but turns into a monster. Even after losing about 15% below normal weight, a person with anorexia is often very thin yet still sees herself as fat, even though she may be extremely skinny.
 - a. 3 out of 4 people with anorexia are female.
 - b. ½ of anorexics use a "binge-purge" technique of eating-and-vomiting or the use of laxatives.
 2. **Bulimia nervosa** – This also often starts as a diet. Bulimia typically sees bingeing and purging where the person eats a lot, then pukes it up.
 - a. Bulimia is usually seen in women in their late teens and early 20s.
 - b. Depression is common, especially around binge time periods.
 - c. A bulimic is often around her normal weight so identifying the disorder is difficult.
 3. A person who binges, but then does NOT purge, fast, or excessively exercise may have a **binge-eating disorder**.
 4. It seems that the family environment plays a big role in eating disorders.
 - a. Summed up, kids in well-off families are in the high-risk category because they don't want to let themselves or others down.
 - b. Basically, it's the Barbie complex – girls imagine trying to be Barbie and take drastic steps to try to attain Barbie.
 5. Other factors play a role in body image...
 - a. Culture – Some cultures, like in Africa, see bigger women as healthier women. Western cultures tend to prefer skinny women.
 - b. Gender – Women are much more critical of their bodies than are men. Western society dictates that women be attractive, men not so much.

VIII. Obesity and weight control

- A. Historically, adding fat has been a good thing. Whenever a person could eat sugary or fatty foods they did it. Fat was stored up for the lean years and a hefty person was seen as a healthy person.
 1. Obesity is growing very fast. "Wealthy" countries lead the fat-race: Australia, Canada, France, and the U.S. The U.S. has the highest rate of gaining weight.
- B. Obesity brings several health risks including the risk of diabetes, high blood pressure, heart disease, gallstones, arthritis, types of cancer, and Alzheimer's for women.
 1. Summed up, obesity lowers a person's life expectancy.
- C. Obesity also affects how others see you and how you see yourself.
 1. Obese people are seen as lazier, meaner and they make less money.
- D. The physiology of obesity helps explain obesity.
 1. Fat cells are like balloons – they blow up to store energy/fat. But, they can also divide in two or tell nearby fat cells to divide and blow up. Once they divide, they can blow up, then shrink, but they never go away.
 2. So, once a person has become obese, then lost weight, the fat cells are still there, just smaller. This makes it very easy to gain the weight again.

3. Once fat, it's tougher to burn it off because fat has a low metabolic rate. If you eat a lot then cut off the food, the body thinks it's being starved and slows metabolism.
- E. Genetics plays a role too.
1. People who sit still generally store more fat than those who fidget. "Fidgetiness" might be inherited.
 2. When trying to figure how much of a role genetics plays in anything, you go to twin and adoptions studies. Evidence of genetics role in obesity...
 - a. Adopted siblings weights correlate with their biological parents, not adoptive parents.
 - b. Identical twins raised separately have weights that correlate at +0.74 (that's pretty high).
 - c. If a parent is obese, boys are 3 times as likely to become obese, girls 6 times.
- F. What we eat and what we do also matters.
1. A lack of sleep leads to gaining weight. Leptin declines (brain doesn't get the "fat report") and ghrelin increases (more appetite).
 2. If we're friends with an obese person, our chances of getting obese increase.
 3. The whole world is getting fatter, with Western nations leading.
 - a. The types of food and increased TV watching are major culprits.
 - i. We eat fast food cooked in oils and drink lots of sugar-laced soda.
 - ii. On average, every 2 hours more of TV per day meant a 23% obesity increase and 7% diabetes increase.
 - b. Also, we do much less physical labor than in the old days. Old Order Amish folks, who do lots of work, have an obesity rate 1/7th of the national average.
- G. Losing weight can be done, but keeping off the weight is the tough part.
1. After losing weight, the fat cells are shrunk in size, but still there. And, with the body below its set point, it thinks it's being starved so (1) metabolism slows and (2) the person constantly thinks of food.
 2. A successful weight-loss strategy is to slowly, moderately, and realistically drop the weight. 10% loss in 6 months is a good time frame.
 3. Always, a successful weight loss consists of a healthy diet and exercise. There's really no secret here.

IX. The physiology of sex

- A. Sexual arousal is a mix of internal and external stimuli.
- B. The "**sexual response cycle**" was studied by William Masters and Virginia Johnson in the 1960s. It has four stages:
 1. Excitement phase
 2. Plateau phase
 3. Orgasm – brain scans show no difference between men and women.
 4. Resolution phase – brings the body back to normal. Males enter a **refractory period** which is the "re-set time" or the time when he's incapable of orgasm.
- C. Hormones initiate sexual behavior.
 1. Women secrete **estrogen**, which peaks during ovulation.
 2. Men generate **testosterone**. Men's hormones are more stable. The situation that a man is in can increase testosterone.
 - a. Removing testosterone usually means a loss of sex-drive.

X. The psychology of sex

- A. External stimuli affects sex-drive. In other words, what we see, hear, and the situation we're in can "get us in the mood."

1. Viewing sexually explicit material can have negative effects—men can think the woman likes being raped or might view his spouse less favorably.
- B. Imagined stimuli affects sex-drive because the brain is the most powerful sex organ. Sexual fantasies are common (95% of men and women report it).

XI. Adolescent sexuality

- A. Family values (or lack of values) and one's culture matters greatly in whether or not a teen has sex before marriage. They estimate that a decision to first have sex is 75% due to environmental factors.
- B. Teen pregnancy in the U.S. is high. Some reasons for this include...
 1. Less use of contraceptives due to ignorance. Many teens say they know about STI's but tests show they really don't. They also overestimate how much sex is really going on.
 2. Less talk about birth control. Being a touchy subject, contraception isn't discussed much with parents or partners.
 3. Guilty feelings about having sex. Most teen girls say they regret having had sex.
 4. Using alcohol. Alcohol is a **disinhibitor**—it makes you do things you normally would not do, like have sex.
 5. Lessons from the media saying, "It's cool." TV, movies, the internet, etc. all point to sex. An hour of TV yields 15 suggestions to sex. The people are usually unmarried, uncommitted to one another, and unprotected. Studies show sex in the media leads to sex among teens.
- C. **STI's** are sexually transmitted infections.
 1. STI's hit young people hardest. 39.5% of girls 14 to 19 years old had STI's in one study.
 2. Condoms sometimes help, sometimes don't.
 - a. Condoms don't help with skin-to-skin diseases.
 - b. Condoms do help stop the HIV virus with an 80% effective rate; but this means they still have a 20% ineffective rate.
 - c. Condoms help stop bacterial diseases.
 3. **Abstinence** (not having sex) is the only fail-safe way to prevent both pregnancy and STI's. Teens that wait to have sex usually show these traits...
 - a. Higher intelligence.
 - b. Religious activity.
 - c. A father who is present and engaged.
 - d. Volunteer somewhere.

XII. Sexual orientation

- A. Sexual orientation is the consistent sexual attraction to the opposite sex (heterosexual) or the same sex (homosexual).
- B. Despite frequency in the movies and on TV, homosexuals are few in number. About 3 or 4% of men are homosexual; about 1 or 2% of women are homosexual.

XIII. The need to belong

- A. As Aristotle pointed out, we humans are "social animals." We like to be around other people.
- B. Being social has helped us survive over the years by aiding (1) hunting, (2) foraging, (3) safety, and (4) increasing the chance we reproduce.
 1. Also, having close family or friends to help us through hard times yields happier people.
- C. Likely above everything else, real, true, close relationships are what matter to people. This "need to belong" seems to far outweigh the need to be rich.
 1. When we feel and know we belong, our self-esteem soars.
 2. Conversely, feeling rejected yields low self-esteem.
- D. People like relationships to last and we seem to have a fear of being alone.

1. After being separated from friends and family, we're rather diligent about communicating.
 2. "Homesickness" is common for a young person off to summer camp or to college.
- E. Ostracism (social exclusion) hurts.
1. This is usually in the form of the "silent treatment", turning away, or simply being ignored.
 2. A person ostracized usually feels depression, tries to get accepted, then withdraws.
 3. In the brain, this social pain behaves similarly to real pain.
 - a. Any pain gets our attention and calls for action.
 - b. Action might be constructive like seeking new friends or it can be mean-spirited or even drastic.