CHAPTER 11

Motivation and Emotion

In this chapter, you will learn about:

- how and why people are motivated
- different types of motivation
- the importance of emotion in human behavior

The great humanistic psychologist Abraham Maslow once proposed that humans have a hierarchy of needs. These needs include not only the basic biological needs that we require for survival but higher needs such as recognition, achievement, and a sense of fulfilling our potential as human beings. These needs provide us with the motives for our behavior.

Other psychologists say that our basic biological needs produce drives that make us uncomfortable. We are motivated to act in a way that will relieve that discomfort and make us feel better. Motivation is a complex concept that involves the interaction of physiological, behavioral, and psychological factors.

One of the most important factors in motivation is emotion. The way we feel plays a key role in motivation and in other areas of cognition. Emotion may even be a necessary element in reasoning.

What Is Motivation?

Why does one person skip the biggest football game of the year to study for a math test, while another accepts a lower grade in math to attend the game? The answer is **motivation**, which is the incentive to act.

The Components of Motivation

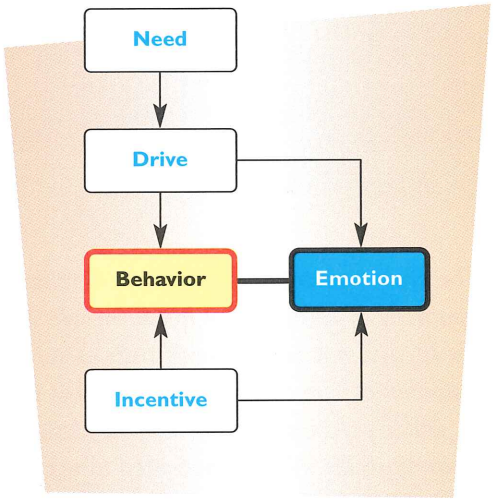
Consider these components of motivation:

* ***Motive***—a stimulus that moves a person toward a behavior designed to achieve a specific goal.
* ***Need***—a lack of something that one requires or desires.
* ***Drive***—a force that pushes a person to act.
* ***Incentive***—a force that pulls a person toward a particular behavior.
* ***Emotions***—the states of the body and mind associated with feelings.

Motivation is a concept that can't be directly observed or measured. It is a complex interaction among physiological and psychological factors. Motivation may be conscious or unconscious. "I need a good grade, so I'll study" is a conscious behavioral decision motivated by the need for a good grade. Nibbling on food while you're studying may be an unconscious behavior. Are you snacking because you're hungry? Or because you're nervous?

Needs, drives, incentives, and emotions interact to produce behavior. For example, a biological need for food creates a drive that pushes an organism toward the behavior of eating. If no biological need exists, the organism can still be pulled toward eating by the incentive of tasty-looking food. Both drives and incentives produce emotions that affect the behavior. The behaviors themselves produce different emotions, such as satisfaction.

Needs and Motivation



Primary and Secondary Needs

Primary needs are unlearned needs for basic things that affect the ongoing functioning of the body. If your body needs oxygen, food, water, or warmth, your body will respond to that need by producing a drive to fill it.

Although it doesn't involve maintenance of the body, sex is also a primary need. It is an essential need in a much wider sense because it ensures the survival of a species.

Secondary needs are psychological, not physiological. They may or may not have something to do with primary needs. Small children learn that having money allows them to buy treats. Later, this translates to the idea that money allows people to buy food or shelter, so a need arises to earn money. Depending on your culture or social environment, the need for money can vary and may even become an end in itself. Achievement and a sense of belonging are other secondary needs.

Processes That Affect Motivation

Homeostasis is a self-adjusting process that maintains a constant internal environment in an organism. The process responds to changes in both the internal and external environment of the organism.

Feedback is a process in which the output of one action becomes the input of another action. If exercise produces a rise in the body's temperature, that rise triggers cooling mechanisms in the homeostatic process. As the body cools, the temperature change causes the cooling processes to slow down or stop as the body returns to an acceptable temperature.

Homeostasis Motivates Behavior

Breathing is a homeostatic process that controls the amount of oxygen in your brain and bloodstream. When you exercise, your body needs more oxygen, so you automatically breathe more deeply.

When you get cold, you shiver and wrap your arms around yourself. The muscle action in shivering helps raise your body temperature. Keeping your arms close to your body reduces heat loss. Both of these actions take place automatically, working much like a thermostat to keep body temperature constant. They generally take place outside of your conscious awareness.

In humans, cognitive functions can work with the autonomic system. For example, when you are cold, you can build a fire or put on more clothes. If you are hungry or thirsty, you can choose what you want to eat or drink.

Homeostasis doesn't just control physiological functions such as breathing or body temperature. It also acts to keep our emotional states within acceptable limits. This process is reflected in our motivations toward pleasure and away from pain.

Theories of Motivation

Because motivation can't be directly observed, psychologists aren't in agreement about what it is and what causes it. Here are **four** theories to explain motivation.

1 The Instinct Theory

An **instinct** is an innate, unlearned behavior. When stroked on the cheek, an infant will automatically turn toward the contact,

looking for food. Mating behaviors, nest-building in birds, and a bee's "dance" to show hive members the direction of food are largely instinctive behavior. They seem to be "hard-wired" into the genes of a particular species.

At one time, psychologists believed that much of human behavior could be explained by instincts. If people bragged, they had a "self-assertion instinct." If they were humble, they had a "self-effacing" instinct. Such instincts were explained in terms of basic needs such as safety or socialization. The problem was that simply naming behaviors didn't explain them.

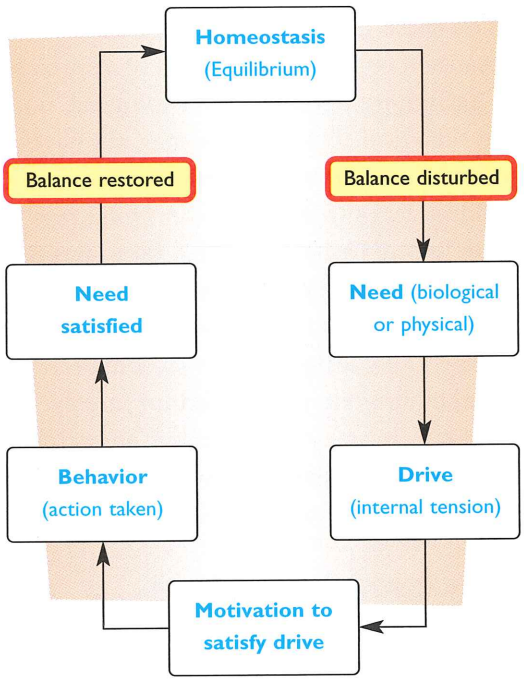
While scientists do agree that our behaviors have a genetic component, they no longer believe that instincts drive most motivation. If safety is an instinct, why are some people motivated to climb mountains or engage in "extreme" sports? Something else must be at work.

2 The Drive-Reduction Theory

In the 1930s, psychologist Clark Hull suggested that the response an organism gives to a stimulus depends both on the stimulus and on factors within the organism, such as drives, prior training, and inhibiting factors. Hull maintained that animals (and humans) experience a drive as an unpleasant sensation. Drive-reduction theory says that an organism will do whatever is necessary to reduce the unpleasant sensation. It does this by filling the need that produces the drive.

Primary biological needs, such as hunger or thirst, are driven by homeostasis. Secondary needs—such as the perceived need for more money—also produce an unpleasant sensation, so drive-reduction also works for them.

Drive-Reduction Theory



One problem with this theory is that humans sometimes act counter to what drive-reduction might suggest. People will sometimes go on hunger strikes if they feel strongly about some cause. The motivation not to eat in this situation is greater than the biological motivation to eat.

3 The Arousal Theory

Some psychologists feel that stimulation is a primary need. They point out that mice will explore a new environment even if no food is available. Infants investigate everything they can lay their hands (or mouths) on.

Too much stimulation causes stress, so homeostatic processes are working here as well. The comfortable level of stimulation seems to differ from individual to individual. Some people exhibit a drive toward high-risk situations and are uncomfortable without the adrenaline rush. Others are content to watch and would feel uncomfortable if they were forced to engage in high-risk behaviors.

4 The Humanistic Theory

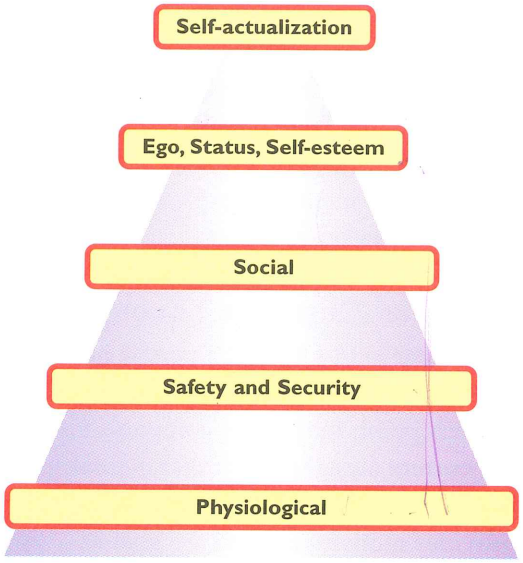
Humanistic psychologist Abraham Maslow proposed that humans have needs beyond those of survival and reducing drive tensions.

Humanistic psychologists believe that the need to do something important with one's life is as essential as the basic biological needs. They acknowledge that lower-level needs must be met before one would move on to higher levels and, eventually, to self-actualization. This list of lower- to higher-level needs is called the **hierarchy of needs**.

Maslow saw this hierarchy as a natural progression of motivation that would be limited only if the individual encountered obstacles that threatened lower-level needs, such as stability or security.

Critics of the hierarchy point to people who seem to show no interest in doing more with their lives beyond having security and meeting their basic needs. It is unclear whether they simply don't have the higher levels of needs or whether they have, indeed, encountered some obstacle that overcame the motivation to meet those needs.

Maslow's Hierarchy of Needs



* ***Physiological Needs:*** primary needs, such as food, water, shelter, and rest
* ***Safety and Security Needs:*** protection from threats in the environment, a sense of security, and a sense of stability
* ***Social Needs:*** a sense of love and belonging and acceptance by others
* ***Ego, Status, and Self-Esteem Needs:*** recognition, self-respect, knowledge, responsibility, prestige, and achievement
* ***Self-Actualization:*** fulfillment of one's potential—becoming the most that one can be

Cognitive Theories of Motivation

One can modify a biological drive through cognition. If you're on a diet, you may choose to ignore hunger signals or to eat less than might be necessary to fill you up. Other cognitive theories, such as the **two** listed below, attempt to explain secondary or higher-level motivations.

1 Social-Cognitive Theory

According to this theory, a person has the mental model of a goal to work toward. At each point, the person compares his or her current situation with that mental model. The difference between the two provides motivation until the goal is reached. As long as there is a difference, the motivation remains.

In addition, progress made toward the goal may be perceived as reward or reinforcement. The anticipation of further reinforcement for success adds to the motivation.

2 Cognitive Consistency Theory

This theory argues that motivation is the drive to maintain a balance between thoughts, beliefs, and behavior. When you behave in a way that seems to be at odds with what you believe, you feel a sense of discomfort called **cognitive dissonance**. At this point, you are motivated to get rid of this dissonance by:

* Making excuses for your behavior.
* Changing your behavior.
* Not thinking about your behavior (separating behavior from thought about the behavior).

According to the social-cognitive theory, what is the motivation for the person who finished second or third in this race? What might be the reward for either of those runners?

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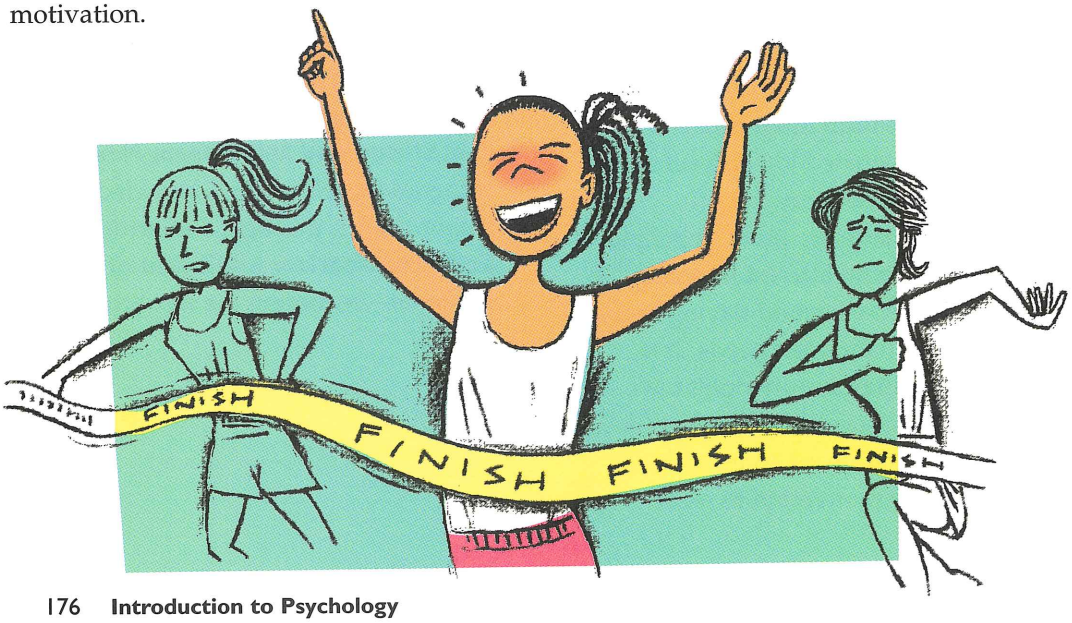


Do All People Have Higher-Level Needs?

Some people talk about their "purpose" in life and are motivated to work toward some higher potential. Others seem to be concerned only with putting food on the table and keeping a roof over their heads. Do all humans have higher needs? What do you think?

THE ISSUES

Maslow and other humanistic psychologists maintain that self-actualization—fulfilling one's highest potential and doing something significant in the world—is the highest need of all humans. While acknowledging that a hungry person is more likely to be motivated toward finding food than worrying about self-respect, they maintain that these needs still exist. They point to people who go hungry rather than lose the respect of others by asking for help and to those who improve their minds even when living in poverty conditions.

Humanists argue that people who seem unmotivated may have encountered obstacles that have left them feeling threatened at a more basic level. Many people don't seem to be motivated beyond the levels of physiological needs, safety and security, and social affiliations. In fact, some seem to prefer work over exerting the effort to maintain a family or foster relationships with other people. Opponents of the humanists argue that, just as some people are motivated toward higher risk than others are, motivation toward self-actualization is an individual need rather than a universally human need.

Do all people have higher-level needs?

THE PROCESS

1. **Restate the issues.** In your own words, state the nature of the disagreement.
2. **Provide evidence.** From your own experience and from the information above, list the evidence *for* believing that all humans have higher-level needs.
3. **Give opposing arguments.** From your own experience and from the information above, list the evidence *against* universal higher-level needs.
4. **Look for more information.** What else would you like to know? Make a list of your questions. On the Internet, in the psychology section of the library, or in the index of psychology books, research the *Humanistic Theory of Motivation* and *Maslow's Hierarchy of Needs.*
5. **Evaluate the information.** Make a chart with two columns:

Humans Possess Higher-Level Needs	
For	Against

   Record the arguments in each column and rank each column of arguments in importance from 1 to 5, with 1 as the most important.
6. **Draw conclusions.** Write one paragraph supporting your answer to the question "Do all people have higher-level needs, such as self-actualization?" Be sure to provide your reasons.

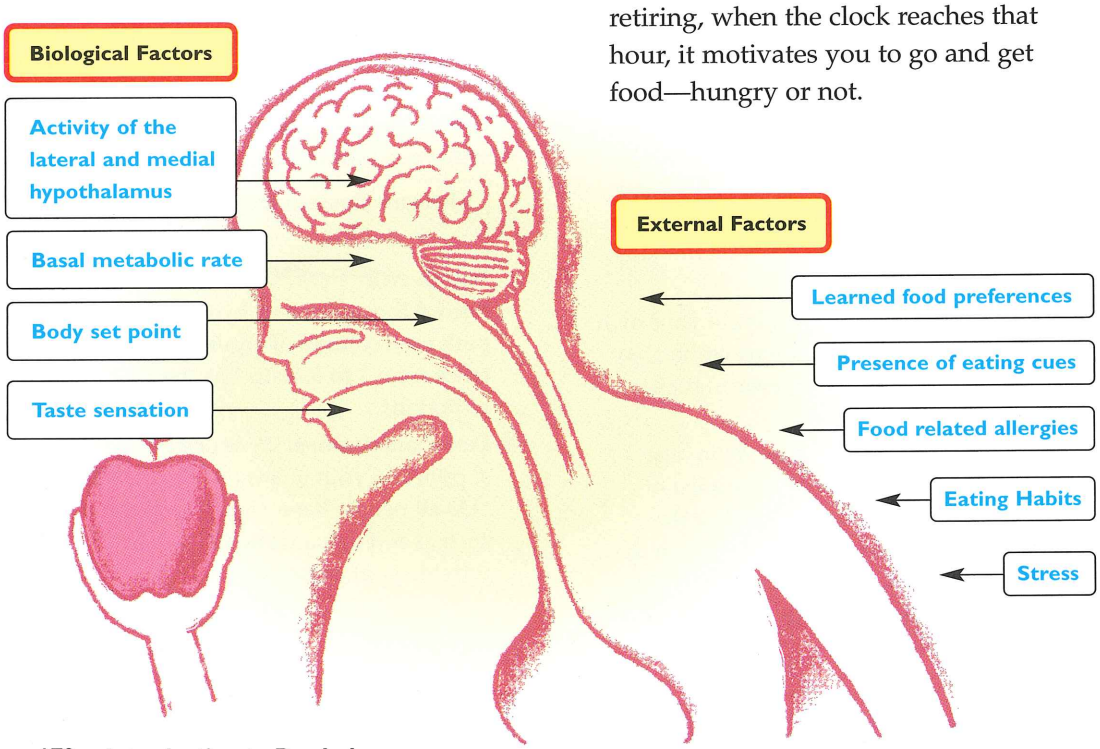
Physiological Motivation

Hunger and the sexual drive are **two** major physiological motivators that occur as a result of chemical, biological, and psychological factors.

1 The Hunger Drive

Of all the physiological needs, hunger is probably the best researched of all. You may think of hunger as simply an uncomfortable feeling in your stomach and a desire to eat. Hunger actually arises from a complex mixture of internal and external factors, as you can see in the diagram below.

Factors That Affect Hunger and Eating



External Factors

* ***Stress.*** Stress causes an unpleasant sensation. Eating generally causes a pleasant feeling. Although the two are not related, a person may eat to counteract the negative feelings produced by stress. Eating certain foods, such as carbohydrates, releases the neurotransmitter serotonin, which has a calming effect.
* ***Eating Habits.*** In many families, you don't eat when you're hungry; you eat at fixed times during the day.
* ***Food-Related Cues.*** You might eat because the food is appealing to you, even though you are not hungry. For example, have you ever eaten a chocolate chip cookie even though your stomach was full?
* ***Presence of Eating Cues.*** If you always have a snack an hour or so before retiring, when the clock reaches that hour, it motivates you to go and get food—hungry or not.

Internal Factors

* ***The Hypothalamus.*** Two processes in the hypothalamus are related to hunger and eating. One monitors chemicals related to the amount of glucose in the body. When glucose drops below the accepted level, the hypothalamus produces the sensation of hunger. After the need has been met, other chemicals are released that signal the feeling that you are full. Another homeostatic system measures the amount of fats and amino acids stored in the body's cells. When their levels drop too low, hunger signals are switched on.
* ***Basal Metabolic Rate.*** Each person burns food at a different rate and expends energy with different efficiency. A person with a high metabolic rate can eat more without gaining weight than someone who is just as active, but has a lower metabolic rate.
* ***Body Set Point.*** Just as we have a temperature "thermostat" that keeps our body temperature within an acceptable range, one theory suggests that we have a weight "set point." Falling below that set point triggers biological processes that cause us to get hungry more often. Newer theories suggest that there is a "settling" point—a range of normal weights within which we can vary.
* ***Taste Sensation.*** Taste is an important factor when we first begin eating. It encourages us to continue. Before long, the taste buds begin to shut down so that we are willing to stop eating when we're full.

2 The Sexual Drive

A second major source of physiological motivation is the sex drive. Just as the pleasure we feel in eating ensures that we will continue to give our bodies nourishment, so the pleasure that organisms derive from sex ensures that they will procreate, helping their species survive.

The sexual drive, like hunger, is a complex interaction involving chemistry, biology, and psychology. For example, researchers have discovered that, at their most receptive times, female moths release pheromones (biochemical odors) into the air. Moths fly mostly at night, so these odors help male moths find receptive females. Males follow the scent back to the females—sometimes as far as several miles!

The release of specific chemicals in the body triggers the emotions that we associate with the sex drive. When you say that there's a certain "chemistry" between you and another person, you may be right.

Cognition also plays an important role in mediating the sex drive. Just as cultural beliefs play a role in determining the foods one will eat or avoid, personal values and cultural customs are determining factors in when, how, and with whom one satisfies the sex drive.

Although it is a primary need, sexual activity is also associated with higher needs in Maslow's hierarchy, such as belonging, avoidance of loneliness, and self-esteem.

Human Pheromones

Studies have shown the importance of pheromones in the mating behaviors of insects and mammals such as mice and pigs. The detection of pheromones is linked to an organ within the nose called the vomeronasal organ, or VNO. Although humans have a VNO, scientists are unsure whether it is functional—or even linked to the brain.

Drs. David Berliner and Louis Monti-Bloch believe they have demonstrated that humans have functioning VNOs. In one study, a chemical purified from the skin of men significantly affected the mood in women when applied directly to VNO tissue.

Another study showed that a mother is able to identify a T-shirt worn by her infant from a pile of T-shirts. Although there is certainly chemical communication among humans, some researchers feel that it may be quite different from that in animals.

One theory suggests that mammals, including humans, may use scent to identify potential mates with different immune system capabilities from their own. Even within populations with very similar genetic backgrounds, both mice and humans have been shown to select mates with the least similar immune capabilities. This adaptive ability would ensure offspring with immune responses to the widest variety of factors—and the greatest chance of survival.

Psychological Motivation

In addition to the biological needs that we share with animals, humans have other needs that are not so easily explained in biological terms. Curiosity and the tendency to explore and manipulate our environment can be explained in adaptive terms—it is useful to know as much as possible about your surroundings in terms of what could and couldn't help or hurt you. But what about people who are motivated toward higher and higher goals and achievement?

Achievement Motivation

How long do you spend on a test question that has you stumped? Some people will continue to work at it until they figure it out. Others will just go on to the next question. The person who works longer seems to have a higher motivation for success. And that motivation works! Even if two people have equal ability, the one who sticks with it tends to achieve more.

Acquiring Achievement Motivation

The influence of parents and caregivers plays an important role in developing the motivation to achieve. Some things parents can do include:

* Demonstrating that they value accomplishment.
* Giving their children opportunities to solve appropriate problems and praising them for their efforts.
* Giving children the chance to have stimulating experiences.

Expectancy/Value Theory

The expectancy/value theory helps us to understand how adult behavior can influence future achievement motivation. The theory suggests that a person's perception of the inherent value of the behavior and his or her expectancy of success in carrying out the behavior are motivating factors.

Value is determined by:

* How the behavior fits into goals.
* How challenging the behavior is.
* How useful the behavior is.
* How interesting the behavior is.

Expectancy of success comes from:

* The difficulty of the task.
* Your past successes.
* A sense of control and competency.
* How your abilities fit the task.

When children have been exposed to appropriately challenging situations, have been given constructive feedback about their efforts, and have been given enough freedom to develop a sense of control and belief in their own abilities, they will look forward to challenges in later life.

Emotion and Achievement

Some children are praised for their accomplishments early in life. Their failures are treated as learning experiences rather than as lack of effort or ability on their part. These children learn that accomplishment feels good. These positive emotions may motivate them toward achievement later in life.

Extrinsic and Intrinsic Motivation

One type of performance toward achievement is reached through a series of specific goals. Once one goal is reached, another higher performance goal is set. A second type is more incremental. In this type of performance, the individual is always striving to do better or to improve abilities or knowledge. How do these goals affect motivation?

Extrinsic Motivation. For every *A* on his report card, a child receives $3. The money is a reward for a behavior—a reward that comes from outside the child. This is called an *extrinsic reward*. Behaviors leading to performance goals are often motivated by extrinsic rewards such as recognition, the approval of others, or prestige. **Extrinsic motivation** promotes behavior for external rewards or to avoid punishment from others.

Sidebar

Examining Your Motivation

In what contexts of your life do you feel the strongest motivations? Are the motivations intrinsic or extrinsic? What theories help you to understand your motivations? Where would you like to be more strongly motivated? What can you do about it?

Intrinsic Motivation. A child is praised for good grades and achievement, creating a positive emotion within the child. Later, the child realizes that the same feeling arises from the sense of accomplishment he or she gets in successfully completing a task. The reward is within the child—it is *intrinsic*. **Intrinsic motivation** promotes behavior for its own sake and for self-satisfaction. Behaviors leading to self-improvement are generally motivated by intrinsic rewards.

Studies have shown that people with intrinsic motivation are more likely to continue toward a goal, regardless of what other people do or say.

Cultural Factors in Motivation

The behaviors one selects to meet a given need are affected by the culture in which one lives. For example, many Americans wouldn't think of eating dog meat, but they eat beef regularly. Hindus consider cattle sacred and would go hungry before eating beef.

Some argue that biological needs will ultimately win out, even over deeply ingrained cultural taboos. During the Holocaust, fathers and sons in concentration camps were seen stealing food from one another. Cannibalism is unthinkable in most cultures, yet people have been known to engage in it in times of profound hunger.

Still other researchers maintain that culture is not the most important factor in motivation. In Mexico, traditional women's roles include being obedient wives and mothers. Modern Mexican and Mexican-American women continue to seek such roles where their own experience has shown the family situation to be a positive, pleasant one. If a girl's family situation was negative and unpleasant, she is much less likely to be motivated toward following the traditional role.

What Is Emotion?

Emotions are states of the body and mind associated with feelings. Emotions have physiological, behavioral, and cognitive components. When you hear a loud, unexpected noise, your heart rate and breathing increase, your adrenal glands secrete stress hormones, and your eyes widen. Your muscles tense and you take a defensive stance. Finally, your conscious mind has a chance to yell, "Fear!"

Types of Emotion

The ancient Chinese believed that there were four instinctive emotions—joy, fear, anger, and sorrow. Today, theorists have added a few more, such as love, surprise, disgust, and anticipation, but not everyone agrees. More subtle emotions such as irritation, terror, or tenderness are seen as either combinations of the more basic emotions or different intensities of those emotions. Humans can identify dozens of different emotions that may have only slightly different meanings.

The Value of Emotions

Psychologists explain which emotions they call *basic* by demonstrating their adaptive value:

* ***Joy*** helps to establish social bonds, an advantage in mating and healthy development of the young.
* ***Anger*** may actually prevent aggression. When a dominant male animal in a pack or herd stares down a challenging opponent, a fight is avoided.
* ***Disgust*** serves several purposes. It encourages the maintenance of a clean and healthy environment. In addition, vomiting after eating a "disgusting" substance may prevent poisoning, illness, or even death.

Physiological Aspects of Emotion

Think of something mildly depressing. Notice that your shoulders droop and your eyes—in fact your whole body—seem to be directed downward. Now, lift your chin and eyes and throw your shoulders back—and stay depressed! Chances are, you'll find it difficult to maintain a blue mood when you change your body's position.

Does the emotion of depression cause your body to take a "down" position, or does the position cause the emotion? Do they occur at the same time? Theorists have different ideas, but it is clear that your physiology is linked, in some way, to your feelings.

Arousal is a change in the physiological factors controlled by the autonomic nervous system (ANS). You sense your body's arousal when you feel fear, anger, or intense joy. By comparison, the emotions of compassion or dejection feel different.

The ANS has two parts—the sympathetic nervous system, which is responsible for arousal; and the parasympathetic nervous system, which calms the body. These two systems work in a homeostatic process to keep the body in an optimal state of arousal for the situation. Each emotion is linked to a specific level of arousal.

Researchers have identified specific portions of the brain that seem to mediate different emotions. For example, the amygdala in the midbrain has everything necessary to produce the emotion of fear. It can rapidly respond to stimuli from the senses, sending out the "flight or fight" response if needed, and has rich connections to the higher thinking portions of the brain in the cortex.

Theories of Emotion

Theories about emotion vary widely and focus on different components of emotion, such as the stimulus, the bodily responses, and cognitive factors. In your own experience of emotion, you may find examples that could be explained by each of the theories. Human emotion is highly complex, and it is unlikely that one theory will be found to explain it. Further, because emotions are subjective, the element of error in research on human emotions is difficult to control. There are several major theories about emotions, as the chart on the facing page presents.

Cognition and Emotion

Have you ever tried to "talk yourself" out of an emotion such as fear? Even if your conscious mind knows that there is no basis for fear, you may feel it nonetheless. It might be, like Little Albert's fear of white, furry things described in Chapter 7, the result of stimulus-response learning with little, if any, cognitive input.

More subtle emotions, such as depression or complex love/hate relationships, depend largely on how one interprets a situation. It's important to note that this interpretation doesn't have to be conscious. It is still cognitive, because unconscious thinking processes are at work. For example, a parent decides to help a teenager organize his room. The parent may see her efforts as helpful, while the teen may feel the parent is intruding or invading his space. Many of the issues for which people seek psychological help involve getting emotions under cognitive control.

The Necessity of Emotions

The same midbrain structures that affect the formation of memory mediate emotions. Research suggests that our experiences are stored in memory along with some "feeling tone"—a blend of emotions unique to each experience. Some scientists believe that it is this emotional blend that determines the value of a particular action or experience. They maintain that, without the ability to assign various values to behaviors, we would be unable to make rational decisions.

We know that emotional issues are more difficult to think about rationally and to decide upon logically. Although we try to eliminate emotion from our thinking, it may be a critical component of that ability.

Theories of Emotion

Name of Theory	General Principles	Pros	Cons
James-Lange Theory Stimulus ▼ Bodily Response ▼ Emotion	When we experience an emotion-evoking stimulus, our autonomic nervous system produces physiological changes that we experience as a particular emotion.	Assumes a different autonomic response for each emotion. The degree to which this is true varies from individual to individual.	Downplays the roles of both cognition and human values and choices.
Cannon-Bard Theory Stimulus ▼ Mental Processing ▼ Bodily Response AND Emotion	External stimulus is processed by the brain, which produces both the emotion and the bodily response simultaneously.	Argues that we experience the same bodily response to many different stimuli, so there must be cognitive recognition involved in identifying the emotion.	We respond to some situations before we recognize them consciously. At times, an emotion follows a "close call" rather than occurring with the body response.
Schacter and Singer's Two-Factor Theory Stimulus ▼ Bodily Reaction AND Cognitive Appraisal ▼ Emotion	The body responds to a stimulus. The brain appraises both the response and the situation. The appraisal gives rise to the emotion.	The quality of an emotional response changes depending on the situation in which it is experienced. The same experience can produce either fear or excitement.	Schacter's results have not been duplicated. Different studies yield different results, casting doubt on the theory.
Solomon's Opponent-Process Theory Stimulus ▼ Emotion ▼ Opposite Emotion ▼ Balance	Homeostasis is just as important in emotions as in the body. When one emotion is strongly experienced, the opposite emotion is soon experienced to bring balance back to the system.	Explains why anxiety over an event is often followed by relief when it occurs, leaving a sense of well-being.	Some people don't exhibit this sort of process, at least in an obvious way. In particular, joy doesn't immediately trigger a corresponding negative emotion.

Expression of Emotion

One of the most obvious forms of nonverbal communication is the expression of emotion. In seconds, most people can identify a basic emotion on someone else's face. In one example, students were able to tell if their teacher liked the student to whom she was talking by watching her face.

When people see photographs of people in other cultures, they are able to accurately identify emotions expressed on the faces. It would appear that facial expressions of emotion and their interpretation are universal and independent of cultural factors.

The Body and Emotions

Not only do we communicate emotion through our faces, but facial expression itself may affect the emotion. People report that they feel the emotion more deeply when they assume the appropriate facial expression. Try smiling and feeling sad at the same time.

In addition to the face, the whole body can affect emotion. When you say "I'm really up (or down) today," you are generally describing an emotion—but your posture might be erect (up) or slumped (down) as well. As you saw earlier, changing body position can change an emotion. Further, you can better understand what another person is feeling by assuming his or her expression and stance.

Culture and Emotion

While people of different cultures experience the same emotions, they may not respond to situations in the same way. For example, in many western cultures, which tend to be highly individualistic, people are primarily concerned with their own interests and will respond emotionally in terms of those interests. A potential threat to themselves or their livelihood evokes more emotion than a threat to their community or nation.

In collectivist cultures that emphasize interdependence among people, expressions of concern or respect are much more common than self-serving emotions that might disrupt the group well-being. Members of these societies feel more strongly about a perceived threat to their village, religion, or nation than about a threat to themselves.

Social Stereotypes and Emotion

Are women more emotional than men? Studies have shown that, in general, women are more sensitive than men to the emotions of others and are more willing to discuss their emotional states. On the other hand, the range of emotions expressed by either sex is much greater than the difference between the sexes.

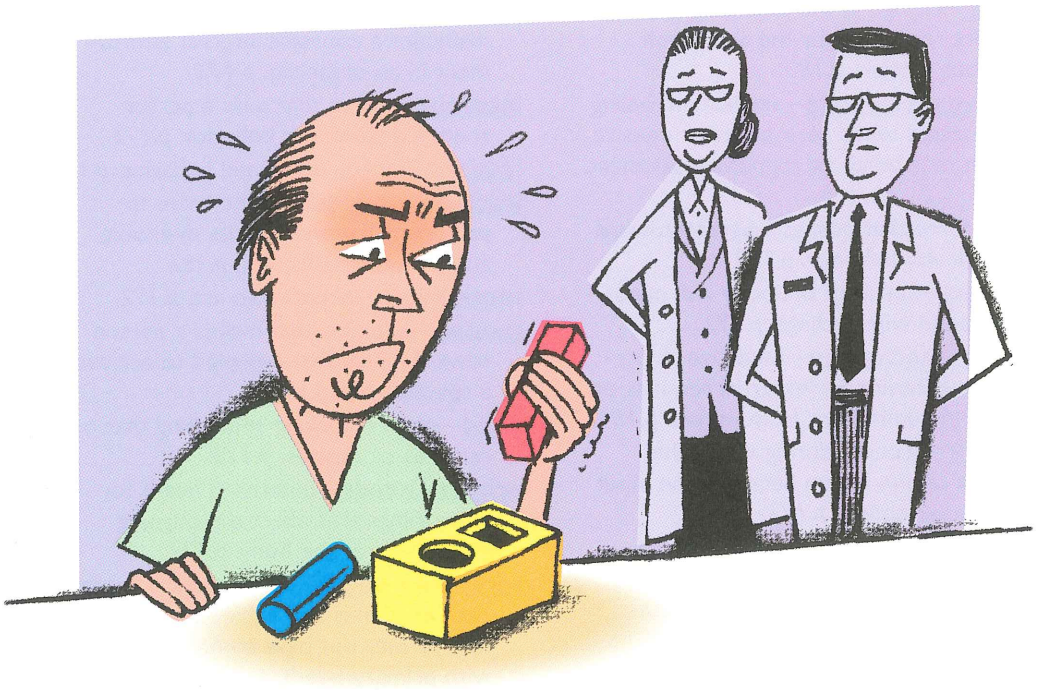
For many years, researchers avoided the study of emotion as too subjective a topic. As science learns more about the biological basis of emotion and its interaction with cognitive processes, emotion is increasingly accepted as an integral factor in understanding the human mind.

Emotion and Decision Making

Fascinated by the story of Phineas Gage (page 42), neurologist Antonio Damasio undertook a study of the role of emotions in reason.

Damasio treated a patient—Elliot—who'd had a portion of the frontal lobes of his brain removed because of a tumor. Elliot retained all of his intelligence, knowledge, and language abilities. But he felt and expressed no emotion. He felt no fear when driving in stressful conditions and although he still worked, he was unable to make the simplest decisions about what to do next or when to stop a particular task.

After many other studies, Damasio suggested that emotions produce the criteria by which we rank options. Without those criteria, there is no way to decide among the options. These studies reinforced the theory that emotion is a critical part of cognitive processes.



Chapter 11 Wrap-up

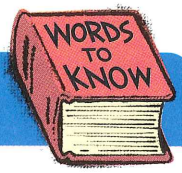
MOTIVATION AND EMOTION

A behavior is what we do. Motivation is why we do it. Motivation is a complex combination of needs, drives, incentives, and emotions. Several theories have been proposed to explain emotion, including the instinct theory, the drive-reduction theory, the arousal theory, and the humanistic or hierarchy-of-needs theory. The social-cognitive theory and cognitive consistency theory focus on the role of cognition in motivation.

Hunger, thirst, and the sex drive are physiological motivations, while achievement and doing something "meaningful" are examples of psychological motivations. Motivations can be intrinsic or extrinsic.

Emotion involves physiological processes, expressive behaviors, and cognitive appraisal in generating feelings. The basic emotions of joy, anger, fear, and sorrow appear to be universal across cultures. Emotions may play an important role in cognitive functions such as reason and decision making.

Psychology



arousal—change in the physiological factors controlled by the autonomic nervous system. *p. 183*

cognitive dissonance—unpleasant feeling that occurs when your behavior doesn't match your beliefs or cognitive assessment. *p. 176*

drive—force that pushes a person toward a particular behavior. *p. 172*

emotions—states of the body and mind associated with feelings. *p. 172*

extrinsic motivation—incentive to perform a behavior for external rewards or to avoid punishment from others. *p. 181*

feedback—process during which the output of one action becomes the input of another action. *p. 173*

hierarchy of needs—list of lower- to higher-level needs that humanistic psychologists believe all people possess. *p. 175*

homeostasis—self-adjusting process that maintains a constant internal environment in an organism. *p. 173*

incentive—force that pulls a person toward a particular behavior. *p. 172*

instinct—innate, unlearned behavior. *p. 173*

intrinsic motivation—incentive to perform a behavior for its own sake and for self-satisfaction. *p. 182*

motivation—incentive to act. *p. 172*

motive—stimulus that moves a person toward a behavior designed to achieve a specific goal. *p. 172*

need—state of lacking something that one requires or desires. *p. 172*

primary needs—unlearned needs for basic things that affect the ongoing functioning of the body. *p. 172*

secondary needs—psychological needs—such as money and achievement—that may or may not have something to do with primary needs. *p. 173*