XI. Emotion

The source of our emotions remains elusive. No one knows exactly where emotions come from, what makes us feel the way we do, or whether we can fully control the way we feel. Emotion is intimately related to cognition and culture, and it affects us physically: our bodies react to different emotional states, and we often show emotion physically. Researchers have proposed many theories about the source, purpose, and expression of emotion.

In many ways, our emotions define our existence—without them, most of us would not feel truly alive. We've all felt fear of a lurking stranger, pride at scoring well on a test, love, sadness, and loneliness. And between emotional extremes are the ups and downs of everyday life: frustration in a traffic jam, contentment over a satisfying lunch, amusement at a cartoon. We have much to learn about emotion—but we have also learned simply by being human and feeling things every day.

A) Theories of Emotion

Emotion is a complex, subjective experience accompanied by biological and behavioral changes. Emotion involves feeling, thinking, activation of the nervous system, physiological changes, and behavioral changes such as facial expressions.

Different theories exist regarding how and why people experience emotion. These include evolutionary theories, the **James-Lange theory**, the**Cannon-Bard theory**, Schacter and Singer's **two-factor theory**, and **cognitive appraisal**.

Evolutionary Theories

More than a century ago, in the 1870s, **Charles Darwin**proposed that emotions evolved because they had adaptive value. For example, fear evolved because it helped people to act in ways that enhanced their chances of survival. Darwin believed that facial expressions of emotion are innate (hard-wired). He pointed out that facial expressions allow people to quickly judge someone's hostility or friendliness and to communicate intentions to others.

Recent evolutionary theories of emotion also consider emotions to be innate responses to stimuli. Evolutionary theorists tend to downplay the influence of thought and learning on emotion, although they acknowledge that both can have an effect. Evolutionary theorists believe that all human cultures share several primary emotions, including happiness, contempt, surprise, disgust, anger, fear, and sadness. They believe that all other emotions result from blends and different intensities of these primary emotions. For example, terror is a more intense form of the primary emotion of fear.

The James-Lange Theory

In the 1880s, two theorists, psychologist **William James** and physiologist **Carl Lange**, independently proposed an idea that challenged commonsense beliefs about emotion. This idea, which came to be known as the **James-Lange theory**, is that people experience emotion because they perceive their bodies' physiological responses to external events. According to this theory, people don't cry because they feel sad. Rather, people feel sad because they cry, and, likewise, they feel happy because they smile. This theory suggests that different physiological states correspond to different experiences of emotion.

The Cannon-Bard Theory

The physiologist **Walter Cannon** disagreed with the James-Lange theory, posing three main arguments against it:

1. People can experience physiological arousal without experiencing emotion, such as when they have been running. (The racing heart in this case is not an indication of fear.)

2. Physiological reactions happen too slowly to cause experiences of emotion, which occur very rapidly. For example, when someone is in a dark alley alone, a sudden sound usually provokes an immediate experience of fear, while the physical “symptoms” of fear generally follow that feeling.
3. People can experience very different emotions even when they have the same pattern of physiological arousal. For example, a person may have a racing heart and rapid breathing both when he is angry and when he is afraid.

Cannon proposed his own theory of emotion in the 1920s, which was extended by another physiologist,**Philip Bard**, in the 1930s. The resulting **Cannon-Bard theory** states that the experience of emotion happens at the same time that physiological arousal happens. Neither one causes the other. The brain gets a message that causes the experience of emotion at the same time that the autonomic nervous system gets a message that causes physiological arousal.

Schachter and Singer’s Two-Factor Theory

In the 1960s, **Stanley Schachter** and **Jerome Singer** proposed a different theory to explain emotion. They said that people’s experience of emotion depends on two factors: physiological arousal and the cognitive interpretation of that arousal. When people perceive physiological symptoms of arousal, they look for an environmental explanation of this arousal. The label people give an emotion depends on what they find in their environment.

Example:

If a person finds herself near an angry mob of people when she is physiologically aroused, she might label that arousal “anger.” On the other hand, if she experiences the same pattern of physiological arousal at a music concert, she might label the arousal “excitement.”

Schachter and Singer agree with the James-Lange theory that people infer emotions when they experience physiological arousal. But they also agree with the Cannon-Bard theory that the same pattern of physiological arousal can give rise to different emotions.

Cognitive Appraisal

The psychologist **Richard Lazarus**’s research has shown that people’s experience of emotion depends on the way they appraise or evaluate the events around them.

Example:

If Tracy is driving on a winding road by the edge of a high cliff, she may be concerned about the danger of the road. Her passenger, on the other hand, thinks about the beauty of the view. Tracy will probably feel frightened, while her passenger may feel exhilarated.

B) The Biological Bases of Emotion

The experience of emotion is accompanied by activation of two major areas of the nervous system: the brain and the autonomic nervous system.

Activation of Brain Regions

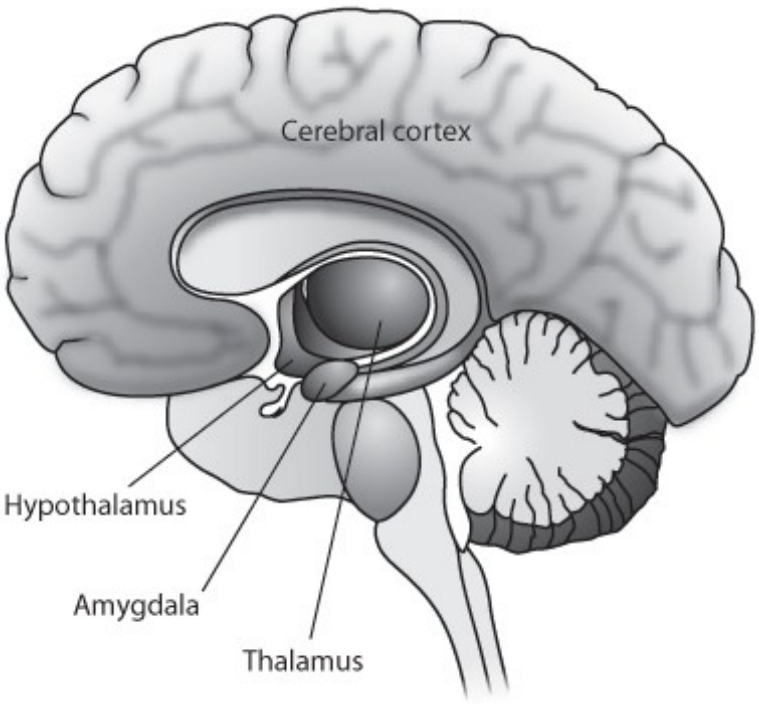
The area of the brain known as the **limbic system** is highly involved in emotion. One structure in the limbic system, called the **amygdala**, plays a particularly important role in regulating emotion.

Researchers believe that sensory information about emotion-evoking events moves along two pathways in the brain. The information goes first to the thalamus and from there moves simultaneously to the amygdala and the cortex of the brain. The amygdala processes the information quickly and sends signals to the hypothalamus, which in turn

activates the autonomic nervous system. The cortex, on the other hand, processes the information more slowly, allowing people to appraise or evaluate the event.

Example:

When information travels from the sense organs to the thalamus to the amygdala, people respond instantaneously, without thinking, to events in their environment. A parent may snatch her child away from a curb without thinking if she hears the sound of squealing tires coming toward them.



The Amygdala

Damage to the amygdala results in an inability to appropriately process fear. Animals with damaged amygdalas cannot develop conditioned fear responses. People with damaged amygdalas can't recognize fear in other people, though they may be able to experience fear themselves.

Activation of the Autonomic Nervous System

The **autonomic nervous system** controls all the automatic functions in the body. See pages 51–52 for more information about the autonomic nervous system.

When an emotion-evoking event happens, the **sympathetic** branch of the autonomic nervous system, which prepares the body for action, begins to work. It sends signals to the adrenal gland, which secretes the hormones epinephrine and norepinephrine. These hormones in turn prepare a person to face the challenges of the event. The following physical responses are indicative signs in a man or woman:

- Blood pressure, heart rate, respiration rate, and blood sugar levels increase and prepare a person for action.
- Pupils dilate to let in more light for vision.

- The digestive processes slow down so that energy can be directed to the crisis at hand.

Autonomic Nervous System

*The autonomic nervous system is made up of two parts: the sympathetic and parasympathetic nervous systems. Unlike the **sympathetic nervous system**, which prepares the body for action, the **parasympathetic nervous system** keeps the body still. The sympathetic nervous system involves expending energy, while the parasympathetic nervous system works to keep energy in the body.*

Measuring Emotion

Researchers often use autonomic responses to measure emotion. One frequently used autonomic response is called the galvanic skin response. The **galvanic skin response**is an increase in the skin's rate of electrical conductivity, which occurs when subjects sweat during emotional states. Researchers also use indicators such as blood pressure, muscle tension, heart rate, and respiration rate to measure emotion.

Polygraph Tests

The **polygraph**, or **lie detector**, is a device used to detect deception. In reality, the polygraph cannot detect deception. Instead, it measures autonomic indices of emotion. A subject is hooked up to the device and asked a series of neutral questions such as*What is your name? Where do you live?* and so on. The polygraph records the autonomic responses as the subject answers these questions, establishing the baseline, or normal pattern of autonomic activation. Then the subject answers other questions that can determine guilt or innocence, such as *Where were you on the night of the murder?*

In theory, when lying, the subject feels emotions such as nervousness or anxiety, and the polygraph records accompanying changes in autonomic activation. In practice, the polygraph is not very effective. Polygraph tests have a high error rate for two main reasons:

- Many people who are not engaging in deception feel nervous or anxious when asked questions concerning their guilt or innocence.
- People who are engaging in deception can often "trick" the polygraph by acting tense during neutral questions so that their baseline responses resemble their responses during the critical period of questioning.

Differences Among Emotions

The release of the hormones epinephrine and norepinephrine accompanies many emotional states, but emotions differ at the biological level:

- Different emotions have different patterns of brain activation.
- Different neurotransmitters are involved in different emotions.
- Different emotions have different patterns of autonomic nervous system activity.

C) Expression of Emotion

People express emotions not only through speech but also through nonverbal behavior, or body language. Nonverbal behavior includes facial expressions, postures, and gestures.

The Basic Emotions

The psychologist **Paul Ekman** and his colleagues have identified six basic emotions: happiness, sadness, anger, fear, surprise, and disgust. Worldwide, most people can identify the facial expressions that correspond to these emotions.

The Catharsis Hypothesis

The catharsis hypothesis suggests that anger can be decreased by releasing it through aggressive actions or fantasies. However, although catharsis helps in some cases, researchers have generally found that catharsis does not decrease anger in the long term. In fact, aggressive actions or fantasies can sometimes increase anger.

The Facial-Feedback Hypothesis

Some researchers have proposed that the brain uses feedback from facial muscles to recognize emotions that are being experienced. This idea is known as the **facial-feedback hypothesis**. It follows from this hypothesis that making the facial expression corresponding to a particular emotion can make a person feel that emotion. Studies have shown that this phenomenon does indeed occur.

For example, if people smile and try to look happy, they will feel happiness to some degree.

Gender Differences

Some research suggests that the genders differ in how much emotion they express. In North America, women appear to display more emotion than men. Anger is an exception—men tend to express anger more than women, particularly toward strangers.

This gender difference in expressiveness is not absolute. It depends on gender roles, cultural norms, and context:

- For both men and women, having a nontraditional gender role leads to increased emotional expressiveness.
- In some cultures, women and men are equally expressive.
- In some contexts, men and women do not differ in expressiveness. For example, neither men nor women are likely to express anger toward someone more powerful than themselves.

D) Emotion and Culture

Some aspects of emotion are universal to all cultures, while other aspects differ across cultures.

Similarities Among Cultures

Ekman and his colleagues have found that people in different cultures can identify the six basic emotions: happiness, sadness, anger, fear, surprise, and disgust. The physiological indicators of emotion are similar in people from different cultures.

Facial Expressions Are Innate

Both people who can see and people who have been blind since birth have similar facial expressions of emotions. This observation suggests that facial expressions are innate, since blind people could not have learned these expressions by observing others.

Differences Among Cultures

Although many emotions and expressions of emotions are universal, some differences exist among cultures:

- **Categories of emotions:** People in different cultures categorize emotions differently. Some languages have labels for emotions that are not labeled in other languages.

Example:
Tahitians do not have a word for sadness. Germans have a word, schadenfreude, indicating joy at someone else's misfortune, that has no equivalent in English.

- **Prioritization of emotions:** Different cultures consider different emotions to be primary.

Example:

Shame is considered a key emotion in some non-Western cultures, but it is less likely to be considered a primary emotion in many Western cultures.

- **Different emotions evoked:** The same situation may evoke different emotions in different cultures.

Example:

A pork chop served for dinner might evoke disgust in the majority of people in Saudi Arabia, while it's likely to provoke happiness in many people in the United States.

- **Differences in nonverbal expressions:** Nonverbal expressions of emotion differ across cultures, due partly to the fact that different cultures have different display rules. **Display rules** are norms that tell people whether, which, how, and when emotions should be displayed.

Example:

In the United States, male friends usually do not embrace and kiss each other as a form of greeting. Such behavior would make most American men uncomfortable or even angry. In many European countries, however, acquaintances normally embrace and kiss each other on both cheeks, and avoiding this greeting would seem unfriendly.

- **Power of cultural norms:** Cultural norms determine how and when to show emotions that are not actually felt. Acting out an emotion that is not felt is called**emotion work**.

Example:

In some cultures, it is appropriate for people who attend a funeral to show extreme grief. In others, it is appropriate to appear stoic.

E) Happiness

Happiness is a basic human emotion, but people often make assumptions about happiness that empirical research does not support. For example, people often assume that most people feel unhappy and dissatisfied with their lives, but research shows this is not true. Most people describe themselves as fairly happy even if they are in less than ideal circumstances. Surprisingly, researchers have not found a consistent positive correlation between happiness and factors such as wealth, age, intelligence, physical attractiveness, or parenthood—factors that many people commonly associate with happiness.

Although circumstances do not reliably predict happiness, some circumstances do correlate with increased happiness. These include having a good social network, being married, having a satisfying job, and having strong religious convictions. These circumstances, however, are only correlated with happiness. As explained on page 10, correlation does not necessarily mean causation. Research also shows that happiness tends to depend on people's expectations of life and on how people compare themselves to their peers.

Subjective Well-being

*Rather than focusing only on negative reactions to unfavorable circumstances, researchers today have begun to study subjective well-being. **Subjective well-being** is the perception people have about their happiness and satisfaction with life. Subjective well-being depends more on attitudes to external circumstances than on the circumstances themselves. That is, factors such as wealth or employment don't matter as much as how we feel about our wealth or employment.*

XII. Motivation

A dog's motivation seems straightforward: offer the dog a treat, and it will perform all sorts of tricks. Human motivations, however, are far more complicated. Food and sex motivate us, just like they do most animals, but we often do amazing, brave, horrifying, or death-defying things because of the importance we ascribe to intangible principles.

Millions of people around the world fast for religious or personal reasons, ignoring hunger. Some people enter eating contests, which challenge them to ignore their full stomachs and eat huge amounts of food. King Edward VIII of England gave up his throne to marry an American divorcée, and Roman Catholic priests give up sex for their calling. Why would people do these things? Food, sex, and achievement are motivations for all of us, but motivation can also be as unique as each individual.

A) What Is Motivation?

A **motive** is an impulse that causes a person to act. **Motivation** is an internal process that makes a person move toward a goal. Motivation, like intelligence, can't be directly observed. Instead, motivation can only be inferred by noting a person's behavior.

Researchers have proposed theories that try to explain human motivation. These theories include **drive reduction theories** and Maslow's **hierarchy of needs theory**.

Drive Reduction Theories

Drive reduction theories of motivation suggest that people act in order to reduce needs and maintain a constant physiological state. For example, people eat in order to reduce their need for food. The idea of homeostasis is central to drive reduction theories. **Homeostasis** is the maintenance of a state of physiological equilibrium.

Drive reduction theories fail to explain several aspects of motivation:

- People sometimes aren't motivated by internal needs.

Example:
Some people fast for long periods for political causes, despite feeling extreme hunger.

- Sometimes, people continue being motivated even when they have satisfied internal needs.

Example:
People sometimes eat even when they don't feel hungry.

- People are often motivated by external incentives as well as internal needs.

Example:
If a person is hungry, he or she may choose to eat a salad rather than a cheeseburger because he or she wants to be slimmer.

Intrinsic and Extrinsic Motivation

A motivation may be intrinsic, extrinsic, or both. **Intrinsic motivation** is the motivation to act for the sake of the activity alone. For example, people have intrinsic motivation to write poetry if they do it simply because they enjoy it. **Extrinsic motivation**, on the other hand, is the motivation to act for external rewards. For example, people have extrinsic motivation to write if they do so in the hopes of getting published, being famous, or making money.

Incentives

*An **incentive** is an environmental stimulus that pulls people to act in a particular way. Getting an A on an exam may be an incentive that pulls a student toward studying.*

Maslow's Hierarchy of Needs

In the 1970s, the psychologist **Abraham Maslow** suggested that people are motivated by a **hierarchy of needs:**

- First, most basic level: physiological needs, such as the need for food, water, safety, and security.
- Second level: needs for social interaction, such as the need to belong.
- Third level: needs for esteem, which include the need for respect from oneself and others.
- Fourth level: needs for self-actualization, or realizing one's full potential.

Maslow believed people pay attention to higher needs only when lower needs are satisfied.

Critics argue that Maslow's theory doesn't explain why higher needs often motivate people even when lower needs are unsatisfied.

Example:

Ray lives in a very dangerous neighborhood and constantly worries about safety. He makes little money at his job in civil-rights law, but he enjoys it because he believes that his true calling is to fight injustice.

Critics also point out that people are sometimes simultaneously motivated by needs at different levels.

Example:

Angie might be motivated to join a theater club both because she wants to be part of a close community and because she wants to be respected for her acting skills.

Types of Needs

People have innate needs and learned needs, both of which are influenced by society and culture. People have a limited number of innate needs, which include needs for food, water, oxygen, and elimination of wastes. There are, however, a relatively large number of learned needs, including needs for achievement, autonomy, and power. These needs are determined by **values**, or people's perceptions of what is important in life.

B) Hunger

Hunger is a complicated motivation; people don't eat only because they need food. Many factors, both biological and environmental, influence hunger. These factors interact with one another in many ways.

Biological Factors

Researchers believe certain genetic differences among individuals play a role in hunger. The brain, the digestive system, and hormones are all involved in influencing hunger at the biological level.

Genetic Differences Among Individuals

Researchers theorize that people have a genetically influenced **set point** for body weight. If a person's weight rises too far above his set point, his appetite decreases, or he uses up more energy. His weight then returns to its set point. If, on the other hand, his weight falls too far below his set point, his appetite increases, or he uses less energy. Once again, he returns to his set point.

The set point is maintained not only by food intake and energy expenditure but also by the body's basal metabolic rate, another genetically influenced variable. **Basal metabolic rate** is the rate at which a person at complete rest uses energy.

Some researchers disagree about set points and believe that people can reset their normal weight if they add or lose pounds slowly. They also point out that people usually gain weight when they have easy access to rich foods.

The Brain

Researchers believe three areas in the hypothalamus play a key role in regulating hunger:

1. The lateral hypothalamus is involved in recognizing hunger. In rats, damage to the lateral hypothalamus results in loss of interest in eating.
2. The ventromedial nucleus of the hypothalamus is involved in recognizing satiety or fullness. In rats, damage to the ventromedial nucleus results in excessive eating and weight gain.
3. The paraventricular nucleus of the hypothalamus is also involved in hunger regulation. When the paraventricular nucleus of a rat is damaged, the rat will eat a very large quantity of food at each meal.

The Digestive System

The digestive system influences hunger in several ways. For instance, after a meal, the stomach and intestines send nerve impulses to the brain to help people recognize that they are full.

The body converts food to**glucose**, a simple sugar that acts as an energy source for cells. The level of glucose in the blood affects hunger. Low blood glucose increases hunger; high blood glucose decreases hunger.

Hormones

The hormone **insulin** also plays an important role in regulating hunger. Insulin allows cells to access glucose in the blood. When the pancreas secretes insulin, hunger increases.

Diabetes is a condition caused by a deficiency of insulin. People who have diabetes take injections of insulin. Without these injections, their cells would be unable to use the glucose in their blood.

Another hormone involved in hunger regulation is **leptin**. Fat cells in the body secrete leptin and release it into the blood. When the leptin level in the blood is high, hunger decreases.

Environmental Factors

Many environmental factors influence hunger, including the availability of rich foods, taste preferences, habits, memory, stress, and cultural attitudes.

- **Availability of rich foods:** People tend to gain weight when rich foods are plentiful.
- **Preferences:** Some taste preferences appear to be innate, such as the preference for fatty foods. However, people acquire most taste preferences through conditioning or observational learning. People tend to prefer familiar foods. These preferences have an influence on hunger and food intake.
- **Habits:** People learn habits, such as when and how much they eat. These habits also influence hunger and food intake.
- **Memory:** The memory of what people last ate and when they ate it influences hunger.
- **Stress:** The increased physiological arousal associated with stressful situations can stimulate hunger in some people. In other people, stress decreases hunger.

- **Cultural attitudes:** Cultural attitudes about ideal body size and shape have a strong influence on what and how much people eat.

Eating Disorders

The prevalence of the eating disorders anorexia nervosa and bulimia nervosa in weight-conscious cultures shows that cultural factors can have a negative influence on hunger and body weight. Anorexia nervosa is characterized by extremely low body weight and a distorted body image. Bulimia nervosa is characterized by bouts of binging, followed by compensatory behaviors such as purging, fasting, or heavy exercise to rid the body of food. Both disorders can be life-threatening.

C) Sexual Drive

Unlike hunger, sexual drive does not motivate people to fulfill a basic biological need. A lack of food leads to death; a lack of sex, on the other hand, does not. Both biological and psychological factors strongly influence sexual drive.

Kinsey's Studies

One of the first researchers to give a modern account of human sexuality was **Alfred Kinsey**. In the 1940s, he and his colleagues interviewed more than 18,000 U.S. men and women about their sexual behavior and attitudes. In his comprehensive reports about human sexuality, Kinsey denounced the repressive social attitudes of his time, which he said bore little relation to actual sexual practices. Kinsey provided statistics showing that sexual practices varied widely and that even in the 1940s there was a high prevalence of masturbation and premarital sex. These statistics shocked many people of his day.

Critics of Kinsey's research maintained three arguments:

- Kinsey's sample was not random. Instead, it consisted largely of well-educated, white city dwellers.
- Kinsey and his colleagues used questionable methods to gather their data, especially asking leading questions when interviewing subjects.
- Kinsey may have let his own beliefs influence his results.

Masters and Johnson's Studies

Other pioneers of sexual research were **William Masters** and **Virginia Johnson**. In the 1960s, they studied several hundred male and female volunteers who agreed to either masturbate or have intercourse in a laboratory. Masters and Johnson hooked up the volunteers to instruments that measured various physiological indicators during sexual activity. Using the results of these studies, they described the sexual response cycle.

The Sexual Response Cycle

Masters and Johnson divided the human sexual response cycle into four phases:

1. **Excitement phase:** Physiological arousal increases quickly. Muscle tension, heart rate, blood pressure, and breathing rate increase. In men, the penis gets erect and the testes swell. In women, the clitoris hardens and swells, the vaginal lips open, and the vagina lubricates.
2. **Plateau phase:** Physiological arousal continues. In women, the clitoris retracts under the clitoral hood. Men may secrete a small amount of fluid from the penis.
3. **Orgasm phase:** Physiological arousal peaks. Men ejaculate seminal fluid. Both men and women experience muscular contractions in the pelvic area, along with a sensation of pleasure.
4. **Resolution phase:** Physiological responses return to normal levels. Men then go through a refractory period that can vary in length, during which they are not responsive to stimulation. The refractory period tends to get longer as men age.

Critics of Masters and Johnson's research maintained two arguments:

- Masters and Johnson studied a biased sample of people. The sample included only people who were both willing and able to perform sexual acts in a laboratory setting.
- Masters and Johnson didn't pay attention to individual differences. In reality, people's sexual responses vary according to factors such as age, amount of sexual experience, and cultural background.

The Role of Testosterone

Sexual drive is related to testosterone level in both men and women, but the relationship is a complex one. Sexual activity increases testosterone levels, and testosterone levels increase sex drive.

Psychological Factors in Sexual Motivation

Hormones alone cannot cause sexual arousal. Psychological factors are also highly influential.

- **Erotic stimuli:** Both men and women can become sexually aroused by external and internal erotic stimuli. External erotic stimuli include sexually exciting material that is read, heard, or seen. Internal erotic stimuli include thoughts, fantasies, and memories of past sexual experiences. What is considered erotic varies according to the individual, historical period, and cultural context.
- **Desires:** People have an infinite number of desires that influence the motivation for sex, including to procreate, to express love, to have physical enjoyment, to cope with difficult situations and emotions, to validate one's desirability, and to do what peers do.
- **Cultural context:** Having a strong influence on sexual behavior, cultures inform people about **sexual scripts**, or implicit rules that allow a person to judge the appropriate sexual behavior for a given situation. For example, people follow sexual scripts when deciding whether they should initiate sexual activity or wait to receive a partner's advances.

A culture's social and economic structure determines the gender roles that men and women adopt. These gender roles in turn determine people's attitude toward sexual activity. In some cultures, for instance, women need marriage to get access to status and wealth. In such cultures, a woman is less likely to be interested in sex for its own sake, since casual sex can damage her reputation and reduce her chances of marriage.

Sex and the Brain

Psychological influences are clearly powerful motivators for sex, and the brain is highly involved in sexual arousal. People who have lost all sensation in their genitals because of spinal injuries, for example, are still capable of sexual desire.

Gender Differences in Sexual Behavior and Partner Choice

Many researchers have found that some differences exist between men and women in sexual behavior and partner choice, though all men and all women do not behave the same way or feel the same things.

Men	Women
More interested in sex; initiate and think about sex more often	Less interested in sex
Want sex with more partners	Not as interested in sex with many partners

Desire sex without emotional commitment	Desire sex with emotional commitment
Focus on youth and physical attractiveness when choosing a sex partner	Focus on social and economic status when choosing a sex partner
Feel more jealous when partner is physically unfaithful	Feel more jealous when partner is emotionally unfaithful

Evolutionary Explanations

Some theorists use evolutionary theory to explain these gender differences. Their explanations are generally based on Robert Trivers's idea that men and women make different parental investments in order to produce offspring. From a biological standpoint, men invest no more than the energy required for intercourse. Women, on the other hand, invest time and energy in pregnancy and breast feeding. Because of these biological differences, females can produce only a limited number of offspring, whereas males can potentially produce virtually unlimited offspring.

Males can increase their reproductive success by producing as many offspring as possible. Evolutionary theory predicts that men tend to choose attractive, youthful partners because these qualities imply good health and an ability to reproduce successfully. Females increase their reproductive success by being highly discriminating when choosing mates. They try to select males who have the most access to material resources, because such males can contribute the most to caring for offspring.

Furthermore, men must contend with paternity uncertainty—they can never be certain that they are the fathers of their partners' offspring. Evolutionary theorists predict that men would therefore tend to have concerns about their partners' sexual infidelity. Women, on the other hand, *can* be certain that their offspring are their own, though they cannot be certain that their partners will provide for their offspring. Therefore, they are more likely to be concerned about the emotional fidelity of their partners.

Problems with Evolutionary Explanations

Many people criticize the use of evolutionary explanations of gender differences in sexual behavior. Some critics argue that alternative explanations can account equally well for the observed gender differences. For example, women's history of social and economic subservience may have taught them to place a high value on their partners' access to material resources. Men's preferences and behaviors may likewise be a product of socialization. See page 43 for more information on problems with evolutionary explanations.

Sexual Orientation

Sexual orientation is such a controversial subject that people cannot even agree about how the term *sexual orientation* should be defined. Some people argue over whether it refers to sexual behavior, sexual attraction, emotional attraction, or all three.

Researchers define sexual orientation in a variety of ways, which means there is no clear idea about what proportion of the population is homosexual. Researchers also have many different opinions regarding how much biological and environmental factors contribute to sexual orientation.

Possible Biological Factors

Researchers have many ideas about the possible biological factors of homosexuality:

- **Hormones:** Some researchers have suggested that homosexuals and heterosexuals have different levels of various hormones in the blood. However, research in this area has failed consistently to find hormonal variations that could account for differences in sexual orientation.
- **Genes:** Others have proposed that there is a genetic basis for predisposition to homosexuality. To investigate the possibility of a genetic basis, researchers have studied the sexual orientations of the identical, fraternal, and adoptive siblings of homosexual people. This research has shown that the identical twins of homosexuals are much more likely to be homosexual than the fraternal twins of homosexuals. In turn, the fraternal twins of homosexuals are more likely to be homosexual than the adoptive siblings of homosexuals.
- **Prenatal factors:** Some researchers have focused on prenatal environment. These researchers believe that the level of hormones present during a critical period in prenatal development can affect the organization of the brain, which in turn can influence sexual orientation. Research shows that women who were exposed to high prenatal levels of androgens are more likely to be homosexual. Critics point out that not all women who were exposed to prenatal androgens became homosexual and that many homosexual women were not exposed to androgens prenatally.
- **Brain differences:** One researcher, Simon LeVay, examined anatomical differences in the brains of homosexual and heterosexual men. He found that a specific area of the hypothalamus tended to be smaller in homosexual men and in heterosexual women than in heterosexual men.

Environmental Factors

Many researchers believe biological factors alone can't explain the origin of homosexuality. For example, there is only about a 50 percent chance that the identical twins of homosexual men will also be homosexual. Therefore, some other factor must make the other 50 percent heterosexual. Although this other factor remains unknown, researchers have proposed a number of environmental situations that might influence sexual orientation:

- An ineffectual, distant father and an overly close, domineering mother
- Seduction in childhood by a homosexual adult
- Same-sex sexual play as children

Many of these proposals lack empirical support.
At this time, no one knows exactly what determines sexual orientation. Possibly, men and women develop homosexual orientations through various pathways. It is also possible that the cause of homosexual orientation differs from individual to individual.

Sexual Orientation in the Animal World

Humans are not the only species to engage in homosexual or bisexual activity. Biologists have documented that animals belonging to hundreds of different species engage in homosexual or bisexual behavior. Many, both male and female, form exclusive, long-term homosexual pairs.

D) Achievement

An **achievement motive** is an impulse to master challenges and reach a high standard of excellence. Both personality and situational factors influence achievement motivation.

Researchers often use the**Thematic Apperception Test (TAT)** to measure people's need for achievement. The TAT consists of a set of ambiguous pictures, such as one of a woman standing in the doorway of a room. Researchers ask subjects to make up stories about these pictures. Some subjects' stories consistently contain themes that relate to achievement. Researchers consider these subjects to have a high need for achievement.

Personality Factors

High-achievement motivation tends to lead to particular personality features. These include persistence, ability to delay gratification, and competitiveness:

- **Persistence:** High achievers tend to be very persistent and work hard to attain goals they set for themselves.
- **Ability to delay gratification:** High achievers tend to have a greater ability to delay gratifying their impulses in the short term in order to reach long-term goals.
- **Competitiveness:** High achievers tend to select careers that give them opportunities to compete with other people.

Self-Fulfilling Prophecies

Expectations can result in self-fulfilling prophecies. If a student expects to get an A on a term paper, she'll work hard, and her work will be more likely to earn her an A.

Situational Factors

Some situational factors also affect achievement motivation. They include the expectation of success, incentives, control, and opportunity:

- **Expectation of success:** People are more likely to have a high expectation of success if they have a feeling of **self-efficacy**, or confidence in their own ability to meet challenges effectively. People can acquire self-efficacy by dealing with difficulties and learning from mistakes. Having good role models and getting constructive feedback and encouragement also help to build self-efficacy.
- **Incentives:** Incentives reward people for their competence and motivate them to achieve. However, incentives can also decrease people's intrinsic motivation if people focus on getting incentives rather than doing tasks for their own sake.
- **Control:** People tend to have more motivation to achieve if they feel they have control over some aspects of their work.
- **Opportunity:** People are motivated to achieve only when they have the opportunity to achieve.

High Achievers Prefer Moderately Difficult Tasks

People with a high need for achievement tend to prefer moderately difficult tasks. Such tasks allow people to succeed and to see themselves as competent for having succeeded. Very difficult tasks tend to prevent success, and very easy tasks don't allow people to feel competent when they succeed.

The Power of Goals

Goals are most likely to increase motivation to achieve if they are specific, challenging but achievable, and positive:

- **Goals should be specific.** The more specific the goals, the more effective they are as motivators.

Example:

If Steve is trying to get all his reading done for a final exam, a specific goal, such as I will finish one chapter each week, is more effective than a more diffuse goal, such asI will make sure I'm ready for my final.

- **Goals should be challenging but achievable.** Goals have to be difficult enough to be challenging but easy enough to be reachable.

Example:

If Kelly has been struggling to maintain a C average in a class all semester, a goal such as I will make a B on the final exam will be more motivational than a goal such as I will get an A in this class.

- **Goals should be positive.** It is better for people to frame goals in terms of what they *will* do rather than in terms of what they *will not* do.

Example:

A goal such as I will study for an hour every weekday evening is likely to be more effective than a goal such as I will not go out on weekday evenings.

XIII. Personality

Personality—it's who we are. Our personalities determine how we act and react, as well as how we interact with and respond to the world. Despite much research, the origins of personality are still a mystery, though there are many theories that attempt to explain them. Some researchers propose that children learn personality from their parents; others believe personality is fixed from birth. Some theories address how environment, genetics, and culture influence the development of personality.

What does it mean to have "personality"? Someone with personality could be funny, passionate, daring, extroverted, aggressive, egotistical, hot-tempered, or insecure. He or she might be altruistic, humble, mellow, shy, or wary. He or she might even be all or any of these things at different times and in different places, depending on the situation. Researchers have developed many ways of assessing personality, but even if we do gain an understanding of*how* we are, the question of *why* we're that way remains.

A) Personality Traits

Personality is the collection of characteristic thoughts, feelings, and behaviors that are associated with a person. Personality **traits** are characteristic behaviors and feelings that are consistent and long lasting.

Traits vs. States

*Unlike traits, which are stable characteristics, **states** are temporary behaviors or feelings that depend on a person's situation and motives at a particular time. The difference between traits and states is analogous to the difference between climate and weather. Los Angeles has a warm climate, but on some days it may have cool weather. In the same way, a person who has the trait of calmness may experience a state of anxiety on a day when he or she faces a difficult challenge.*

Ancient Greek Ideas

The ancient Greeks believed that people's personalities depended on the kind of**humor**, or fluid, most prevalent in their bodies. The ancient Greeks identified four humors—blood, phlegm, black bile, and yellow bile—and categorized people's personalities to correspond as follows:

- **Sanguine:** Blood. Cheerful and passionate.
- **Phlegmatic:** Phlegm. Dull and unemotional.
- **Melancholic:** Black bile. Unhappy and depressed.
- **Choleric:** Yellow bile. Angry and hot-tempered.

The Greek theory of personality remained influential well into the eighteenth century.

Cattell's Sixteen Traits

Like the ancient Greeks, modern researchers believe in the existence of a few basic personality traits. Combinations of these basic traits, they believe, form other traits. Psychologist Raymond Cattell used a statistical procedure called **factor analysis** to identify basic personality traits from a very long list of English words that identified traits. Factor analysis allowed Cattell to cluster these traits into groups according to their similarities. He found that personality is made up of sixteen basic dimensions.

The Big Five Traits

Other researchers have since clustered personality traits into even fewer categories. Today, many psychologists believe that all personality traits derive from five basic personality traits, which are commonly referred to as the **Big Five**:

1. Neuroticism
2. Extraversion
3. Openness to experience
4. Agreeableness
5. Conscientiousness

The Big Five traits remain quite stable over the life span, particularly after the age of thirty. Although researchers identified the Big Five traits by using a list of English words, these traits seem to be applicable in many countries.

Criticisms of the Big Five Model

Critics of the Big Five have various arguments against the model:

- Some critics think that more than five traits are needed to account for the wide personality differences among people.
- Other critics argue that five traits are too many. For example, they point out that openness correlates positively with extraversion. These critics argue that just three traits— neuroticism, extraversion, and agreeableness—should be enough to fully describe personality.
- Still other critics argue that the Big Five are somewhat arbitrary because they depend on the words used in the statistical analysis that produced them. A different list of words may have yielded different basic traits.
- Some psychologists have questioned the research supporting the stability of the Big Five traits across cultures. They argue that the research could be biased because the use of Western tests is more likely to uncover cultural similarities than differences.

B) Psychodynamic Theories

Many psychologists have proposed theories that try to explain the origins of personality. One highly influential set of theories stems from the work of Austrian neurologist **Sigmund Freud**, who first proposed the theory of psychoanalysis. Collectively, these theories are known as **psychodynamic theories**. Although many different psychodynamic theories exist, they all emphasize unconscious motives and desires, as well as the importance of childhood experiences in shaping personality.

Sigmund Freud's Theory of Psychoanalysis

In the late 1800s and early 1900s, Freud developed a technique that he called**psychoanalysis** and used it to treat mental disorders. He formed his theory of psychoanalysis by observing his patients. According to psychoanalytic

theory, personalities arise because of attempts to resolve conflicts between unconscious sexual and aggressive impulses and societal demands to restrain these impulses.

The Conscious, the Preconscious, and the Unconscious

Freud believed that most mental processes are unconscious. He proposed that people have three levels of awareness:

- The **conscious** contains all the information that a person is paying attention to at any given time.

Example:

The words Dan is reading, the objects in his field of vision, the sounds he can hear, and any thirst, hunger, or pain he is experiencing at the moment are all in his conscious.

- The **preconscious** contains all the information outside of a person's attention but readily available if needed.

Example:

Linda's telephone number, the make of her car, and many of her past experiences are in her preconscious.

- The **unconscious** contains thoughts, feelings, desires, and memories of which people have no awareness but that influence every aspect of their day-to-day lives.

Example:

Stan's unconscious might contain angry feelings toward his mother or a traumatic incident he experienced at age four.

Freud believed that information in the unconscious emerges in slips of the tongue, jokes, dreams, illness symptoms, and the associations people make between ideas.

The Freudian Slip

Cathy calls up her mother on Mother's Day and says, "You're the beast, Mom," when she consciously intended to say, "You're the best, Mom." According to psychoanalytic theory, this slip of the tongue, known as a Freudian slip, reveals her unconscious anger toward her mother.

The Id, the Ego, and the Superego

Freud proposed that personalities have three components: the id, the ego, and the superego.

- **Id:** a reservoir of instinctual energy that contains biological urges such as impulses toward survival, sex, and aggression. The id is unconscious and operates according to the **pleasure principle**, the drive to achieve pleasure and avoid pain. The id is characterized by **primary process thinking**, which is illogical, irrational, and motivated by a desire for the immediate gratification of impulses.
- **Ego:** the component that manages the conflict between the id and the constraints of the real world. Some parts of the ego are unconscious, while others are preconscious or conscious. The ego operates according to the**reality principle**, the awareness that gratification of impulses has to be delayed in order to accommodate the demands of the real world. The ego is characterized by **secondary process thinking**, which is logical and rational. The ego's role is to prevent the id from gratifying its impulses in socially inappropriate ways.
- **Superego:** the moral component of personality. It contains all the moral standards learned from parents and society. The superego forces the ego to conform not only to reality but also to its ideals of morality. Hence,

the superego causes people to feel guilty when they go against society's rules. Like the ego, the superego operates at all three levels of awareness.

Conflict

Freud believed that the id, the ego, and the superego are in constant conflict. He focused mainly on conflicts concerning sexual and aggressive urges because these urges are most likely to violate societal rules.

Anxiety

Internal conflicts can make a person feel anxious. In Freud's view, anxiety arises when the ego cannot adequately balance the demands of the id and the superego. The id demands gratification of its impulses, and the superego demands maintenance of its moral standards.

Defense Mechanisms

To manage these internal conflicts, people use defense mechanisms. **Defense mechanisms** are behaviors that protect people from anxiety. There are many different kinds of defense mechanisms, many of which are automatic and unconscious:

- **Repression:** keeping unpleasant thoughts, memories, and feelings shut up in the unconscious.

Example:

Nate witnessed his mother being beaten by a mugger when he was seven years old. As an adult, he does not remember this incident.

- **Reaction formation:** behaving in a way that is opposite to behavior, feelings, or thoughts that are considered unacceptable.

Example:

Lisa feels sexually attracted to her roommate's boyfriend but does not admit this to herself. Instead, she constantly makes very disparaging comments about the boyfriend and feels disgusted by the way he acts.

- **Projection:** attributing one's own unacceptable thoughts or feelings to someone else.

Example:

Mario feels angry toward his father but is not aware of it. Instead, he complains that he cannot be around his father because his father is such an angry man.

- **Rationalization:** using incorrect but self-serving explanations to justify unacceptable behavior, thoughts, or feelings.

Example:

Sylvia runs a red light while driving. She justifies this by telling herself she was already in the intersection when the light changed to red.

- **Displacement:** transferring feelings about a person or event onto someone or something else.

Example:

Seth is angry at his professor for giving him a bad grade. He leaves class and shouts angrily at a passerby who accidentally bumps into him.

- **Denial:** refusing to acknowledge something that is obvious to others.

Example:

Kate's use of alcohol starts to affect her academic performance, her job, and her relationships. However, she insists that she drinks only to relieve stress and that she does not have an alcohol problem.

- **Regression:** reverting to a more immature state of psychological development.

Example:

When six-year-old Jameel gets less attention from his parents because of a new baby brother, he suddenly starts to wet his bed at night.

- **Sublimation:** channeling unacceptable thoughts and feelings into socially acceptable behavior.

Example:

Priya deals with her angry feelings toward her family by writing science-fiction stories about battles between civilizations.

Psychosexual Stages of Development

Freud believed that personality solidifies during childhood, largely before age five. He proposed five stages of psychosexual development: the oral stage, the anal stage, the phallic stage, the latency stage, and the genital stage. He believed that at each stage of development, children gain sexual gratification, or sensual pleasure, from a particular part of their bodies. Each stage has special conflicts, and children's ways of managing these conflicts influence their personalities.

If a child's needs in a particular stage are gratified too much or frustrated too much, the child can become fixated at that stage of development. **Fixation** is an inability to progress normally from one stage into another. When the child becomes an adult, the fixation shows up as a tendency to focus on the needs that were over-gratified or over-frustrated.

Freud's Psychosexual Stages of Development

Stage	Age	Sources of pleasure	Result of fixation
Oral stage	Birth to roughly twelve months	Activities involving the mouth, such as sucking, biting, and chewing	Excessive smoking, overeating, or dependence on others
Anal stage	Age two, when the child is being toilet trained	Bowel movements	An overly controlling (anal-retentive) personality or an easily angered (anal-expulsive) personality
Phallic stage	Age three to five	The genitals	Guilt or anxiety about sex
Latency Stage	Age five to puberty	Sexuality is latent, or dormant, during this period	No fixations at this stage

Genital stage	Begins at puberty	The genitals; sexual urges return	No fixations at this stage

Oedipus Complex

*Freud believed that the crucially important **Oedipus complex** also developed during the phallic stage. The Oedipus complex refers to a male child's sexual desire for his mother and hostility toward his father, whom he considers to be a rival for his mother's love. Freud thought that a male child who sees a naked girl for the first time believes that her penis has been cut off. The child fears that his own father will do the same to him for desiring his mother—a fear called **castration anxiety**. Because of this fear, the child represses his longing for his mother and begins to identify with his father. The child's acceptance of his father's authority results in the emergence of the superego.*

During his lifetime, Freud had many followers who praised his theory, but his ideas, particularly his emphasis on children's sexuality, also drew criticism. Some of Freud's followers broke away from him because of theoretical disagreements and proposed their own theories. These theorists are called neo-Freudians. Some important neo-Freudians were Carl Jung, Alfred Adler, and object-relations theorists.

Penis Envy and Womb Envy

*Freud believed that the successful resolution of the Oedipus complex played a crucial role in the formation of the superego and the personality. However, he did not have a plausible account of how this developmental phase applied to girls. Freud believed that because girls do not have a penis, they don't have the same motivation to develop a strong superego. Instead, they develop **penis envy**, or a sense of discontent and resentment resulting from their wish for a penis. This gender-biased idea has raised strong criticism from many psychologists, including the psychoanalyst Karen Horney. Horney proposed that it was more likely that men have**womb envy** because of their inability to bear children.*

Carl Jung's Analytical Psychology

Until the 1910s, **Carl Jung** was a follower and close friend of Freud's. Like Freud, Jung believed that unconscious conflicts are important in shaping personality. However, he believed the unconscious has two layers: the **personal unconscious**, which resembled Freud's idea, and the **collective unconscious**, which contains universal memories of the common human past.

Jung called these common memories archetypes. **Archetypes** are images or thoughts that have the same meaning for all human beings. Jung said that archetypes exist in dreams as well as in art, literature, and religion across cultures.

Example:

The archetype of the "powerful father" can be seen in the Christian conception of God, the Zeus of Greek mythology, and popular movies such as The Godfather.

Alfred Adler's Individual Psychology

Alfred Adler, another follower of Freud and a member of his inner circle, eventually broke away from Freud and developed his own school of thought, which he called**individual psychology**. Adler believed that the main motivations for human behavior are not sexual or aggressive urges but strivings for superiority. He pointed out that children naturally feel weak and inadequate in comparison to adults. This normal feeling of inferiority drives them to adapt, develop skills, and master challenges. Adler used the term **compensation** to refer to the attempt to shed normal feelings of inferiority.

However, some people suffer from an exaggerated sense of inferiority, or an **inferiority complex**, which can be due either to being spoiled or neglected by parents. Such people**overcompensate**, which means that rather than try to master challenges, they try to cover up their sense of inferiority by focusing on outward signs of superiority such as status, wealth, and power.

Object-Relations Theories

The object-relations school of psychoanalysis emerged in the 1950s, led by a group of psychoanalysts that included D. W. Winnicott and Melanie Klein. The term **object relations** refers to the relationships that people have with others, who are represented mentally as objects with certain attributes. Object-relations theorists believe that people are motivated most by attachments to others rather than by sexual and aggressive impulses. According to these theorists, the conflict between autonomy and the need for other people plays a key role in shaping personality.

Criticisms of Psychodynamic Theories

Freud's original ideas have little popularity today, but many psychologists do adhere to neo-Freudian ideas. However, other psychologists criticize psychodynamic theories for various reasons:

- Some critics argue that psychodynamic theories are not falsifiable (see pages 8–9) and therefore unscientific. In response to this criticism, proponents of psychodynamic theories point out that empirical evidence does support some psychodynamic concepts. For example, empirical research shows that there are unconscious mental processes, that people have mental representations of other people, and that people use unconscious defense mechanisms to protect themselves from unpleasant emotions such as anxiety.
- Other critics argue that psychodynamic theories are made by generalizing from a small number of patients to the whole human population. Relying only on case studies can lead to faulty conclusions.
- Still others argue that most psychodynamic theories are not based on studies that follow people from childhood to adulthood. Instead, psychodynamic theorists listen to descriptions of an adult patient's past and draw conclusions about the relevance of childhood experiences. However, as described on pages 172–174, memories are not always reliable.

C) Behaviorist Theories

The school of behaviorism emerged in the 1910s, led by **John B. Watson**. Unlike psychodynamic theorists, behaviorists study only observable behavior. Their explanations of personality focus on learning. Skinner, Bandura, and Walter Mischel all proposed important behaviorist theories.

B. F. Skinner's Ideas

As described in Chapter 7, "Learning and Conditioning,"**B. F. Skinner** is well known for describing the principles of operant conditioning. Skinner believed that the environment determines behavior. According to his view, people have consistent behavior patterns because they have particular kinds of**response tendencies**. This means that over time, people learn to behave in particular ways. Behaviors that have positive consequences tend to increase, while behaviors that have negative consequences tend to decrease.

Skinner didn't think that childhood played an especially important role in shaping personality. Instead, he thought that personality develops over the whole life span. People's responses change as they encounter new situations.

Example:

When Jeff was young, he lived in the suburbs. He developed a liking for fast driving because his friends enjoyed riding with him and he never got speeding tickets. After he left college, though, he moved to the city. Whenever he

drove fast, he got a speeding ticket. Also, his new friends were much more cautious about driving in fast cars. Now Jeff doesn't like to drive fast and considers himself to be a cautious person.

Albert Bandura's Ideas

Albert Bandura pointed out that people learn to respond in particular ways by watching other people, who are called models. See Chapter 7, "Learning and Conditioning," for more information on Bandura's research on observational learning.

Although Bandura agrees that personality arises through learning, he believes that conditioning is not an automatic, mechanical process. He and other theorists believe that cognitive processes like thinking and reasoning are important in learning. The kind of behaviorism they advocate is called social-cognitive learning.

Whom Do We Imitate?

Research has shown that people are more likely to imitate some models than others. People tend to imitate models they like or admire and models they consider attractive and powerful. People are also more likely to imitate models who seem similar to themselves. Furthermore, if people see models being rewarded for their behavior, they will be more likely to imitate those models. Advertisers often use these research results when they design ads. For example, ads that try to persuade young adults to purchase a certain brand of soft drink often show young, attractive models who are being rewarded with good times for their soda-drinking behavior.

Walter Mischel's Ideas

Walter Mischel, like Bandura, is a social-cognitive theorist. Mischel's research showed that situations have a strong effect on people's behavior and that people's responses to situations depend on their thoughts about the likely consequences of their behavior. Mischel's research caused considerable debate because it cast doubt on the idea of stable personality traits. Mischel himself did not want to abandon the idea of stable personality traits. He believed that researchers should pay attention to both situational and personal characteristics that influence behavior.

Today, most psychologists acknowledge that both a person's characteristics and the specific situation at hand influence how a person behaves. Personal characteristics include innate temperaments, learned habits, and beliefs. The environment includes opportunities, rewards, punishments, and chance occurrences. Personality results from a two-way interaction between a person's characteristics and the environment. This process of interaction is called**reciprocal determinism**. People's characteristics influence the kind of environment in which they find themselves. Those environments, in turn, influence and modify people's personal characteristics.

Criticisms of Behavioral Approaches

Critics of the behavioral approach to personality maintain three arguments:

- Behaviorist researchers often do animal studies of behavior and then generalize their results to human beings. Generalizing results in this way can be misleading, since humans have complex thought processes that affect behavior.
- Behaviorists often underestimate the importance of biological factors.
- By emphasizing the situational influences on personality, some social-cognitive theorists underestimate the importance of personality traits.

D) Humanistic Theories

Some psychologists at the time disliked psychodynamic and behaviorist explanations of personality. They felt that these theories ignored the qualities that make humans unique among animals, such as striving for self-determination and self-realization. In the 1950s, some of these psychologists began a school of psychology called **humanism**.

Humanistic psychologists try to see people's lives as those people would see them. They tend to have an optimistic perspective on human nature. They focus on the ability of human beings to think consciously and rationally, to control their biological urges, and to achieve their full potential. In the humanistic view, people are responsible for their lives and actions and have the freedom and will to change their attitudes and behavior.

Two psychologists, Abraham Maslow and Carl Rogers, became well known for their humanistic theories.

Abraham Maslow's Theory

The highest rung on **Abraham Maslow**'s ladder of human motives is the need for **self-actualization**. Maslow said that human beings strive for self-actualization, or realization of their full potential, once they have satisfied their more basic needs. Maslow's hierarchy of needs theory is described on page 247.

Maslow also provided his own account of the healthy human personality. Psychodynamic theories tend to be based on clinical case studies and therefore lack accounts of healthy personalities. To come up with his account, Maslow studied exceptional historical figures, such as Abraham Lincoln and Eleanor Roosevelt, as well as some of his own contemporaries whom he thought had exceptionally good mental health.

Maslow described several characteristics that self-actualizing people share:

- Awareness and acceptance of themselves
- Openness and spontaneity
- The ability to enjoy work and see work as a mission to fulfill
- The ability to develop close friendships without being overly dependent on other people
- A good sense of humor
- The tendency to have peak experiences that are spiritually or emotionally satisfying

Carl Rogers's Person-Centered Theory

Carl Rogers, another humanistic psychologist, proposed a theory called the**person-centered theory**. Like Freud, Rogers drew on clinical case studies to come up with his theory. He also drew from the ideas of Maslow and others. In Rogers's view, the **self-concept** is the most important feature of personality, and it includes all the thoughts, feelings, and beliefs people have about themselves. Rogers believed that people are aware of their self-concepts.

Congruence and Incongruence

Rogers said that people's self-concepts often do not exactly match reality. For example, a person may consider himself to be very honest but often lies to his boss about why he is late to work. Rogers used the term **incongruence** to refer to the discrepancy between the self-concept and reality. **Congruence**, on the other hand, is a fairly accurate match between the self-concept and reality.

According to Rogers, parents promote incongruence if they give their children conditional love. If a parent accepts a child only when the child behaves a particular way, the child is likely to block out experiences that are considered unacceptable. On the other hand, if the parent shows unconditional love, the child can develop congruence. Adults whose parents provided conditional love would continue in adulthood to distort their experiences in order to feel accepted.

Results of Incongruence

Rogers thought that people experience anxiety when their self-concepts are threatened. To protect themselves from anxiety, people distort their experiences so that they can hold on to their self-concept. People who have a high degree of incongruence are likely to feel very anxious because reality continually threatens their self-concepts.

Example:

Erin believes she is a very generous person, although she is often stingy with her money and usually leaves small tips or no tips at restaurants. When a dining companion comments on her tipping behavior, she insists that the tips she leaves are proportional to the service she gets. By attributing her tipping behavior to bad service, she can avoid anxiety and maintain her self-concept of being generous.

Criticisms of Humanistic Theories

Humanistic theories have had a significant influence on psychology as well as pop culture. Many psychologists now accept the idea that when it comes to personality, people's subjective experiences have more weight than objective reality. Humanistic psychologists' focus on healthy people, rather than troubled people, has also been a particularly useful contribution.

However, critics of humanistic theories maintain several arguments:

- Humanistic theories are too naïvely optimistic and fail to provide insight into the evil side of human nature.
- Humanistic theories, like psychodynamic theories, cannot be easily tested.
- Many concepts in humanistic psychology, like that of the self-actualized person, are vague and subjective. Some critics argue that this concept may reflect Maslow's own values and ideals.
- Humanistic psychology is biased toward individualistic values.

E) Biological Approaches

Psychologists agree that environmental factors interact with genetic factors to form personality. Some psychologists have proposed theories that emphasize these genetic influences on personality.

Hans Eysenck's Theory

Psychologist **Hans Eysenck**believes that genetics are the primary determinate of personality, although he thinks conditioning also plays a role. According to Eysenck, personality traits are hierarchical, with a few basic traits giving rise to a large array of more superficial traits. Genetically determined differences in physiological functioning make some people more vulnerable to behavioral conditioning. Eysenck suggests that introverted people have higher levels of physiological arousal, which allows them to be conditioned by environmental stimuli more easily. Because of this, such people develop more inhibitions, which make them more shy and uneasy in social situations.

Empirical evidence for genetic contributions to personality comes mainly from two kinds of studies: studies of children's temperaments and heritability studies.

Studies of Temperament

Temperament refers to innate personality features or dispositions. Babies show particular temperaments soon after birth. Temperaments that researchers have studied include reactivity, which refers to a baby's excitability or responsiveness, and soothability, which refers to the ease or difficulty of calming an upset baby.

Researchers have studied children from infancy to adolescence and found that temperaments remain fairly stable over time. However, temperaments can also be modified over time by environmental factors.

Heritability Studies

Heritability studies also provide evidence for genetic contributions to personality.**Heritability** is a mathematical estimate that indicates how much of a trait's variation in a population can be attributed to genes. For more information about heritability, see page 35.

Twin studies help researchers to determine heritability, as described in Chapter 2, “Evolution and Genes.” Researchers have shown that identical twins raised together are more similar than fraternal twins raised together in traits such as positive emotionality, negative emotionality, and constraint. Identical twins separated early in life and raised apart are more similar in these traits than are fraternal twins raised together. Both of these research findings suggest the existence of a genetic component to personality.

Behavioral geneticists have shown, after doing studies in many different countries, that the heritability of personality traits is around .5, which means that 50 percent of the variation in personality traits in a group of people can be attributed to genetic differences among those people.

The Influence of Family Environment

Surprisingly, research shows that sharing a family environment doesn’t lead to many similarities in personality. There is no or little correlation between the personality traits of adopted children and their adoptive parents. Researchers think this is because parents don’t act the same way with all their children. Children’s temperaments influence how a parent behaves toward them, and a child’s gender and place in a birth order can also affect how that child is treated.

Environmental Influences

The environment also has important influences on personality. These include peer relationships and the kinds of situations a child encounters. As described on page 277, under “Walter Mischel’s Ideas,” the interactions between innate characteristics and environmental factors are two-way. Children’s temperaments are likely to influence their peer relationships and the situations they encounter. Similarly, peers and situations can modify children’s personality characteristics.

Evolutionary Approaches

Evolutionary theorists explain personality in terms of its adaptive value. Theorists such as David Buss have argued that the Big Five personality traits are universally important because these traits have given humans a reproductive advantage.

F) Culture and Personality

Cultural psychologists have noted that some aspects of personality differ across cultural groups. For example, Americans and Asians have slightly different conceptions of self. American culture promotes a view of the self as independent. American children tend to describe themselves in terms of personal attributes, values, and achievements, and they learn to be self-reliant, to compete with others, and to value their uniqueness.

Many Asian cultures, such as those of Japan and China, promote a view of the self as interdependent. Children from these cultures tend to describe themselves in terms of which groups they belong to. They learn to rely on others, to be modest about achievements, and to fit into groups.

Researchers believe that culture influences aggressiveness in males. In places where there are plentiful resources and no serious threats to survival, such as Tahiti or Sudest Island near New Guinea, males are not socialized to be aggressive. Culture also influences altruism. Research shows that children tend to offer support or unselfish suggestions more frequently in cultures where they are expected to help with chores such as food preparation and caring for younger siblings.

Challenges for Cultural Psychology

Cultural psychologists face the difficult challenge of studying and describing differences among cultures without stereotyping any particular culture. Ideally, cultural psychologists acknowledge that all members of a culture don’t

behave similarly. Variation exists within every culture, in terms of both individuals and subcultures. Cultural psychologists also try not to exaggerate differences among cultures.

G) Assessing Personality

Doctors, researchers, and employers use personality assessments for a variety of reasons:

- Clinical psychologists often use assessments as aids for diagnosing psychological disorders.

Example:

A psychologist might administer personality tests to a patient with a varied set of symptoms to narrow down possible diagnoses. In such a case, a psychologist would typically use a battery of tests in addition to interviewing the patient.

- Some mental health providers use tests to decide how best to counsel people about normal problems of daily living.

Example:

A counselor might administer a personality test in order to help a person choose a career.

- Some organizations use assessments to select personnel to hire, although this practice is decreasing in popularity.

Example:

A consulting firm might assess job candidates in order to decide which candidates would be likely to perform well under pressure.

- Researchers frequently use tests in the course of studying personality traits.

Example:

A researcher studying the correlation between risk taking and criminality might administer a personality test to a sample of prison inmates.

Three important ways of assessing personality include objective tests, projective tests, and assessment centers.

Objective Personality Tests

Objective personality testsare usually self-report inventories. **Self-report inventories** are paper-and-pen tests that require people to answer questions about their typical behavior. Commonly used objective tests include the MMPI-2, the 16PF, and the NEO Personality Inventory.

The MMPI-2

The **Minnesota Multiphasic Personality Inventory (MMPI)** was developed in the 1940s and revised in the 1980s. The revised version is called the MMPI-2. The MMPI-2 contains a list of 567 questions. People taking the test must answer these questions with *true*, *false*, or *cannot say*.

The MMPI was originally developed to help clinical psychologists diagnose psychological disorders. To interpret the MMPI-2, psychologists divide the answers to questions into fourteen subscales. Ten of these subscales are clinical subscales, which give information about different aspects of the test taker's personality. The other four subscales are validity subscales, which indicate whether the test taker was careless or deceptive when answering questions. A score on any single subscale doesn't provide a clear indication of a specific psychological disorder. Rather, the score profile, or pattern of responses across subscales, indicates specific psychological disorders.

The 16PF

The **Sixteen Personality Factor Questionnaire (16PF)** is a test that assesses sixteen basic dimensions of personality. It consists of a list of 187 questions.

The NEO Personality Inventory

The **NEO Personality Inventory** measures the Big Five traits: extraversion, openness to experience, agreeableness, conscientiousness, and neuroticism.

Advantages and Disadvantages of Self-Report Inventories

Self-report inventories are useful because they allow psychologists to get precise answers to standardized questions. In other words, all subjects who take a test answer the same questions, and all subjects have to select answers from the same range of options. Inventories are also objective, which means that different people scoring the same test would score them in the same way. However, these scores might be interpreted differently by different people.

There are several disadvantages to self-report inventories as well:

- Self-report inventories often contain transparent questions, which means subjects can figure out what a psychologist wants to measure. Therefore, subjects can lie intentionally and fake personality traits they don't really have. Researchers who develop tests address this problem by including **lie scales** in tests, which provide information about the likelihood that a subject is lying.
- The social desirability bias can affect responses on self-report inventories. In other words, when filling out an inventory, people might state what they wish were true, rather than what *is* true. Test developers can minimize this bias by dropping questions that are likely to evoke it.
- People sometimes don't understand the questions on the test. Test developers try to address this issue by wording questions very clearly so that they have only one possible interpretation.
- People sometimes don't remember aspects of the experience they are asked about.

Projective Personality Tests

Projective personality tests require subjects to respond to ambiguous stimuli, such as pictures and phrases, that can be interpreted in many different ways. Projective tests are based on the **projective hypothesis**, which is the idea that people interpret ambiguous stimuli in ways that reveal their concerns, needs, conflicts, desires, and feelings.

Clinical psychologists and researchers often use two projective tests: the Rorschach test and the Thematic Apperception Test.

The Rorschach Test

The **Rorschach test** consists of a series of ten inkblots. Psychologists ask subjects to look at the inkblots and describe what they see, and the psychologists then use complex scoring systems to interpret the subjects' responses. Scores are based on various characteristics of responses, such as the originality of the response and the area of the blot described in the response. The Rorschach gives psychologists information about the subject's personality traits and the situational stresses the subject may be experiencing.

The Thematic Apperception Test

The **Thematic Apperception Test (TAT)** consists of a series of pictures containing a variety of characters and scenes. Psychologists ask subjects to make up stories about each picture and look for themes that run through the subjects' responses. For example, a person with a high need for achievement may consistently come up with stories that have achievement-related themes.

Advantages and Disadvantages of Projective Tests

Projective tests are useful because they allow psychologists to assess unconscious aspects of personality. Projective tests are also not transparent: subjects cannot figure out how their responses will be interpreted. Therefore, subjects cannot easily fake personality traits on a projective test.

A serious disadvantage of projective tests is that they have questionable reliability and validity. Despite this flaw, many researchers and clinicians find that such tests give them useful information.

Assessment Centers

Assessment centers allow psychologists to assess personality in specific situations. In assessment centers, subjects are made to face situations in which they must use particular types of traits and skills, and their performance is then assessed. Assessment centers work on the well-accepted idea that the best predictor of future behavior is past behavior in similar situations. For example, a corporation may select a person for a managerial position by placing candidates in a simulated managerial situation for half a day and assessing their performance.

Assessment centers are useful for selecting personnel for positions of responsibility because they predict how people will act in challenging situations. However, assessment centers are expensive and time consuming.