





Chapter Outline

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Psychological Applications: Do You Have a Chameleon-Like Personality?





"It is totally me, Dad!"

his was my daughter Amelia's reaction a few years ago upon reading the "personality profile" she received from the handwriting analysis machine at Michigan's Upper Peninsula State Fair. After Amelia slipped her signature into the "Data Entry" slot (and paid a \$2 fee to the cashier), the lights on the graphology machine's cardboard façade flashed furiously before the machine spit out its evaluation. As Amelia marveled at the accuracy of her personality profile, I noticed

Cute is when your personality shines through your looks. Like, when you see someone's personality in the way they walk and you just feel like hugging them every time you see them.

—Natalie Portman, US actress, b. 1981 a partially hidden worker placing a fresh stack of pretyped profiles into the "Completed Profile" slot behind the machine. At that moment, a scene from *The Wizard of Oz* ran through my mind. It was the scene where Dorothy returns to Oz and presents

the dead witch's broom to the all-powerful Wizard. As the huge, disembodied head of the Wizard blusters and bellows at Dorothy, her dog Toto pulls back a curtain, revealing that the Wizard is really just an ordinary man manipulating people's impressions with smoke and mirrors.

That day at the fair, I decided not to tell Amelia about the man behind the machine. Sometime later, however, we talked a bit about the validity of handwriting analysis, palm reading, and horoscopes. Put simply, these techniques that claim to assess personality have no scientific validity (Beyerstein & Beyerstein, 1992; Kelly, 1997). They provide assessments that appear remarkably accurate in divining our unique characteristics because they are either flattering to our egos or generally true of everybody (Forer, 1949). For example, consider the following generic description of personality:

You are an independent thinker, but you have a strong need to be liked and respected by others. At times, you are outgoing and extraverted, while at other times, you are reserved and introverted. You have found it unwise to be too frank in revealing yourself to others. While you have some personality weaknesses, you can generally compensate for them. You tend to be critical of yourself. You have a great deal of potential, but you have not yet fully harnessed it. Some of your aspirations are pretty unrealistic.

When college students were provided with personality assessments similar to this one and told that an astrologer had prepared the profiles just for them, almost all the students evaluated the accuracy of these descriptions as either "good" or "excellent" (Davies, 1997; Glick et al., 1989). Further, after receiving their assessments, students were more likely to believe that astrology was a valid way to assess personality. This tendency to accept global and ambiguous feedback about oneself—even if the source of the information lacks credibility—is known as the *Barnum effect*, in honor of master showman P. T. Barnum. He credited his success in the circus industry to the fact that "There's a sucker born every minute."

Now I am not suggesting that my daughter and the majority of college students are "suckers" waiting to be fleeced of their money by unscrupulous fortune hunters. I am suggesting that there is a more accurate—and, yes, more ethical—way to understand our personalities. It is through the application of the scientific method. In this chapter, we continue our journey of discovery through psychology by venturing behind the scientific "curtain" of personality theory and research. I think you will find that this particular journey reveals much more than the smoke and mirrors effects typically created by graphologists, palm readers, and astrologers.

10.1 The Nature of Personality

Before reading further, spend a few minutes identifying certain recurring ways in which you respond across a variety of situations. In addition, identify ways in which you think, feel, or behave that set you apart from many other people. Which of these personal qualities help you successfully meet life's challenges?

10.1a Consistency and Distinctiveness Define Personality

One important quality of personality is *consistency* in thinking, feeling, and acting. We consider people to be consistent when we see them responding in the same way in a variety of situations and over an extended period of time. Of course, people do not respond with consistency entirely, but in order for us to notice that they have a characteristic way of thinking, feeling, and behaving, they must respond consistently across many situations and over time. For instance, you may have a friend who argues at the drop of a hat. This aspect of his or her interaction style is consistent enough that you have a pretty good idea how your friend will act around others, regardless of whether they are friends, relatives, or strangers.

Distinctiveness is another important quality of personality because it is used to explain why everyone does not act the same in similar situations. Return to the example of your argumentative friend. Because most people generally try to find points of agreement when interacting with others, your friend's argumentative style is distinctive, setting him or her apart from most people.

Overall, then, when we study personality, we are studying how people are consistent across situations and how they differ from one another. For our purposes, **personality** is defined as the *consistent* and *distinctive* thoughts, feelings, and behaviors

in which an individual engages. This definition has its roots in philosophy as much as in science. For that reason, parts of this chapter may seem like they are describing a different kind of psychology—a more speculative and less data-driven psychology—than other parts of the chapter. You will most likely notice this during the discussion of psychoanalytic and humanistic approaches to personality. During the second half of the 20th century, the study of personality followed the rest of the field of psychology and moved away from broad theorizing to scientifically testing hypotheses about personality functioning. Modern personality theorists tend to be much more limited and narrower in their approach to the field. This more modest approach has allowed for clearer descriptions of *personality* styles, though the more overarching and comprehensive descriptions that were present earlier have been lost

Personality

The consistent and distinctive thoughts, feelings, and behaviors in which an individual engages



Consistency and distinctiveness are important qualities of personality. What are your consistent and distinctive personal qualities?

(Magnavita, 2002). In the later sections of the chapter, these more modern approaches to studying personality functioning are represented by the trait and social cognitive theories. We also examine various means of assessing or describing personality.

10.1b Culture and Evolutionary Processes Shape Personality

Personality psychology was developed and has flourished in the North American and Western European social climate of *individualism*. This philosophy of life conceives of people as being unique, independent entities, separate from their social surroundings. In contrast, *collectivism* emphasizes group needs and desires over those of the individual (Singelis et al., 1995). During the past 35 years, as psychology has become more of an international science, personality theorists in individualist societies have devoted more attention to investigating how personality is a product of the individual's interaction with her or his social settings. In adopting this approach, personality theorists are thinking about human behavior in a way similar to that of collectivists (Triandis & Suh, 2002). This *interactionist* perspective on personality is discussed at various points in this chapter (see Sections 10.4d and 10.5a).

In addition to the influence that cultural beliefs can have on the study of personality, research further suggests that cultural beliefs can actually shape personality development (Church & Ortiz, 2005). For example, people from collectivist Latin cultures are often taught to have *simpatía*, which is a way of relating to others that is empathic, respectful, and unselfish and maintains harmonious social relationships (Varela et al., 2007). Likewise, the Chinese concept of *ren qin* (relationship orientation) and the Japanese concept of *amae* (indulgent dependence) emphasize social ties and dependence on others (Yu, 2007). Individuals who internalize these social norms will develop a personality style that is characteristic of their social group and may be relatively uncommon in other cultures (Ho et al., 2001).

Although personality styles may be associated with particular cultures, most personality researchers strive to identify universal aspects of personality. In this regard, a growing number of social scientists are beginning to examine how certain aspects of personality have been shaped over the course of our species' evolutionary history (Ridley et al., 2005). According to this viewpoint, because the evolutionary process is the only known creative process capable of producing complex organisms, all theories of human nature, including personality theories, must consider the basic principles of evolution by natural selection (see Chapter 1, Section 1.2e). Consistent with this viewpoint, in this chapter we periodically offer an evolutionary account of personality.



- Personality research examines how people are consistent across situations and how they differ from one another.
- More than culture influences how personality is studied; many contemporary psychologists study how both cultural and evolutionary forces shape personalities.

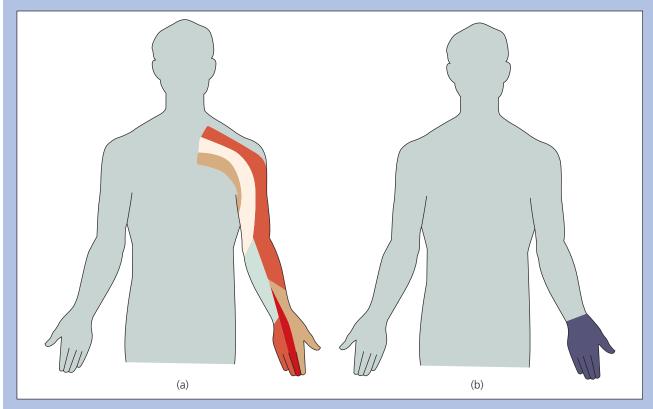
10.2 The Psychoanalytic Perspective

The most recognizable person in the field of psychology—Sigmund Freud—was not trained as a psychologist. Freud (1856–1939) grew up in Austria, was trained as a physician in Vienna, and aspired to become a university professor. Early in his professional career as a medical doctor, he studied the nervous system in the hope of applying newly discovered principles of physics and chemistry to the functioning of the human mind. In addition to teaching and doing laboratory work, Freud worked with patients (mostly women) who complained about problems with the functioning of their nervous systems. However, he frequently discovered that their symptoms seemed to originate from emotional trauma. Over time, this young Viennese doctor developed the idea that the young science of psychology held answers to many of these perplexing disorders (Freud, 1917/1959).

An example of the kind of medical problem that set Freud on his journey of discovery into psychology was a strange neurological-like condition referred to as *glove anesthesia* (see Figure 10–1). In this condition, the patient has no feeling from the wrists to the tips of the fingers but does have feeling in the forearms. Glove anesthesia is not consistent with the way the nervous system functions, which

Figure 10-1 Glove Anesthesia

Glove anesthesia describes numbness in the entire hand, ending at the wrist. The skin areas served by nerves in the arm are shown in (a). Glove anesthesia, depicted in (b), cannot be caused by nerve damage. The realization that such a condition was likely caused by emotional trauma led Freud to develop psychoanalytic theory, which emphasized unconscious conflict.



suggested to Freud that its cause was not physiological but psychological (Freud, 1895/1966). As you will see, this idea revolutionized the study of personality in the early 1900s.

10.2a Psychoanalytic Theory Asserts That the Unconscious Controls Behavior

When Freud suspected that some of the medical problems of his patients were in fact caused by emotional disturbances, he sought the advice of French neurologist Jean-Martin Charcot, who was treating such patients using hypnosis (Gay, 1988). Freud was also impressed by psychiatrist Joseph Breuer's "talking cure" therapy, in which patients with emotional problems were told to report whatever came to mind. Adapting these two techniques, Freud encouraged his patients to talk about their symptoms and what was occurring when the symptoms emerged. As they did this, Freud developed the idea that their symptoms were psychologically related to some sort of problem or dilemma they were experiencing. For instance, the previously described glove anesthesia of one of his young patients developed soon after she became aware of her emerging sexual urges. Stimulating herself with her hand was simultaneously very pleasurable and extremely anxiety-inducing. Freud believed that to prevent the expression of this unacceptable urge to sexually gratify herself, the woman unconsciously "deadened" her hand, making it unusable. Piecing together his patients' accounts of their lives while under hypnosis, Freud believed that he had discovered the unconscious mind.

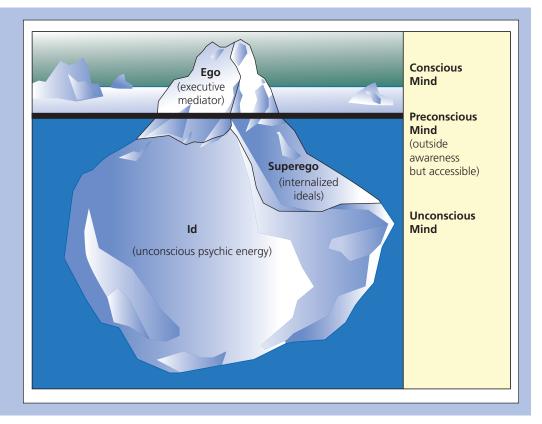
Freud's model of the mind proposed that it was mostly hidden, like an iceberg. As depicted in Figure 10–2, our **conscious mind** is the relatively small part of our mind that we are aware of at the moment, like the tip of the iceberg that is visible above the surface of the water. Right now, your conscious processes include (I hope!) the

Conscious mind

According to Freud, the relatively small part of our minds that we are aware of at the moment

Figure 10–2 Freud's Model of Personality Structure

In Freud's theory of personality, the mind is likened to an iceberg: The conscious mind is the small part of the iceberg visible above the water line and the unconscious mind is that part of the iceberg below the surface. The ego includes part of the conscious mind and part of the unconscious mind. The same is true of the superego, whereas the id is completely unconscious.



material from the previous sentences, perhaps an awareness of certain stimuli in your surroundings, and maybe the thought that you would like to be doing something other than reading this book. Immediately below the surface of the conscious mind resides the **preconscious mind**, which consists of those mental processes that are not currently conscious but could become so at any moment. Examples of preconscious material might include your parents' phone number, hopefully some of the material from previous sections of this book, and a conversation you had yesterday with a friend. Below this preconscious level resides the **unconscious mind**, which is like the huge section of the iceberg that is hidden in the water's depths. The unconscious mind is driven by biological urges that have been shaped by our evolutionary history, and it contains thoughts, desires, feelings, and memories that are not consciously available to us but that nonetheless shape our everyday behavior. Examples of unconscious material are painful, forgotten memories from childhood, hidden feelings of hostility toward someone you profess to like (or even love), and sexual urges that would create intense anxiety if you became aware of them.

Freud's theory of the mind was an important milestone in the history of psychology because it challenged the prevailing notion that our consciousness was the determining factor in the management and control of behavior. As you will see in later sections of this chapter, opposition to Freud's perspective on what determines human behavior spawned a number of competing personality theories.

10.2b Freud Divided Personality into the Id, the Ego, and the Superego

As Freud continued treating patients with psychological problems, he proposed another dimension to his theory of the mind, which came to be called the *structural model*. According to Freud, personality consisted of three subcomponents, or structures: the *id*, the *ego*, and the *superego*. Each structure has different operating principles and different goals, and frequently the goals of one component conflict with the goals of another component. This model of the mind is sometimes called a *conflict model* because it attempts to explain how psychological conflicts determine behavior.

The **id**—which in Latin means "it"—is an entirely unconscious portion of the mind. It contains the basic drives for reproduction, survival, and aggression. The id operates on the **pleasure principle**, meaning that it consistently wants to satisfy, as quickly and directly as possible, whatever desire is currently active. The id's agenda, as directed by the pleasure principle, might be summarized by the statement "if it feels good, do it." Freud believed that newborn infants represent the purest form of id impulses, crying whenever their needs are not immediately satisfied. He further proposed that a part of our personality continues to function like those newborns—wanting needs met immediately—throughout our lives.

Info-Bit



Hollywood has incorporated Freud's personality theory into many of its movies. For example, in the 1956 science fiction classic, *Forbidden Planet*, an Earth scientist living on a distant planet greatly expands the power of his mind—and unknowingly, his id—by using alien technology. When a space cruiser from planet Earth visits, his id—externalized as an invisible monster—destroys anyone who expresses sexual interest in the scientist's lovely daughter.

Preconscious mind

According to Freud, those mental processes that are not currently conscious but could become so at any moment

Unconscious mind

According to Freud, the thoughts, desires, feelings, and memories that are not consciously available to us but that nonetheless shape our everyday behavior

ld

An unconscious part of the mind that contains our sexual and aggressive drives

Pleasure principle

The process by which the id seeks to immediately satisfy whatever desire is currently active



Imagine how you might behave if you had no ego and simply acted, instead, on your id desires. How long do you think you would remain healthy, acting on impulse and unchecked by ego restraint?

Ego

The part of our minds that includes our consciousness and that balances the demands of the id, the superego, and reality

Reality principle

The process by which the ego seeks to delay gratification of id desires until appropriate outlets and situations can be found

Superego

The part of our minds that includes our conscience and counterbalances the more primitive demands of the id

Psychosexual stages

The fixed sequence of childhood developmental stages during which the id primarily seeks sexual pleasure by focusing its energies on distinct erogenous zones

One of life's realities is that our needs are seldom immediately satisfied. Freud asserted that as infants, whenever immediate gratification does not occur, we experience distress and anxiety. As a way to cope with this infantile stress, the **ego**—which in Latin means "I" develops out of the id. Its function is to be the decisionmaking part of the personality that satisfies id impulses in socially acceptable ways. In performing this function, the ego is both partially conscious and partially unconscious. The conscious part of the ego is in contact with external reality, while the unconscious part is in contact with the id. In seeking id satisfaction, the ego is guided by the **reality principle**, which is the process by which it seeks to delay gratification of id desires until appropriate outlets and situations can be found. The ego is interested in achieving pleasure but learns that this will more likely occur if the constraints of reality are taken into account.

The **superego**—which in Latin means "over the I"—develops later in childhood, around age 4 or 5. The superego has several functions, including the task of overseeing the ego and making sure that it acts morally. As such, the superego is concerned not just with what is

acceptable but also with what is ideal. It provides us with a conscience, making us feel guilty when we do "wrong" and instilling pride when we do "right." Essentially, the superego represents the internalization of cultural norms and values into the individual mind. Not surprisingly, the superego and the id are frequently at odds about the proper course of action in a given situation. The ego balances the demands of the id and superego, along with those of external reality, to generate behavior that will still bring pleasure.

Although this description of the three personality components appears to suggest that the ego (our conscious self) is controlling our behavior, Freud contended that this is largely an illusion. Throughout our daily activities, we are generally unaware of the unconscious compromises that our ego makes to create a particular outcome. For example, a college sophomore may agree to spend hours tutoring a group of first-year students, unaware of how his sexual attraction to one member of the group figured in his decision. He may be conscious of feeling altruistic about helping these students, and thus his superego is satisfied; however, he is largely unaware of how his ego has unconsciously allowed his id to be gratified as well.

10.2c Personality Development Occurs in Psychosexual Stages

As Freud listened to his patients during therapy, they repeatedly mentioned significant events from their childhood that left them with emotional scars. Based on his patients' reconstruction of their lives, Freud created a theory about how personality develops and how the ego and superego come into existence (Stern, 1985). Consistent with the idea that personality involves a degree of consistency, his psychoanalytic theory proposed that children pass through a fixed sequence of **psychosexual stages**. Each stage is characterized by a part of the body, called an *erogenous zone*, through which the id primarily seeks sexual pleasure. Critical elements of the personality are formed during each of these stages (see Table 10–1). If children experience conflicts when seeking pleasure during a particular psychosexual stage, and if these conflicts

Table 10-1 Freud's Stages of Psychosexual Development

Stage	Approximate Age	Erogenous Zone	Key Tasks and Experiences
Oral	0–1	Mouth (sucking, biting)	Weaning (from breast or bottle)
Anal	2–3	Anus (defecating)	Toilet training
Phallic	4–5	Genitals (masturbating)	Coping with <i>Oedipal/Electra</i> conflict and identifying with same-sex parent
Latency	6–11	None (sexual desires repressed)	Developing same-sex contacts
Genital	Puberty onward	Genitals (being sexually intimate)	Establishing mature sexual relationships

go unresolved, the children will become psychologically "stuck"—or *fixated*—at that stage. **Fixation** is a tendency to persist in pleasure-seeking behaviors associated with an earlier psychosexual stage where conflicts were unresolved. One important point to keep in mind about fixation is that the conflicts that trigger fixation can be caused by either too little or too much gratification of id desires.

Fixation

A tendency to persist in pleasure-seeking behaviors associated with an earlier psychosexual stage during which conflicts were unresolved



Journey of Discovery

An increasing number of contemporary personality theorists pay attention to how culture and evolutionary forces shape personality. Is there any evidence in Freud's theory of personality indicating that he considered the impact that culture and evolution had on personality?

Oral Stage

The first stage of psychosexual development, which encompasses the first year of life, is referred to as the **oral stage**. During this stage, infants are totally dependent on those around them to care for their needs, especially nourishment. Freud believed that the id derives intense sexual pleasure by engaging in oral activities such as sucking, biting, and chewing. Adults with fixations at the oral stage are often extremely clingy and emotionally dependent on others. In attempting to satisfy oral needs, they might smoke excessively and/or spend a great deal of time eating and thinking about eating.

Oral stage

In Freud's theory, the first stage of psychosexual development, during which the child derives pleasure by engaging in oral activities

Anal Stage

The **anal stage** follows the oral stage, as the focus of erotic pleasure shifts from the mouth to the process of elimination. This psychosexual stage begins at about age 2, when toilet training becomes an area of conflict between children and parents. Freud argued that from the child's point of view, toilet training represents the parents' attempt at denying the child's primary pleasure by exerting control over where and when

Anal stage

In Freud's theory, the second stage of psychosexual development, during which the child derives pleasure from defecation urination and defecation occur. Fixation at this stage, caused by overly harsh toilettraining experiences, produces children who too closely conform to the demands of parents and other caretakers. As adults, they will be excessively neat and orderly (this is the source of the term *anal retentive*). Overly relaxed toilet-training experiences can also cause fixation, with individuals forever being messy and having difficulty complying with authority and keeping their behavior under control (*anal expulsive*). Successful negotiation of this stage results in a capacity to engage in directed work without being dominated by the need to perform perfectly.

Phallic Stage

At about age 4, children enter the **phallic stage**, which is characterized by a shift in the erogenous zone to the genitals and pleasure being derived largely through self-stimulation. According to Freud, accompanying this interest in genital stimulation is the association of this pleasure with the other-sex parent. Freud asserted that boys develop an erotic attachment to their mothers and girls develop a similar attachment to their fathers. Soon, however, children realize that they are in competition with their same-sex parents for the attention and affection of their other-sex parents.

Among boys, Freud related this dilemma to a character in ancient Greek literature, Oedipus Rex, who became king by unknowingly marrying his mother after murdering his father. This *Oedipus complex* arouses fear in boys that their fathers will punish them for their sexual desires for the mother. Freud asserted that this fear of the loss of genital pleasure is psychologically represented as *castration anxiety*, which is the fear that the father will cut off the penis.

Among girls, instead of being afraid that their mothers will harm them, Freud believed that they are likely to express anger because they believe that their mothers have already inflicted the harm: by removing their penis. This "mother conflict" is known as the *Electra complex*, after another Greek character that had her mother killed. Freud asserted that the "penis envy" that girls experience during this stage stems from their belief that this anatomical "deficiency" is evidence of their inferiority to boys.

Successful negotiation of the phallic stage requires that children purge their sexual desires for their other-sex parents and bury their fear and anger toward their same-sex parents. Children accomplish these dual feats by identifying with the competitive parents. According to Freud, this process of identification is critical for the development of a healthy adult personality because this is how children internalize their parents' values. This internalization of parental values—which generally mirror larger societal values—is critical in the development of the superego. Less-successful negotiation of this stage can cause people to become chronically timid because they fear that they do not "measure up" to their rivaled same-sex parent.

Latency Stage

From about ages 6–11, children are in a psychological period of relative calm, called the **latency stage**. During this time, the content of the dramatic struggles in the oral, anal, and phallic stages is forgotten by the ego. Although the ego is relatively free from interference by the id, sexual, aggressive, and other id impulses are still present and must be managed. Often this is accomplished by channeling these desires into socially acceptable activities in school, sports, and the arts.

Phallic stage

In Freud's theory, the third stage of psychosexual development, during which the child derives pleasure from masturbation

Latency stage

In Freud's theory, the fourth stage of psychosexual development, during which the child is relatively free from sexual desires and conflict

Genital Stage

Latency is followed by puberty and the onset of the **genital stage**. During adolescence, many of the issues of the earlier stages reemerge and can be reworked to a certain extent. Mature sexual feelings toward others also begin to emerge, and the ego learns to manage and direct these feelings. Of all the stages, Freud spent the least amount of time discussing the psychological dynamics of the genital stage. This was probably due to his belief that personality was largely determined by age 5.

10.2d Defense Mechanisms Reduce or Redirect Unconsciously Caused Anxiety

When Freud was first developing his theory of the mind, he proposed that people managed to move anxiety-arousing thoughts into the unconscious through the use of a very basic defense mechanism that he called **repression**. As Freud's model developed from a relatively simple one to one with greater levels of complexity, he developed the idea that the ego uses a variety of more-sophisticated **defense mechanisms** to keep threatening and unacceptable material out of consciousness and thereby reduce anxiety (Freud, 1926). His daughter, Anna Freud (1936), later more fully described how these ego defense mechanisms reduce anxiety.

Defense mechanisms are important features of psychoanalytic theory because they explain why humans—whom Freud believed are essentially driven by sexual and aggressive urges—can become civilized. Furthermore, Freud asserted that the particular defense mechanisms that people rely on most often in adapting to life's challenges become distinguishing features of their personalities. Thus, Freud would tell us that although we have probably used most of the defense mechanisms described in Table 10–2 at least once in our lives, our personality could be described by that configuration of defenses on which we rely most heavily. He would also say that under extreme stress, we might begin to use more powerful defenses, which are also more primitive and associated with psychological disorders.

Table 10-2 Major Ego Defense Mechanisms

Mechanism	Description	
Repression	Pushing high-anxiety-inducing thoughts out of consciousness and keeping them unconscious; the most basic of the defense mechanisms	
Rationalization	Offering seemingly logical self-justifying explanations for attitudes, beliefs, or behavior in place of the real unconscious reasons	
Reaction formation	Preventing unacceptable feelings or ideas from being directly expressed by expressing opposing feelings or ideas	
Displacement	Discharging sexual or aggressive urges toward objects that are more acceptable than those that initially created the arousal	
Projection	Perceiving one's own sexual or aggressive urges not in oneself but in others	
Regression	Psychologically retreating to an earlier developmental stage where psychic energy remains fixated	

Genital stage

In Freud's theory, the last stage of psychosexual development, during which mature sexual feelings toward others begin to emerge, and the ego learns to manage and direct these feelings

Repression

In Freud's theory, a very basic defense mechanism in which people move anxietyarousing thoughts from the conscious mind into the unconscious mind

Defense mechanism

In Freud's theory, the ego's method of keeping threatening and unacceptable material out of consciousness and thereby reducing anxiety

Rationalization

A defense mechanism in which people offer logical, self-justifying explanations for their actions in place of the real, more anxiety-producing, unconscious reasons

Reaction formation

A defense mechanism that allows people to express unacceptable feelings or ideas by consciously expressing the exact opposite

Displacement

A defense mechanism that diverts people's sexual or aggressive urges toward objects that are more acceptable than those that actually stimulate their feelings

Projection

A powerful defense mechanism in which people perceive their own aggressive or sexual urges, not in themselves, but in others

Regression

A defense mechanism in which people faced with intense anxiety psychologically retreat to a more infantile developmental stage where some psychic energy remains fixated

Psychodynamic perspective

A diverse group of theories descending from the work of Sigmund Freud that asserts that behavior is controlled by unconscious forces **Rationalization** is probably one of the more familiar defense mechanisms. It involves offering seemingly logical self-justifying explanations for our attitudes, beliefs, or behavior in place of the real, unconscious reasons. For instance, we might say that we are punishing someone for his or her "own good," when in reality the punishment primarily serves to express our anger at the person. Have you ever been romantically rejected and then convinced yourself that you never really cared for the person in the first place? Freud might say this was your ego's attempt to defend you against feelings of worthlessness.

Reaction formation allows us to express an unacceptable feeling or idea by consciously expressing its exact opposite. Thus, if we are interested in sex (and according to Freud we all are) but are uncomfortable with this interest, we might devote ourselves to combating pornography. Such action allows us to think about sex, but in an acceptable way. Of course, there are nondefensive reasons to oppose pornography or to engage in other activities that could indicate a reaction formation. In fact, one of Freud's primary ideas is that all human actions are *multiply determined*, meaning that each behavior has many causes.

Displacement is a defense mechanism that diverts our sexual or aggressive urges toward objects that are more acceptable than the one actually stimulating our feelings. This is commonly referred to as the "kick the dog" defense, when we unconsciously vent our aggressive impulses toward a threatening teacher, parent, or boss on a helpless creature, such as the family pet. Similarly, we might displace sexual feelings away from a parent because that is unacceptable and date, instead, someone who is remarkably like dear old Mom or Dad.

Projection is one of the more powerful defense mechanisms and can involve quite serious distortions of others' motivations. In projection, we perceive our own aggressive or sexual urges, not in ourselves, but in others. Thus, an insecure person may falsely accuse other people of being insecure while not recognizing this characteristic in his or his or her own personality. Freud contended that we are more likely to use projection when we are feeling strongly threatened, either by the strength of our feelings or the particularly stressful situation we are in. Soldiers in combat, for instance, may begin to see everyone around them as potential enemies who could hurt them.

Another powerful defense mechanism is **regression**, which occurs when we cannot psychologically function in our current surroundings due to anxiety, and we psychologically retreat to a more infantile developmental stage where some psychic energy remains fixated. For example, following the birth of a younger sibling who threatens an older child's sense of "place" in the family, that older child may lose control of bowel or bladder functions, or return to thumb-sucking. When this occurs in adults, it may be a relatively contained regression, such as talking like a baby when working with an authority figure.

10.2e There Are Many Variations of Psychoanalytic Theory

In the 100 years since Freud began developing his personality theory, we have learned a great deal about human behavior, and many psychologists have worked to adapt Freud's theories to what we have learned about how people function. Yet the process of revising Freud's ideas actually began during his lifetime. Three of his closest coworkers—Alfred Adler, Carl Jung, and Karen Horney—disagreed about the central role of sexual drives in the determination of people's personalities (Mayer, 2002). Freud, an authoritarian individual who demanded strict obedience from his followers, reacted very negatively to such criticism. Let us briefly examine the ideas of some of those individuals who refused to follow Freud's lead. These personality theories, along with Freud's original theory of psychoanalysis, are often given the general label of the **psychodynamic perspective**.

Adler's Individual Psychology

As a youngster, Alfred Adler (1870–1937) was sickly, and these early illnesses may have shaped his later views of personality development. In 1902 he joined Freud's inner circle of "disciples," who were expected to carry on their master's work while adhering to its basic theoretical principles. However, Adler soon began developing his own ideas about how personality developed, which led to arguments and tension between him and Freud. Adler's view of personality stressed social factors more than did Freud's theory. For example, concerning family dynamics, he felt that Freud focused so much attention on the mother-child-father bonds that he neglected the important influence that siblings can have on personality development. In this regard, Adler was one of the first theorists to write about how birth order shapes personality, and he coined the term sibling rivalry.

In 1911, the Freud-Adler relationship ended when Adler proposed his individual psychology, which downplayed the importance of sexual motivation and, instead, asserted that people strive for superiority. By this, Adler meant that children generally feel weak and incompetent compared with adults and older children. In turn, these feelings of inferiority motivate them to acquire new skills and develop their untapped potential. Adler (1929) called this process of striving to overcome feelings of inferiority compensation. However, for some individuals, such striving can lead to overcompensation if the sense of inferiority is excessively strong. Instead of mastering new skills, these people simply seek to obtain outward symbols of status and power, such as money and expensive possessions. By flaunting their success, they try to hide their continuing sense of inferiority.

Jung's Analytical Psychology

Carl Jung (pronounced "Yoong"; 1875-1961), a native of Switzerland and the son of a Protestant pastor, was inspired to become a psychoanalyst by reading Freud's The Interpretation of Dreams (Freud, 1900/1953). After corresponding with Freud through letters, Jung met Freud for the first time in 1906, and the two men talked nonstop for 13 hours! They quickly became close friends, and Freud viewed his younger protégé as the person most capable of carrying on his work. However, in 1914, after Jung challenged some of Freud's central ideas concerning personality development, their friendship abruptly ended.

Jung (1916) called his approach analytical psychology. Like Adler, Jung de-emphasized the sex motive in his version of psychoanalysis. Instead, he asserted that people are motivated by a desire for psychological growth and wholeness, which he called the *need for individuation*. Jung's idea that humans are motivated to engage in a quest for personal growth later became the central focus of the humanistic perspective (see Section 10.3).

Unlike Adler, who also de-emphasized the influence of the unconscious on behavior, Jung agreed with Freud that the unconscious mind has a powerful effect on people's lives. Yet, for Jung, the unconscious was less a reservoir for repressed childhood conflicts and more a reservoir of images from our species' evolutionary past. In studying different cultures and religions, he noticed certain universal images and themes, which were also strikingly similar to the images and themes in his patients' dreams. Based on these observations, Jung asserted that besides our personal unconscious, we also have a collective unconscious, which is that part of the unconscious mind containing inherited memories shared by all human beings. Jung (1963, 1964) called these inherited memories archetypes, and he believed they reveal themselves when our conscious mind is distracted (as in fantasies or



Carl Jung, founder of analytical psychology

Collective unconscious

In Jung's personality theory, the part of the unconscious mind containing inherited memories shared by all human beings

Archetypes

In Jung's personality theory, inherited images that are passed down from our prehistoric ancestors and that reveal themselves as universal symbols in dreams, religion, and art

CGJung," US-PD, via Wikimedia



Carl Jung proposed that universally shared memories within the collective unconscious reveal themselves in religion, art, and popular culture as various archetypal figures. For example, Jung might suggest artist Karl Priebe's dreamlike painting, *Mayor of Tehuantepec*, depicts the archetype of the "wise old person."

Introvert

A person who is preoccupied with his or her inner world and tends to be hesitant and cautious when interacting with people

Extravert

A person who is focused on the external world and tends to be confident and socially outgoing art) or inactive (as in dreams). He further believed that archetypes are represented in the religious symbols found throughout the world. Key archetypal figures are *mother*, *father*, *shadow*, *wise old person*, *God*, and *the hero*. Jung also claimed that the feminine and masculine qualities that everyone possesses were represented by the male feminine archetype, *anima*, and the female masculine archetype, *animus*. However, the most important archetype is the *self*, which Jung described as the ultimate unity of the personality, symbolized in religions by the circle, the cross, and the mandala.

Although Jung's idea of the collective unconscious has generally been dismissed in mainstream psychology, it has had considerably greater influence in other disciplines, such as anthropology, art, literature, and religious studies (Tacey, 2001). However, one aspect of his personality theory that has been incorporated into mainstream personality theories is the idea that we are born with tendencies to direct our psychological energies either into our inner self or into the outside world (Jung, 1921). **Introverts** are preoccupied with the inner world and tend

to be hesitant and cautious when interacting with people. In contrast, **extraverts** are focused on the external world and tend to be confident and socially outgoing.

Horney's Neo-Freudian Perspective

German physician Karen Horney (pronounced "HOR-nigh"; 1885–1952) was the first influential female psychoanalyst. Like Adler, Horney (1945) believed that social factors played a much larger role in personality development than sexual influences. Instead of personality problems being caused by fixation of psychic energy, Horney believed that problems in interpersonal relationships during childhood created anxiety; this anxiety caused later personality problems. Developmental psychologists later expanded on these ideas by studying how parent-child emotional attachments shape children's personalities (see Chapter 3, Section 3.2a).

Horney was also instrumental in confronting some of Freud's assertions concerning female personality development (Smith, 2007). Whereas Freud proposed that gender differences in behavior were due to biological factors, Horney proposed social and cultural explanations. Although conceding that women often felt inferior to men, Horney (1926) claimed that this is not due to penis envy but is rather because of the sexism that denied women equal opportunities. What women really envied was the social power and privilege that men enjoyed in the larger society.

An Overall Evaluation of Freud's Legacy

Freud's impact on psychology cannot be dismissed. Indeed, his influence extends into other disciplines that study humans and their behavior, such as anthropology, sociology, literature, and history. Indeed, psychoanalytic theory today may have more influence outside of psychology than within it. For example, a content analysis of 150 highly ranked US colleges and universities found that psychoanalytic ideas are represented somewhere in the curricula of most schools, but significantly more courses feature psychoanalytic ideas outside psychology departments than within them (Redmond & Shulman, 2008).

Despite Freud's influence on the social sciences and the larger culture, a major limitation of his theory is that it is not based on carefully controlled scientific research. Indeed, Freud's entire theory is based on his own self-analysis and a handful of cases from his clinical practice that do not constitute a representative sampling of the human population. As you know from our discussion of scientific methods in Chapter 1, Section 1.3a, a theory's usefulness is difficult to determine if the research sample does not represent the population of interest. Further, reexaminations of Freud's case notes suggest that he may have distorted some of his patients' histories so that they conformed to his view of personality (Esterson, 1993). Related to these criticisms is the fact that Freud did not welcome anyone questioning or challenging his ideas (Gardner, 1993). Such a stance does not advance scientific understanding.

Another criticism of Freud's theory is that many of its psychological processes—such as the id—cannot be observed, much less measured. If aspects of his theory cannot be scientifically tested, then of what use are they to the science of psychology? Further, when scientific studies have tested some of Freud's concepts, they have found little evidence to support the existence of the Oedipal/Electra complex, penis envy, or many of Freud's ideas on sexual and aggressive drives (Crews, 1998).

Despite the inability to test certain portions of Freud's personality theory, and despite the lack of evidence for other portions that have been scientifically tested, a new scientific movement has developed in recent years to bridge the gap between Freud's theory and science. Employing brain imaging techniques and other neuroscientific methods, researchers in the field of *neuropsychoanalysis* claim that at least the following four general ideas concerning personality have received empirical support (Olds, 2012; Panksepp & Solms, 2012):

- 1. Unconscious processes shape human behavior.
- 2. Childhood experiences shape adult personality.
- 3. Learning to regulate impulses is critical for healthy development.
- 4. Some dreams are associated with wish fulfillment.

Given these continuing contributions, psychoanalysis still deserves recognition as an important, albeit flawed, perspective on personality. As long as psychoanalysis continues to generate interest among scientists who employ cutting-edge technology to test its theoretical arguments, this perspective on personality will continue to enrich and thereby illuminate our understanding of the human mind.



- Freud believed that the unconscious mind largely determines human behavior.
- Freud's three personality structures are the id (the entirely unconscious part of the personality that contains our sexual and aggressive urges), the ego (the part of the personality that balances the demands of the id, the superego, and reality), and the superego (the part of the personality that counterbalances the more primitive id demands).
- Psychosexual stages include the oral stage, anal stage, phallic stage, latency stage, and genital stage.

- The conscious part of the ego is protected from awareness of disturbing id impulses because defense mechanisms transform raw id desires into more acceptable actions.
- Later psychodynamic theorists departed from Freud's personality theory:
 Alfred Adler emphasized personal striving to overcome feelings of inferiority. Carl Jung emphasized how our thoughts and actions are influenced by a collective unconscious. Karen Horney stressed how social and cultural factors influence female personality.
- Psychoanalytic theory has two major limitations: (1) it is not based on carefully controlled scientific research, and (2) many of its concepts cannot be measured.
- Acknowledging these limitations, researchers in the new area of neuropsychoanalysis are using cutting-edge technology to scientifically test various aspects of psychoanalytic theory.

10.3 The Humanistic Perspective

As discussed in Chapter 1, Section 1.2b, due to many psychologists' dissatisfaction with both the behaviorists' and the psychoanalysts' views of human nature, in the 1950s a new perspective developed in psychology. This "third wave" in psychology, known as the *humanistic perspective*, emphasized people's innate capacity for personal growth and their ability to consciously make choices. Carl Rogers and Abraham Maslow were the primary architects of humanistic psychology, and they both contended that psychologists should study people's unique subjective mental experiences of the world. This stance represented a direct challenge to behaviorism and was instrumental in focusing renewed attention on the self. Further, by emphasizing the possibilities for positive change that people can make at any point in their lives, the humanistic perspective stood in sharp contrast to the more pessimistic tone of the psychoanalytic perspective (Lambert & Erekson, 2008).

10.3a Rogers's Person-Centered Theory Emphasizes Self-Realization

Carl Rogers (1902–1987) believed that people are basically good and that we all are working toward becoming the best that we can be. Rogers (1961) asserted that, instead of being driven by sexual and aggressive desires, we are motivated by a wish to be good, and that we would achieve our potential if we were given **unconditional positive regard**. Unfortunately, according to Rogers, many of us are frustrated in our potential growth because important people in our lives often provide us with positive regard only if we meet their standards. Being the recipient of this **conditional positive regard** stunts our personal growth because, in our desire to be regarded positively, we lose sight of our *ideal self*, which is the person whom we would like to become. Rogers stated that as we continue to adjust our lives to meet others' expectations, the discrepancy between our *actual self*, which is the person we know ourselves to be now, and our ideal self becomes greater.

Unconditional positive regard

An attitude of complete acceptance toward another person regardless of what she or he has said or done; based on the belief in that person's essential goodness

Conditional positive regard

An attitude of acceptance toward another person only when she or he meets your standards

Rogers's theory of personality is as much about how people change as it is about how people are at any given moment (Kirschenbaum, 2004). For him, the dilemma of personality involves how people's thwarted growth potential can be released. The answer to this dilemma is for people with damaged selves, or low self-esteem, to find someone who will treat them with unconditional positive regard. The assumption here is that when people are accepted for who they are, they will eventually come to accept themselves as well. With this self-acceptance, people can then put aside others' standards that are false for them and get back on track in developing their true selves. Conveying unconditional positive regard to others involves the following three characteristics: genuineness (being open and honest), warmth (being caring and nurturing), and empathy (accurately identifying what the person is thinking and feeling).

10.3b Maslow's Self-Actualization Theory Stresses Maximizing Potential

Like Rogers, Abraham Maslow (1908–1970) was interested in people's ability to reach their full potential. As discussed in Chapter 9, Section 9.1f, this process of fulfilling one's potential was what Maslow (1970) called *self-actualization*. Like Rogers and Freud, Maslow used the case study method in developing his theory. However,

unlike Rogers and Freud, Maslow studied healthy, creative people rather than those who were troubled and seeking therapy. He chose as his subjects people who had led or were leading rich and productive lives, including outstanding college students, faculty, professionals in other fields, and historical figures, such as Abraham Lincoln, Thomas Jefferson, and Eleanor Roosevelt.

Maslow found that self-actualized people were secure in the sense of who they were and not paralyzed, therefore, by others' opinions. They were also loving and caring, and they often focused their energies on a particular task, one they often regarded as a life mission. Maslow also reported that these people had experienced personal or spiritual **peak experiences**, which are fleeting but intense moments of joy, ecstasy, and absorption, in which people feel extremely capable. A peak experience can occur while a person is engaging in a religious activity or service, while performing athletically, while listening to music, or while relating to a lover (Ravizza, 2007). Some women report their childbirth experiences to be peak experiences. Although anyone can have peak experiences, Maslow's group of self-actualizing people reported both more peak experiences and that the quality of those experiences was richer than the experiences reported by others whom he studied. These peak experiences have a lasting effect on those who experience them, enriching their outlook and causing them to become more open to the experiences of others.



Carl Rogers's person-centered theory of personality considers receiving unconditional positive regard an essential ingredient in healthy personal growth. Parents are the primary providers of this affection to children.

Peak experiences

Fleeting but intense moments when a person feels happy, absorbed, and extremely capable

10.3c The Humanistic Perspective Has Been Criticized as Being Overly Optimistic

Like Freud, humanistic psychologists have had a significant impact on popular culture. If you look in the self-help section in any bookstore, you will find numerous titles emphasizing the control you have over changing your life and achieving your full potential. However, in trying to correct for Freud's gloomy outlook on human nature, the humanistic perspective on personality may have overshot the mark and failed to acknowledge that many people engage in mean-spirited and even cruel behavior on a fairly regular basis. The truth is that people have the capacity to act in a wide variety of ways. Further, some of the forces that shape our behavior are outside our conscious awareness.

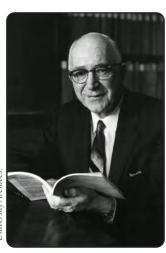
Although humanistic psychology has helped revitalize attention to the self, one of its major limitations is that it has not produced a substantial body of testable hypotheses for its personality theories. Like Freud before them, humanistic psychologists have not clearly defined their concepts and have often rejected the use of carefully controlled scientific studies to test the validity of their theories. As a result, most of the scientific investigations of the self have come from outside the humanistic perspective, especially the social cognitive perspective (see Section 10.5c) and the closely related perspective of positive psychology (see Section 10.4d).



- The humanistic perspective assumes that human nature is essentially good.
- Carl Rogers proposed that being provided with unconditional positive regard allows people to heal the split between their actual and their ideal selves.
- According to Abraham Maslow, in order to self-actualize, people must be motivated to become the best person they can be.

10.4 The Trait Perspective

During the summer of 1919, 22-year-old psychology student Gordon Allport was traveling through Europe when he boldly decided to ask the world-famous Sigmund Freud to meet with him. Upon arriving at Freud's office, the young Allport was at a loss in explaining the purpose of his visit. In truth, he simply wanted to meet this great man. After a strained silence, Allport told a story about a boy he saw on the train to Vienna who pleaded with his meticulously dressed mother to keep dirty passengers from sitting near him. When Allport finished telling the story, Freud paused and then asked in a soft voice, "And was that little boy you?" Allport was mortified. Freud had mistakenly perceived this "icebreaker" story as a window into the young man's unconscious. Later, after reflecting on Freud's assumption, Allport decided that psychoanalysis was not the best way to understand personality. Instead of searching for hidden, unconscious motives in people's behavior, he thought that personality psychologists should first try to describe and measure the basic factors of personality (Allport, 1967). This set him on a path of research that culminated in the development of the *trait perspective*.



HUP Allport, Gordon W. (14), olvwork278613. Harvard

Gordon Allport (1897–1967) is widely considered the "father" of trait theory.

10.4a Trait Theories Describe Basic Personality Dimensions

The **trait perspective** conceives of personality as consisting of stable characteristics that people display over time and across situations (Nicholson, 1998). A **trait** is a relatively stable tendency to behave in a particular way. As an approach to understanding personality, the trait perspective is more concerned with describing *how* people differ from one another than in explaining *why* they differ. The way psychologists typically measure traits is similar to the way everyone assesses other people's personalities. They observe them over time and in various situations, or they ask them how they typically behave. For example, if a friend is always prompt, you come to rely on that as characteristic of him or her. From the trait perspective, we would propose that your friend is consistently on time because of an underlying trait that predisposes him or her to act in this manner. This may seem a little circular, and to a certain extent it is. However, like so much else in personality psychology, traits cannot be measured directly but instead are inferred from behavior.

In studying traits, Gordon Allport and his colleague Henry Odbert (1936) began by combing through a dictionary and making a list of words that described people's personal characteristics. From this initial list of 18,000 words, they reduced it to about 200 clusters of related words, which became the original traits in Allport's personality theory (Allport, 1937). Allport's perspective on personality had a good deal in common with those of humanistic psychologists in that he emphasized that the whole human being should be the focus of study. Like humanistic psychologists, he further asserted that behaviorism was seriously mistaken when it explained human behavior as no different from that of rats and pigeons. In addition to being influenced by his humanistic associations, Allport was influenced by Gestalt psychology. As you recall from Chapter 4, Section 4.5a, the Gestalt perspective contends, "the whole is different from the sum of its parts." Similarly, Allport (1961) argued that personality was not simply a collection of traits but that, instead, these traits seamlessly fit together to form a dynamic and unique personality.

Allport's contemporary, Henry Murray (1938, 1948), was also a trait psychologist who appreciated humanistic psychology's emphasis on the total person. However, Murray's personality approach was also influenced by Jung's and Freud's theories of unconscious motivation. As a result, he focused on traits that are relatively irrational, passionate, and laden with conflict and emotion. Ironically, both men were doing their research at about the same time in the same place: Harvard.

How can a single perspective—the trait perspective—contain theorists who take such different positions about the nature of personality? Actually, the trait approach is not based on specific assumptions about human nature. Traits are viewed as the small building blocks of personality, and a theorist can fit them together in a variety of ways, just as a landscaper can lay bricks into a path in a variety of patterns. Whereas psychoanalytic and humanistic theorists have definite beliefs about whether human beings are basically rational, aggressive, or unconsciously motivated, the trait approach assumes that people differ in the degree to which they possess personality traits. For example, instead of taking a position that people are basically aggressive or nonaggressive, trait theorists contend that people differ in the degree to which they possess aggressive traits (McCrae, 2005).

Trait perspective

A descriptive approach to personality that identifies stable characteristics that people display over time and across situations

Trait

A relatively stable tendency to behave in a particular way across a variety of situations

10.4b Factor Analysis Is Used to Identify Personality Traits

Allport's work in identifying a list of traits was a necessary first step in the development of a scientific trait approach to personality, yet his list of 200-some traits needed to be reduced to a more manageable level. Researchers achieved this by relying on factor analysis. As you recall from Chapter 8, Section 8.3d, *factor analysis* is a statistical technique that allows researchers to identify clusters of variables that are related to—or *correlated* with—one another. When a group of traits correlates in factor analysis, this suggests that a more general trait is influencing them. For example, several studies have found that people who describe themselves as outgoing also describe themselves as talkative, active, and optimistic about the future. This cluster of traits has been associated with the more general trait of *extraversion*.

Raymond Cattell (1965, 1986) was one of the first trait theorists to use factor analysis to identify these general traits, which he called source traits. First he collected people's ratings of themselves on many different traits, and then he identified clusters of related traits using factor analysis. Based on this procedure, Cattell concluded that you could understand an individual's personality by identifying the degree to which she or he possessed each of the 16 source traits listed in Table 10–3. To measure these traits, Cattell developed the *Sixteen Personality Factor Questionnaire* (16PF), which is widely used for career counseling, marital counseling, and evaluating employees and executives (Cattell, 2001; Tango & Kolodinsk, 2004).

Cattell was a pioneer in the use of factor analysis to study personality. He also demonstrated the importance of testing personality traits in applied settings—in business organizations, in schools, in clinical work—and then using that information to better understand the traits. Testing personality theories in applied settings and then refining the theories based on what is learned has become an important part of modern trait approaches to personality.

Reserved Outgoing Trusting Suspicious Relaxed Tense More intelligent Less intelligent Stable **Emotional** Humble Assertive Happy-go-lucky Sober Conscientious Expedient Venturesome Shy Tender-minded Tough-minded **Imaginative** Practical Shrewd Forthright Placid **Apprehensive** Experimenting Conservative Self-sufficient Group-tied Controlled Casual

Table 10–3 Cattell's 16 Basic Personality Traits

British psychologists Hans Eysenck and Sybil Eysenck (pronounced "EYE-zink") also used factor analysis to describe personality functioning. However, unlike Cattell, the Eysencks believed that personality researchers should rely on other evidence besides the findings of factor analysis when identifying the basic dimensions of personality. Specifically, they believed that researchers should also consider the biological bases of personality. Based on thousands of studies conducted over 5 decades, the Eysencks concluded that there are three genetically influenced dimensions of personality: *extraversion* (which included Cattell's factors of outgoingness and assertiveness), *neuroticism* (which included Cattell's factors of toughmindedness and shrewdness).

So how many basic traits are there in personality? Are there 16 source traits, as Cattell proposed, or are there the much more modest three dimensions proposed by the Eysencks? Before reading further, complete Closer Look 10–1.



Can You Perform an Intuitive Factor Analysis of Personality Traits?

In the 1930s, well before the widespread use of factor analysis in research, Gordon Allport and Henry Odbert (1936) relied upon their intuitive judgment to reduce an initial list of 18,000 personality traits to about 200 clusters of related traits. To gain some appreciation of their effort, examine carefully the 30 traits listed below and sort them into five groups of related traits, each containing six traits. In forming each grouping, keep in mind that the traits in each group are assumed to "go together," so that people who have one of the traits in the group are also likely to have the other traits. After you have finished sorting the 30 traits, identify what they have in common. Can you attach an overall trait name to each of the five groups of traits? Finally, for each group, how would people who possess an abundance of the overall trait differ from people who possess very little of this overall trait?

Achievement-oriented	Eccentric	Positive emotions	
Action-oriented	Excitement seeking	Rich emotional life	
Altruistic	Full of energy	Rich fantasy life	
Anxious	Hostile	Self-conscious	
Assertive	Idiosyncratic	Self-disciplined	
Competent	Impulsive	Straightforward	
Compliant	Modest	Tender-minded	
Deliberate	Novel ideas	Trusting	
Depressed	Orderly	Vulnerable	
Dutiful	Outgoing	Warm	

When other college students have completed a similar task (Sneed et al., 1998), more than 70% classified 30 traits similar to those in this exercise so that at least five of the six items in each grouping fell into clusters similar to the following: (1) rich fantasy life, rich emotional life, action-oriented, novel ideas, eccentric, idiosyncratic; (2) competent, orderly, dutiful, self-disciplined, deliberate, achievement-oriented; (3) outgoing, positive emotions, assertive, full of energy, excitement seeking, warm; (4) trusting, straightforward, compliant, modest, tender-minded, altruistic; (5) anxious, self-conscious, depressed, hostile, impulsive, vulnerable. Did your own clustering conform to this pattern?

10.4c The Five-Factor Model Specifies Five Basic Personality Traits

Over the past 30 years, the consensus among most personality trait researchers is that the key personality factors do in fact cluster in the manner described in Closer Look 10–1, and that these five key factors or dimensions of personality are known as the **five-factor model**. These five basic traits, first identified by Paul Costa and Robert McCrae (1992), are *openness to experience*, *conscientiousness*, *extraversion*, *agreeableness*, and *neuroticism* (use the acronym *OCEAN* to remember these five traits). As shown in Table 10–4, each of the five factors represents a clustering of more specific traits. For example, people who score high on neuroticism tend to be anxious, self-conscious, depressed, hostile, impulsive, and vulnerable. These lower-order traits are called *facets* in the five-factor model (Wiggins, 1996).

With only slight variations, the five basic traits that make up the five-factor model have consistently emerged in studies of children, college students, and the elderly (McCrae et al., 1999). Further, these traits have been found in societies as diverse as those of the United States, Bangladesh, Brazil, Japan, Canada, Finland, Spain, Germany, Poland, China, and the Philippines (Gorostiaga et al., 2011; McCrae et al., 2011; McCrae et al., 1999). This is especially impressive when you consider the wide variety of languages used in these various studies to test for these traits. Although gender differences are small, a study of 24 cultures from five continents found that women tend to score higher than men on neuroticism and agreeableness (Costa et al., 2001).

Evolutionary theorists contend that the reason these five traits are found across a wide variety of cultures is that they reflect the most salient features of humans' adaptive behavior over the course of evolutionary history. In other words, these five traits have emerged as the basic components of personality because, as a species, we have evolved special sensitivity to variations in the ability to handle stress (neuroticism), seek out

Five-factor model

A trait theory asserting that personality consists of five traits (openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism)

Table 10-4 The Five-Factor Model and Its Facets

Openness to Experience	Conscientiousness	Extraversion	Agreeableness	Neuroticism
Rich fantasy life	Competent	Outgoing	Trusting	Anxious
Rich emotional life	Orderly	Positive emotions	Straightforward	Self-conscious
Action-oriented	Dutiful	Assertive	Compliant	Depressed
Novel ideas	Self-disciplined	Full of energy	Modest	Hostile
Eccentric	Deliberate	Excitement seeking	Tender-minded	Impulsive
Idiosyncratic	Achievement-oriented	Warm	Altruistic	Vulnerable

others' company (extraversion), approach problems (openness to experience), cooperate with others (agreeableness), and meet our social and moral obligations (conscientiousness). In contrast, sociocultural theorists propose that the behaviors associated with these five traits are learned through the experiences that children and young adults have while mastering important social roles found in cultures throughout the world (Roberts et al., 2005). Instead of genetic predisposition to developing these traits, sociocultural theorists emphasize the role that learning plays in shaping the behaviors that psychologists associate with these traits. Presently, neither of these theories has received sufficient empirical support to declare it superior to the other.

Does this mean that these five traits compose an individual's entire personality? Most trait theorists would say no. Although almost any personality trait probably has a good deal in common

The five-factor model of personality contends that there are five basic components of personality: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. What traits do you think are strongest in your personality?

with one of these five basic traits, the five-factor model does not capture the entire essence of personality (Funder, 2001). Let us briefly examine each of these traits.

Openness to Experience

People who are particularly open to experience are adventurous—constantly searching out new ways to do things—and they are sensitive and passionate, with a childlike wonder at the world (McCrae, 1994). They can also flout traditional notions of what is appropriate or expected in terms of their behavior or ideas (McCrae & Costa, 1997). As with most of the other dimensions, openness to experience is at the end of the pole that appears more desirable; in fact, however, many qualities of those who are more closed to experience are quite valuable. These individuals tend to be hardworking, loyal, down-to-earth, and proud of their traditional values. They also tend to be more politically conservative. A meta-analysis of 88 studies with over 22,000 participants found that people who scored low on openness to experience held more conservative political beliefs than those individuals who scored high on openness (Jost et al., 2003).

Conscientiousness

Conscientiousness is the measure of a person's willingness to conform to others' expectations and follow through on promises and agreements, despite more tempting options that may arise. People who score high on conscientiousness tend to be well organized, dependable, hardworking, and ambitious—whereas those who score low are more likely to be disorganized, undependable, lazy, and easygoing. This dimension is very important in career planning and workplace productivity. Adolescents who are conscientious are much more likely to spend time thinking about and planning their future career options than those who lack conscientiousness (Lounsbury et al., 2005). Similarly, conscientious employees are good workplace citizens, while nonconscientious employees are nonproductive and undermine the organization's health (Howard & Howard, 2000).



How do you think Freud would describe the highly conscientious person?

Extraversion

Extraversion was first identified by Carl Jung (see Section 10.2e) and has been included in virtually every personality system proposed in the last 50 years. Extraverts are people who seek out and enjoy others' company. They tend to be confident, energetic, bold, and optimistic, and they handle social situations with ease and grace. Extraverts' social skills, confidence, and take-charge attitude often make them well-suited for leadership positions (Johnson et al., 2004). On the opposite end of this particular personality dimension is the introverted character. Introverts tend to be shy, quiet, and reserved—and it is harder for others to connect with them (Tellegen et al., 1988).

Agreeableness

Agreeableness is a personality dimension that ranges from friendly compliance with others on one end to hostile antagonism on the other. People who score high on agreeableness tend to be good-natured, softhearted, courteous, and sympathetic—whereas those who score low tend to be irritable, ruthless, rude, and tough-minded. Agreeableness is a useful way to obtain popularity, and agreeable people are better liked than disagreeable people. However, people high in agreeableness may be too dependent on others' approval and thus ill-suited for situations requiring tough or more objective decisions. For instance, scientists, art or literary critics, and judges may be able to perform better if they are less agreeable and more "objective" in their jobs (Graziano et al., 1996).

Does being tough-minded versus good-natured affect how much money people earn in their jobs? A series of studies found that people who scored low on agreeableness earned 18% more in their jobs than those who were more agreeable (Judge et al., 2012). Interestingly, the relationship between agreeableness and income was significantly stronger for men than for women. One way to interpret these findings is that behaving counter to your sex's traditional gender role—men being softhearted and sympathetic and women being ruthless and tough-minded—causes more of a salary backlash for men than for women. The fact that being tough-minded is a masculine trait, and the finding that it is associated with higher salaries in our culture, also reflects the greater value our culture places on masculine traits compared to feminine traits (see Chapter 3, Section 3.2e).

Info-Bit



Agreeableness is consistent across the life span. Disagreeable boys develop into men who are described as irritable, undercontrolled, and moody (Caspi et al., 1989). Some researchers have suggested that this, in turn, may be related to the underlying temperament of individuals, and that being disagreeable may be related to an overactive sympathetic division of the autonomic nervous system (Rothbart, 1989).

Neuroticism

At the core of neuroticism is negative affect (McCrae & Costa, 1987). This personality dimension, which is sometimes labeled *emotional stability*, describes how people differ in terms of being anxious, high-strung, insecure, and self-pitying versus relaxed, calm, composed, secure, and content. Neurotics (people low in emotional stability) can either channel their worrying into a kind of compulsive success or let their anxiety lead them into recklessness. Many of the facets underlying neuroticism will be discussed more fully in Chapter 11, when we examine psychological disorders.

How Do the Five Traits Interact in Predicting Behavior?

Trait theorists often use the five-factor model to identify a cluster of personality traits that are associated with relevant behavioral and mental health outcomes. For example, in an investigation of traits associated with mental health resilience among gay, lesbian, bisexual, and transgender young adults, researchers found that those who scored low on neuroticism and high on extraversion, agreeableness, conscientiousness, and openness were much less likely to be at risk for suicide when facing discrimination than individuals whose personality traits were high on neuroticism and low on extraversion, agreeableness, conscientiousness, and openness (Livingston et al., 2015). Similarly, in a study of life satisfaction among US high school students, although neuroticism was negatively correlated with satisfaction, the traits of openness, conscientiousness, and extraversion were positively correlated with feelings of satisfaction (Suldo et al., 2015). Interestingly, while agreeableness was positively correlated with satisfaction for girls, it was not significantly related to satisfaction for boys. Can you guess why this gender difference might have been found? As discussed in Chapter 9, Section 9.4a, women tend to be more relationship oriented than are men. As such, in our culture, being good-natured, softhearted, courteous and sympathetic may be more predictive of teenaged girls' happiness than it is for teenaged boys' happiness. Before reading further, check out Closer Look 10-2 to learn whether the five-factor model is useful in understanding personality traits among nonhuman animals.



Do Nonhuman Animals Have Personality Traits?

Our family dog, Maizy, is trusting, curious, very energetic, somewhat absentminded, and extremely friendly. I would guess that she is low on neuroticism and high on agreeableness, extraversion, and openness to experience. Is my application of the five-factor model to a canine based on any scientific evidence, or should it be dismissed as the whimsical musings of a dog lover?

Samuel Gosling and Oliver John (1999) believe that the five-factor model can be used to describe the personality of many nonhuman animals, including dogs. In a review of 19 animal personality studies involving 12 different species, they found that the personality traits of extraversion, neuroticism, and agreeableness commonly occur across species. Chimpanzees, gorillas, various other primates, mammals in general, and even guppies and octopuses exhibit individual differences that are remarkably similar to these three personality traits (Gosling, 2008; Iwanicki & Lehmann, 2015). The researchers believe that this cross-species similarity in personality traits suggests that biological mechanisms are likely responsible.

Using personality distinctions similar to those in the five-factor model, comparative psychologist John Capitanio (1999) has also discovered that the behavior of adult male rhesus monkeys can be reliably predicted from personality dimensions. Over a 4 1/2-year period, Capitanio found that, compared to monkeys who scored low on these personality dimensions, highly extraverted monkeys engaged in more affiliative behavior, highly neurotic monkeys were more fearful and hypersensitive to changes in their surroundings, and highly agreeable monkeys were more easygoing in their social behavior. Like Gosling and John, Capitanio believes that biological mechanisms are shaping the expression of these personality traits.

These consistencies across species and over time further suggest that the five factors identified by trait theorists reflect some of the basic styles of behavior that are necessary for many species to best adapt to their environments (Capitanio, 2004; Smith & Blumstein, 2008). For instance, an animal that is high in neuroticism might be the most responsive to the presence of a predator, and so could act as a sentinel in a group of animals. Meanwhile, another animal that is low in neuroticism may promote group solidarity by being relaxed and calm. Together, these animals could contribute to the social functioning of their group in



The five-factor model has been used to describe nonhuman personalities. Experts' ratings of dog breeds identified traits that closely matched four of the five traits in the fivefactor model, as well as a fifth personality dimension, "dominance-territoriality." Which personality factor do you think they found only in humans and chimpanzees?

different ways, with the net result that both of them (and their kin) may be more likely to survive and reproduce. Thus, the genes that influence these personality styles are likely to be passed on to future generations (Adams, 2011).

So what are the important traits in a dog's personality? I wasn't far off the mark in sizing up Maizy. Factor analyses of experts' ratings of dog breeds identified traits that closely approximated four of the five traits in the five-factor model: neuroticism, agreeableness, extraversion, and openness to experience. A fifth personality dimension, "dominance-territoriality," was also identified (Svartberg & Forkman, 2002). Maizy, a golden retriever, would score very low in this dimension.

What about conscientiousness? Gosling and John's research found that chimpanzees were the only species other than humans that exhibited the trait of conscientiousness (it was not found among gorillas), although it was defined more narrowly in chimps than in humans. Among chimps, conscientiousness included individual behavioral variations involving lack of attention and goal directedness, unpredictability, and disorganized behavior. Because conscientiousness entails following rules, thinking before acting, and other complex cognitive functions, it is not surprising that this trait was found only in humans' closest genetic relative. These findings suggest that conscientiousness is a recent evolutionary development among hominids, the subfamily composed of humans, chimpanzees, and gorillas.

10.4d Positive Psychologists Identify Personality Traits That Are Character Strengths

As previously discussed in Chapter 1, Section 1.2b, positive psychology is a psychological perspective, closely related to humanistic psychology, that attempts to identify how people make their lives happy and fulfilling. Researchers who identify themselves as positive psychologists are currently studying what it means to be a well-adapted person in modern-day society, with a good deal of their research investigating personality traits associated with positive living. Christopher Peterson and Martin Seligman (2004) are two of the primary investigators who have sought to identify what they refer to as *character strengths* that consistently emerge across history and culture.

According to Peterson and Seligman, **character strength** is a special type of trait that allows optimal functioning in pursuing a virtue. A *virtue* is a core human characteristic valued, worldwide, in moral philosophies and religions. Character strengths are different from general personality traits because of their association with virtues. In their analysis of religions and philosophies around the world, Peterson and Seligman identified six broad categories of human virtues: *wisdom, courage, justice, humanity, temperance,* and *spirituality* (Dahlsgaard et al., 2005; Ruch & Proyer, 2015). Research suggests that these virtues are also associated with the type of personality traits identified as most desirable for romantic partners or friends to possess (Buss, 1989).

Having identified six common virtues, Peterson and Seligman next attempted to determine how each of these virtues is typically expressed. To achieve this goal, they enlisted a group of psychologists and psychiatrists to examine dozens of existing personality inventories and use designated criteria to identify character strengths. This procedure yielded 24 "strengths" of character distributed across the six virtue categories in their **Values in Action (VIA) Classification** system, which is listed in Table 10–5. Peterson and Seligman claim that the character strengths in the VIA Classification define what's best about people. For example, wisdom is a virtue, while creativity, curiosity, open-mindedness, love of learning, and perspective are character strengths that can be used to achieve wisdom. Across the 24 character strengths, the researchers assumed that there would be a wide range of individual differences in the degree to which people possess specific strengths. They further assumed that individuals would rarely, if ever, display high degrees of all strengths.

Character strength

A trait that allows optimal functioning in pursuing a virtue

Values in Action (VIA) Classification of Strengths

A positive psychology classification system of 24 universal character strengths that defines what's best about people

Table 10-5 Values in Action (VIA) Classification of Virtues and Strengths

Wisdom and Knowledge: cognitive strengths that are related to acquiring and using knowledge

- Creativity: Thinking of novel and productive ways to understand and do things
- Curiosity: Having an interest in things for their own sake
- Open-mindedness: Thinking things through and examining them from all sides
- Love of learning: Mastering new skills, topics, and bodies of knowledge
- Perspective: Being able to provide wise counsel to others

Courage: emotional strengths that require the exercise of willpower to accomplish goals in the face of opposition

- Bravery: Not shrinking from threat, challenge, difficulty, or pain
- Persistence: Finishing what you start
- Integrity: Speaking the truth and acting in a genuine and sincere manner
- Vitality: Approaching life with excitement and energy

Humanity: interpersonal strengths that involve tending to and befriending others

- Love: Valuing intimate relationships with others
- Kindness: Doing favors and good deeds for others
- Social intelligence: Being aware of the motives and feelings of other people and yourself

Justice: civic strengths that underlie healthy community life

- Citizenship: Working well as a member of a group or team
- Fairness: Treating all people the same according to notions of fairness and justice
- Leadership: Encouraging a group of which one is a member to get things done and at the same time maintaining good relations within the group

Temperance: strengths that protect against excess

- Forgiveness and mercy: Forgiving those who have done wrong
- Humility/Modesty: Letting one's accomplishments speak for themselves
- Prudence: Being careful about your choices
- Self-regulation: Regulating what you feel and do

Transcendence: strengths that forge connections to the larger universe and provide meaning

- Appreciation of beauty and excellence: Noticing and appreciating beauty, excellence, and/or skilled performance in various domains of life
- Gratitude: Being aware of and thankful for the good things that happen to you
- Hope: Expecting the best in the future and working to achieve it
- Humor: Liking to laugh and tease
- Spirituality: Having sound beliefs about the higher purpose and meaning of the universe

In an internet study of almost 118,000 adults from 54 countries, Park, Peterson, and Seligman (2006) found that three of the most commonly endorsed character strengths were kindness, integrity, and gratitude. Of the 24 character strengths, research suggests that the ones most strongly associated with life satisfaction are gratitude, love, hope, curiosity, zest, and self-regulation (Proyer et al., 2013). Additional longitudinal research with over 17,000 individuals living in the United Kingdom found that as people aged, they tended to display higher degrees of their character strengths (Linley et al., 2007).

Given the challenges that life can present to people, positive psychologists have studied the role of character strengths in traumatic life events. For example, following the September 11, 2001, terrorist attacks in the United States, a survey of more than 4,800 people in the US compared their character strengths before this national tragedy with 2 months after. Results indicated that, immediately following the attacks, people experienced an increase in the seven character strengths of gratitude, hope, kindness,

leadership, love, spirituality, and teamwork. Ten months later, these character strengths were still elevated, although to a somewhat lesser degree than immediately following the attacks (Peterson & Seligman, 2003). These findings suggest that when a group experiences a dangerous external threat, individual members often react by experiencing a heightened sense of communion with and gratitude for fellow group members, as well as a stronger belief in the higher purpose and meaning of life. A related study found that hope and spirituality were the two character strengths that contributed most to lower levels of depressive symptoms among US college students following the terrorist attacks (Ai & Evans-Campbell, 2007). Similarly, other studies suggest that recovering from a serious illness can be a character builder for many people (Peterson et al., 2006).

As with the five-factor model, Peterson and Seligman do not contend that the VIA Classification system captures the complete picture of human personality. However, they do believe that the investigation of positive psychologists into human character strengths will provide important insights into how specific aspects of our personalities provide us with the necessary strengths to lead healthier, happier, and more fulfilling lives.

10.4e Critics Challenge Whether Traits Reliably Predict Behavior

Personality theorists—whether they take a psychoanalytic, humanistic, or trait perspective—all have emphasized that personality is an important determinant of behavior. Yet Walter Mischel (1968, 1984) has argued that this is a misguided belief. Instead, he asserts that personality is not really stable over time and across situations and that the situation we place people in is a much stronger determinant of behavior than are their personalities. This viewpoint, which is called **situationism**, asserts that our behavior is not determined by stable traits but is strongly influenced by the situation.

In making a situationism argument, Mischel discussed an early study conducted by Hugh Hartshorne and Mark May (1928) in which they placed children in many different situations where they had the opportunity to lie, cheat, and steal. Instead of finding that the children displayed honest or dishonest traits consistently across many different situations, Hartshorne and May found that the situation was the most important determinant of how the children behaved. If kids thought they could get away with it, most of them were likely to behave dishonestly. In Mischel's own research, he found virtually no correlation between people's traits and their behavior across situations (Mischel, 1968, 1984). In other words, personality traits were not reliably predicting behavior. Based on this evidence, Mischel argued that personality traits are a figment of trait theorists' imaginations!

As you might guess, this critique stirred up considerable controversy among personality psychologists, who argued that Mischel was not seeing consistency in behavior across situations because he was not measuring enough behaviors (Epstein, 1980). For example, no one expects that your IQ score will predict whether you correctly answer a specific question on a certain test in a particular class during a given semester. Predicting such a thing would be highly unreliable because so many factors exist that might influence your response (Were you rushed for time? Did you understand this information in class? Did you read the question correctly?). However, your IQ score will be much more accurate in predicting your *average* performance over many questions on several exams. Similarly, your score on an introversion-extraversion scale will not be very accurate in predicting whether you introduce yourself to that attractive person you see on campus tomorrow. However, your score will probably be much more accurate in predicting your *average* sociability across many situations. By and large, research supports this argument: Personality trait scores do reliably predict how people generally behave (Funder, 2001; Paunonen, 2003).

Situationism

The viewpoint that our behavior is strongly influenced by the situation rather than by personality traits

What about the assertion by situationists that personality is not stable over time? Actually, most studies find that personality traits are remarkably stable over the adult years but somewhat less so during childhood (Asendorpf & Van Aken, 2003). The most extensive study of personality trait stability at different ages was a meta-analysis of 150 studies involving almost 50,000 participants (Roberts & DelVecchio, 2000). In the various studies included in this meta-analysis, participants' personalities had been measured for at least 1 year. As depicted in Figure 10–3, results indicated that personality traits are least stable during childhood (correlations in the .40s), somewhat more stable in early adulthood (correlations in the .50s), and most stable after the age of 50 (correlations in the .70s). These findings do not support the situationists' claim that personality is not stable over time. Our personalities are quite stable, especially during the adult years, with most change occurring during the early years of life. Despite this trait stability, additional research indicates that our personalities are certainly capable of changing throughout our lives (Srivastava et al., 2003). They do not necessarily become fixed like plaster at a particular age.

One important contribution to personality theory made by situationists was their insistence that situational factors shape people's behavior. In response, many personality researchers acknowledged that situations do indeed shape behavior, and that how we behave is often determined by an *interaction* of personal and situational factors. In some situations, social norms may constrain the expression of personality traits. For example, extraverts, like everyone else, are likely to be relatively quiet and subdued at a library, in a funeral home, or during a church service. The personalities of those with whom we interact also can significantly alter our own behavior. For instance, a store clerk who is low on agreeableness may treat us very rudely, which may cause us to react in a similar fashion—despite the fact that we generally are kind and considerate. Thus, although personality traits do appear to explain a good deal of our behavior, situational forces significantly influence us (see Chapter 14).

The criticisms of the trait approach have helped to sharpen our understanding of the limits of personality as a determinant of behavior, but they have also increased

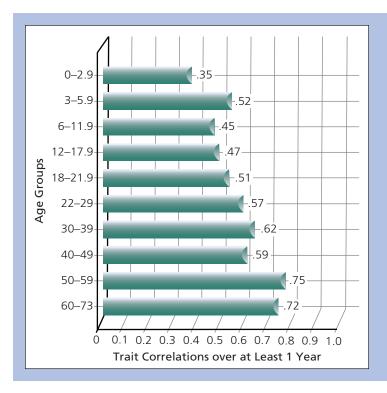


Figure 10–3 Stability of Personality Traits at Different Ages

A meta-analysis of 150 studies involving nearly 50,000 participants examined the stability of personality at different ages (Roberts & DelVecchio, 2000). Based on the findings depicted in this graph, at what ages is personality least stable? When is it most stable?

Data from "The rank-order consistency of personality traits from childhood to old age: A quantitative review of longitudinal studies, by B. Roberts and W. DelVecchio," *Psychological Bulletin*, *126*, 3–25, 2000.

Interactionism

The study of the combined effects of both the situation and the person on human behavior

our ability to predict behavior. Attending only to personality traits will not accurately predict behavior in most circumstances. Instead, many personality researchers have increasingly embraced **interactionism**, which is the study of the combined effects of both the situation and the person on human behavior (Sadler & Woody, 2003). As outlined here, Mischel's critical position toward the trait approach fueled a number of research directions that might not otherwise have been pursued. In psychology, as in all science, a critical or contrary position that is well presented frequently benefits the field by causing everyone to more clearly state (and examine) their assumptions and beliefs.



- The trait perspective is a descriptive approach to personality that focuses on stable characteristics that people display over time and across situations.
- Trait theorists identify traits by relying on factor analysis.
- The five-factor model, the most widely accepted trait theory, contends that personality is best described by the traits of openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism.
- The Values in Action Classification of Strengths system identifies 24 universal character strengths that are related to six common virtues; these character strengths define what's best about people.
- Personality traits are most stable during later adulthood and least stable during early childhood.
- Personality traits interact with situational factors in determining behavior.

10.5 The Social Cognitive Perspective

The perspectives examined thus far all contend that personality consists of internal psychological needs or traits that shape our thoughts, feelings, and behavior. These approaches provide a good illustration of how the ideology of *individualism* has shaped the development of many personality theories. In contrast, our fourth major approach, the **social cognitive perspective**, has a less individualistic bias because it views personality as emerging through the process of the person interacting with her or his social environment. This perspective has its roots in the behavioral principles of *classical conditioning* and *operant conditioning*, but its closest association is with the more cognitively oriented principles of observational learning. As you recall from Chapter 6, Section 6.3a, observational learning is the central feature of Albert Bandura's (1986) *social learning theory*. Bandura proposes that people learn social behaviors primarily through observation and cognitive processing of information rather than through direct experience.

Social cognitive perspective

A psychological perspective that examines how people interpret, analyze, remember, and use information about themselves, others, social interactions, and relationships

10.5a Personality Is Shaped by Interactions among People's Cognitions, Behavior, and Environment

According to Bandura (1986), Skinner was only partly correct when he asserted that the environment determines people's behavior. Bandura pointed out that people's behavior also determines the environment. He further contended that people's thoughts, beliefs, and expectations determine and are determined by both behavior and the environment. As such, personality emerges from an ongoing mutual interaction between people's cognitions, their actions, and their environment. This basic principle of the social cognitive perspective—which is depicted in Figure 10–4—is known as **reciprocal determinism**. Thus, while environmental factors shape our personalities, we think about what is happening to us and develop beliefs and expectations that will alter both our behavior and our environment (Makoul, 2010). In turn, these behavioral and environmental changes will influence our thoughts, which will then alter our personalities. As you can see, the idea that personality emerges through reciprocal determinism does not fit into the individualist mold of traditional personality theories.

One of the most important cognitive factors in reciprocal determinism is **self-efficacy**, which is a person's belief about his or her ability to perform behaviors that should bring about a desired outcome. Perceptions of self-efficacy are largely subjective and tied to specific kinds of activities. You could have high self-efficacy for solving mathematical problems but low self-efficacy for interacting with new acquaintances. Because of these two different self-efficacies, you might approach a difficult calculus course with robust confidence, whereas you feign illness when invited to a new friend's party. Success in an activity heightens self-efficacy; failure lowers it. Further, the more self-efficacy you have at a particular task, the more likely you will pursue that task, try hard, persist in the face of setbacks, and succeed (Pajares, 2008). Success breeds self-efficacy, which in turn breeds further success. This mutual interaction is an illustration of reciprocal determinism.

Journey of Discovery

Is self-efficacy the same thing as self-esteem?

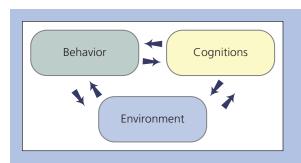


Figure 10–4 Reciprocal Determinism

Reciprocal determinism is the idea that personality emerges from an ongoing mutual interaction between people's cognitions, their behavior, and their environment.

Reciprocal determinism

The social cognitive belief that personality emerges from an ongoing mutual interaction between people's cognitions, their actions, and their environment

Self-efficacy

A person's belief about his or her ability to perform behaviors that should bring about a desired outcome

Locus of control

The degree to which we expect that outcomes in our lives depend on our own actions and personal characteristics versus the actions of uncontrollable environmental forces

10.5b Life Experiences Foster Beliefs about Either Control or Helplessness

According to social cognitive theorist Julian Rotter (1966, 1990), through the process of interacting with our surroundings we develop beliefs about ourselves as controlling, or controlled by, our environment. The degree to which we believe that outcomes in our lives depend on our own actions versus the actions of uncontrollable environmental forces is known as our locus of control. People who believe that outcomes occur because of their own efforts are identified as having an internal locus of control, whereas those who believe that outcomes are outside their own control are identified as having an external locus of control. Individuals with an internal locus of control are more likely to be achievement-oriented than are those with an external locus of control because those with an internal locus of control believe that their behavior can result in positive outcomes (Lachman & Weaver, 1998). True to these expectations, internals tend to be more successful in life than are externals. Externals are less independent than internals, and they are also more likely to be depressed and stressed (Presson & Benassi, 1996). Spend a few minutes responding to the items in Self-Discovery Questionnaire 10-1 to get an idea of whether you have an internal or external locus of control.



Do You Have an Internal or an External Locus of Control?

Instructions: For each item, select the alternative that you more strongly believe to be true. Remember that this is a measure of your personal beliefs and that there are no correct or incorrect answers.

- a. Making a lot of money is largely a matter of getting the right breaks.
 - b. Promotions are earned through hard work and persistence.
- 2. a. In my experience, I have noticed that there is usually a direct connection between how hard I study and the grades I get.
 - b. Many times, the reactions of teachers seem haphazard to me.
- a. Marriage is largely a gamble.
 - b. The number of divorces indicates that more and more people are not trying to make their marriages work.
- a. When I am right, I can convince others.
 - b. It is silly to think that one can really change another person's basic attitudes.

- a. In our society, a person's future earning power is dependent upon his or her ability.
 - b. Getting promoted is really a matter of being a little luckier than the next person.
- a. I have little influence over the way other people behave.
 - b. If one knows how to deal with people, they are really quite easily led.

Scoring instructions: Give yourself one point for each of the following answers: 1(a), 2(b), 3(a), 4(b), 5(b), and 6(a). Then add up your total number of points. The higher the score, the more external you are. A score of 5 or 6 suggests that you are in the high external range, while a score of 0 or 1 suggests that you are in the high internal range. Scores of 2, 3, and 4 suggest that you fall somewhere between these two extremes.

Source: Adapted from "Generalized Expectancies for Internal versus External Control of Reinforcement," by J. B. Rotter, 1966, Psychological Monographs, 80, pp. 1–28, Table 1. Copyright ©1966 by the American Psychological Association.

People who believe that external events control their lives often develop a feeling of helplessness. As discussed in Chapter 6, Section 6.2g, Martin Seligman (1975) defined this *learned helplessness* as the passive resignation produced by repeated exposure to aversive events that are believed to be unavoidable. Because people develop the expectation that their behavior has no effect on the outcome in the situation, they simply give up trying to change the outcome, even when their actions might bring rewards (Baum et al., 1998).

Learned helplessness is an example of the operation of reciprocal determinism. After repeatedly failing to achieve a desired outcome, people develop a belief that there is nothing they can do to alter their current conditions, so they stop trying. Even when the world around them changes so that success is now possible, they don't act on opportunities



People with an internal locus of control are more achievement-oriented and successful in life than those with an external locus of control. What sort of thinking causes these differences among "internals" and "externals"?

because they falsely believe that such action is futile. Learned helplessness explains why some people who have grown up in poverty don't take advantage of opportunities that, if pursued, could lead to economic rewards. Having developed the belief that they cannot change the cards that have been dealt them, these people remain mired in poverty and often instill these pessimistic beliefs in their children. Social welfare programs that have been successful in helping people pull themselves out of poverty specifically attack learned helplessness (Wanberg et al., 1999).

10.5c Social Cognitive Psychologists Have Extensively Studied the Self

In the 1950s and 1960s, humanistic psychologists' attention to the self did not generate a great deal of research; however, their self personality theories did help keep the concept alive in psychology during a time when behaviorism was the dominant perspective. Today, the self is one of the most popular areas of scientific study, and social cognitive theorists are some of the more prominent researchers. As discussed in Chapter 3, Section 3.2d, *self-concept* is the "theory" that a person constructs about herself or himself through social interaction, whereas *self-esteem* is a person's evaluation of his or her self-concept.

Two related areas that social cognitive psychologists have examined are whether people evaluate themselves accurately, and how they typically explain successes and failures in their lives. For example, when you receive a good grade on an exam, do you usually conclude that your success was caused by your intelligence, your hard work, or a combination of the two? What if you do poorly? Are you likely to blame your failure on the unreasonable demands of your professor or on pure bad luck? The tendency to take credit for success while denying blame for failure is known as the **self-serving bias**, and it reflects a common mode of thinking (Campbell & Sedikides, 1999). The most agreed-upon explanation for the self-serving bias is that it allows us to enhance and protect self-esteem. If we feel personally responsible for successes or positive events in our lives but do not feel blameworthy for failures or other negative events, our self-worth is likely to be bolstered.

Consistent with the self-serving bias, research suggests that when we compare our past selves to our current selves we are motivated to evaluate our past selves in a way that makes us feel good about ourselves now (Ross & Wilson, 2002, 2003).

Self-serving bias

The tendency to bolster and defend self-esteem by taking credit for positive events while denying blame for negative events

Of all the lives that I have lived, I would have to say that this one is my favorite. I am proud that I have developed into a kinder person than I ever thought I would be.

—Mary Tyler Moore, US actress, b. 1936–2017; quoted at age 60

Self-esteem and selfcontempt have specific odors; they can be smelled.

—Eric Hoffer, US social philosopher, 1902–1983 We accomplish this feat by perceiving our present self as superior to our former selves, especially in characteristics that are important to our self-concepts (Wilson & Ross, 2001). Although you might think that negatively evaluating our past selves would lower our self-esteem, past selves are not as real to us as our present self. Criticizing our past selves allows us to feel better about our current performance in relation to these important characteristics. Additional studies suggest that, regardless of our age, we tend to believe we are more superior to our peers at the present time than we were when we were younger (Wilson & Ross, 2001). Of course, it is possible that most people do learn from experience and get better with age, but it is not statistically possible for all of us to improve more than our peers! In fact, do we really improve noticeably over time? Apparently, not nearly as much as we would like to think. When people are studied longitudinally, although they perceive themselves as improving in a number of personal characteristics, there often is actually no evidence of any such improvement. These findings suggest that wishful thinking is often an important ingredient in our self-concepts.

One point to keep in mind about these findings is that this tendency to try to enhance feelings of self-worth varies in strength across cultures. Individualist cultures are much more likely than collectivist cultures to believe that high self-esteem is essential for mental health and life satisfaction (Oishi et al., 1999). This cultural difference in the importance placed on self-esteem may explain why individualists are more likely than collectivists to exhibit the self-serving bias (Heine & Hamamura, 2007).

10.5d The Social Cognitive Perspective Has Difficulty Explaining Nonrational Behavior

Traditional behavioral theories of personality that are based primarily on the operant conditioning principles of B. F. Skinner have been criticized for assessing only how environmental factors shape personality. To its credit, the social cognitive perspective has taken a much more complex view of human personality, while still testing its theories using the scientific method. In their reliance on carefully controlled studies, social cognitive theories have much more in common with the trait approach to personality than with the less scientifically based theories from the humanistic and psychoanalytic perspectives.

Social cognitive personality theories have also drawn praise for emphasizing the important role that cognitions play in personality. They have quite rightly pointed out that our behavior is significantly shaped by our beliefs and expectations, including those related to us and those related to our environment. The social cognitive approach has also drawn praise because its scientific findings have generated useful applications in the real world concerning how to understand and help solve such problems as drug abuse, unemployment, academic underachievement, and teen pregnancy.

The social cognitive perspective's emphasis on cognition has placed it squarely in the mainstream of contemporary psychology, and it enjoys immense popularity among many psychologists. However, by emphasizing the cognitive side of human nature, the social cognitive perspective is best at explaining rational behavior that is thought through. Like many cognitively oriented theories, it is less able to explain behavior that is spontaneous, irrational, and perhaps sparked by unconscious motives (Schacter & Badgaiyan, 2001). Table 10–6 provides a brief summary of the four personality perspectives that we have discussed.

Table 10-6 The Four Perspectives on Personality

Perspective	Explanation of Behavior	Evaluation
Psychoanalytic	Personality is set early in childhood and is driven by unconscious and anxiety-ridden sexual impulses that we poorly understand.	A speculative, hard-to-test theory that has had an enormous cultural influence and a significant impact on psychology
Humanistic	Personality is based on conscious feelings about oneself and is focused on our capacity for growth and change.	A perspective that revitalized attention to the self but often did not use rigorous scientific methods
Trait	Personality consists of a limited number of stable characteristics that people display over time and across situations.	A descriptive approach that sometimes underestimates the impact that situational factors have on behavior
Social cognitive	Personality emerges from an ongoing mutual interaction among people's cognitions, their behavior, and their environment.	An interactionist approach that tends to underestimate the impact that emotions and unconscious motives have on behavior



- In the social cognitive perspective, personality represents the unique patterns of thinking and behavior that a person learns in the social world.
- According to the principle of reciprocal determinism, personality emerges from an ongoing mutual interaction among people's cognitions, their actions, and their environment.
- According to the concept of locus of control, by interacting with our surroundings we develop beliefs about ourselves as controlling, or being controlled by, our environment.
- Engaging in the self-serving bias allows us to enhance and protect selfesteem, which is a tendency more common in individualist cultures than in collectivist cultures.
- Social cognitive theories are best at explaining rational behavior but are less capable of explaining irrational behavior.

10.6 Measuring Personality

Two basic assumptions underlie the attempt to understand and describe personality. The first assumption, which we just examined, is that personal characteristics shape people's thoughts, feelings, and behavior. The second assumption, which we are about to examine, is that those characteristics can be measured in some manner (Briggs, 2005). We will consider two kinds of personality tests: *projective* and *objective*.

10.6a Projective Tests Measure Unconscious Motives

Projective tests are based on the assumption that if people are presented with an ambiguous stimulus or situation, the way they interpret the material will be a projection of their unconscious needs, motives, fantasies, conflicts, thoughts, and other hidden aspects of personality. In other words, when people describe what they see in ambiguous stimuli, their description will be like the image projected on the screen at the movies. In this analogy, the film in the movie projector is like the hidden personality aspects, and the responses to the test are like the images seen on the screen. Projective tests are among the most commonly used assessment devices by psychotherapists in their clinical practices. The most popular projective tests are the *Rorschach Inkblot Test* and the *Thematic Apperception Test*.

The Rorschach Inkblot Test

Have you ever played the "cloud game," in which you and another person look at cloud formations and tell each other what the shapes look like? The **Rorschach Inkblot Test** has a format similar to that of the cloud game (Woods, 2008). Introduced in 1921 by the Swiss psychiatrist Hermann Rorschach (1884–1922), the test consists of ten symmetrical inkblots. Five cards are black and white, and five are colored. Rorschach purposely varied the composition of his inkblots—some of them are essentially large blobs; others are bits of ink all over the page (Mattlar, 2004). The inkblot in Figure 10–5 is similar to those developed by Rorschach.

People's responses to the Rorschach Test are scored on three major features: the *location* or part of the card mentioned in the response; the *content* of the response; and which aspect, or *determinant*, of the card (its color or shading) prompted the response. Rorschach's original system of scoring was later revised, and by 1950, there were five separate systems for scoring and interpreting the inkblots, with none of them exhibiting good reliability or validity. In an attempt to correct these problems, James Exner (1993) integrated the five scoring systems into one system that decreased, but did not eliminate, reliability and validity concerns. One of the more serious validity problems with the Rorschach is that the current scoring system tends to misidentify mentally healthy people as having psychological problems (Daruna, 2004). Although most critics do not believe that the Rorschach is completely invalid, they believe that tests are available that are more valid and also cheaper to administer, score, and interpret. Today, many users of the Rorschach administer it as a way to start a conversation with clients seeking therapy rather than as a way to measure their personality.

Thematic Apperception Test

Another widely used projective measure is the *Thematic Apperception Test (TAT)*. As described in Chapter 9, Section 9.4b, Henry Murray developed the TAT in 1937. Administering this test involves asking a person to tell a story about several pictures

Projective tests

Psychological tests that ask people to respond to ambiguous stimuli or situations in ways that will reveal their unconscious motives and desires

Rorschach Inkblot Test

A projective personality test in which people are shown 10 symmetrical inkblots and asked what each might be depicting

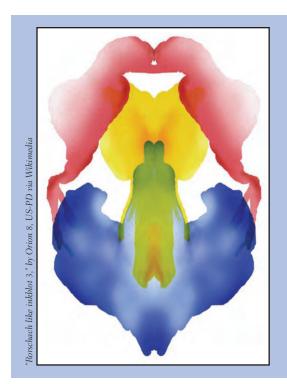


Figure 10–5
The Rorschach Test

People taking the Rorschach Inkblot Test describe what they see in a series of inkblots. The assumption of this projective personality test is that the way people interpret the inkblots will be a projection of their unconscious mind. What is one of the more serious validity problems with the Rorschach Test?

the person is shown (Ephraim, 2008). In each case, the picture depicts a person or people involved in a situation that is ambiguous. For example, in the TAT-like picture depicted in Figure 10–6, are the three people happy or sad? Is this a picture of a family, a student and teachers, or something else? The person telling the story about the TAT cards is instructed to tell about what led up to the story, what the people in the story are thinking and feeling, and how the situation resolves or comes to an end. Murray hypothesized that the issues that people are struggling with in their own lives would be perceived to be issues for the characters in the cards. He proposed that the storyteller could give the characters various needs, such as the need for nurturance or the need for achievement. There would also be an opposing pressure from the environment, such as the demand to conform or to provide nurturance to others. Murray further proposed that across the stories people told, certain themes would emerge related to important issues in their lives.

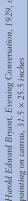




Figure 10–6 Thematic Apperception Test (TAT)

This picture of two adults sitting in a room focusing their attention on a child is an illustration of a TAT-like image. What sort of story do you think this picture tells? Why is the TAT referred to as a "projective" test?

Over several decades, the TAT and other variations of the test have demonstrated adequate validity in measuring need for achievement, but the test-retest reliability is relatively low. In addition, because the scenarios depicted in the TAT pictures were created for people in the US, assessing the motives of people from other cultures using the TAT is often not recommended (Hofer & Chasiotis, 2004). For these reasons, the TAT is not considered to be one of the better ways to measure personality. Today, as with the Rorschach, psychologists using the TAT in therapy frequently employ it to help start a conversation about a client's problems.

10.6b Objective Tests Measure Conscious Thoughts, Feelings, and Behavior

Unlike projective tests, which are designed to trick the unconscious into revealing its contents, **objective tests** are primarily designed to assess consciously held thoughts, feelings, and behavior by asking direct, unambiguous questions. The questions can be directed toward friends and family members or toward people who have just met the person being assessed. When people evaluate themselves, the test is called a *self-report inventory*. This is the most common kind of objective personality test.

Like college exams, objective personality tests can be administered to a large group of people at the same time. Also similar to exams, objective tests usually ask true-false, multiple-choice, or open-ended questions. However, unlike exams in a college course, personality tests have no one correct answer to questions. Each respondent chooses the answer that best describes her or him. Many objective tests measure only one specific component of personality (for example, refer to the *Self-Monitoring Scale* in the end-of-chapter "Psychological Applications" section), whereas other objective tests assess several traits simultaneously.

One test that assesses several traits is the Minnesota Multiphasic Personality Inventory (MMPI), which is the most extensively researched and widely used personality inventory (Butcher, 2005). Since its development in the 1940s, the MMPI has been revised so its language and content better reflect contemporary concerns and a more culturally diverse population. The more recent second edition, the MMPI-2, has 567 items, with participants responding "True," "False," or "Cannot say," The MMPI is an *empirically derived test*, meaning that the items were not selected for inclusion on a theoretical basis but were included only if they clearly distinguished one group of people from another (for example, patients with schizophrenia versus a normal comparison group). Each item had to demonstrate its usefulness by being answered differently by members of the two groups but similarly by members within each group.

The MMPI has 10 *clinical scales*, which are used to identify psychological difficulties or interests; thus, the groups that were used to choose the scale items were various groups of people with different psychological problems or interests. For example, the items that comprise the MMPI depression scale were those that depressed individuals endorsed more than did nondepressed people. People who score above a certain level on the depression scale are considered to have a problem with depression. Table 10–7 briefly describes the 10 clinical scales for the MMPI-2.

The MMPI also contains four *validity scales*, which are item groups that detect suspicious response patterns indicating dishonesty, carelessness, defensiveness, or evasiveness (Schroeder et al., 2012). The interpretation of responses to these four scales can help psychologists understand the attitudes that someone has taken toward all the test items. For example, someone who responds "true" to items such as "I like every person I have ever met" and "I never get angry" may not be providing honest answers to the other test items. The four MMPI-2 validity scales are also described in Table 10–7.

Objective tests

Personality tests that ask direct, unambiguous questions about a person's thoughts, feelings, and behavior

Minnesota Multiphasic Personality Inventory (MMPI)

An objective personality test consisting of true-false items that measure various personality dimensions and clinical conditions such as depression

Table 10-7 MMPI-2 Clinical and Validity Scales

Scale	Description
Clinical Scales	
Hypochondriasis	Abnormal concern with bodily functions and health concerns
Depression	Pessimism, feelings of hopelessness; slowing of action and thought
Hysteria	Unconscious use of mental or physical symptoms to avoid problems
Psychopathic deviation	Disregard for social customs; emotional shallowness
Masculinity/femininity	Interests culturally associated with a particular gender
Paranoia	Suspiciousness, delusions of grandeur or persecution
Psychasthenia	Obsessions, compulsions, fears, guilt, anxiety
Schizophrenia	Bizarre thoughts and perceptions, withdrawal, hallucinations, delusions
Hypomania	Emotional excitement, overactivity, impulsiveness
Social introversion	Shyness, insecurity, disinterest in others
Validity Scales	
Cannot say	Not answering many items indicates evasiveness
Lie	Repeatedly providing socially desirable responses indicates a desire to create a favorable impression; lying to look good
Frequency	Repeatedly providing answers rarely given by normal people may indicate an attempt to appear mentally disordered; faking to look mentally ill
Correction	A pattern of failing to admit personal problems or shortcomings, indicating defensiveness or lack of self-insight

The MMPI is easy to administer and score, and it has proven useful in identifying people who have psychological disorders (Bagby et al., 2005; Sellbom et al., 2012). Despite these advantages, it is often difficult to interpret MMPI scores when trying to diagnose specific disorders because people with different disorders score highly on a number of the same clinical scales. Critics also contend that the MMPI has not kept pace with advances in personality theory.

One of the most well-known objective personality tests is the Myers-Briggs Type Indicator (MBTI), created in the 1940s by Katharine Cook Briggs and her daughter, Isabel Briggs Myers. Based on Carl Jung's theory of personality (see Section 10.2e), the MBTI is widely used in many job fields and employment agencies to help people find careers that best fit their personalities (Wilde, 2011). The MBTI measures the degree to which respondents are introverted versus extraverted in their orientation toward the world, practical versus intuitive in dealing with their perceptions, analytical versus emotional in their judgments, and methodical versus spontaneous in their decision-making. When combined, these four classification preferences place a respondent into one of 16 personality types (Ross, 2011). Although the MBTI may be the most widely used personality measure in the world, questions remain regarding its accuracy, with some studies supporting and others questioning its validity.

Two more objective tests that represent the new wave of modern personality trait measures are the 243-item *Neuroticism Extraversion Openness Personality Inventory, Revised*, or *NEO-PI-R* (Costa & McCrae, 1992), and the 240-item *Values in Action Inventory of Strengths*, or *VIA-IS* (Peterson & Seligman, 2004). Unlike the MMPI, the NEO-PI-R and the VIA-IS measure personality differences that are not problematic. The NEO-PI-R is based on the five-factor model, while the VIA-IS is based on positive psychology's notion of character strengths being traits that are stable over time yet changeable due to life experiences. In cultures throughout the world, both the NEO-PI-R and the VIA-IS are widely used in research and clinical therapy; they both have good validity and reliability (Gorostiaga et al., 2011; McCrae et al., 2011).



- Projective testing assumes that if people are presented with ambiguous stimuli, their interpretation of it will be a projection of unconscious needs and desires.
- The two most widely used projective tests are the Rorschach Inkblot Test and the Thematic Apperception Test.
- Objective testing involves assessing consciously held thoughts, feelings, and behavior.
- The Minnesota Multiphasic Personality Inventory (MMPI) and the Myers-Briggs Type Indicator (MBTI) are two of the oldest and most widely used objective personality tests.
- The NEO-PI-R is an objective test that measures five-factor model traits.
- The VIA-IS is an objective test that measures positive psychology's notion of character strengths.

10.7 Neurological and Genetic Determinants of Personality

My oldest daughter, Amelia, can be a little absentminded at times, like her father, whereas my youngest daughter, Lillian, is very organized, like her mother. Both girls are generally good-natured, ambitious, and open to new experiences—traits they share with both their parents. Did they inherit these traits from one or both of us? Or are they like one or both of us because we shaped their personalities while raising them? To what degrees do heredity and environment account for personality? Also, is there any evidence that personality traits are associated with the activation of different areas of the brain?

Identifying the biological basis of personality is a difficult task. For example, brain imaging studies have found evidence that individual differences in four of the five personality traits in the five-factor model—conscientiousness, extraversion, agreeableness, and neuroticism—are correlated with individual differences in the size of specific brain areas (DeYoung et al., 2010). What do these results tell us? In examining the findings for the personality trait of conscientiousness, people who differ in conscientiousness tend to have different volumes in areas of the prefrontal cortex associated with planning and voluntary control of behavior. However, because

this relationship is correlational, we don't know whether this difference in brain volume is causing the difference in conscientiousness or vice-versa. It is also possible that some unknown third variable is causing the changes in both brain volume and in conscientiousness.

10.7a Personality Is Shaped by Nervous System Arousal and Specific Brain Activity

The most convincing evidence that individual differences in personality are caused by biological differences among people comes from a line of research first begun

by Hans Eysenck (see Section 10.4b). In studying introverts and extraverts, Eysenck (1997) suggested that these differences in personality types are caused by inherited differences in people's nervous systems, especially their brains. As you recall from Chapter 9, Section 9.1d, the Yerkes–Dodson law informs us that we seek to achieve and maintain an optimum level of bodily arousal—not too much and not too little. Yet the amount of stimulation necessary to reach the optimal level of arousal for one person is often not the same amount of stimulation needed by another person. According to Eysenck, introverts have inherited a nervous system that operates at a high level of arousal and is very sensitive to stimulation. Therefore, introverts avoid a great deal of social interaction and situational change in order to keep their arousal from reaching uncomfortable levels.



To what degree are people's desire or hesitation for participating in large and rowdy social settings shaped by inherited differences in their nervous systems?

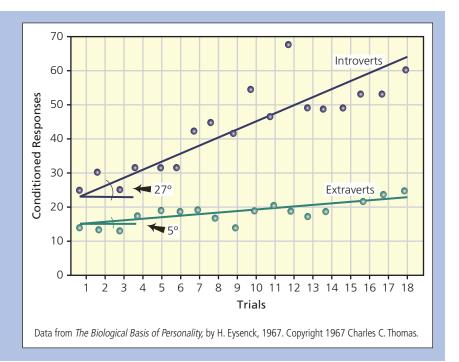
Extraverts have the opposite problem. Their nervous system normally operates at a relatively low level of arousal and is much less sensitive to stimulation, and thus they seek out situations that stimulate them. Consistent with this idea of different levels of nervous system activation, researchers have found that introverted students prefer studying in quiet, socially isolated settings, whereas extraverted students prefer studying in relatively noisy settings where they can socialize with others (Campbell & Hawley, 1982). Additional studies indicate that extraverts not only choose to perform tasks in noisy settings but actually perform better, also, in such settings (Geen, 1984). Also consistent with Eysenck's arousal hypothesis are the findings that introverts are more sensitive to pain than are extraverts and that they salivate more when lemon juice is place on their tongues than do extraverts.

Some of the more inventive studies that Eysenck and his colleagues conducted to test the hypothesis that introverts have higher levels of arousal than extraverts involved classically conditioning the eye-blink response, using puffs of air to the eye as the unconditioned response (see Chapter 6, Self-Discovery Questionnaire 6–1). Eysenck reasoned that if introverts' nervous systems operate at a higher level of arousal than do those of extraverts, introverts' eye blinking should become conditioned faster than extraverts' to the conditioned stimulus (Eysenck & Levey, 1972). As you can see from Figure 10–7, his hypothesis was supported: Introverts exhibited a much higher percentage of conditioned eye-blink responses to the conditioned stimulus than did extraverts.

Studies employing brain imaging technology suggest that brain structures in the frontal lobes that inhibit behavior possibly associated with danger or pain are more active among introverts than extraverts (Johnson et al., 1999). Additional research has found evidence that extraversion may be related to greater activation of dopamine pathways in the brain associated with reward and positive affect (Fishman et al., 2011;

Figure 10–7 Do Introverts Have Higher Levels of Arousal Than Extraverts?

To test the hypothesis that introverts have higher levels of nervous system arousal than extraverts, numerous studies have classically conditioned the eye-blink response in these two groups of people (Eysenck, 1967; Eysenck & Levey, 1972). Results indicate that introverts show a much higher percentage of conditioned eye-blink responses to the conditioned stimulus than do extraverts. How do these findings support the hypothesis that introverts have inherited a nervous system that operates at a higher level of arousal than that of extraverts?



Wacker et al., 2006). Further, when introverts and extraverts are shown positive images (for example, puppies, a happy couple, or sunsets), extraverts experience greater activation of brain areas that control emotion, such as the frontal cortex and the amygdala (Canli & Amin, 2002). Together, this research suggests that introversion and extraversion are associated with distinct patterns of brain activity, and that the experience of positive affect may be a primary feature of extraversion.

Another related personality characteristic associated with a hyperactive nervous system and different brain activity is shyness, which involves feelings of discomfort and inhibition during interpersonal situations (Rubin et al., 2002). Although almost everybody feels shy at some point in their lives, about 40% of the population is excessively shy, which hinders them in making friends, developing romantic relationships, and pursuing other goals involving social interaction. When compared to nonshy people, shy individuals are much more self-focused and spend an excess amount of time worrying about how others are evaluating them. Some studies show that shy children and adults are more likely to have been "high-reactive" infants, meaning they were more sensitive to environmental stimuli and thus fussier than other infants (Woodward et al., 2001). Such reactivity is detectable even in the womb. Fetuses with fast heart rates are more likely to develop into shy children than are those with slow or normal heart rates.

Regarding brain activation, it appears that both the amygdala (which is involved in the emotion of fear) and the right frontal lobe (which is involved in controlling emotions) play a role in shyness. Brain scans of chronically shy adults indicate that when they are shown unfamiliar faces or when they are interacting with strangers, these shy adults experience much greater activation of the amygdala and the right frontal lobe than do nonshy people (McManis et al., 2002). This different level of brain activation among shy people makes them more susceptible than others to experiencing anxious emotions.

10.7b Both Genetic and Environmental Factors Shape Personality

Many personality theorists have long assumed that genetic predispositions influence most aspects of personality (Rowe & Van den Oord, 2005). As discussed in Chapter 8, Section 8.4b, psychologists have conducted a great deal of research comparing twins reared together versus those reared apart to better understand genetic and environmental influences on intelligence. Many of these same studies have also examined personality traits. Overall, they have found that when raised together, identical twins have more similar traits than do fraternal twins (Agrawal et al., 2004; McCrae, 1996). These findings indicate a moderate genetic influence on personality. However, this same research has found that the trait correlations for identical twins reared apart are considerably lower than for those reared together, which suggests that environment also influences trait development. Currently, the best estimates are that personality differences in the population are between 30% and 60% genetically determined, with the balance attributable to environment (Bouchard, 2004).

Although genetics plays an important role in shaping personality, how it does so is not clear. It's possible that genes influence personality due to their impact on physical characteristics and general predispositions toward certain temperaments associated with activity, emotionality, and sociability (Johnson & Krueger, 2005). These physical characteristics and temperaments then interact with environmental factors to shape personality. For example, children who inherit a healthy body and high sociability and activity levels may actively seek opportunities to play with other children. Such interactions may foster the development of important social skills and the enjoyment of social activities, which are characteristic of extraverted personalities. Of course, this does not mean that genetic predispositions will actually lead to specific personality traits for a given person. For instance, even though shyness is an inherited trait, children and older adults can consciously overcome their social inhibitions and become remarkably skilled and outgoing in a wide variety of social settings (Rowe, 1997). Parents are especially important either in diminishing children's shyness or in maintaining it into adulthood (Rubin et al., 2002). Thus, instead of genetics determining personality in some lockstep fashion, we appear to inherit the building blocks of personality from our parents. Then our interactions with our social environment create the personality that we develop.



- Inherited differences can be seen in introverts' and extraverts' nervous systems, especially in their brains.
- Higher levels of nervous system activity and different levels of brain activation cause shy people to experience anxious emotions more frequently than do other people.
- Both genetic and environmental factors shape trait development.

P s y c h o l o g i c a l A p p l i c a t i o n s

Do You Have a Chameleon-Like Personality?

When studying personality, we are examining how people are consistent across situations and how they differ from one another. Yet what if I told you that personality researchers have identified a trait in which the defining characteristic is that people consistently behave inconsistently when interacting with others? Although this may sound strange to you, this trait is associated with a very normal self-presentation style that many of us exhibit. Before reading further, spend a few minutes responding to the items in the Self-Monitoring Scale (see below) to better understand your association with this trait.

Self-Monitoring

In social relationships, we often try to manage the impression we make on others by carefully constructing and monitoring our self-presentations. Although we all monitor and adjust how we present ourselves to others depending on the situation and with whom we are interacting, there is a personality difference in the degree to which we make such alterations in "who we are to others." According to Mark Snyder (1987), these differences are related to a personality trait called **self-monitoring**, which is the tendency to use cues from other people's self-presentations in controlling our own self-presentations. Those of us high in self-monitoring

Self-monitoring

A personality trait involving the tendency to use cues from other people's selfpresentations to control one's own self-presentations

The Self-Monitoring Scale

The personality trait of self-monitoring is measured by items on the Self-Monitoring Scale (Snyder, 1974; Snyder & Gangestad, 1982). To discover your level of self-monitoring, read each item below; and then indicate whether each statement is true or false for you.

 1. I find it hard to imitate the behavior of other people.
 2. At parties and social gatherings, I do not attempt to do or say things that others will like.
 3. I can only argue for ideas that I already believe.
 4. I can make impromptu speeches even on topics about which I have almost no information.
 5. I guess I put on a show to impress or entertain others.
 6. I would probably make a good actor.
 7. In a group of people, I am rarely the center of attention.
 8. In different situations and with different people, I often act like very different persons.
 9. I am not particularly good at making other people like me.
 10. I'm not always the person I appear to be.
 11. I would not change my opinions (or the way I do things) in order to please someone or win their favor.
 12. I have considered being an entertainer.
 13. I have never been good at games like charades or improvisational acting.
 14. I have trouble changing my behavior to suit different people and different situations.
 15. At a party, I let others keep the jokes and stories going.
 16. I feel a bit awkward in company and do not show up quite as well as I should.
17. I can look anyone in the eye and tell a lie with a straight face (if for a right end).
 18. I may deceive people by being friendly when I really dislike them.

Directions for scoring: Give yourself one point for answering "True" to each of the following items: 4, 5, 6, 8, 10, 12, 17, and 18. Also give yourself one point for answering "False" to each of the following items: 1, 2, 3, 7, 9, 11, 13, 14, 15, and 16. Then add up your total number of points to arrive at your self-monitoring score.

When Snyder (1974) developed the Self-Monitoring Scale, the mean score for North American college students was about 10 or 11. The higher your score is above these values, the more of this personality trait you probably possess. The lower your score is below these values, the less of this trait you probably possess.

Source: Adapted from "The self-monitoring of expressive behavior," by Mark Snyder in *Journal of Personality and Social Psychology, 30,* p. 531, Table 1. Copyright ©1974 by the American Psychological Association.

spend considerable time learning about other people, and we tend to emphasize impression management in our social relationships (Peluchette et al., 2006).

In social settings, high self-monitoring people become much less physiologically aroused than low self-monitoring people, even while striving to project a positive self-image (Hofmann, 2006). Due to their greater attention to social cues, high self-monitors are more skilled at both understanding and expressing the proper emotions in a social setting, and they often spontaneously mimic others' nonverbal behavior (Estow et al., 2007). For example, when trying to initiate a romantic relationship, high self-monitoring men and women behave in a chameleon-like fashion, strategically and often deceptively changing their self-presentations in an attempt to appear more desirable (Rowatt et al., 1998). In contrast, low self-monitors are less attentive to situational cues, and their behavior is guided more by inner attitudes and beliefs. As a result, their behavior is more consistent across situations. Although it may appear to the casual observer that the low self-monitor has a stable personality and the high self-monitor has no identifiable personality at all, the high self-monitors' inconsistency across situations represents a stable personality trait.

Due to their greater attention to social cues, high self-monitors learn more quickly how to behave in new situations and are more likely to initiate conversations (Gangestad & Snyder, 2000). On the negative side, people high in self-monitoring have fewer intimate and committed social relationships, and they tend to judge people more on superficial characteristics, such as physical appearance and social activities, rather than their attitudes and values (Evans & Clark, 2012).

Self-Monitoring on the Job

Because high self-monitors' actions are guided by what they think are the appropriate behaviors in a given situation, some psychologists have wondered how this might affect their search for a job and their performance in that job. What about low self-monitors? Because they are guided more by their inner feelings and beliefs than social propriety, will they tend to gravitate toward and perform better in different jobs than their more socially sensitive counterparts?

Research suggests that those high in self-monitoring prefer jobs with clearly defined occupational roles. In comparison, low self-monitors tend to prefer occupational roles that coincide with their own personalities so they can "be themselves" on the job (Snyder & Gangestad, 1982). Thus, if you are high in self-monitoring, you may be more willing than those low in self-monitoring to mold and shape yourself to "fit" your chosen occupational role. You might find, for example, that occupations in the fields of law, politics, public relations, and the theater are particularly attractive. Or, considering yourself assertive, industrious, and a risk-taker, you may gravitate toward a career in business or other entrepreneurial professions. In these careers, you can use your social chameleon abilities to mimic others' social expectations. In contrast, if you are low in self-monitoring and consider yourself to be warm, compassionate, and caring, you may seek out social service or "helping" occupations such as medicine, psychology, and social work.

After choosing and securing a job, your level of self-monitoring may influence your work performance. High self-monitors' social skills make them well suited for jobs that require the ability to influence others, and they are more likely to become leaders than those low in self-monitoring (Douglas & Gardner, 2004). One type of job that appears to be particularly suited to the skills of the high self-monitor is a so-called boundary-spanning job, in which individuals must interact and communicate effectively with two or more parties who, because of their conflicting interests, often cannot deal directly with one another. Examples of boundary-spanning jobs would be the mediator in a dispute between management and labor; a real estate agent who negotiates the transfer of property from seller to buyer; and a university administrator who deals with students, faculty, and alumni. In an examination of 93 field representatives whose jobs required boundary spanning, researchers found that high self-monitors did perform better in these jobs than low self-monitors (Caldwell & O'Reilly, 1982). These findings suggest that self-monitoring skills may be particularly helpful in occupations where one must interact with people who have conflicting interests and agendas. In such work settings, high self-monitors are less likely to allow their personal feelings to affect their social interactions—even though they are more willing than low self-monitors to use intimidation if they think it will be effective in securing their goals (Oh et al., 2014).

Being adept at reshaping self-presentation styles to overcome conflict on the job might be particularly useful for women who are breaking the corporate "glass ceiling" in many traditionally male-dominated occupations. For example, there is evidence that women who are business executives are less likely to experience a sexist backlash effect on the job due to their being in a traditionally masculine gender role if they are high self-monitors. One study found that over an 8-year period following graduation with an MBA degree, high self-monitoring female executives received more job promotions than did comparable low self-monitoring female executives (O'Neill & O'Reilly, 2011). The greater effectiveness of these high self-monitoring women is likely due to them being more willing and capable of shaping their self-presentations on the job, so that they overcome the underlying sexism of coworkers and thereby reduce resentment and resistance to them being in a position of power within the company.

It is not whether you really cry. It's whether the audience thinks you are crying.

—Ingrid Bergman, Swedish actress, 1915–1982

In what type of job might you perform better if you are low in self-monitoring? The job performance of low self-monitors appears to be less influenced by their leader's behavior than that of high self-monitors, who are more sensitized to such external demands. In other words, the degree of effort that low self-monitors exert on the job is less dependent on their boss's expectations and more determined by their own intrinsic motivation. What this suggests is that if you are low in self-monitoring, you may be more effective than high self-monitors working in unsupervised settings—if you feel your work is important.

Now that you have learned about this particular personality trait, which end of the self-monitoring spectrum do you think is the desirable pole? Do you see high self-monitoring as more socially adaptive because it allows people to better negotiate in an ever-changing and complicated social world? Or do you think that the chameleon-like nature of the high self-monitor suggests shallowness? Does the consistency of low self-monitoring individuals suggest "principled behavior" or "inflexibility"? The safest and perhaps wisest conclusion is that neither high nor low self-monitoring is necessarily undesirable unless it is carried to the extreme. Fortunately, pure high or low self-monitoring is rare; most of us fall somewhere on a continuum between these two extremes.

Suggested Websites

Great Ideas in Personality

http://www.personalityresearch.org

This website deals with scientific research programs in personality psychology. It provides information about personality research from a variety of perspectives, including some not covered in this chapter. It also contains a good selection of well-organized links to other personality websites.

The Society for Personality Assessment

http://www.personality.org

This Society for Personality Assessment website is intended primarily for professional use; it contains a section outlining the requirements for personality assessment credentials and telling how to go about becoming a personality psychologist.

The American Psychoanalytic Association

http://www.apsa.org

The website of the American Psychoanalytic Association is intended for both the general public and the professional psychoanalytic community. Information is provided about the current state of the psychoanalytic theoretical orientation.

Humanistic Psychology

http://www.apadivisions.org/division-32/

This is the official website of the American Psychological Association's division of humanistic psychology. It provides information on upcoming APA events and information for students interested in this perspective.

Queendom.com Complete List of Tests

http://www.queendom.com/tests/alltests.html

This website has a number of online personality tests that you can take and receive feedback on.

Key Terms

Anal stage, 457 Archetypes, 461 Character strength, 474 Collective unconscious, 461 Conditional positive regard, 464 Conscious mind, 454 Defense mechanism, 459 Displacement, 460 Ego, 456 Extravert, 462 Five-factor model, 470 Fixation, 457 Genital stage, 459 Id, 455 Interactionism, 478 Introvert, 462 Latency stage, 458

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Review Questions

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- 1. The modern study of personality involves all except which of the following?
 - a. studying how personality emerges from the interaction between the individual and his or her environment
 - b. approaches that are more limited and narrower than in the first half of the 20th century
 - c. understanding how people may be generally predictable yet different from others
 - d. both philosophical and scientific roots
 - e. a focus on overarching and comprehensive descriptions of personality styles
- 2. Freud is perhaps best known for the significance of his theory of _____.
 - a. glove anesthesia
 - b. the nervous system
 - c. the mind
 - d. biological urges
 - e. hypnosis

- 3. Regarding personality, Freud's structural model emphasized the different operating principles and goals that operated within which of the following subcomponents of the mind?
 - a. the collective unconscious and archetypes
 - b. id, ego, and superego
 - c. id, pleasure principle, and archetypes
 - d. ego, reality principle, and the collective unconscious
 - e. id, superego, and reality
- 4. Among Freud's contributions was his theory of psychosexual stages, which included an emphasis on which of the following?
 - a. five fixed stages of development in childhood and adolescence
 - b. projection, which involves unresolved conflicts emerging from too little gratification of id desires
 - the Oedipus complex, in which children develop unconditional positive regard toward their same-sex parent
 - d. the oral stage, when unconscious sexual and aggressive impulses go dormant
 - e. personality development after age 5

- 5. What does the psychoanalytic theory of defense mechanisms, or ways we control anxiety-provoking thoughts and impulses, suggest about defense mechanisms?
 - a. They protect the id from unacceptable urges.
 - b. They represent permanent changes in the structure of the mind.
 - c. They allow us to understand our unconscious motivations.
 - d. They explain why we can become civilized.
 - e. They tend to be consistent, but not distinguishing, characteristics of personality.
- 6. An individual with a strong desire to perform immoral acts might exhibit extremely moralistic behavior and be harshly judgmental of others if he used which defense mechanism?
 - a. rationalization
 - b. reaction formation
 - c. displacement
 - d. projection
 - e. regression
- 7. All the alternative approaches to Freud's psychoanalysis have in common which of the following notions?
 - a. The collective unconscious is a fourth component of the mind's structure.
 - b. Social interaction is the basis for personality.
 - c. The mind can be understood only through carefully controlled scientific research.
 - d. The unconscious mind is less important than Freud claimed.
 - e. Sexual drives are not central in determining people's personalities.
- 8. The humanistic model of personality development differed from the predominant views of psychoanalysis and behaviorism primarily in which of the following?
 - a. the discrepancy between Rogers's actual and feared self
 - b. its exclusive focus on the development of psychologically healthy and creative people
 - c. the belief that individual psychological growth is predetermined
 - d. its optimistic approach to the possibilities for positive human change
 - e. the scientific and testable hypotheses it generated

- 9. On what is the trait approach to personality primarily focused?
 - a. describing how people differ from one another in specific ways
 - b. Allport's view that behavior varies across situations
 - relatively new ideas concerning the classification of people according to personality types
 - d. direct measurement, rather than inference, of personality characteristics
 - e. describing why people differ from one another in specific ways
- 10. What is the general consensus among personality researchers today about the basic personality traits?
 - a. They are biologically or genetically determined.
 - b. They capture the essence of individual personality.
 - c. They are a result of adaptive human evolution.
 - d. They vary across cultures.
 - They include neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness.
- 11. Which of the following is true of Mischel's controversial claim concerning the predictive ability of personality traits?
 - a. Predictive ability was based on limited samples of behavior.
 - b. Predictive ability was supported by personality research indicating that traits reliably predict behavior.
 - c. Predictive ability led to the realization that situations do not play a role in shaping behavior.
 - d. Predictive ability generated new research but did not increase the ability to predict behavior.
 - e. Predictive ability indicated that children are reliably honest or dishonest across situations.
- 12. The social cognitive approach describes personality as primarily based on which of the following?
 - a. classical conditioning
 - b. operant conditioning
 - c. an individualist approach
 - d. observational learning
 - e. direct experience

- 13. What does Bandura's reciprocal determinism explain?
 - a. The environment plays a more important role in behavior than the individual.
 - b. Self-efficacy is stable and consistent across situations.
 - Personality emerges from an ongoing mutual interaction between people's cognitions, actions, and environment.
 - d. Individual perceptions are of little consequence in determining behavior.
 - e. There is no relationship between self-efficacy and self-esteem.
- 14. In research on the Values in Action Classification of Strengths system, an internet study of almost 118,000 adults from 54 countries found which of the following were three of the most commonly endorsed character strengths?
 - a. creativity, curiosity, and open-mindedness
 - b. forgiveness, humility, and modesty
 - c. kindness, integrity, and gratitude
 - d. bravery, persistence, and integrity
 - e. citizenship, fairness, and leadership
- 15. The concept of locus of control, originated by Rotter, is associated with all except which of the following:
 - a. a belief in one's ability to control the outcomes in one's life
 - b. learned helplessness
 - c. anger and acting-out behaviors
 - d. achievement orientation
 - e. success in life
- 16. What is the primary difference between projective and objective measures of personality?
 - a. Objective measures rely on ambiguous stimuli, whereas projective measures are more direct.
 - b. Projective tests assess unconscious aspects of personality, whereas objective tests assess conscious aspects of personality.
 - Objective tests are scored on the basis of a correct answer, but there are no correct answers on projective tests.
 - d. Projective tests are more reliable and valid than objective tests.
 - e. Objective tests are used primarily to start conversations about a client's problems.