Thinking, or cognition (from a Latin word meaning “to know”), can be defined as mental activity that goes on in the brain when a person is processing information—organizing it, understanding it, and communicating it to others.

Thinking includes memory, making decisions, comparing information to other information, and using it to solve problems.

Mental images (representations that stand in for objects or events and have a picture-like quality) are one of several tools used in the thought process.

Researchers have found that it does take longer to view a mental image that is larger or covers more distance than a smaller, more compact one (Kosslyn et al., 2001; Ochsner & Kosslyn, 1994).

In one study (Kosslyn et al., 1978), participants were asked to look at a map of an imaginary island. On this map were several landmarks, such as a hut, a lake, and a grassy area. After viewing the map and memorizing it, participants were asked to imagine a specific place on the island, such as the hut, and then to “look” for another place, like the lake. When they mentally “reached” the second place, they pushed a button that recorded reaction time. The greater the physical distance on the map between the two locations, the longer it took participants to scan the image for the second location. The participants were apparently looking at their mental image and scanning it just as if it were a real, physical map.

People are even able to mentally rotate, or turn, images (Shepherd & Metzler, 1971).

Kosslyn (1983) asked participants questions such as the following: “Do frogs have lips and a stubby tail?” He found that most participants reported visualizing a frog, starting with the face (“no lips”), then mentally rotating the image so it was facing away from them, and then “zooming in” to look for the stubby tail (“yes, there it is”).

A very important aspect of the research on mental rotation is that we tend to engage mental images in our mind much like we engage or interact with physical objects.

When we rotate an object in our minds (or in other ways interact with or manipulate mental images), it is not instantaneous—it takes time, just as it would if we were rotating a physical object with our hands.

In the brain, creating a mental image is almost the opposite of seeing an actual image. With an actual image, the information goes from the eyes to the visual cortex of the occipital lobe and is processed, or interpreted, by other areas of the cortex that compare the new information to information already in memory. In creating a mental image, areas of the cortex associated with
stored knowledge send information to the visual cortex, where the image is perceived in the "mind's eye" (Kosslyn et al., 1993; Sparing et al., 2002). PET scans show areas of the visual cortex being activated during the process of forming an image, providing evidence for the role of the visual cortex in mental imagery (Kosslyn et al., 1993, 1999, 2001).

- Through the use of functional magnetic resonance imagery (fMRI), researchers have been able to see the overlap that occurs in brain areas activated during visual mental imagery tasks as compared to actual tasks involving visual perception (Ganis et al., 2004).
- During both types of tasks, activity was present in the frontal cortex (cognitive control), temporal lobes (memory), parietal lobes (attention and spatial memory), and occipital lobes (visual processing). However, the amount of activity in these areas differed between the two types of tasks. For example, activity in the visual cortex was stronger during perception than in imagery, suggesting sensory input activates this area more strongly than memory input. And an important finding overall is that those areas activated during visual imagery were a subset of those activated during visual perception, with the greatest similarity in the frontal and parietal regions rather than the temporal and occipital regions.

**CONCEPTS**

- Concepts are ideas that represent a class or category of objects, events, or activities.
- People use concepts to think about objects or events without having to think about all the specific examples of the category. For example, a person can think about “fruit” without thinking about every kind of fruit there is in the world, which would take far more effort and time. This ability to think in terms of concepts allows us to communicate with each other.
- Concepts not only contain the important features of the objects or events people want to think about, but also they allow the identification of new objects and events that may fit the concept.
- Concepts can have very strict definitions, such as the concept of a square as a shape with four equal sides.
- Concepts defined by specific rules or features are called formal concepts and are quite rigid. To be a square, for example, an object must be a two-dimensional figure with four equal sides and four angles adding up to 360 degrees.
- People are surrounded by objects, events, and activities that are not as clearly defined as formal concepts.
- Natural concepts, are concepts people form not as a result of a strict set of rules but rather as the result of experiences with these concepts in the real world.
Formal concepts are well defined, but natural concepts are “fuzzy” (Hampton, 1998). Natural concepts are important in helping people understand their surroundings in a less structured manner than school-taught formal concepts, and they form the basis for interpreting those surroundings and the events that may occur in everyday life.

- a prototype, a concept that closely matches the defining characteristics of the concept
- More than likely, prototypes develop according to the exposure a person has to objects in that category.
- So someone who grew up in an area where there are many coconut trees might think of coconuts as more prototypical than apples, whereas someone growing up in the northwestern United States would more likely see apples as a prototypical fruit (Aitchison, 1992).
- Culture also matters in the formation of prototypes.
- Natural concepts are important in helping people understand their surroundings in a less structured manner than school-taught formal concepts, and they form the basis for interpreting those surroundings and the events that may occur in everyday life.
- No matter what type, concepts are one of the ways people deal with all the information that bombards their senses every day, allowing them to organize their perceptions of the world around them.
- This organization may take the form of schemas, mental generalizations about objects, places, events, and people (for example, one’s schema for “library” would no doubt include books and bookshelves), or scripts, a kind of schema that involves a familiar sequence of activities (for example, “going to a movie” would include traveling there, getting the ticket, buying snacks, finding the right theater, etc.).
- Concepts not only help people think, but also they are an important tool in problem solving, a type of thinking that people engage in every day and in many different situations.
- Motivation is the process by which activities are started, directed, and continued so that physical or psychological needs or wants are met.
- Extrinsic motivation is a type of motivation in which a person performs an action because it leads to an outcome that is separate from or external to the person.
- Intrinsic motivation is type of motivation in which a person performs an action because the act itself is rewarding or satisfying in some internal manner.

EARLY APPROACHES TO UNDERSTANDING MOTIVATION

INSTINCTS AND THE EVOLUTIONARY APPROACH

- Early attempts to understand motivation focused on the biologically determined and innate patterns of behaviour called instincts that exist in both people and animals.
- Just as animals are governed by their instincts to perform activities such as migrating, nest building, mating, and protecting their territory, evolutionary theorists proposed that human beings may also be governed by similar instincts (James, 1890; McDougall, 1908).
- For instance, according to these theorists, the human instinct to reproduce is responsible for sexual behaviours, and the human instinct for territorial protection may be related to aggressive behaviours.
- William McDougall (1908) actually proposed a total of 18 instincts for humans, including curiosity, flight (running away), pugnacity (aggressiveness), and acquisition (gathering possessions).
- As the years progressed, psychologists added more and more instincts to the list until there were thousands of proposed instincts.
- However, none of these early theorists did much more than give names to these instincts. Although there were plenty of descriptions, such as “submissive people possess the instinct of submission,” there was no attempt to explain why these instincts exist in humans, if they exist at all (Petri, 1996).
- Instinct approaches have faded away because, although they could describe human behaviour, they could not explain it.
- But these approaches did accomplish one important thing by forcing psychologists to realize that some human behaviour is controlled by hereditary factors.

DRIVE-REDUCTION THEORY

- The next approach to understanding motivation focuses on the concepts of needs and drives.
- A need is a requirement of some material (such as food or water) that is essential for survival of the organism. When an organism has a need, it leads to a psychological tension as well as a physical arousal that motivates the organism to act in order to fulfill the need and reduce the tension. This tension is called a drive (Hull, 1943).
- Drive-reduction theory proposes just this connection between internal physiological states and outward behavior. In this theory, there are two kinds of drives.
• Primary drives are those that involve survival needs of the body such as hunger and thirst,
• whereas acquired (secondary) drives are those that are learned through experience or conditioning, such as the need for money or social approval or the need of recent former smokers to have something to put in their mouths.
• This theory also includes the concept of homeostasis, or the tendency of the body to maintain a steady state.
• When there is a primary drive need, the body is in a state of imbalance. This stimulates behavior that brings the body back into balance, or homeostasis. For example, if Jarrod’s body needs food, he feels hunger and the state of tension/arousal associated with that need.
• Although drive-reduction theory works well to explain the actions people take to reduce tension created by needs, it does not explain all human motivation.
• People don’t always seek to reduce their inner arousal either—sometimes they seek to increase it. Bungee-jumping, parachuting as recreation, rock climbing, and watching horror movies are all activities that increase the inner state of tension and arousal, and many people love doing these activities.

Motivation is about needs. Drive-reduction theory talks about needs, and other theories of motivation include the concept of needs. In many of these theories, most needs are the result of some inner physical drive (such as hunger or thirst) that demands to be satisfied, but other theories examine our psychological needs.

MCCLELLAND’S THEORY: AFFILIATION, POWER, AND ACHIEVEMENT NEEDS

• Harvard University psychologists David C. McClelland (1961, 1987) proposed a theory of motivation that highlights the importance of three psychological needs not typically considered by the other theories: affiliation, power, and achievement.
• According to McClelland, human beings have a psychological need for friendly social interactions and relationships with others. Called the need for affiliation (abbreviated as nAff in McClelland’s writings), people high in this need seek to be liked by others and to be held in high regard by those around them.
• A second psychological need proposed by McClelland is the need for power (nPow). Power is not about reaching a goal but about having control over other people. People high in this need would want to have influence over others and make an impact on them. They want their ideas to be the ones that are used, regardless of whether their ideas will lead to success. Status and prestige are important, so these people wear expensive clothes, live in expensive houses, drive fancy cars, and dine in the best restaurants.
• The need for achievement (nAch) involves a strong desire to succeed in attaining goals, not only realistic ones but also challenging ones. People who are high in nAch look for careers and hobbies that allow others to evaluate them, because these high achievers also need to have feedback about their performance in addition to the achievement of reaching the goal. Achievement motivation appears to be strongly related to success in school, occupational success, and the quality and amount of what a person produces.

CAROL DWECK’S SELF-THEORY OF MOTIVATION

• According to motivation and personality psychologist Carol Dweck, the need for achievement is closely linked to personality factors, including a person’s view of how self (the beliefs a person holds about his or her own abilities and relationships with others) can affect the individual’s perception of the success or failure of his or her actions.

• This concept is related to the much older notion of locus of control.

• Dweck’s research supports the idea that people’s “theories” about their own selves can affect their level of achievement motivation and their willingness to keep trying to achieve success in the face of failure.

• According to this research, people can form one of two belief systems about intelligence, which in turn affects their motivation to achieve.

• Those who believe intelligence is fixed and unchangeable often demonstrate an external locus of control when faced with difficulty, leading them to give up easily or avoid situations in which they might fail—often ensuring their own failure in the process. They are prone to developing learned helplessness, the tendency to stop trying to achieve a goal because past failure has led them to believe that they cannot succeed.

• The other type of person believes that intelligence is changeable and can be shaped by experiences and effort in small increases, or increments. These people also tend to show an internal locus of control, both in believing that their own actions and efforts will improve their intelligence and in taking control or increasing their efforts when faced with challenges. They work at developing new strategies and get involved in new tasks, with the goal of increasing their “smarts.” They are motivated to master tasks and don’t allow failure to destroy their confidence in themselves or pre- vent them from trying again and again, using new strategies each time.

• Based on this and other research, Dweck recommends that parents and teachers praise efforts and the methods that children use to make those efforts, not just successes or ability.
AROUSAL AND INCENTIVE THEORIES

- Stimulus motive: a motive that appears to be unlearned but causes an increase in stimulation, such as curiosity.

**AROUSAL THEORY**

- In arousal theory, people are said to have an optimal (best or ideal) level of tension.
- Task performances, for example, may suffer if the level of arousal is too high (such as severe test anxiety) or even if the level of arousal is too low (such as boredom).
- For many kinds of tasks, a moderate level of arousal seems to be best.
- This relationship between task performance and arousal has been explained by the Yerkes-Dodson law (Teigen, 1994; Yerkes & Dodson, 1908), although Yerkes and Dodson formulated the law referring to something “high–moderate” level for optimal performance, whereas difficult tasks require a “low–moderate” level.
- A sports psychologist might work with an athlete to help them get “in the zone,” where they are in that specific zone of arousal (not too low and not too high) and state of mental focus so as to maximize their athletic skills and performance. Social psychologists also examine the effect of the presence of other people on the facilitation or impairment of an individual’s performance. Stimulus intensity, not arousal level (Winton, 1987).
- Even though the average person might require a moderate level of arousal to feel content, there are some people who need less arousal and some who need more. The person who needs more arousal is called a sensation seeker.
- *Sensation seekers* seem to need more complex and varied sensory experiences than do other people. The need does not always have to involve danger. For example, students who travel to other countries to study tend to score higher on scales of sensation seeking than do students who stay at home (Schroth & McCormack, 2000). Sensation seeking may be related to temperament.
- In one study (Putnam & Stifter, 2002), researchers found evidence of “sensation-seeking” behavior in children as young as age 2. In this study, 90 children were studied at the ages of 6, 12, 24, and 25 months. In a test of the youngest participants, the babies were shown two sets of toys: a block, a plate, and a cup; or a flashing light, a toy beeper, and a wind-up dragon. The first set was considered a low-intensity stimulus, whereas the second set was labeled a high-intensity stimulus. The infants who reached out for the toys more quickly and reached for the high-intensity toys in particular were high sensation seekers.
INCENTIVE APPROACHES

- Incentives are things that attract or lure people into action.
- In incentive approaches, behavior is explained in terms of the external stimulus and its rewarding properties. These rewarding properties exist independently of any need or level of arousal and can cause people to act only upon the incentive.
- Incentive theory is actually based, at least in part, on the principles of learning.
- By itself, the incentive approach does not explain the motivation behind all behavior.
- Many theorists today see motivation as a result of both the “push” of internal needs or drives and the “pull” of a rewarding external stimulus. For example, sometimes a person may actually be hungry (the push) but choose to satisfy that drive by selecting a candy bar instead of a celery stick. The candy bar has more appeal to most people, and it, therefore, has more pull than the celery. (Frankly, to most people, just about anything has more pull than celery.)
• Personality is the unique way in which each individual thinks, acts, and feels throughout life.
• Personality should not be confused with character, which refers to value judgments made about a person’s morals or ethical behavior;
• Nor should it be confused with temperament, the biologically innate and enduring characteristics with which each person is born, such as irritability or adaptability.
• Both character and temperament are vital parts of personality, however.
• Every adult personality is a combination of temperaments and personal history of family, culture, and the time during which they grew up

Freud came to believe that there were layers of consciousness in the mind. His belief in the influence of the unconscious mind on conscious behavior, published in The Psychopathology of Everyday Life (Freud, 1901), shocked the Victorian world.

The Structure of the Mind

• Freud believed that the mind was divided into three parts: the preconscious, conscious, and unconscious.
• Freud theorized that there is a part of the mind that remains hidden at all times, surfacing only in symbolic form in dreams and in some of the behavior people engage in without knowing why they have done so.
• Even when a person makes a determined effort to bring a memory out of the unconscious mind, it will not appear directly, according to Freud.
• Freud believed that the unconscious mind was the most important determining factor in human behavior and personality.
• An iceberg represents the three levels of the mind.
• The part of the iceberg visible above the surface is the conscious mind. Just below the surface is the preconscious mind, everything that is not yet part of the conscious mind. Hidden deep below the surface is the unconscious mind, feelings, memories, thoughts, and urges that cannot be easily brought into consciousness.
• While two of the three parts of the personality (ego and superego) exist at all three levels of awareness, the id is completely in the unconscious mind.

Freud’s Divisions of the Personality  Freud believed, based on observations of his patients, that personality itself could be divided into three parts, each existing at one or more levels of conscious awareness. The way these three parts of the personality develop and interact with one another became the heart of his theory.
ID: IF IT FEELS GOOD, DO IT

- The first and most primitive part of the personality, present in the infant, is the id.
- Id is a Latin word that means “it.”
- The id is a completely unconscious, pleasure-seeking, amoral part of the personality that exists at birth, containing all of the basic biological drives: hunger, thirst, self-preservation, and sex.
- In fact, thinking about what infants are like when they are just born provides a good picture of the id. Infants are demanding, irrational, illogical, and impulsive. They want their needs satisfied immediately, and they don’t care about anyone else’s needs or desires.
- Freud called this need for satisfaction the pleasure principle, which can be defined as the desire for immediate gratification of needs with no regard for the consequences. The pleasure principle can be summed up simply as “if it feels good, do it.”

EGO: THE EXECUTIVE DIRECTOR

- According to Freud, to deal with reality, a second part of the personality develops called the ego.
- The ego, from the Latin word for “I,” is mostly conscious and is far more rational, logical, and cunning than the id.
- The ego works on the reality principle, which is the need to satisfy the demands of the id only in ways that will not lead to negative consequences.
- This means that sometimes the ego decides to deny the id its desires because the consequences would be painful or too unpleasant.
- For example, while an infant might reach out and take an object despite a parent’s protests, a toddler with the developing ego will avoid taking the object when the parent says, “No!” to avoid punishment—but may go back for the object when the parent is not looking. A simpler way of stating the reality principle, then, is “if it feels good, do it, but only if you can get away with it.”

SUPEREGO: THE MORAL WATCHDOG

- Freud called the third and final part of the personality, the moral center of personality, the superego.
- The superego (also Latin, meaning “over the self”) develops as a preschool-aged child learns the rules, customs, and expectations of society.
- The super ego contains the conscience, the part of the personality that makes people feel guilt, or moral anxiety, when they do the wrong thing. It is based on morality principle


- The id makes demands, the superego puts restrictions on how those demands can be met, and the ego has to come up with a plan that will quiet the id but satisfy the superego.
- Sometimes the id or the superego does not get its way, resulting in a great deal of anxiety for the ego itself.
- This constant state of conflict is Freud’s view of how personality works; it is only when the anxiety created by this conflict gets out of hand that disordered behavior arises.
• The psychological defense mechanisms are ways of dealing with anxiety through unconsciously distorting one’s perception of reality.

• These defense mechanisms were mainly outlined and studied by Freud’s daughter, Anna Freud, who was a psychoanalyst.

• In order for the three parts of the personality to function, the constant conflict among them must be managed, and Freud assumed that the defense mechanisms were among the most important tools for dealing with the anxiety caused by this conflict.

<table>
<thead>
<tr>
<th>Defense Mechanism and Definition</th>
<th>example</th>
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<tbody>
<tr>
<td>Denial: refusal to recognize or acknowledge a threatening situation.</td>
<td>Renata refuses to acknowledge her son was killed during his recent military deployment.</td>
</tr>
<tr>
<td>repression: “pushing” threatening or conflicting events or situations out of conscious memory.</td>
<td>Regan, who was sexually abused as a child, cannot remember the abuse at all.</td>
</tr>
<tr>
<td>rationalization: making up acceptable excuses for unacceptable behavior.</td>
<td>“If I don’t have breakfast, I can have that piece of cake later on without hurting my diet.”</td>
</tr>
<tr>
<td>projection: placing one’s own unacceptable thoughts onto others, as if the thoughts belonged to them and not to oneself.</td>
<td>Maria is attracted to her sister’s husband but denies this and believes the husband is attracted to her.</td>
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<tr>
<td>reaction formation: forming an emotional reaction or attitude that is the opposite of one’s threatening or unacceptable actual thoughts.</td>
<td>Kyle is unconsciously attracted to Cian but outwardly voices an extreme hatred of homosexuals.</td>
</tr>
<tr>
<td>Displacement: expressing feelings that would be threatening if directed at the real target onto a less threatening substitute target.</td>
<td>Sandra gets reprimanded by her boss and goes home to angrily pick a fight with her husband.</td>
</tr>
<tr>
<td>regression: falling back on childish patterns as a way of coping with stressful situations.</td>
<td>Four-year-old Blaine starts wetting his bed after his parents bring home a new baby.</td>
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<tr>
<td>identification: trying to become like someone else to deal with one’s anxiety.</td>
<td>Samantha really admires Emily, the most popular girl in school, and tries to copy her behavior and dress.</td>
</tr>
<tr>
<td>Compensation (substitution): trying to make up for areas in which a lack is perceived by becoming superior in some other area.</td>
<td>Ethan is not good at athletics, so he puts all of his energies into becoming an academic scholar.</td>
</tr>
<tr>
<td>Ryder, who is very aggressive, becomes a mixed martial arts fighter.</td>
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Stages of Personality Development

• Freud believed that personality development occurs in a series of psychosexual stages that are determined by the developing sexuality of the child.

• At each stage, a different erogenous zone, or area of the body that produces pleasurable feelings, becomes important and can become the source of conflicts. Conflicts that are not fully resolved can result in fixation, or getting “stuck” to some degree in a stage of development. The child may grow into an adult but will still carry emotional and psychological “baggage” from that earlier fixated stage.
**ORAL STAGE** (First 18 Months)

- The first stage is called the oral stage because the erogenous zone is the mouth. The conflict that can arise here, according to Freud, will be over weaning (taking the mother’s breast away from the child, who will now drink from a cup).
- Weaning that occurs too soon or too late can result in too little or too much satisfaction of the child’s oral needs, resulting in the activities and personality traits of the child’s oral needs, resulting in the activities and personality traits associated with an orally fixated adult personality.
- Orally fixated adult personality: overeating, drinking too much, chain smoking, talking too much, nail biting, gum chewing, and a tendency to be either too dependent and optimistic called **oral dependent personality** (when the oral needs are overindulged) or too aggressive and pessimistic called **oral biting personality** (when the oral needs are denied).

**ANAL STAGE (18 TO 36 MONTHS)**

- As the child becomes a toddler, Freud believed that the erogenous zone moves from the mouth to the anus, because he also believed that children got a great deal of pleasure from both withholding and releasing their feces at will. This stage is, therefore, called the anal stage.
- Freud thought that the main area of conflict here is toilet training, the demand that the child use the toilet at a particular time and in a particular way.
- This invasion of reality is part of the process that stimulates the development of the ego during this stage. Fixation in the anal stage, from toilet training that is too harsh, can take one of two forms.
- The child who rebels openly will refuse to go in the toilet and, according to Freud, translate in the adult as an **anal expulsive personality**, someone who sees messiness as a statement of personal control and who is somewhat destructive and hostile.
- Some children, however, are terrified of making a mess and rebel passively—refusing to go at all or retaining the feces. No mess, no punishment. As adults, they are stingy, stubborn, and excessively neat. This type is called the **anal retentive personality**.

**PHALLIC STAGE (3 TO 6 YEARS)**

- As the child grows older, the erogenous zone shifts to the genitals. Children have discovered the differences between the sexes by now, and most have also engaged in perfectly normal self-stimulation of the genitals, or masturbation.
- This awakening of sexual curiosity and interest in the genitals is the beginning of what Freud termed the phallic stage. (The word phallic comes from the Greek word phallos and means “penis.”)
- Freud believed that when boys realized that the little girl down the street had no penis, they developed a fear of losing the penis called **castration anxiety**, while girls developed **penis envy** because they were missing a penis.
Freud essentially believed that boys develop both sexual attraction to their mothers and jealousy of their fathers during this stage, a phenomenon called the Oedipus complex. (Oedipus was a king in a Greek tragedy who unknowingly killed his father and married his mother.)

His jealousy of his father leads to feelings of anxiety and fears that his father, a powerful authority figure, might get angry and do something terrible. To deal with this anxiety, two things must occur by the time the phallic stage ends. The boy will repress his sexual feelings for his mother and identify with his father.

Identification is one of the defense mechanisms used to combat anxiety. Girls go through a similar process called the Electra complex with their father as the target of their affections and their mother as the rival.

The result of identification is the development of the superego, the internalized moral values of the same-sex parent. If a child does not have a same-sex parent with whom to identify, or if the opposite-sex parent encourages the sexual attraction, fixation can occur.

Fixation in the phallic stage usually involves immature sexual attitudes as an adult. People who are fixated in this stage, according to Freud, will often exhibit promiscuous* sexual behavior and be very vain. The vanity is seen as a cover-up for feelings of low self-worth arising from the failure to resolve the complex, and the lack of moral sexual behavior stems from the failure of identification and the inadequate formation of the superego. Additionally, men with this fixation may be “mama’s boys” who never quite grow up, and women with this fixation may look for much older father figures to marry.

**LATENCY STAGE (6 YEARS TO PUBERTY)**

From age 6 to the onset of puberty, children will remain in the stage of hidden, or latent, sexual feelings, so this stage is called latency. In this stage, children grow and develop intellectually, physically, and socially but not sexually. This is the age at which boys play only with boys, girls play only with girls, and each thinks the opposite sex is pretty awful.

**GENITAL STAGE (PUBERTY ON)**

When puberty does begin, the sexual feelings that were once repressed can no longer be ignored. Bodies are changing and sexual urges are once more allowed into consciousness, but these urges will no longer have the parents as their targets. Instead, the focus of sexual curiosity and attraction will become other adolescents, celebrities, and other objects of adoration. Since Freud tied personality development into sexual development, the genital stage represented the final process in Freud’s personality theory, as well as the entry into adult social and sexual behavior.
THE NEO-FREUDIANS

- A number of early psychoanalysts, objecting to Freud’s emphasis on biology and particularly on sexuality, broke away from a strict interpretation of psychoanalytic theory, instead altering the focus of psychoanalysis.
- At the same time, they retained many of Freud’s original concepts such as the id, ego, superego, and defense mechanisms. These early psychoanalysts became the neo-Freudians, or “new” Freudian psychoanalysts.

CARL GUSTAV JUNG

- Jung disagreed with Freud about the nature of the unconscious mind. Jung believed that the unconscious held much more than personal fears, urges, and memories. He believed that there was not only a personal unconscious, as described by Freud, but a collective unconscious as well (Jung, 1933).
- According to Jung, the collective unconscious contains a kind of “species” memory, memories of ancient fears and themes that seem to occur in many folktales and cultures.
- These collective, universal human memories were called archetypes by Jung.
- There are many archetypes, but two of the more well-known are the anima/animus (the feminine side of a man/the masculine side of a woman) and the shadow (the dark side of personality, called the “devil” in Western cultures). The side of one’s personality that is shown to the world is termed the persona.

ALFRED ADLER

- Adler was also in disagreement with Freud over the importance of sexuality in personality development.
- Adler (1954) developed the theory that as young helpless children, people all develop feelings of inferiority when comparing themselves to the more powerful, superior adults in their world.
- The driving force behind all human endeavors, emotions, and thoughts for Adler was not the seeking of pleasure but the seeking of superiority.
- He developed a theory that the birth order of a child affected personality.
- Firstborn children with younger siblings feel inferior once those younger siblings get all the attention and often overcompensate by becoming overachievers.
- Middle children have it slightly easier, getting to feel superior over the dethroned older child while dominating younger siblings. They tend to be very competitive.
- Younger children are supposedly pampered and protected but feel inferior because they are not allowed the freedom and responsibility of the older children.

HORNEY

- Karen Horney disagreed with Freudian views about the differences between males and females and most notably with the concept of penis envy.
- She countered with her own concept of “womb envy,” stating that men felt the need to compensate for their lack of child-bearing ability by striving for success in other areas.
Rather than focusing on sexuality, Horney focused on the basic anxiety created in a child born into a world that is so much bigger and more powerful than the child.

While people whose parents gave them love, affection, and security would overcome this anxiety, others with less secure upbringings would develop neurotic personalities and maladaptive ways of dealing with relationships.

Some children, according to Horney, try to deal with their anxiety by moving toward people, becoming dependent and clingy.

Others move against people, becoming aggressive, demanding, and cruel.

A third way of coping would be to move away from people by withdrawing from personal relationships.

ERIKSON

Erik Erikson was an art teacher who became a psychoanalyst by studying with Anna Freud.

He also broke away from Freud’s emphasis on sex, preferring instead to emphasize the social relationships that are important at every stage of life.

Erikson gave eight psychosocial stages of personality development

EVALUATE THE INFLUENCE OF FREUDIAN THEORY ON MODERN PERSONALITY THEORIES.

The idea of the defense mechanisms has had some research support and has remained useful in clinical psychology as a way of describing people’s defensive behavior and irrational thinking. The concept of an unconscious mind also has some research support.

Modern researchers have had to admit that there are influences on human behavior that exist outside of normal conscious awareness. Although much of this research has taken place in the area of hypnosis and subliminal perception other researchers have looked at the concept of implicit memory and implicit learning

One criticism is Freud’s theory is based on his own observations (case studies) of numerous patients.

For example, many of Freud’s patients told him that they were sexually abused by fathers, brothers, and other close family members. Freud was apparently unable to accept these memories as real and decided that they were fantasies, making them the basis of the Oedipal conflict.

He actually revised his original perceptions of his patients’ memories of abuse as real in the face of both public and professional criticism from his German colleagues (Masson, 1984).

Another criticism is Freud based much of his diagnoses of patients’ problems on the interpretations of and the results of the patient’s free association (talking about anything without fear of negative feedback).

These “sources” of information are often criticized as being too ambiguous and without scientific support for the validity of his interpretations.

The very ambiguity of these sources of information allowed Freud to fit the patient’s words and recollections to his own preferred interpretation, as well as increasing the possibility that his own suggestions and interpretations, if conveyed to the patient, might alter the actual memories of the patient, who would no doubt be in a very suggestible state of mind during therapy.

Another criticism of Freud’s theory concerns the people upon whose dreams, recollections, and comments the theory of psychoanalysis was based.

Freud’s clients were almost all wealthy Austrian women living in the Victorian era of sexual repression.
Critics state that basing his theory on observations made with such a demographically limited group of clients promoted his emphasis on sexuality as the root of all problems in personality, as women of that social class and era were often sexually frustrated.

Freud rarely had clients who did not fit this description, and so his theory is biased in terms of sexual frustrations (Robinson, 1993).

Although most professionals today view Freud’s theory with a great deal of skepticism, his influence on the modern world cannot be ignored.

Freudian concepts have had an impact on literature, movies, and even children’s cartoons. People who have never taken a course in psychology are familiar with some of Freud’s most basic concepts, such as the defense mechanisms.

He was also one of the first theorists to emphasize the importance of childhood experiences on personality development—in spite of the fact that he did not work extensively with children.

The Behavioral and Social Cognitive View of Personality

- At the time that Freud’s theory was shocking the Western world, another psychological perspective was also making its influence known.
- The theories of classical and operant conditioning were conceptualized
- Behaviorists (researchers who use the principles of conditioning to explain the actions and reactions of both animals and humans) and social cognitive theorists (researchers who emphasize the influence of social and cognitive factors on learning) have a very different view of personality.
- For the behaviorist, personality is nothing more than a set of learned responses or habits
- In the strictest traditional view of Watson and Skinner, everything a person or animal does is a response to some stimulus that has been either conditioned, or reinforced in some way.
- Many learning theorists today do not use only classical and operant conditioning to explain the development of the behavior patterns referred to as personality.
- Social cognitive learning theorists, who emphasize the importance of both the influences of other people’s behavior and of a person’s own expectancies on learning, hold that observational learning, modeling, and other cognitive learning techniques can lead to the formation of patterns of personality.

Bandura’s Reciprocal Determinism and Self-Efficacy

Bandura (1989) believed that three factors influence one another in determining the patterns of behavior that make up personality:

- the environment,
- the behavior itself,
- and personal or cognitive factors that the person brings into the situation from earlier experiences.
- These three factors each affect the other two in a reciprocal, or give-and-take, relationship. Bandura calls this relationship reciprocal determinism
- The environment includes the actual physical surroundings, the other people who may or may not be present, and the potential for reinforcement in those surroundings.
- The intensity and frequency of the behavior will not only be influenced by the environment but will also have an impact on that environment.
The person brings into the situation previously reinforced responses and mental processes such as thinking and anticipating.

Another important concept of Bandura is self-efficacy, a person’s expectancy of how effective his or her efforts to accomplish a goal will be in any particular circumstance (Bandura, 1998).

Self-efficacy is not the same concept as self-esteem, which is the positive values a person places on his or her sense of worth.

People’s sense of self-efficacy can be high or low, depending on what has happened in similar circumstances in the past (success or failure), what other people tell them about their competence, and their own assessment of their abilities.

According to Bandura, people high in self-efficacy are more persistent and expect to succeed, whereas people low in self-efficacy expect to fail and tend to avoid challenges (Bandura, 1998).

**ROTTER’S SOCIAL LEARNING THEORY: EXPECTANCIES**

- Julian Rotter devised a theory based on a basic principle of motivation derived from Thorndike’s law of effect: People are motivated to seek reinforcement and avoid punishment.
- He viewed personality as a relatively stable set of potential responses to various situations.
- If in the past a certain way of responding led to a reinforcing or pleasurable consequence, that way of responding would become a pattern of responding, or part of the “personality”.
- One very important pattern of responding in Rotter’s view became his concept of locus of control, the tendency for people to assume that they either have control or do not have control over events and consequences in their lives.
- People who assume that their own actions and decisions directly affect the consequences they experience are said to be internal in locus of control,
- whereas people who assume that their lives are more controlled by powerful others, luck, or fate are external in locus of control.
- Rotter associated people high in internal locus of control with the personality characteristics of high achievement motivation (the will to succeed in any attempted task). Those who give up too quickly or who attribute events in their lives to external causes can fall into patterns of learned helplessness and depression.
- Rotter believed there are two key factors influencing a person’s decision to act in a certain way given a particular situation: expectancy and reinforcement value.
  - **Expectancy** is fairly similar to Bandura’s concept of self-efficacy in that it refers to the person’s subjective feeling that a particular behavior will lead to a reinforcing consequence. A high expectancy for success is similar to a high sense of self-efficacy and is also based on past experiences with successes and failures.
  - **Reinforcement value** refers to an individual’s preference for a particular reinforcer over all other possible reinforcing consequences. Things or circumstances that are particularly appealing to us have a higher reinforcement value than other possible reinforcers.

**Evaluation**

- Behaviorism theory does not take mental processes into account when explaining behavior, nor does it give weight to social influences on learning.
- The social cognitive view of personality, unlike traditional behaviorism, does include social and mental processes and their influence on behavior.
- Unlike psychoanalysis, the concepts in this theory can and have been tested under scientific conditions.
• Some of this research has investigated how people’s expectancies can influence their control of their own negative moods.
• Some critics think that human personality and behavior are too complex to explain as the result of cognitions and external stimuli interacting.
• This viewpoint has enabled the development of therapies based on learning theory that have become effective in changing undesirable behavior.

HUMANISM AND PERSONALITY

• The humanistic perspective, led by psychologists such as Carl Rogers and Abraham Maslow, wanted psychology to focus on the things that make people uniquely human, such as subjective emotions and the freedom to choose one’s own destiny.
• Both Maslow and Rogers (1961) believed that human beings are always striving to fulfill their innate capacities and capabilities and to become everything that their genetic potential will allow them to become. This striving for fulfillment is called the self-actualizing tendency.
• An important tool in human self-actualization is the development of an image of oneself, or the self-concept.
• The self-concept is based on what people are told by others and how the sense of self is reflected in the words and actions of important people in one’s life, such as parents, siblings, coworkers, friends, and teachers.

REAL AND IDEAL SELF

• Two important components of the self-concept are the real self (one’s actual perception of characteristics, traits, and abilities that form the basis of the striving for self-actualization) and the ideal self (the perception of what one should be or would like to be).
• The ideal self primarily comes from important, significant others in a person’s life, especially our parents when we are children.
• Rogers believed that when the real self and the ideal self are very close or similar to each other, people feel competent and capable, but when there is a mismatch between the real self and ideal self, anxiety and neurotic behavior can be the result.
• When a person has a realistic view of the real self, and the ideal self is something that is actually attainable, there usually isn’t a problem of a mismatch.
• It is when a person’s view of self is distorted or the ideal self is impossible to attain that problems arise.
• How the important people in a person’s life react to the person can greatly impact the degree of congruence, between real and ideal selves. However, as an individual develops, they look less to others for approval and disapproval and more within themselves to decide if they are living in a way that is satisfying to them.

CONDITIONAL AND UNCONDITIONAL POSITIVE REGARD

• Rogers defined positive regard as warmth, affection, love, and respect that come from the significant others (parents, admired adults, friends, and teachers) in people’s experience.
• Positive regard is vital to people’s ability to cope with stress and to strive to achieve self-actualization.
• Rogers believed that unconditional positive regard, or love, affection, and respect with no strings attached, is necessary for people to be able to explore fully all that they can achieve and become.
• Unfortunately, some parents, spouses, and friends give conditional positive regard, which is love, affection, respect, and warmth that depend, or seem to depend, on doing what those people want.
These are called conditions of worth

FULLY FUNCTIONING PERSON:

- For Rogers, a person who is in the process of self-actualizing, actively exploring potentials and abilities and experiencing a match between the real self and ideal self, is a fully functioning person.
- Fully functioning people are in touch with their own feelings and abilities and are able to trust their innermost urges and intuitions (Rogers, 1961).
- To become fully functioning, a person needs unconditional positive regard.

DIFFERENCE BETWEEN SELF ACTUALIZATION AND FULLY FUNCTIONING PERSON

- Although the two concepts are highly related, there are some subtle differences.
- Self-actualization is a goal that people are always striving to reach, according to Maslow (1987).
- In Rogers’s view, only a person who is fully functioning is capable of reaching the goal of self-actualization.
- To be fully functioning is a necessary step in the process of self-actualization.
- Maslow (1987) listed several people who he considered to be self-actualized people: Albert Einstein, Mahatma Gandhi, and Eleanor Roosevelt, for example.
- These were people who Maslow found to have the self-actualized qualities of being creative, autonomous, and unprejudiced.
- In Rogers’s view, these same people would be seen as having trusted their true feelings and innermost needs rather than just going along with the crowd.

EVALUATION

- Humanistic views of personality paint a very rosy picture. Some critics believe that the picture is a little too rosy, ignoring the more negative aspects of human nature. For example, would humanistic theory easily explain the development of sociopathic personalities?
- Some aspects of humanistic theory are difficult to test scientifically, and it has been suggested this viewpoint could be considered more a philosophical view of human behavior than a psychological explanation.
- Despite the challenges, humanistic theory has greatest impact has been in the development of therapies designed to promote self-growth and to help people better understand themselves and others.
- Some of the premises of positive psychology have their roots in humanistic psychology.

TRAIT THEORIES

- Trait theories are less concerned with the explanation for personality development and changing personality than they are with describing personality and predicting behavior based on that description. A trait is a consistent, enduring way of thinking, feeling, or behaving, and trait theories attempt to describe personality in terms of a person’s traits.

ALLPORT

- One of the earliest attempts to list and describe the traits that make up personality can be found in the work of Gordon Allport.
- Allport and his colleague H. S. Odbert literally scanned the dictionary for words that could be traits, finding about 18,000, then paring that down to 200 traits after eliminating synonyms.
Allport believed that these traits were literally wired into the nervous system to guide one’s behavior across many different situations and that each person’s “constellation” of traits was unique.

**CATTELL AND THE 16PF**  
Raymond Cattell (1990) defined two types of traits as surface traits and source traits.

- **Surface traits** are like those found by Allport, representing the personality characteristics easily seen by other people.
- **Source traits** are those more basic traits that underlie the surface traits.
- For example, shyness, being quiet, and disliking crowds might all be surface traits related to the more basic source trait of introversion, a tendency to withdraw from excessive stimulation.
- Using a statistical technique that looks for groupings and commonalities in numerical data called factor analysis, Cattell identified 16 source traits, and although he later determined that there might be another 7 source traits to make a total of 23, he developed his assessment questionnaire, The Sixteen Personality Factor (16PF) Questionnaire, based on just 16 source traits.
- These 16 source traits are seen as trait dimensions, or continuums, in which there are two opposite traits at each end with a range of possible degrees for each trait measurable along the dimension.
- For example, someone scoring near the “reserved” end of the “reserved/outgoing” dimension would be more introverted than someone scoring in the middle or at the opposite end.

**MODERN TRAIT THEORIES: THE BIG FIVE**

McCrae & Costa, 1996) gave five dimensions of personality that have become known as the five-factor model, or the Big Five and represent the core description of human personality.

These five trait dimensions can be remembered by using the acronym OCEAN, in which each of the letters is the first letter of one of the five dimensions of personality.

- **Openness** can best be described as a person’s willingness to try new things and be open to new experiences. People who try to maintain the status quo and who don’t like to change things would score low on openness.
- **Conscientiousness** refers to a person’s organization and motivation, with people who score high in this dimension being those who are careful about being places on time and careful with belongings as well. Someone scoring low on this dimension, for example, might always be late to important social events or borrow belongings and fail to return them or return them in poor condition.
- **Extraversion** is a term first used by Carl Jung (1933), who believed that all people could be divided into two personality types: extraverts and introverts.
  1. Extraverts are outgoing and sociable, whereas
  2. Introverts are more solitary and dislike being the center of attention.
- **Agreeableness** refers to the basic emotional style of a person, who may be easy-going, friendly, and pleasant (at the high end of the scale) or grumpy, crabby, and hard to get along with (at the low end).
- **Neuroticism** refers to emotional instability or stability. People who are excessive worriers, overanxious, and moody would score high on this dimension, whereas those who are more even-tempered and calm would score low.

Robert McCrae and Paul Costa proposed that these five traits are not interdependent. In other words, knowing someone’s score on extraversion would not give any information about scores on the other four dimensions, allowing for a tremendous amount of variety in personality descriptions.
Beyond descriptions of personality, there is a good deal of support for the predictive power of the five-factor model as well. For example, aspects of the five-factor model have been linked to cognition. In older adults, openness is positively related to an individual’s general level of cognitive ability. It is also positively related to verbal ability, episodic memory, and fluid intelligence (Curtis et al., 2015). In contrast, individuals lower in conscientiousness but higher in neuroticism appear to be at greater risk for Alzheimer’s disease.

Evaluate the strengths and limitations of the trait view of personality.

- Some theorists have cautioned that personality traits will not always be expressed in the same way across different situations.
- Walter Mischel, a social cognitive theorist, has emphasized that there is a trait–situation interaction in which the particular circumstances of any given situation are assumed to influence the way in which a trait is expressed.
- An outgoing extravert, for example, might laugh, talk to strangers, and tell jokes at a party. That same person, if at a funeral, would still talk and be open, but the jokes and laughter would be less likely to occur.
- The five-factor model provides a dimensional approach to classifying personality structure as opposed to a categorical approach.
- The components of the five-factor model are the topic of many studies.
- For example, openness has been linked to intellect as a related trait, leading some five-factor researchers to use the label Openness/Intellect to recognize both subfactors.
- Both appear to be related to cognitive exploration, with individuals higher in Openness/Intellect displaying a greater ability and tendency to pursue, understand, and make use of information than those lower in the construct.

PERSONALITY: GENETICS AND CULTURE OR NATURE AND NURTURE

THE BIOLOGY OF PERSONALITY: BEHAVIORAL GENETICS

- The field of behavioral genetics is devoted to the study of just how much of an individual’s personality is due to inherited traits.
- Temperament consists of the characteristics with which each person is born and is, therefore, determined by biology to a great degree.
- If the temperaments of animals can be influenced by manipulating patterns of genetic inheritance, then it is also possible to assume that at least those personality characteristics related to temperament in human beings may also be influenced by heredity.
- There are different ways to study the differential influence of genetics and environment. Two of them are Twin studies and Adoption studies.

TWIN STUDIES

- The difference between monozygotic (identical) and dizygotic (fraternal) twins is that while, identical twins share 100 percent of their genetic material, having come from one fertilized egg originally, whereas fraternal twins share only about 50 percent of their genetic material, as any other pair of siblings would.
By comparing identical twins to fraternal twins, especially when twins can be found who were not raised in the same environment, researchers can begin to find evidence of possible genetic influences on various traits, including personality.

The results of the Minnesota twin study have revealed that identical twins are more similar than fraternal twins or unrelated people in intelligence, leadership abilities, the tendency to follow rules, and the tendency to uphold traditional cultural expectations. They are also more alike with regard to nurturance, empathy, assertiveness, and aggressiveness (Miles & Carey, 1997). This similarity holds even if the twins are raised in separate environments.

ADOPTION STUDIES

Another tool of behavioral geneticists is to study adopted children and their adoptive and birth families. Adoption studies refer to studying unrelated people who are raised in the same environment which help investigators discover the influence of environment.

By comparing adopted children to their adoptive parents and siblings and, if possible, to their biological parents who have not raised them, researchers can uncover some of the shared and non-shared environmental and genetic influences on personality.

Adoption studies have confirmed what twin studies have shown: Genetic influences account for a great deal of personality development, regardless of shared or non-shared environments.

Through this kind of study, for example, a genetic basis has been suggested for shyness and aggressiveness.

HERITABILITY OF PERSONALITY

One important aspect of genetic studies is the concept of heritability, or how much some trait within a population can be attributed to genetic influences, and the extent individual genetic variation impacts differences in observed behavior.

Several studies have found that the five personality factors of the five-factor model have nearly a 50 percent rate of heritability across several cultures.

Personality’s relationship to psychopathology is also being investigated via genetic techniques. Together with the results of the Minnesota twin study and other, the studies of genetics and personality seem to indicate that variations in personality traits are about 25 to 50 percent inherited.

This also means that environmental influences apparently account for about half of the variation in personality traits as well.

ASSESSMENT OF PERSONALITY

The methods for measuring or assessing personality vary according to the theory of personality used to develop those methods, as one might expect.

However, most psychological professionals doing a personality assessment on a client prefer to take a more eclectic view of personality; that is a way of choosing the parts of different theories that seem to best fit a particular situation rather than using only one theory to explain a phenomenon.

In fact, looking at behavior from multiple perspectives can often bring insights into a person’s behavior that would not easily come from taking only one perspective.

Hence many professionals will not only use several different perspectives but also several of the assessment techniques that follow.
INTERVIEWS, BEHAVIORAL ASSESSMENTS, AND PERSONALITY INVENTORIES

BEHAVIORAL ASSESSMENTS

- Behaviorists assume that personality is merely habitually learned responses to stimuli in the environment, the preferred method for a behaviorist would be to watch that behavior unfold in the real world.
- In direct observation, the psychologist observes the client engaging in ordinary, everyday behavior, preferably in the natural setting of home, school, or workplace, for example. A therapist who goes to the classroom and observes that tantrum behavior only happens when a child is asked to do something involving fine motor abilities (like drawing or writing) might be able to conclude that the child has difficulty with those skills and throws a tantrum to avoid the task.
- Other methods often used by behavioral therapists and other assessors are rating scales and frequency counts.
- In a rating scale, a numerical rating is assigned, either by the assessor or by the client, for specific behaviors.
- In a frequency count, the assessor literally counts the frequency of certain behaviors within a specified time limit.
- Educators make use of both rating scales and frequency counts to diagnose behavioral problems such as attention-deficit/hyperactivity disorder (ADHD) and aspects of personality such as social-skill level through the various grade levels.

INTERVIEWS

- Some therapists ask questions and note down the answers in a survey process called an interview.
- Interview is a method of personality assessment in which the professional asks questions of the client and allows the client to answer, either in a structured or unstructured fashion.
- This type of interview, unlike a job interview, may be unstructured and flow naturally from the beginning dialogue between the client and the psychologist.
- Other professionals may use a semistructured interview, which has specific questions, and, based on the individual’s responses, guidance for follow-up items, similar to a decision tree or flow diagram.

PERSONALITY INVENTORIES

- Personality inventories are paper-and-pencil or computerized test that consists of statements that require a specific, standardized response from the person taking the test.
- It’s a self-report form.
- The standard nature of the questions (everyone gets the same list) and the lack of open-ended answers make these assessments far more objective and reliable.
  i. THE MMPI-2-RF
- Minnesota Multiphasic Personality Inventory, Version II, Restructured Form or MMPI-2-RF, specifically tests for abnormal behavior and thinking patterns in personality and psychopathology.
- The current questionnaire consists of 338 statements such as “I am often very tense” or “I believe I am being plotted against.”
- The person taking the test must answer “true,” “false,” or “cannot say.” The MMPI-2-RF has 12 higher-order and clinical scales, 10 validity scales, and numerous scales for specific problems (e.g., family problems, aggression, anxiety, etc.).
• Each scale tests for a particular kind of behavior or way of thinking. The thinking and behavior patterns include relatively mild personality problems such as excessive worrying and shyness as well as more serious disorders such as schizophrenia and depression.
• MMPI-2-RF has also been used for vocational guidance and job screening, especially in high-risk settings, for example, in conjunction with other requirements of the application process, research has supported the use of the MMPI-2-RF in screening potential police officers.
• **Validity scales**, are intended to indicate whether a person taking the inventory is responding honestly.
• Responses to certain items on the test will indicate if people are trying to make themselves look better or worse than they are, for example, and certain items are repeated throughout the test in a slightly different form, so that anyone trying to “fake” the test will have difficulty responding to those items consistently.
• Some validity scales are so good that even experts have a hard time pretending to have symptoms of specific disorders. For example, a group of mental health professionals, with both expertise and significant experience in assessing and treating major depression, were unable to successfully fake major depression on the MMPI-2.

**OTHER COMMON INVENTORIES**

• Another common personality inventory is Cattell’s 16PF.
• Costa and McCrae have further revised their Revised Neuroticism/Extraversion/Openness Personality Inventory (NEO-PI-R), which is based on the five-factor model of personality traits and still being published. The newest version is the NEO-PI-3, which has been made easier to read for use with adolescents and has new norms
• Another inventory in common use is the Myers-Briggs Type Indicator (MBTI), which is based on the ideas of Carl Jung and looks at four personality dimensions: the sensing/intuition (S/N) dimension, the thinking/feeling (T/F) dimension, the introversion/extraversion (I/E) dimension, and the perceiving/judging (P/J) dimension.
• These four dimensions can differ for each individual, resulting in 16 (4 * 4) possible personality types: ISTJ, ISTP, ISFP, ISFJ, and so on
• Other common personality tests include the Eysenck Personality Questionnaire, the Keirsey Temperament Sorter II and the California Psychological Inventory.

**EVALUATING BEHAVIORAL ASSESSMENTS, INTERVIEWS, AND PERSONALITY INVENTORIES**

• For interviews, being a self-report measure clients can lie, distort the truth, misremember, or give what they think is a socially acceptable answer instead of true information.
• Interviewers themselves can be biased, interpreting what the client says in light of their own belief systems or prejudices.
• Another problem with interviews is something called the halo effect, which is a tendency to form a favorable or unfavorable impression of someone at the first meeting, so that all of a person’s comments and behavior after that first impression will be interpreted to agree with the impression—positively or negatively.
• The halo effect can happen in any social situation, including interviews between a psychological professional and a client. First impressions really do count, and people who make a good first impression because of clothing, personal appearance, or some other irrelevant* characteristic will seem to have a “halo” hanging over their heads—they can do no wrong after that
• Sometimes the negative impression is called the “horn effect.”
- Problems with behavioral assessments can include the observer effect (when a person’s behavior is affected by being watched) and observer bias, which can be controlled by having multiple observers and correlating their observations with each other.
- The advantage of personality inventories over interviews and projective tests is that inventories are standardized (i.e., everyone gets exactly the same questions and the answers are scored in exactly the same way).
- In fact, responses to inventories are often scored on a computer. Observer bias and bias of interpretation are typically not possible. Across different scoring programs, though, there may be some variability in the diagnostic suggestions provided by the computerized scoring.
- In general, the validity and reliability of personality inventories are generally high.
- Problems with questionnaires are for example the validity scales, are not always perfect.
- Some people are still able to modify their response patterns and respond in what they feel are more socially appropriate ways.
- Individual responses to specific questions may also vary, as questions may be interpreted in different ways by different individuals, and are very likely to be subject to cultural influences.

**PROJECTIVE TESTS**

- Projective tests are personality assessments that present ambiguous visual stimuli to the client and ask the client to respond with whatever comes to mind.
- The hope is that the client will project unconscious concerns onto the visual stimulus, revealing them to the examiner.
- Such tests are performance based and can be used to explore a client’s personality or used as a diagnostic tool to uncover problems in personality.
- **The Rorschach Inkblots** One of the more well-known projective tests is the Rorschach inkblot test, developed in 1921 by Swiss psychiatrist Hermann Rorschach.
  - Rorschach inkblot test is a projective test that uses 10 inkblots as the ambiguous stimuli, 5 in black ink on a white background and 5 in colored inks on a white background.
  - People being tested are asked to look at each inkblot and simply say whatever it might look like to them.
  - Using predetermined categories and responses commonly given by people to each picture, psychologists score responses on key factors, such as reference to color, shape, figures seen in the blot, and response to the whole or to details.
  - They are still used to describe personality, diagnose mental disorders, and predict behavior.
- **The Tat** First developed in 1935 by psychologist Henry Murray and his colleagues, the Thematic Apperception Test (TAT) consists of 20 pictures, all black and white, that are shown to a client.
  - The client is asked to tell a story about the person or people in the picture, who are all deliberately drawn in ambiguous situations.
  - The story developed by the client is interpreted by the psychoanalyst, who looks for revealing statements and projection of the client’s own problems onto the people in the pictures.
  - Other types of projective tests include the Sentence Completion test, Draw-A-Person, and House-Tree-Person.
  - In the Sentence Completion test, the client is given a series of sentence beginnings, such as “I wish my mother ...” or “Almost every day I feel ...” and asked to finish the sentence,
  - Whereas in the Draw-A-Person and House-Tree-Person, the client is asked to draw the named items.
Problems with Projective Tests

- Projective tests are by their nature very subjective
- Subjective is referring to concepts and impressions that are only valid within a particular person’s perception and may be influenced by biases, prejudice, and personal experiences
- Problems lie in the areas of reliability and validity.
- Reliability is the tendency of a test to give the same score every time it is administered to the same person or group of people, and validity is the ability of the test to measure what it is intended to measure
- Projective tests, with no standard grading scales, have both low reliability and low validity
- Projective tests are still used by many psychologists and psychiatrists. Some psychologists believe these tests have practical use and some validity especially when a client’s answers on these tests are used as a starting point for digging deeper into the client’s recollections, concerns, and anxieties