Now we will explore theories of development.   
  
We discussed research methods in Lesson One. We are now turning our attention to theories of development.  
Theories are explanations about how the world works. In development, theories suggest how or why people change or remain the same over time.  
Theories help inform research. Theoretical concepts and assertions need to be tested through research.  
Theories should be modified based on research results. They are not facts. They are subject to change.  
  
  
The first theories we will explore are explanations for what motivates us. They are referred to as psychodynamic theories because they suggest that psychological needs motivate our actions. These include Freud’s psychosexual theory and Erikson’s psychosocial theory.   
  
  
Sigmund Freud offered the first comprehensive theory of personality: an explanation of how the management of early biological drives and motives could result in certain personality traits.   
He lived from 1856 to 1939 witnessing the Victorian Era in England, World War I and the start of World War II. He lived in a time in which genetics was a popular explanation for human behavior and many behaviors were believed to be instinctive.  
But Freud studied an ailment called hysteria that had mystified the clinical world for a long time. Hysteria was originally thought to be disorder only women suffered; it was referred to as the ‘disease of the wandering womb’ because the Greeks thought it resulted from the womb becoming dislocated in the body. When men began to suffer from hysteria-like symptoms, it was believed that only genetically inferior men were vulnerable. Freud found that genetic explanations for this disorder marked by physical writhing and uncontrollable emotion were inadequate.   
Men suffering from symptoms of hysteria came from a variety of genetic backgrounds. What they all shared was the trauma of war. Freud found that when they were able to talk about this trauma or their fears of what might happen when they reached combat, their symptoms dissipated. He invented the “talking cure.”   
He believed that early childhood experiences were often the source of mental anguish and emphasized the importance of parenting for shaping personality.  
He viewed mental illness, not as a result of being evil, immoral, or diseased, but because of an inability to handle painful realities of one’s life.  
  
  
Freud described a variety of defense mechanisms, or ways to distort and therefore be able to handle, painful truths. This is a partial listing and represents some of the common ways people distort reality. Few of us can handle painful experiences psychologically as soon as they happen. So don’t be worried if you can identify with some of these. That doesn’t mean you have a mental disorder! It just means that these are commonly used.  
To repress is to avoid thinking about something that is upsetting. It’s often recommended by others. A friend might say, “Don’t worry about it. Just stay busy.”  
Regression involves returning to a time in life when you felt safe; perhaps this means to revert back to your childhood psychologically. This defense mechanism is less common.  
Rationalization is the use of seemingly logical explanations to explain away the painful truth. For example, a woman who has been abused by her husband may think that if she only prepared a better meal, this wouldn’t have happened.   
Denial is lying to oneself. You simply say it isn’t so. “He won’t really leave.” Or “I’m not really in that much debt.”  
Sublimation involves transforming unacceptable urges (such as aggression or sexual urges) into acceptable behaviors such as exercise or competition.  
Displacement involves carrying out frustration onto a safer target. Have you ever been overly upset about something very simple? It may be a sign of displacing your frustration that is really about something else.  
Projection is the tendency to attribute your feelings onto others. So a person who is angry suggests that it is someone else who is really mad.  
Reaction formation involves outwardly opposing something inwardly desired, yet feared. A person who is rigidly opposed to something might really be fighting their own tendencies.  
  
  
Freud’s theory of self suggests that there are three parts of the self.  
The id is the part of the self that is inborn. It responds to biological urges without pause and is guided by the principle of pleasure: if it feels good, it is the thing to do. A newborn is all id. The newborn cries when hungry, defecates when the urge strikes.   
The ego develops through interaction with others and is guided by logic or the reality principle. It has the ability to delay gratification. It knows that urges have to be managed. It mediates between the id and superego using logic and reality to calm the other parts of the self.  
The superego represents society’s demands for its members. It is guided by a sense of guilt. Values, morals, and the conscience are all part of the superego.   
  
The personality is thought to development in response to the child’s ability to learn to manage biological urges. Parenting is important here. If the parent is either overly punitive or lax, the child may not progress to the next stage.  
The oral stage lasts from birth until around age 2. The infant is all id. At this stage, all stimulation and comfort is focused on the mouth and is based on the reflex of sucking. Too much indulgence or too little stimulation may lead to fixation.   
The anal stage coincides with potty training or learning to manage biological urges. The ego is beginning to develop in this stage. Anal fixation may result in a person who is compulsively clean and organized or one who is sloppy and lacks self-control.   
The phallic stage occurs in early childhood and marks the development of the superego and a sense of masculinity or femininity as culture dictates.  
Latency occurs during middle childhood when a child’s urges quiet down and friendships become the focus. The ego and superego can be refined as the child learns how to cooperate and negotiate with others.  
The genital stage begins with puberty and continues through adulthood. Now the preoccupation is that of sex and reproduction.  
  
  
Freud focused on biology as a prime motivator. Erikson suggested that our relationships and society’s expectations motivate much of our behavior in his theory of psychosocial development.   
Erikson was a student of Freud’s but emphasized the importance of the ego, or conscious thought, in determining our actions. In other words, he believed that we are not driven by unconscious urges. We know what motivates us and we consciously think about how to achieve our goals.   
He is considered the father of developmental psychology because his model gives us a guideline for the entire life span and suggests certain primary psychological and social concerns throughout life.  
  
  
Erikson’s first four stages address childhood. Each stage is an elaboration of the previous stage. So, for example, a sense of trust in infancy can extend to a sense of autonomy in toddlerhood.  
Trust versus mistrust is the crisis of infancy. The infant is dependent and hopes that needs are met. If so, the infant may gain a sense that the world is a trustworthy place.   
Autonomy (or self-rule) versus shame and doubt is the struggle of toddlers. Once the toddler can walk and talk, he wonders where he can go and what can be said. The ability to be independent within safe limits is the goal.  
Initiative versus guilt guides early childhood. The child wants to plan and begin a task or project without assistance. Maybe it’s building a fort out of all the couch cushions or putting together a play and making paper tickets. (Keep in mind that the couch cushions won’t necessarily be picked up right away. After all, the goal is initiation, not completion!)  
Industry versus inferiority is the primary concern once a child is learning how to get along with other children and begins participating in school or other endeavors in which children come together and are compared. Industry involves being very busy and trying out one’s skills. Hopefully, the child has successes and believes that they measure up well when comparisons are made.  
  
  
The last four stages address adolescence and continue through life.  
Adolescents struggle with identity. Teenagers struggle with the question, “Who am I?” Who am I socially, physically, sexually, morally, academically, and so on?   
The early adult is focused on intimacy versus isolation. Once an identity has been established, the person is in a better position to make intimate, long-term commitments.  
Generativity or productivity and a sense of giving back to the next generation are a concern during midlife or much of adulthood. A person looks at their life and hopes to be doing something that is worthwhile. If not, they may feel stagnated or stuck and impelled to make changes.  
Integrity versus despair concerns us at the end of life. We want to look back and think that we have lived according to our beliefs. We want to see agreement between who we are and what we’ve done. If not, we may experience a sense of despair because time is running out.  
  
  
Now, test yourself.   
Who is the father of developmental psychology?  
According to Freud, which part of the self are we born with?  
At what age do we establish a basic sense of trust, per Erikson?  
Name and describe one defense mechanism.  
When does the ego develop?  
How would you test Freudian concepts? Well, that’s a hard question. The answer is probably, “with great difficulty.”  
  
  
Learning theories explain some of the ways that experience changes what we are capable of doing. Unlike psychodynamic theories, learning theories focus on behaviors that are observable.  
We are going to explore three theories: classical conditioning, operant conditioning, and social learning theory.  
  
Classical conditioning is an explanation of how we learn to feel the way we do.   
Ivan Pavlov was a Russian physiologist who discovered that certain cues in our environment can create automatic physiological responses in us. For example, if you think of lemons, you may start to salivate and your mouth may pucker. The reason is because you’ve associated the word lemon with your experience when tasting a lemon. Now the word can bring about the same response.  
Classical conditioning occurs when we learn through association. The reaction is a gut level, physiological response like heart rate, relaxation, respiration and other ways that our body changes when experiencing an emotion. Our sympathetic and parasympathetic divisions of the autonomic nervous system are engaged.  
  
  
Pavlov’s understanding of classical conditioning developed out of his work when studying how saliva breaks down food. Notice that this dog has a tube attached to his mouth. This is designed to capture saliva that can be measured when the dog is eating.  
Pavlov noticed that the dogs produced saliva even before he introduced food. For example, they began to salivate when they heard his assistant coming down the hall. Why? Because they knew that footsteps come before food and therefore their bodies are getting ready to digest by producing salivation.   
Salivating to footsteps is a response to a psychological event or thought process. Pavlov called this a “psychic reflex” and began to pair other stimuli to feeding. For example, he rang a bell just before feeding. After that pairing was made several times, the dog would then begin to salivate to the bell.   
  
  
Let’s review some terms by applying these to the experiment just described.  
Before conditioning has occurred, we see that dogs naturally produce saliva when food is introduced.  
The unconditioned stimulus is food and the unconditioned response is salivation.  
After the bell has become associated with food, the dog begins to salivate when hearing the bell. The conditioned (or learned) stimulus is now the sound of the bell. The conditioned (or learned) response is to salivate to the sound of the bell.  
  
  
Let’s take this information beyond dogs and salivation.   
  
John B. Watson built upon Pavlov’s work by applying the principles of classical conditioning to children. He was considered a parenting expert in the 1920s and wrote a column in the newspaper giving parenting advice. He rejected the idea that genetics explained our actions. Rather, he thought that learning was key in determining how children behave. Consequently, he emphasized the importance of parenting practices.   
He believed that children could be taught to love or hate anything associate with unconditioned stimuli. He demonstrated this in his work with Little Albert by teaching Albert to be afraid of a variety of animals and other objects after they had been associated with a loud noise, which Albert automatically feared.   
  
  
Watson left academia and carried his message to the world of advertising. One of his first clients was Sunkist, a company who sold oranges. Watson created an ad in which a beautiful woman was shown holding an orange. Think about this example and identify the unconditioned stimulus, the unconditioned response, the conditioned stimulus, and the conditioned response for review.  
  
  
Now let’s turn our attention to operant conditioning.   
This is an explanation of why we repeat voluntary actions or operants. For example, demonstrate a voluntary action right now as you’re working through this lesson. What did you do? Perhaps you raised your hand or looked up. Maybe you decided to stand or say something. All of these are operants. Now, if I wanted to encourage you to do this again, how would I go about it? Maybe asking you to do it again would be sufficient. But chances are I would need to make it rewarding in order to get you to repeat that action.   
The Law of Effect states that an organism will repeat an action if it is followed by a good effect. If I were with you now, I might be able to smile when you stood up and therefore increase the likelihood that you would stand again.  
Reinforcement encourages a behavior. B. F. Skinner, who brought us the principles of operant conditioning, suggested that reinforcement is a more effective means of encouraging a behavior than is criticism or punishment. By focusing on strengthening desirable behavior, we have a greater impact than if we emphasize what is undesirable.  
  
  
Reinforcement is anything that an organism desires and is motivated to obtain. A reinforcer is something that encourages or promotes a behavior.  
Some things are natural rewards. They are considered intrinsic or primary because their value is easily understood. Think of what kinds of things babies or animals such as puppies find rewarding.  
Extrinsic or secondary reinforcers are things that have a value not immediately understood. Their value is indirect. They can be traded in for what is ultimately desired.   
  
Consider the following. Can you identify these as primary or secondary?  
  
  
The use of positive reinforcement involves adding something to a situation in order to encourage a behavior. For example, if I give a child a cookie for cleaning a room, the addition of the cookie makes cleaning more likely in the future.  
Think of ways in which you positively reinforce others.  
  
  
Negative reinforcement occurs when taking something unpleasant away from a situation encourages behavior. For example, I have an alarm clock that makes a very unpleasant, loud sound when it goes off in the morning. As a result, I get up and turn it off. By removing the noise, I am reinforced for getting up.  
How do you negatively reinforce other?  
  
  
Punishment is an effort to stop a behavior. It means to follow an action with something unpleasant or painful.   
Punishment is often less effective than reinforcement for several reasons. It doesn’t indicate the desired behavior, it may result in suppressing rather than stopping a behavior, (in other words, the person may not do what is being punished when you’re around, but may do it often when you leave), and a focus on punishment can result in not noticing when the person does well.   
  
  
Not all behaviors are learned through association or reinforcement. Many of the things we do are learned by watching others. This is addressed in social learning theory.  
  
  
Social learning theory occurs when we copy, imitate, or learn a role by watching other people. Others include family members, friends, as well as role models in the media.   
We use modeling as a quick guide to tell us how to act particularly when we are in new situations. Perhaps you’ve started a new job or become a parent. One of the ways to learn how to behave in these situations is to witness someone else in this role and use them as a guide.   
Review the commentary from Albert Bandura in the video clip of the Bobo Doll experiment contained in your lesson. Notice that modeling is more than copying or imitating. It involves creating new ways to act out a role. The children demonstrate new aggressive behavior never seen in the model.   
  
  
Think of these examples. How did you learn these behaviors? Was it through classical conditioning? Was it through imitation and modeling or a result of operant conditioning?  
  
  
Cognitive theories of development explain how our ability to think changes over time. Our thoughts and reasoning abilities differ when we are 6 or 16 or 36 years of age. Let’s explore how and why this change occurs. We will focus on two theorists: Piaget and Vygotsky.  
  
  
Jean Jacque Piaget, the man with the glasses and no beard shown in the front row in this image, is considered the father of cognitive psychology. He offered a theory of how our ability to make sense of the world changes as we mature.  
  
Our desire to understand the world comes from a need for cognitive equilibrium. This is an agreement or balance between what we sense in the outside world and what we know in our minds.   
If we experience something that we cannot understand, we try to restore the balance by either changing our thoughts or by altering the experience to fit into what we do understand.   
Perhaps you meet someone who is very different from anyone you know. How do you make sense of this person? You might use them to establish a new category of people in your mind or you might think about how they are similar to someone else.   
  
  
A schema or schemes are categories of knowledge. They are like mental boxes of concepts. A child has to learn many concepts. They may have a scheme for “under” and “soft” or “running” and “sour”. All of these are schema. Our efforts to understand the world around us lead us to develop new schema and to modify old ones.  
  
  
One way to make sense of new experiences is to focus on how they are similar to what we already know. So the person we meet who is very different may be understood as being “sort of like my brother” or “his voice sounds a lot like yours.”  
Or a new food may be assimilated when we determine that it tastes like chicken!  
This is assimilation.  
  
  
Another way to make sense of the world is to change our mind. We can make a cognitive accommodation to this new experience by adding new schema.   
This food is unlike anything I’ve tasted before. I now have a new category of foods that are bitter-sweet in flavor, for instance.   
This is accommodation.  
Do you accommodate or assimilate more frequently? Children accommodate more frequently as they build new schema. Adults tend to look for similarity in their experience and assimilate. They may be less inclined to think “outside the box.”  
  
  
Piaget suggested different intelligences or ways of understanding that are associated with maturation.  
Sensorimotor intelligence is based on knowledge that relies on use of the senses and motor skills. From birth until about age 2, the infant knows by tasting, smelling, touching, hearing, and moving objects around. This is a real hands on type of knowledge.  
Preoperational intelligence involves being able to think about the world using symbols. A symbol is something that stands for something else. The use of language, whether it is in the form of words or gestures, facilitates knowing and communicating about the world. This is the hallmark of preoperational intelligence and occurs in early childhood. However, these children are preoperational or pre-logical. They still do not understand how the physical world operates. They may, for instance, fear that they will go down the drain if they sit at the front of the bathtub, even though they are too big.   
Concrete operational intelligence is the ability to think logically about the physical world. Middle childhood is a time of understanding concepts such as size, distance, and constancy of matter, and cause and effect relationships. A child knows that a scrambled egg is still an egg and that 8 ounces of water is still 8 ounces no matter what shape of glass contains it.  
Formal operational intelligence is the ability to think logically about concrete and abstract events. The teenager who has reached this stage is able to consider possibilities and to contemplate ideas about situations that have never been directly encountered. More abstract understanding of religious ideas or morals or ethics and abstract principles such as freedom and dignity can be considered.   
  
Lev Vygotsky was a Russian psychologist who focused on the process of guidance and interaction that occurs in all cultures when teaching cognitive skills. He believed that cognitive abilities were not entirely dependent on physical maturation. Cognitive abilities are acquired through guidance and interaction with others.  
This interaction involves scaffolding in which the child or apprentice in learning is given hands-on assistance along with explanation as they learn to perform a task.   
The key is to work with a child within their zone of proximal development. The task needs to be stimulating enough to engage their learning but not too difficult to achieve.   
  
  
One of the most comprehensive theories of human development comes to us from Urie Bronfenbrenner. Bronfenbrenner studies Freud, Erikson, Piaget, and learning theorists and believed that all of those theories could be enhanced by adding the dimension of context. What is being taught and how society interprets situations depends on who is involved in the life of a child and on when and where a child lives.   
  
  
Bronfenbrenner’s model explains the direct and indirect influences on an individual’s development.  
Microsystems impact a child directly. These are the people with whom the child interacts such as parents, peers, and teachers. The relationship between individuals and those around them need to be considered. For example, to appreciate what is going on with a student in math, the relationship between the student and teacher should be known.  
Mesosystems are interactions between those surrounding the individual. The relationship between parents and schools, for example will indirectly affect the child.   
Larger institutions such as the mass media or the healthcare system are referred to as the exosystem. These have an impact on families and peers and schools who operate under policies and regulations found in these institutions.  
We find cultural values and beliefs at the level of macrosystems. These larger ideals and expectations inform institutions that will ultimately impact the individual.   
All of this happens in an historic context referred to as the chronosystem. Cultural values change over time as do policies of educational institutions or governments in certain political climates. Development occurs at a point in time.  
So in order to understand a student in math, we can’t simply look at that individual and what challenges they face directly with the subject. We have to look at the interactions that occur between teacher and child. Perhaps the teacher needs to make modifications as well. The teacher may be responding to regulations made by the school such as new expectations for students in math or constraints on time that interfere with the teacher’s ability to instruct. These new demands may be a response to national efforts to promote math and science deemed important by a political leaders in response to relations with other countries at a particular time in history.   
In sum, this model challenges us to go beyond the individual if we want to understand human development and promote improvements.