Welcome to life span, growth and development. This is the study of how and why people change or remain the same over time.   
Although this course is offered in psychology, this is a very interdisciplinary course. Psychologists, nutritionists, sociologists, anthropologists, educators, and health care professionals all contribute to our knowledge of life span.  
We will look at how we change physically over time from early development through aging and death. We examine cognitive change-or how our ability to think and remember changes over time. We look at how our concerns and psychological state is influenced by age and finally, how our social relationships change throughout life.  
There are several goals of those involved in this discipline:   
1. Describe change-many of the studies we will examine simply involve the first step in investigation, which is description. Arnold Gesell’s study on infant motor skills, for example.  
2. Explaining changes is another goal. Theories provide explanations for why we change over time. For example, Erikson offers an explanation about why our two-year-old is temperamental. Levinson offers an explanation about why a 45 year old husband is so concerned with buying a sports car. Freud offers an explanation of why films with sex and violence are such moneymakers.  
3. Predict-science offers us the ability to make predictions about what the future holds. In some areas, we can make predictions about the future. For example, we know some about how smoking and drinking can affect prenatal development.  
4. Influence change-ultimately, practitioners want to help people lead better, healthier and happier lives.  
  
  
What is a context? You may think of it as the background or setting in which a person exists. Our lives are impacted by a variety of contexts. We may have different world views depending on life circumstances. For example, people who grew up during the Great Depression of the 1930s in the U. S. suffered economically and sometimes carried that idea of thrift with them throughout their lives.   
When and where we live creates this context.  
Some examples of contexts include cohort, social class, and culture.  
A cohort is a group of people born within the same generation in a geographic location.  
A social class is a category of people who share similar levels of education, income, occupational status, and consumption patterns.  
Culture refers to a way of life of a group of people. Through culture, we learn what to strive for, what to eat, what to think, how to behave, and so many other things. An interesting story in the news last week was an interview of an Asian student who is studying children’s interpretations of art and how this is influenced by culture. In middle class America, children are taught to look at detail and function. “This is a sturdy car that rides fast.” But in Asia, children are taught to think more abstractly about images.  
The ways in which our own culture affects us is often hard to see. We grow used to our own views and ways of doing things and assume that our ways are best.   
Ethnocentrism is the belief in the superiority of one’s own culture and is a natural outcome from being raised in a particular culture. However, it can get in the way of understanding other cultural beliefs and practices. Cultural relativity is the ability to appreciate how another culture’s practices may be best within that culture rather than judging a practice from one’s own viewpoint.   
Let me tell you a story to illustrate these concepts. Once upon a time, a long time ago, there were two creatures: a monkey and a fish. Along came a great flood. The monkey, being strong and agile, quickly climbed to the top of a tree to escape the raging waters. He looked down from his safe place and saw his friend the fish, struggling in the water. With the very best of intentions, the monkey climbed down from the tree and pulled the fish out of the water. The result was inevitable.  
The message is this: understanding and ultimately being able to help others requires that we also understand the contexts for development and take these into consideration when making decisions or judgments. This is particularly important if we are in a role of delivering care.   
  
  
All cultures have some system of stratification. This means that categories of people are ranked in a hierarchy within society and that more wealth, status, and privilege are found when moving up.   
Systems can be based on social class as is the case in the United States. One profile of social class is presented in this slide. A more thorough description of each class is provided in your reading.  
The upper class is the smallest category and represents the highest amounts of wealth and power.   
The upper middle class is larger and consists of more highly paid professionals who have higher levels of education, status, and wealth.  
The middle class is larger still and is comprised of people who hold professional jobs that pay less and have less status.  
The working class is also a large category consisting of people who are more likely to hold jobs in vocational skills or trade occupations.   
The working poor have seasonal, inconsistent, and low-paying occupations and all of the difficulties associated with financial insecurity.  
The underclass is the most impoverished and the least powerful group.  
With which social classes are you most likely to be involved? With whom would you feel most comfortable? Why? How might you become more effective when working with someone of a social class that differs from your own? What kinds of difficulties would people of a certain social class experience and how would these impact education, health care, nutrition, and stress levels?   
  
  
Many early theories of human development were created and popularized in the early 1900s. These are referred to as stage theories because they present development as occurring in stages. The assumption is that once one stage is completed, a person moves into the next stage and that stages tend to occur only once.   
Some examples of stage theories that we will be studying include Freud’s psychosexual stages, Erikson’s psychosocial stages, and Piaget’s stages of cognitive development, to name a few.   
These theories are appealing in a way because they provide the ability to predict what will happen next and they allow us to attribute behavior to a person’s being ‘in a stage’. These theories offered the security of understanding human behavior in a time of rapid change during industrialization in the early 1900s. Science seemed to be laying a predictable groundwork we could rely upon.   
But these early theories also implied that those who did not progress through stages in the predictable way were delayed somehow and this led to the idea that development had to occur in a patterned way.   
Today we understand that development does not occur in a straight line. Sometimes we change in many directions depending on our experiences and surroundings. For example, there can be growth and decline in cognitive functioning at any age depending on nutrition, health, activity, and stimulation. And that both nature (heredity) and nurture (the environment) shape our abilities throughout life. Some things about us are continuous such as our temperament or sense of self, perhaps. And we may revisit a stage of life more than once. For instance, Erikson suggests that we struggle with trust as infants and then begin to focus more on independence or autonomy. But if we are in circumstances in which our independence is jeopardized, such as becoming physically dependent, we may struggle with trust again.  
Keep these thoughts in mind as we explore stage theories in our next lesson.  
  
The study of human development is based on research. Let’s look at the methods used to understand development. In other words, how do we know what we know?  
  
All of us know some things about human development. But how do we know these things? Very often, it’s a matter of personal knowledge.   
I have ideas about children, largely based on my experiences with my own two daughters. I know about myself because of what I’ve been through. So it’s based on what I know directly, personally.   
But there are problems with personal knowledge. Ever hear the expression, “Seeing is believing”? It suggests that in order to know something, I have to see it.   
But social psychologists tell us that this is not how the mind works. Typically, we have a belief about something and that belief guides what we perceive. (So for example, if I believe that teenagers are argumentative, I’m more likely to notice when my teenaged daughter is in a bad mood or is argumentative than when she’s compliant and happy.) Science is designed to get us to be more objective in what we observe to get out of the ‘believing is seeing’ trap.  
Confirmation bias is the tendency to look for evidence that we are right. This bias can keep us from seeing what is really going on when working with patients, or students, or anyone else. Practitioners, for example, can get used to seeing a certain kind of cases and assume that anyone with the same set of symptoms must also have the same illness. Sometimes this can get in the way of delivering an accurate diagnosis. An example that comes to mind is one in which a 40 year old woman who was very thin wasn’t diagnosed as anorexic for some time because of her age. But, in fact, anorexia was the problem. The clinician assumed that anorexia was only found in younger women.   
Sampling bias is the tendency to get information from people who are accessible or close to us when trying to find out about how the world works. If I ask those who live and work with me about parenting, or health, or love, I’m going to find out about their situations but not about the views of those unlike me who live and work outside my boundaries. As a result, my knowledge is biased and incomplete.  
  
Have you ever heard of the “scientific method”? Chances are, if you have, you’ve heard of the quantitative method. It involves a set of procedures ultimately designed to give numeric expression to a phenomenon or to quantify what is happening and perhaps, to test whether or not what is happening could be due to chance.  
Quantitative methods involve beginning with a research question, reviewing the literature to see what others have found in their research of the topic, determining specifically what aspect of the topic to explore in your research and determining the most appropriate method to use for your purposes, conducting the study, which means finding your sample, administering your survey or conducting your experiments, interpreting the results by analyzing your data, drawing conclusions about what you have found, and finally sharing your findings with others in the scientific community by publishing your research.   
This method has been favored in the scientific community for some time. It has been viewed as the most scientifically rigorous.   
  
  
Qualitative methods of research involve using a more open, evolving approach to finding out about the world. There is less emphasis on quantifying what is known and more emphasis on tapping into the experiences, assumptions, and meanings subjects give to their situations. Qualitative methods can be used to explore an area about which little is known or to get a fresh look at a situation that has been studied before. The use of narratives in which the researcher tries to find out what is going on by using the subjects’ own words is one approach. Qualitative methods are used in anthropology, education, nursing, and other areas where the researcher wishes to be led by the participants into seeing what they deem as important.  
The researcher begins with a broad interest and gains entrance into a setting in which to explore. Information is gathered using a variety of techniques such as observation, documenting the physical space and surroundings of that setting, recording interviews, etc. After gathering general information, the researcher may decide to focus more closely on specific research questions. Patterns may become apparent as the researcher revisits their field notes and spends more time in a setting. These prompt the researcher to explore new ideas until they feel they reach a point of saturation, or a feeling that they’ve thoroughly explored the situation. Patterns and answers to research questions are noted in a report of the findings.   
  
  
Let’s explore types of research or research designs. These are several ways in which researchers gather information. All have advantages and disadvantages.  
  
  
Some advantages of this method include:  
You observe behavior in the natural environment. Our surroundings often shape our behavior.  
You can see what people do rather than relying on them to tell you what they do.  
You can generate hypotheses that can guide future research.  
Disadvantages include:  
Because you have not randomly selected your sample to observe, you cannot make general statements from your findings. In other words, if I observe children on a playground in a small community in the Pacific Northwest, I can’t assume that all children will behave in a similar manner.  
Observational studies are often descriptive only. They allow us to describe behavior, but not to explain why something has occurred.  
  
  
In research, concepts or ideas take the form of variables. Variables are factors that change in value.  
An independent variable is one that is controlled by or introduced by the researcher. In experimental research, it is a potential causal variable. In other words, it introduced to see if it brings about a change or effect.   
(Keep in mind that not all independent variables are causal. Some are correlational meaning they are related to another factor, but haven’t been established as the cause of change in the other factor.)  
  
  
Dependent variables are outcomes. They tend to be what the research is all about. They are called dependent because their value depends on what has been introduced.   
  
Here are some examples to use for practice. Can you name the independent or dependent variable in the following statements?   
  
The primary advantage of the experimental design is its ability to isolate cause and effect relationships.  
In order to establish a cause and effect relationship between variables, three conditions have to be met.  
First, the independent and dependent variable have to be related in some way. For example, if the independent variable is increased or decreased, the dependent variable must change in some way. Correlational studies focus on these relationships.   
Second, the independent variable must come before the dependent variable. What aspect of experimental design tells us that the independent variable had to be introduced before the dependent variable could change?  
Finally, we have to know that there is no outside cause creating the change that we see. What aspect of experimental design helps us to eliminate outside or unknown causes?   
The disadvantages of experimental design include the Hawthorne Effect and the potential difficulty in creating real life situations in an artificial, laboratory environment. For example, can we recreate in a laboratory setting the altruism that people exhibit toward one another after a natural disaster?  
  
  
Case studies involve focusing attention on a single person or situation. The researcher gathers information in a variety of ways to find out as much as possible about the case.   
Clinicians, whether they are physicians, nurses, social workers, or psychotherapists often use a modified case study approach when finding out about a patient or client. They observe behavior, administer tests, and interview the person to gather information. The case study method of research is often used by clinicians too.  
  
  
Case studies are a good way to explore unusual situations and can provide a basis for hypotheses that can be tested in other research.   
Confirmation bias can occur when clinicians trained to see a particular problem see it even when it isn’t there. For example, psychotherapists are often trained to see psychopathology in those they serve. As a result, they may miss seeing what’s right with a person.   
  
  
Surveys involve asking a standard or consistent set of questions with a sample of people from the population of interest. Those who answer the survey are often given a set of responses from which to choose.   
  
  
Surveys are used a lot because they allow you to reach a large number of people in a limited amount of time. The use of internet, telephone, and mail allow the researcher to gather information from people far and near.  
Disadvantages of surveys include their reliance on self-report. In other words, the people answering the survey are reporting on their behavior and sometimes what we say we do is not the same as what we actually do.  
It’s difficult to survey people about sensitive topics. Participants may be reluctant to give honest answers about activities that are stigmatized.  
And survey questions have to be worded carefully in order to not bias the answers given. These questions need to be worded in a neutral way to give ‘permission’ to answer candidly. The responses available must be thorough as well so that participants feel comfortable in choosing a response.  
  
  
Secondary or content analysis involves analyzing information that has already been collected whether that is in the media or through another agency that gathers data, such as the census.   
  
  
One of the clearest advantages is the time saved from not having to recruit participants and gather information from them.  
But if the data that has been gathered by someone else is faulty in some way, for example inaccurate, the results drawn through secondary analysis will also be faulty.   
And an analysis of media may not accurately reflect people’s actual behavior or attitudes.  
  
  
Some research designs that are especially useful in studying human development include cross-sectional, longitudinal, and cross-sequential designs.   
Cross-sectional research involves looking at a varied group (representing gender, race, age groups, etc.) at one point in time.  
Longitudinal research involves following a particular group over a long period of time.  
Cross-sequential research involves following a varied group over a long period of time.   
What would be the advantages and disadvantages of each?