Development Across the Lifespan

Developmental psychology: The branch of psychology that studies how people change over the lifespan (page 324)

(top left) Caiaimage/Paul Bradbury/Getty Images, (top right) Mint Images/Tim Pannell/Getty Images, (bottom left) Blend Images/Alamy, (bottom right) Erickson Stock/Blend Images

Three core goals of studying developmental psychology to
(1) describe,
(2) explain, and
(3) optimize developmental processes.

Optimization of human development focuses on helping people develop in a positive direction.

- How can our capacities be enhanced?
- How can developmental difficulties be prevented?
- How can developmental problems that emerge be overcome?

This may involve evaluating ways to stimulate intellectual growth in schools, preventing drug and alcohol abuse, supporting the elderly after the death of a spouse, preventing teenage pregnancy.

While this may seem obvious and simple, our incorrect beliefs can interfere with what scientific research suggests about human development. In addition, current scientific knowledge may be incomplete at this point in time and may change with further research.

Beliefs and Perception

Beliefs

- Influence you unconsciously and automatically and sometimes without your awareness,
- Influence what you perceive and fail to perceive,
- Can make it difficult for you to perceive alternative explanations.
- Difficult to “unsee” the current interpretation.

Examples from Social Psychology

Beliefs and Perception

Different beliefs can make it hard to understand why others cannot see the same things you do

Incorrect Beliefs in Developmental Psychology

- We are purely a product of our biology.
- We are purely a product of our environment.
- Attachment if fostered by mothers who feed them.
- Children think pretty much the same as adults.
- Fetal Alcohol Syndrome was caused by bad genetics.
- Technology will help us successfully address our social problems (e.g. learning language, attachment, adolescence, aging, etc.).

Like scientist, can we discard our desire to maintain our belief if the data contradicts our belief?

The Blind Men and the Elephant

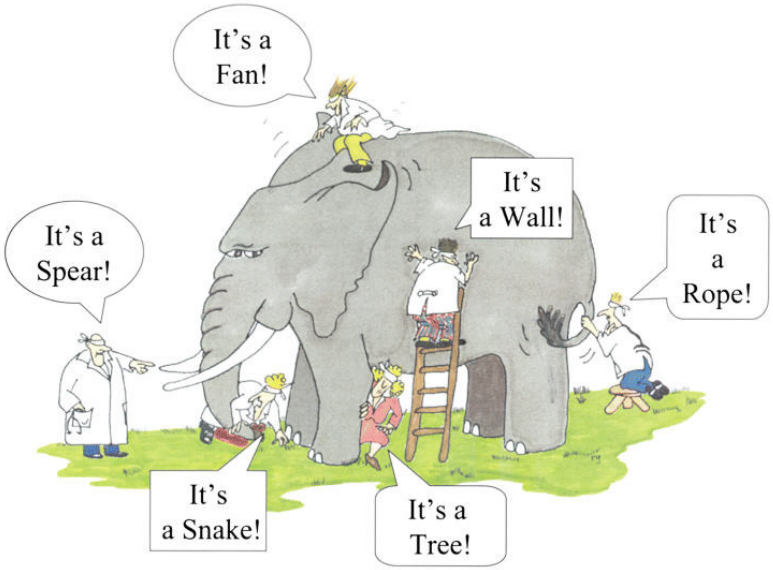
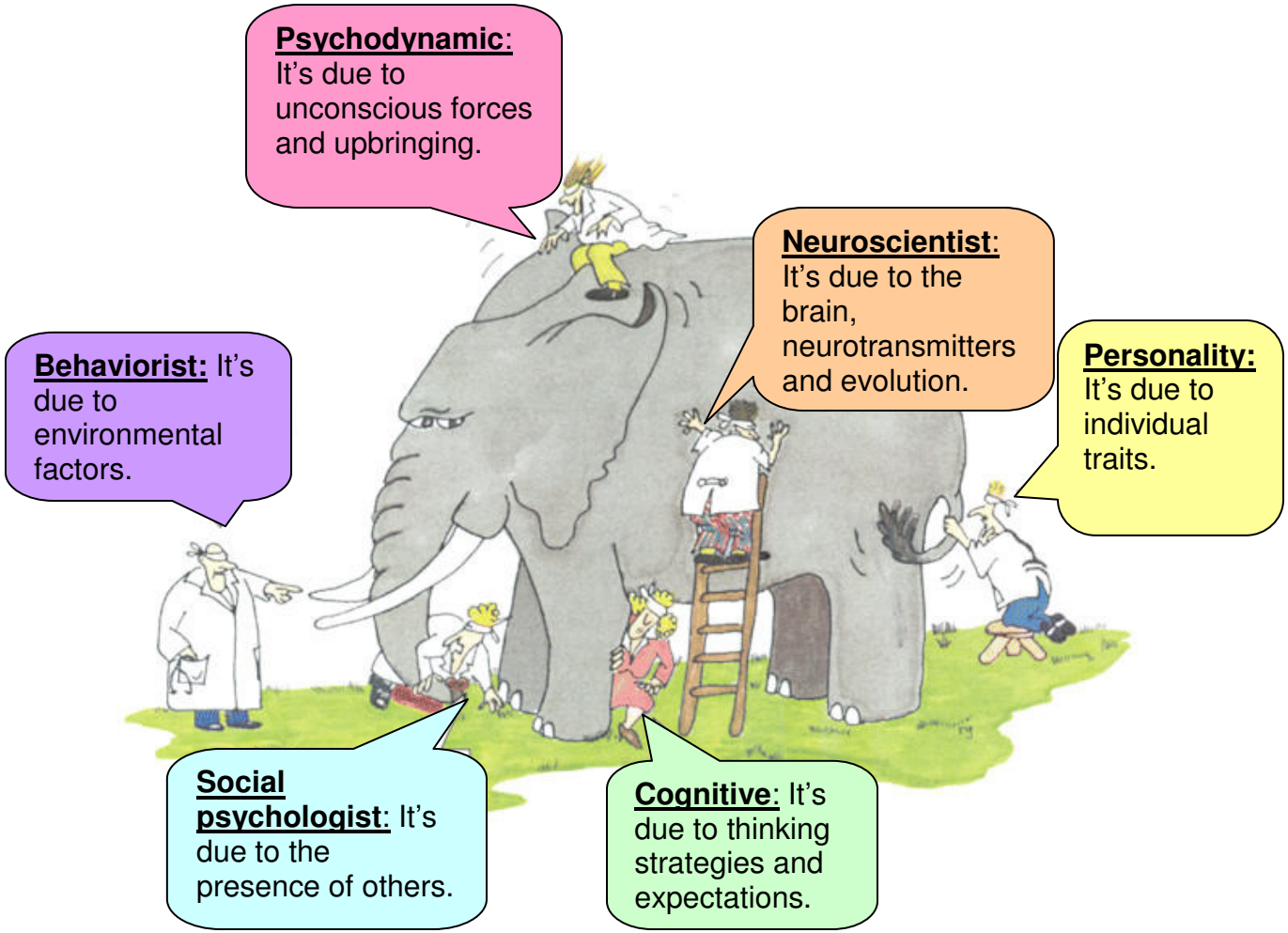


Image source: www.foodinfo.org.nz

There is a metaphor for our understanding of reality in that it is limited. Our ability to understand reality is limited to where we are looking. Blind women and men only know a small part of reality and can disagree because they are looking at different parts of reality (the elephant). In order to understand the reality of the elephant, you need to understand multiple perspectives.

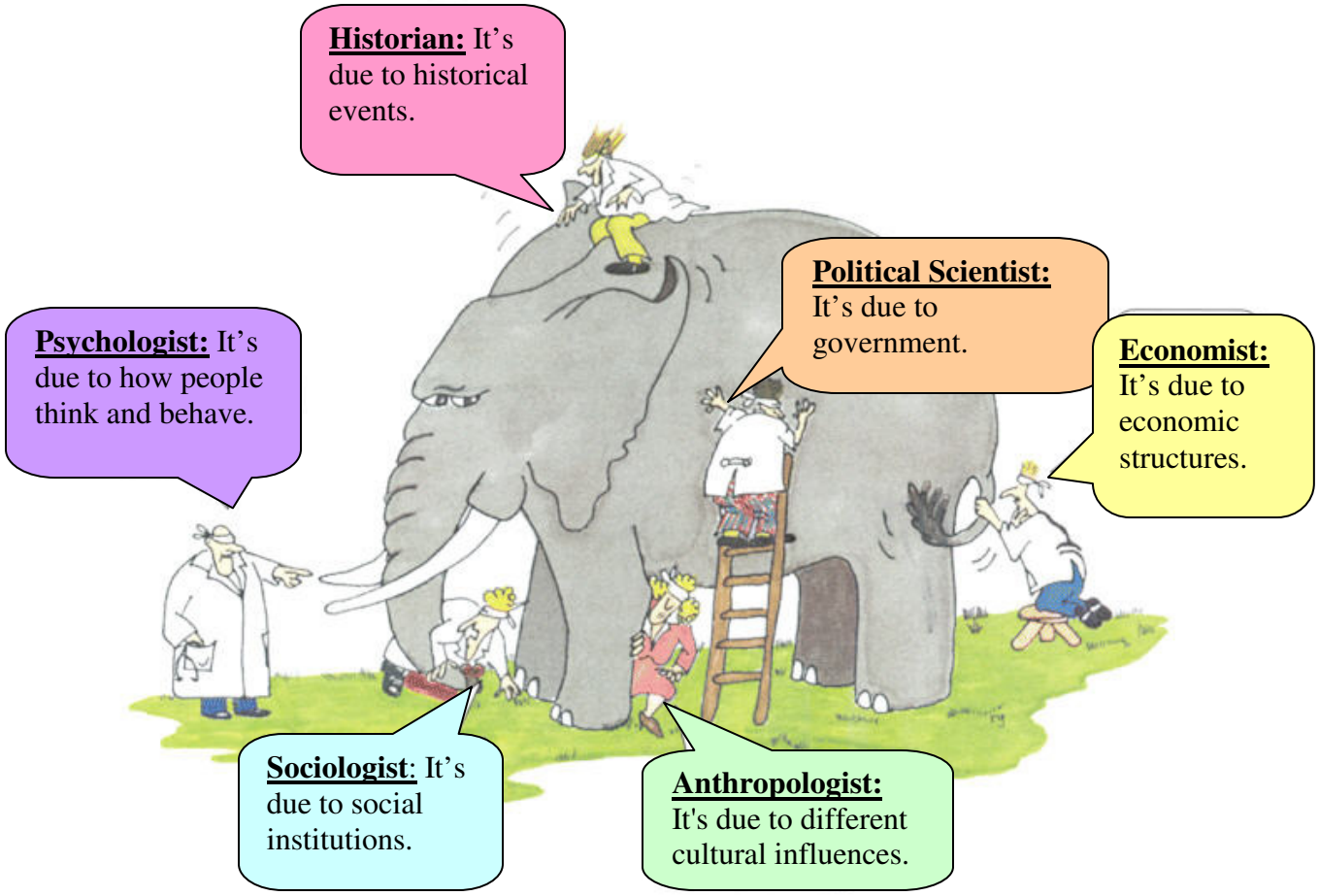
Understanding psychology is similar. In order to understand thinking and behavior, you have to understand different perspectives.

Why are people the way that they are?



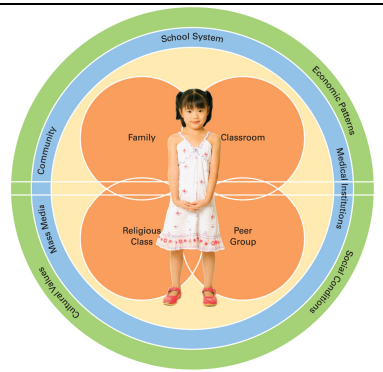
We need different perspectives of psychology to understand who we are.

Why are people the way that they are?



We need different perspectives of the social sciences to understand who we are.

The Ecological, Developmental Systems Approach (page 22)



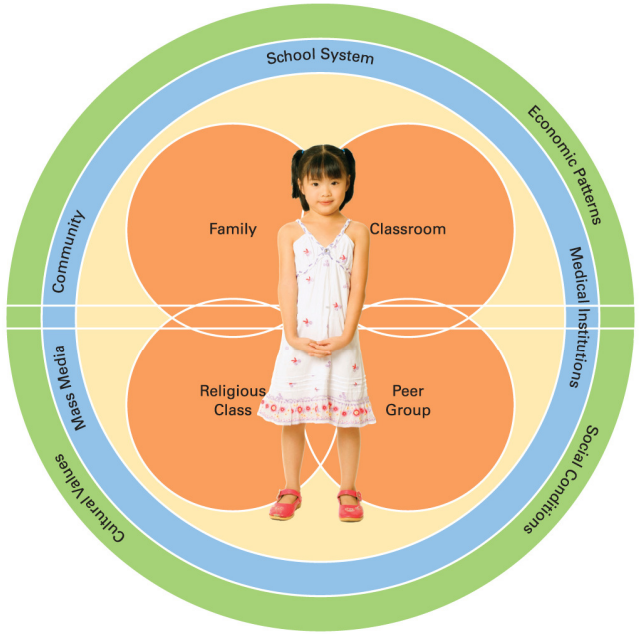
Belsky, *Experiencing the Lifespan*, 5e, © 2019 Worth Publishers George Shellye/Masterfile
Credit: Red Chopsticks/Getty Images

Ecological, developmental systems approach: An all-encompassing outlook on development that stresses the need to embrace a variety of approaches, and emphasizes the reality that many influences affect development.

Bronfenbrenner was one of the first psychologists to emphasize that real-world behavior has many different causes.

- There are immediate relationships that have a stronger influence on the individual such as the family, classroom, peer group and religious class (there may be others) as shown in the center of the circle. This is the individual's (the microsystem)
- The next set of influences influence the family, classroom, peer group, etc. and are more indirect and environmental such as the mass media, community, schools, and medical institutions--the social setting (the exosystem).
- Much broader social factors would be our culture, economic and social conditions in which the person lives (the macrosystem).

The Ecological, Developmental Systems Approach (page 22)



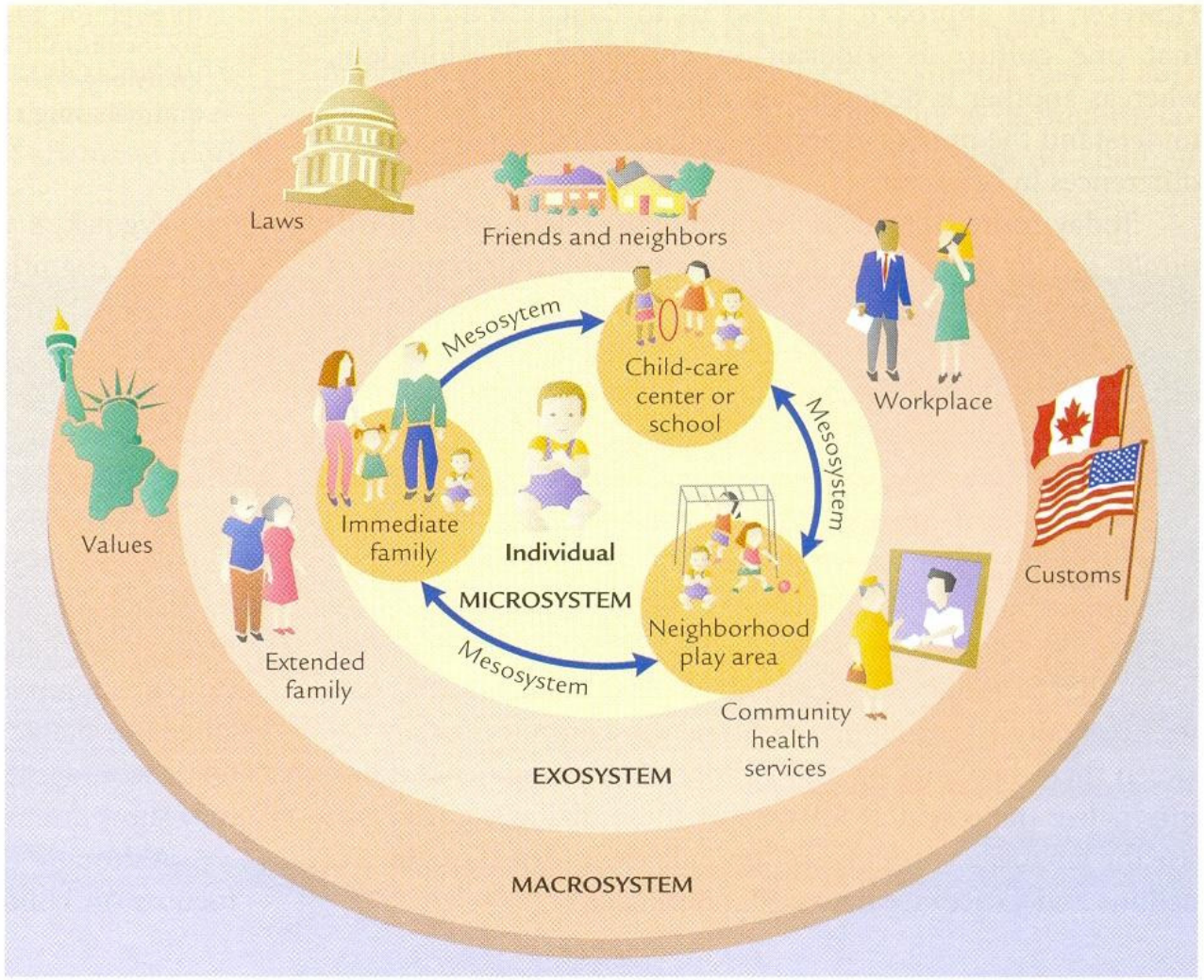
Belsky, *Experiencing the Lifespan*, 5e, © 2019 Worth Publishers George Shellye/Masterfile
Credit: Red Chopsticks/Getty Images

Ecological, developmental systems approach: An all-encompassing outlook on development that stresses the need to embrace a variety of approaches, and emphasizes the reality that many influences affect development.

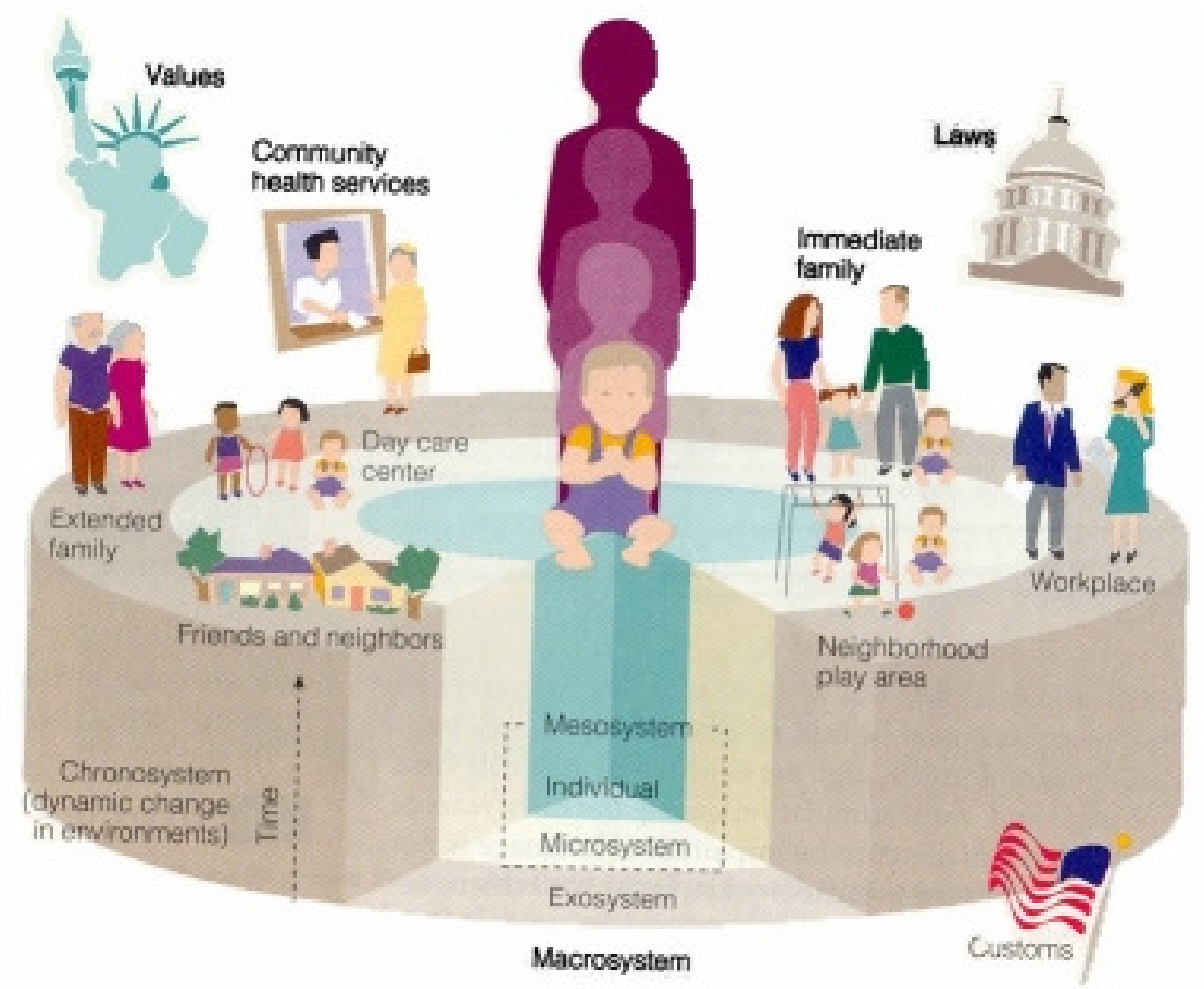
The ecological, developmental systems approach stresses the need to look at many different perspectives of examining behavior and that our behavior has many causes AND how the processes interaction with one another.

As described in your book (page 24), poverty (or lack of it) can affect attachment and nutrition and stress levels, which can in turn influence your biological expression.

Other depictions of Bronfenbrenner



Other depictions of Bronfenbrenner



Nature and nurture, NOT nature or nurture

Historically, people have asked whether we are a product of our environment or our biology. This asks the wrong question. The wrong question influences what we perceive and what questions we ask. Most psychologists find that we are a product of both environment and biology and they interact and shape us.

Our inborn talents and temperamental tendencies (biology) may evoke, or produce certain responses from the world (environment).

- A joyous child elicits smiles. Smiles make us happier.
- A child who is temperamentally irritable will elicit harsh responses from parents (page 19). Harsh responses make us more likely to be irritable.
- Likewise, we actively select our environments based on our genetic tendencies. Those who are athletic may choose to be more involved with sports than those who are not.


Jesse Kunerth/Getty Images

A musically talented girl may choose to spend more time playing the piano.

As she plays the piano more, her talent in playing the piano may grow.

The matching of environment and our talents facilitate our growth.

Nature and nurture, NOT nature or nurture

What this means is that we need to provide an environment that makes people thrive and promote the best in us. Conversely, an impoverished environment can make it difficult for people to become their best.

The core goal of developmental science is to foster the correct person-environment fit—making the wider world bring out our human "best." (page 19)

Bringing out our best does not necessarily rely on technology, but our understanding of psychological processes, which is not a general cultural expectation.

Theories of development

Theory	Nature vs. Nurture Emphasis and Ages of Interest	Representative Question
Behaviorism	Nurture (all ages)	What reinforcers are shaping this behavior? Who is this person modeling? How can I stimulate self-efficacy?
Psychoanalytic theory	Nurture	What unconscious motives, stemming from early childhood, are motivating this person?
Attachment theory	Nature and nurture (infancy but also all ages)	How does the attachment response unfold in infancy? What conditions evoke this biologically programmed response at every life stage?
Evolutionary theory	Nature (all ages)	How might this behavior be built into the human genetic code?
Behavioral genetics	Nature (all ages)	To what degree are the differences I see in people due to genetics?
Erikson's theory	(all ages)	Is the baby experiencing basic trust? Where is this emerging adult in terms of identity? Has this middle-aged person reached generativity?
Piaget's theory	Children	How does this child understand the world? What is the child's thinking like?

Theories of development: Behaviorism

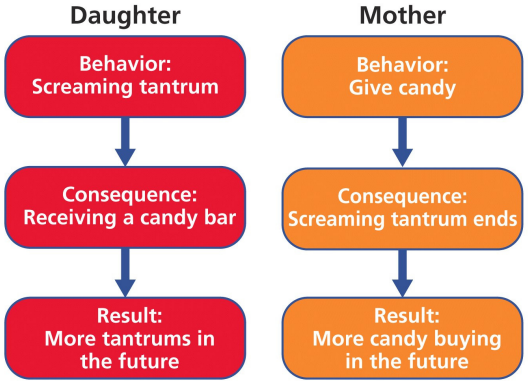
Traditional Behaviorism: The original behavioral worldview that focused on charting and modifying only "objective" visible behaviors.

I want to focus on a limited aspect of behavioral theory in relation to development.

- Reinforcement: A behavioral term for reward. A consequence that increases the likelihood of a behavior occurring in the future.
- Extinction: The reduction of a behavior through the lack of reinforcement.
- Modeling: Learning by watching and imitating what other people do.
- Self-Efficacy: Our belief in our competence, our sense that we can be successful at a given task.

Theories of development: Behaviorism

- Reinforcement: A behavioral term for reward. A consequence that increases the likelihood of a behavior occurring in the future.
- Extinction: The reduction of a behavior through the lack of reinforcement.



Theories of development: Behaviorism

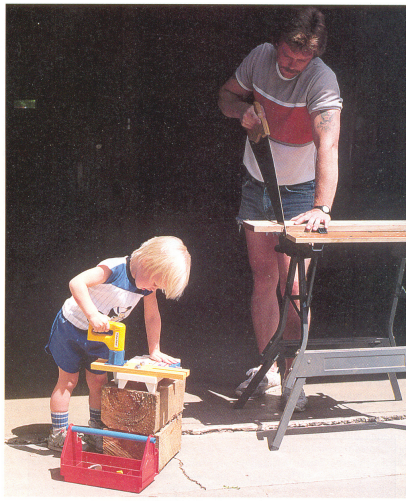
We tend to reinforce people when we tell lies (things we want to hear) it becomes more likely. When we tell people the truth, we don't say "thank you" or appreciate it. In extreme cases, we get mad and truth telling tends to get extinguished and less likely to occur.

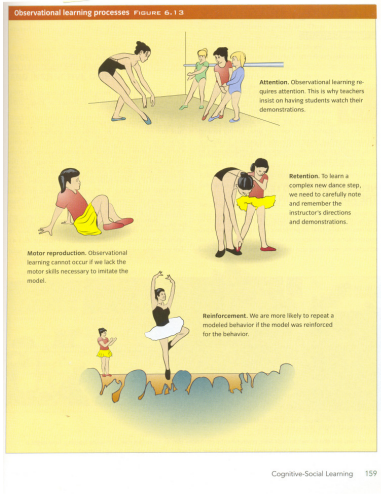
Theories of development: Behaviorism

Whether it is the throwing of tantrums or people not telling us what they really think, we tend to focus on personality explanations and not how these behaviors are learned.

Theories of development: Social Learning Theory

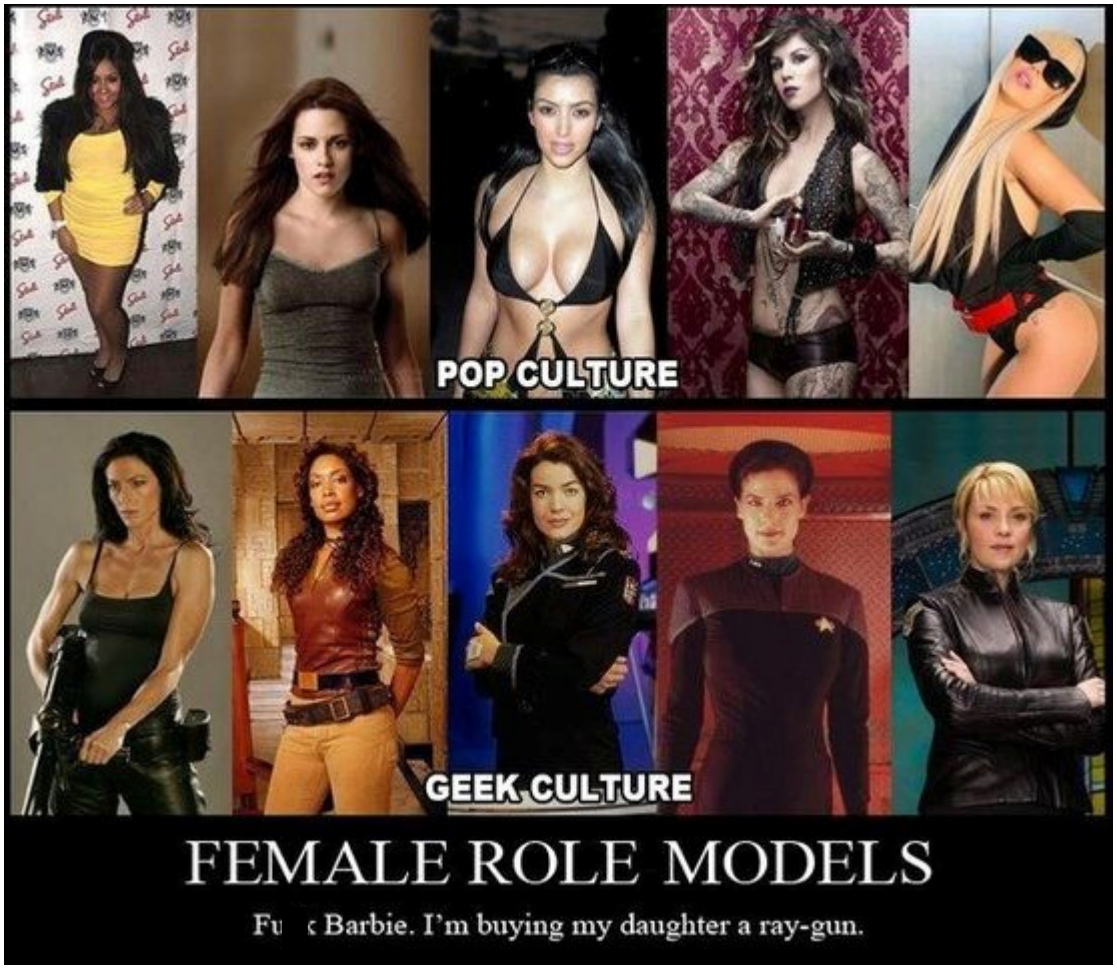
Modeling: Learning by watching and imitating what other people do.





Our behavior is shaped by those around us. Good role models lead to good behavior. Bad role models lead to bad behavior.

Theories of development: Social Learning Theory



also exercise and eating behaviors

Theories of development: Behaviorism

Self-Efficacy: Our belief in our competence, our sense that we can be successful at a given task.

One theme through several chapters is the matching of the environment with the person. In order to be successful, you need to discover what you are interested and pursue it, gain feedback on your performance and see failure as a learning experience, rather than a defect of character.

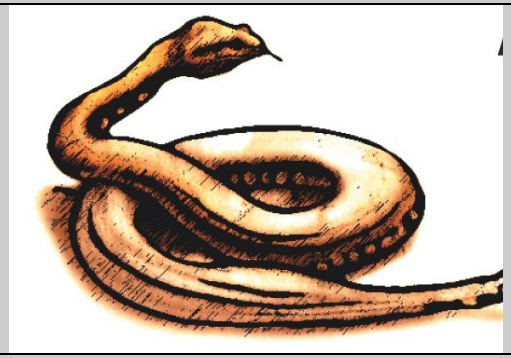
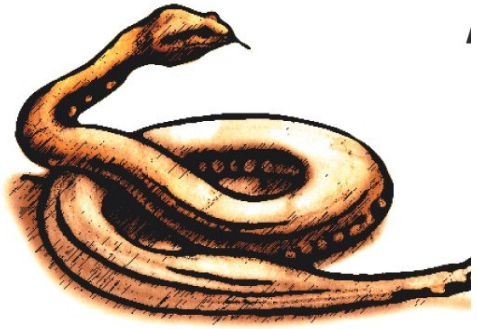
If you find something you enjoy, you are more likely to study it on your own, seek self-improvement (you are interested in finding out why you made mistakes) and happier with what you are doing.

Theories of development: Evolutionary Psychology

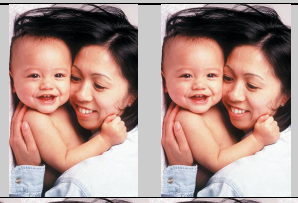
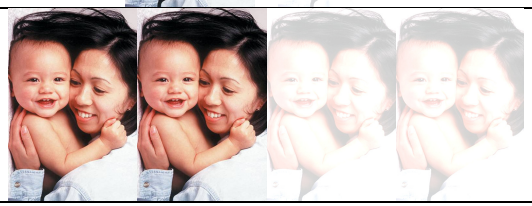
Evolutionary psychology explain behavior in terms of natural selection.

Traits that facilitate survival are more likely to allow that person (or group of people) to survive, live longer, reproduce and grow in numbers. Traits that don't facilitate survival are less likely to allow that person or group to survive, live longer, reproduce and grow in numbers.

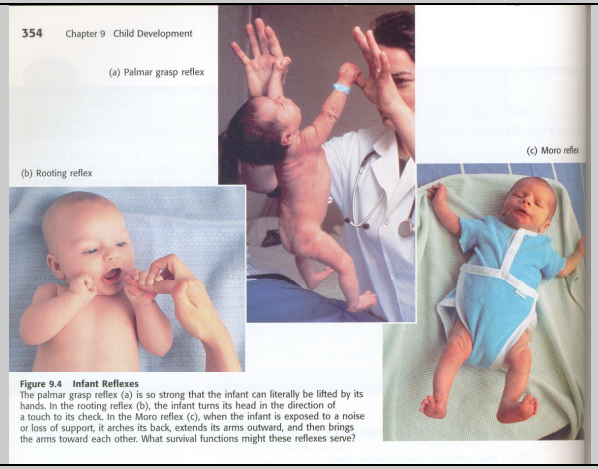
Theories of development: Evolutionary Psychology

Afraid of Snakes	Not afraid of Snakes
	
More likely to avoid dangerous snakes	Less likely to avoid dangerous snakes
Live longer, have larger families	Live shorter lives, have smaller families
	
	

Theories of development: Evolutionary Psychology

Biased to perceive faces	Unable to perceive faces
	
More likely to affiliate with others and avoid enemies	Unable to affiliate with others and avoid enemies
Live longer, have larger families	Live shorter lives, have smaller families
	
	

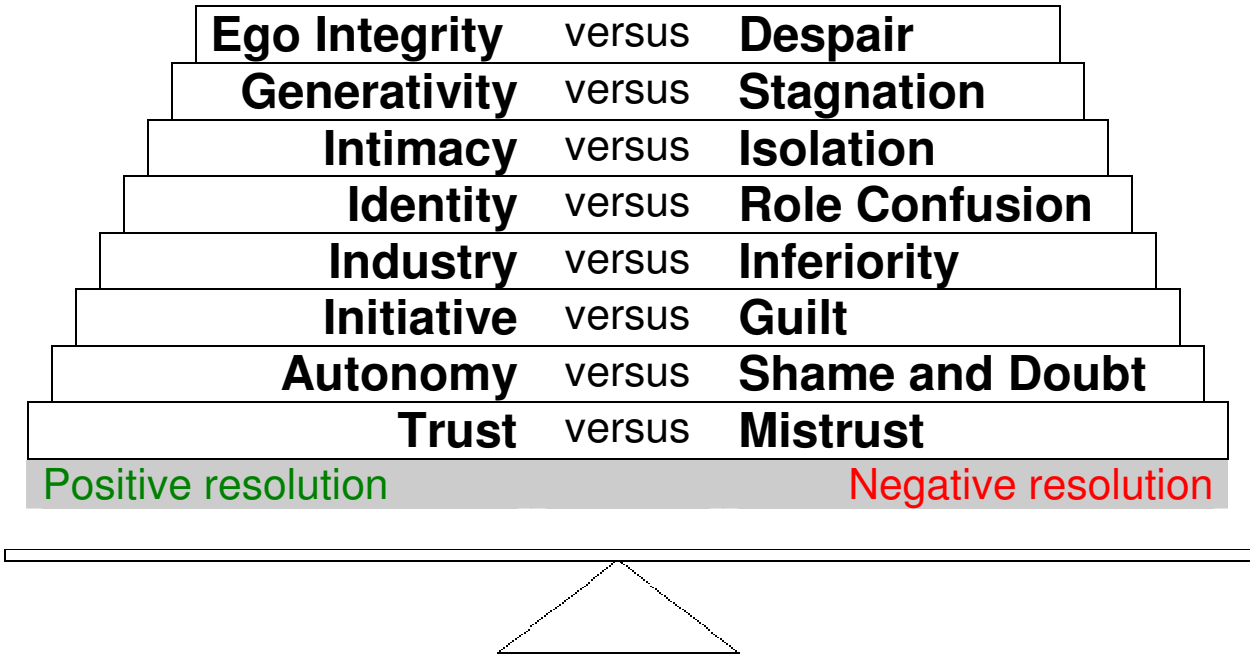
Theories of development: Evolutionary Psychology

Innate reflexes that facilitate survival	No innate reflexes
	
More likely to survive	Less likely to survive
Live longer, have larger families	Live shorter lives, have smaller families
	
	

Erik Erikson: Psychosocial Stages of Development

Unlike Freud who believed development ends during adolescence, Erikson believed that development continues beyond puberty across the lifespan based on how the individual deals with conflicts or crises.

The following are Erik Erikson's eight psychosocial conflicts that we need to resolve across the lifespan. Resolutions of these crises or conflicts are NOT an either/or outcome, but rather they tend to be positive or negative. These conflicts continue to occur throughout the lifespan, but have a greater impact at different periods.



If there are more positive experiences than negative experiences, one has a positive resolution at that stage.

- A positive resolution of each conflict (Erikson called them crises) contribute to a progressive strengthening of the self and a positive resolution at early stages increases the chances that an individual will positively resolve a crisis at late stages.
- A negative resolution of each conflict contribute to a progressive weakening of the self and a negative resolution at early stages increases the chances that an individual will negatively resolve a crisis at other stages.

Research Methods: Correlations vs. Experiments

Correlational studies: A research strategy that involves relating two or more (naturally occurring) variables (without any attempt to manipulate the variables) (page 25).

True experiment: The only research strategy that can determine that something cause something else; involves randomly assigning people to different treatments and then looking at the outcomes (page 26).

There are many similarities between correlations and experiments. Both involve two or more variables that look at a relation between them.

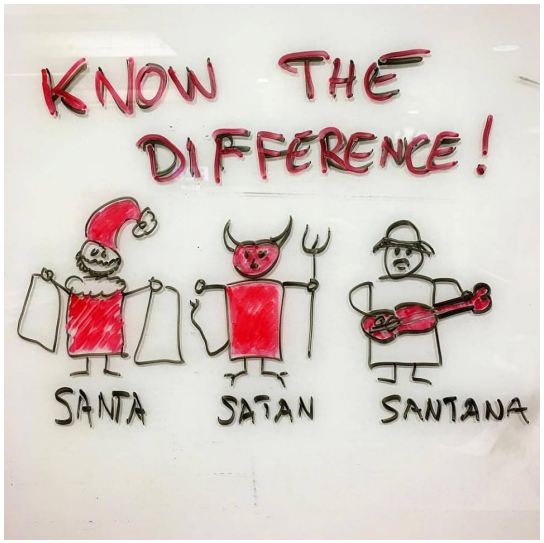
- Correlations tend to be easier to do because you just observe and measure two (or more variables).
- Experiments require you to alter one variable forming at least two groups, randomly assign people to a group that has the altered variable or a group that has the unaltered variable, and then observe and measure the other variable.

Simply observing variables cannot establish a causal relationship. Only through manipulation and altering a variable can you know if one variable causes a change in the other.

Research Methods: Correlations vs. Experiments

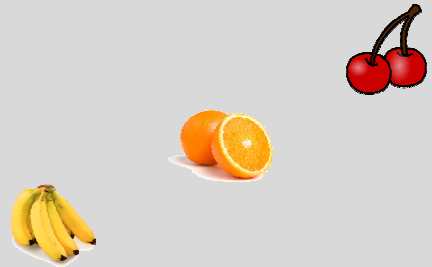
	Correlations	Experiments
• Measures two or more variables	x	x
• Determines relations between variables	x	x
• Measures naturally occurring variables without interference	x	
• Manipulates a variable to establish cause and effect		x

While similar in many ways, the difference between correlations and experiments are subtle, but important.



Correlations

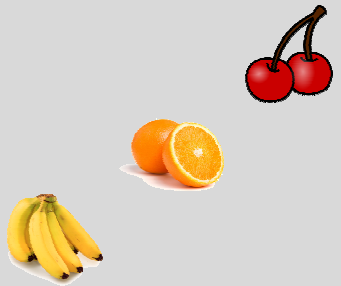
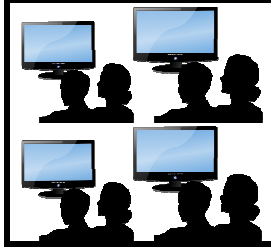
If we have a hypothesis that eating more fruit is associated with lower cholesterol. We measure how much fruit you eat and your cholesterol levels, we can find that these variables are associated with one another—people who eat more fruit have lower cholesterol levels.

<table>
<tr><td colspan="3">  </td></tr>
<tr><td colspan="3">We measure or observe how much fruit they eat, and measure and observe their cholesterol levels, and can find that those who eat more fruit have lower cholesterol levels than those who eat less fruit.</td></tr>
<tr><td>Measure/observe
Amount of fruit eaten</td><td></td><td>Measure/observe
Level of cholesterol</td></tr>
<tr><td>  </td><td>have</td><td>Lower cholesterol</td></tr>
<tr><td>  </td><td>have</td><td>Higher cholesterol</td></tr>
</table>

However, because we only measure/observe the variables (a correlation), we cannot know if eating fruit causes lower cholesterol levels.

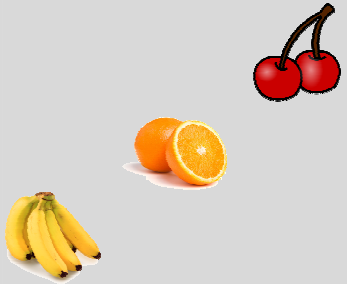
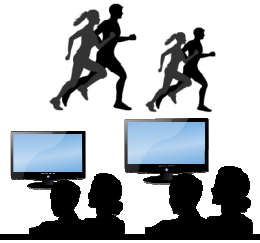
Correlations

We cannot determine cause and effect relationships with only a correlational study that measures/observes variables. In this case, a third variable could cause changes in both variables—the amount of fruit eating and cholesterol levels—such as lifestyle.

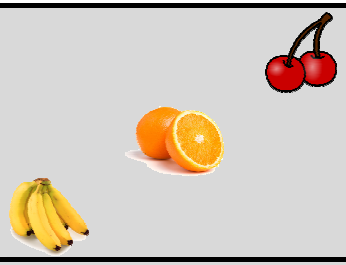
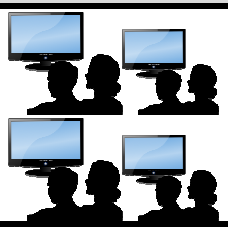
We measure or observe how much fruit they eat, and measure and observe their cholesterol levels, and can find that those who eat more fruit have lower cholesterol levels than those who eat less fruit.			
Amount of exercise	Measure/observe Amount of fruit eaten		Measure/observe Cholesterol level
		have	Lower cholesterol
		have	Higher cholesterol

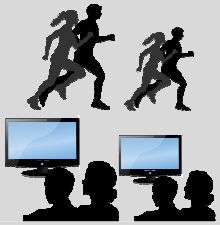
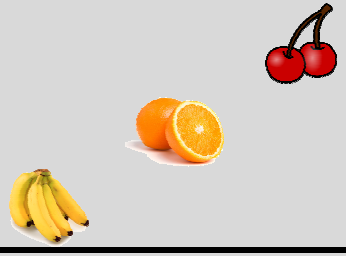
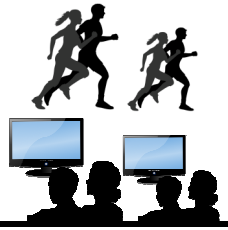
Experiments

To determine of eating more fruit causes lower cholesterol levels, we need to do an experiment where one variable is manipulated (changed) and randomly assign participants to an experimental condition. Random assignment reduces any pre-existing variables we can't account for.

We randomly assign participants to either eat a lot of fruit, or eat a little bit of fruit (this is the variable manipulation) and measure their cholesterol levels.			
	Randomly assigned groups to eat a lot of fruit or a little fruit		Measure/observe cholesterol levels
		have	Lower cholesterol
		have	Higher cholesterol

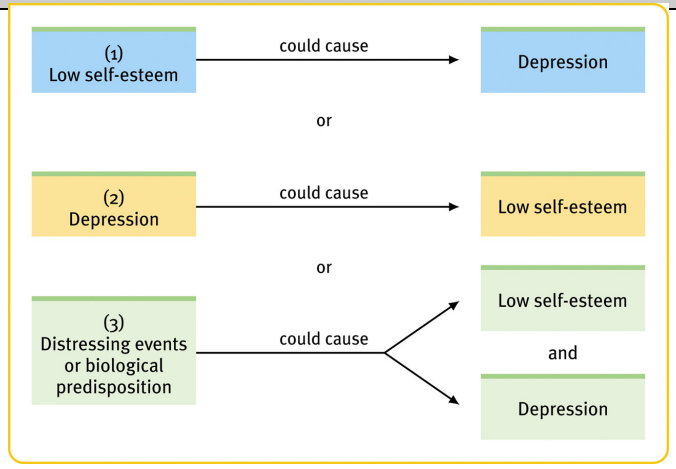
Correlations versus Experiments

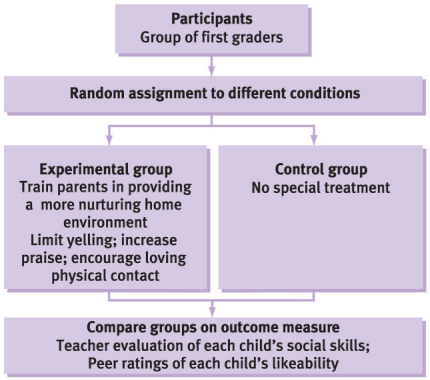
Correlations measure pre-existing variables. If there is a relationship, it could be due to another variable.			have	Lower cholesterol
		Measured variable		Measured variable
			have	Higher cholesterol

Experiments manipulate one variable to establish cause and effect relationships. Think **cause**, think **experiments**			have	Lower cholesterol
		Randomly assigned variable		Measured/observed variable
			have	Higher cholesterol

Research Methods: Correlations vs. Experiments

Correlations	Experiments
• Do people who take vitamin C have fewer colds? a. Measure vitamin C intake b. Measure number of colds	• Does taking vitamin C reduce the number of colds? a. Change/manipulate amount of vitamin C taken b. Measure the number of colds
• Do those who eat oat bran have lower cholesterol? a. Measure how much oat bran you eat b. Measure cholesterol levels	• Does eating oat bran reduce cholesterol levels? a. Change/manipulate the amount of oat bran eaten b. Measure the cholesterol levels





Belsky, *Experiencing the Lifespan*, 5e, © 2019 Worth Publishers George Shellye/Masterfile
Credit: SolStock/E+/Getty Images

Is this an Experiment or Correlation?

A study was done with some safety equipment. Would the safety equipment interfere with how enjoyable participants engaged in the activity?

Does using a condom interfere with people experiencing pleasure during sex? A study was done that found that that whether or not you use a condom, there is no reported difference in pleasure

- Is it more likely that this study was an experiment or a correlation?

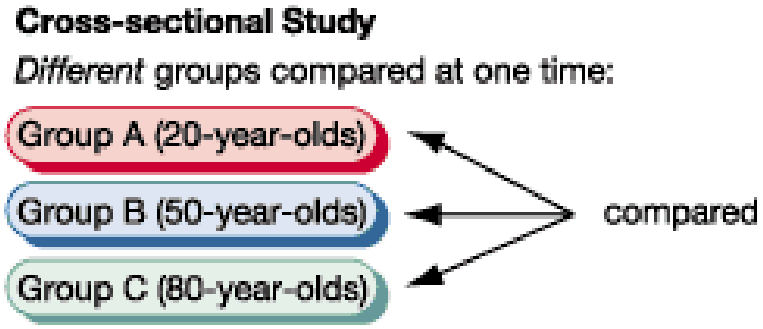
Before answering the question and just responding, think about the following:

(1) What is an experiment?
(2) What is a correlation?
(3) What is the difference between an experiment and correlation?

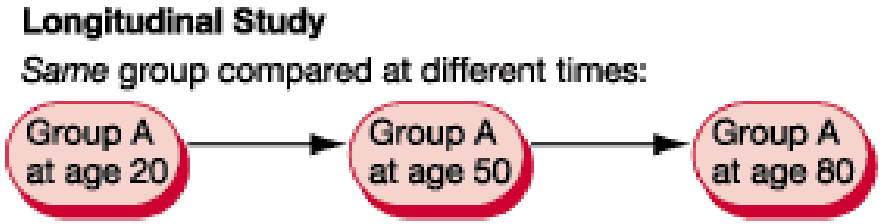
How would you conduct an experiment to see if gender causes how many cats are adopted?

Research Methods: Cross Sectional and Longitudinal Studies

Cross-sectional studies: A developmental research strategy that involves testing different age groups at the same time (page 27).



Longitudinal studies: A developmental research strategy that involves testing an age group repeatedly over many years (page 28).



Research Methods: Cross Sectional and Longitudinal Studies

Cross-sectional studies: A developmental research strategy that involves testing different age groups at the same time (page 27).

Cross-sectional Study

Different groups compared at one time:

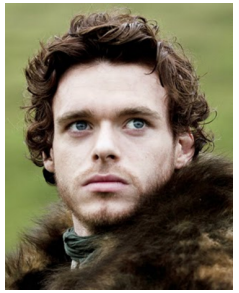
Group A (20-year-olds)

Group B (50-year-olds)

Group C (80-year-olds)

compared

Group A



Group B

Group C

Research Methods: Cross Sectional and Longitudinal Studies

Longitudinal studies: A developmental research strategy that involves testing an age group repeatedly over many years (page 28).


Arya Stark at 20


Arya Stark at 50

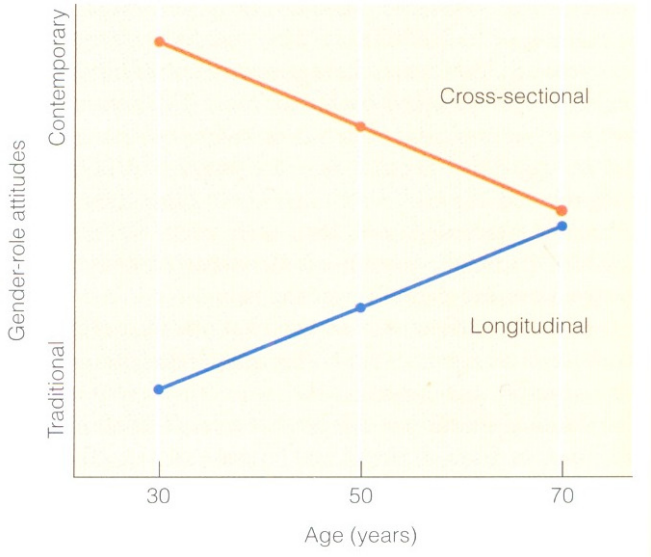

Arya Stark at 80

If we use the different analogy, we track her development across the 8 seasons of Game of Thrones.

Limits of Cross-Sectional and Longitudinal Studies

All studies have their limits. It is possible to appear to get discrepant results from Cross-sectional and longitudinal studies. For example,

- A cross-sectional study shows more traditional gender-role attitudes with older cohorts.
- A longitudinal study shows less traditional gender-role attitudes as we age.

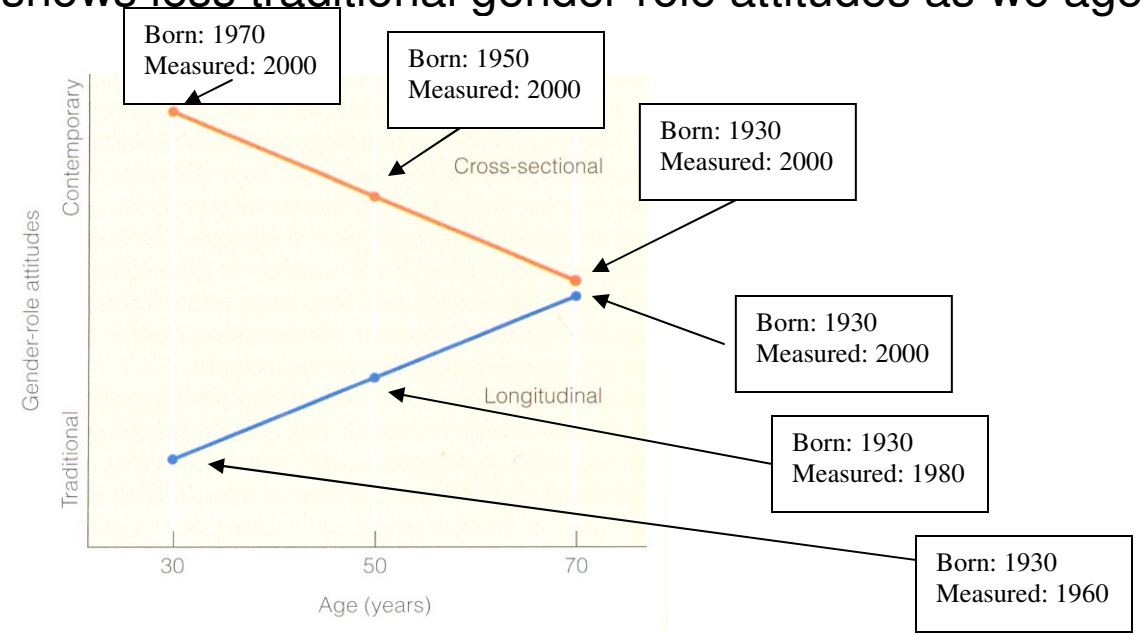


In order to properly interpret these studies, you need to understand the context of lifespan development with what is known and understand the limits of each type of research method. This is difficult because it requires knowledge in the topic.

Limits of Cross-Sectional and Longitudinal Studies

It is possible to appear to get discrepant results from Cross-sectional and longitudinal studies. For example,

- A cross-sectional study shows more traditional gender-role attitudes with older cohorts.
- A longitudinal study shows less traditional gender-role attitudes as we age.

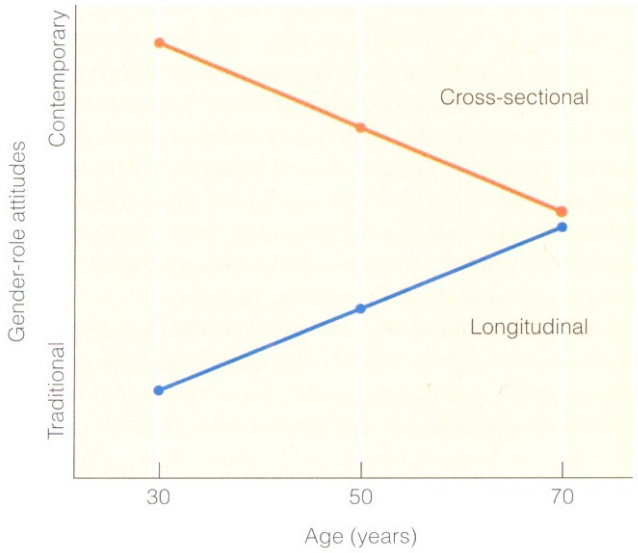


In order to properly interpret these studies, you need to understand the context of lifespan development with what is known and understand the limits of each type of research method. This is difficult because it requires knowledge in the topic.

Limits of Cross-Sectional and Longitudinal Studies

All studies have their limits. It is possible to appear to get discrepant results from cross-sectional and longitudinal studies where

- A cross-sectional study shows more traditional gender-role attitudes with older cohorts.
- A longitudinal study shows less traditional gender-role attitudes as we age.



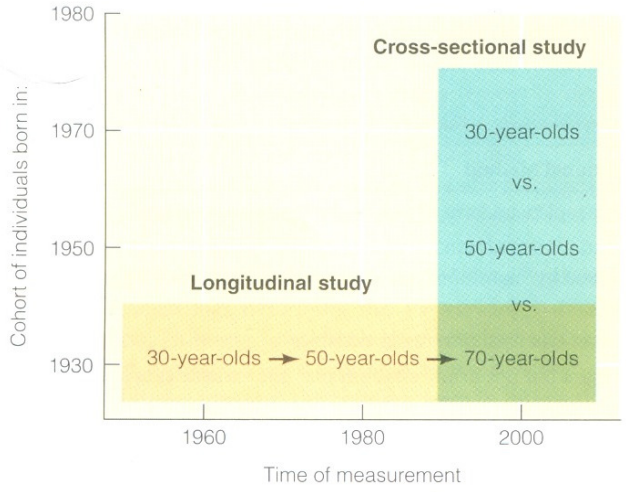


Figure 1.4 Cross-sectional and longitudinal studies of development from age 30 to age 70

In order to properly interpret these studies, you need to understand the context of lifespan development with what is known and understand the limits of each type of research method. This is difficult because it requires knowledge in the topic.