

Chapter 3 Test Review

Take out your study and chapter
notes

Review options

- Flash cards and practice questions are here:

<http://www.worthpublishers/myers8e>

Textbook: pp. 95-137

Behavior Genetics: Predicting Individual Differences, p. 96

Behavior Geneticists study our differences and weigh the relative effects of heredity and environment.

The study is “top-down”: what behaviors are linked to genes?

Behavior genetics and heritability

- 1. In the field of *behavior genetics* (p. 96) we find the *heritability* of a given trait.
- In other words, what percentage of the difference among individuals we can attribute to genes?

When is heritability GREATEST? (REVIEW PAGE 98)

- **A. Heritability**

Definition: the proportion of *variation* among individuals that we can attribute to genes

When genetically *dissimilar* individuals are reared *in similar* environmental circumstances, the *heritability of a trait is said to be greater*

When is heritability greater? (example)

- If schools are the same, all families equally loving, and all neighborhoods equally healthy, heritability---genetic dissimilarities---would increase.
- Because, the differences due to the environment would decrease, the influence of genetics would be greater

Genes and behavior, 97

- Most human traits aren't caused by one gene.
- The influence of many genes, called *gene complexes*, acting together leads to most human traits and characteristics.

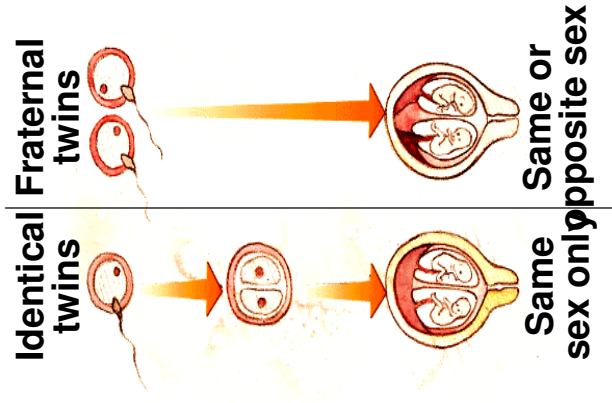
Behavior Genetics, 98

- **Identical Twins**

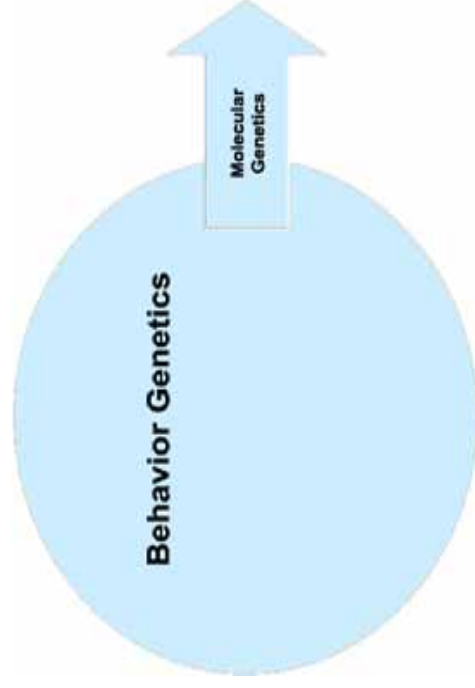
- develop from a single zygote (fertilized egg) that splits in two, creating two genetic replicas

- **Fraternal Twins**

- develop from separate zygotes
- genetically no closer than brothers and sisters, but they share the fetal environment



The New Frontier: Molecular Genetics, 105



Molecular genetics
is a branch
extension of
behavior genetics
that asks the
question, “Do
genes influence
behavior?”

Molecular Genetics: 105-106

Molecular geneticists are trying to identify genes that put people at risk for disorders.

This approach is “bottom up”

An example was the program we saw on *Williams syndrome*. (Chromosome 7 has a missing chunk of 25 genes).

Study of this issue lead for the search to find the gene for sociability.

Scientists are looking for genes that influence body weight, sexual orientation and extraversion, among others.



Gender differences and sexuality, 110

1. women more likely to disapprove of or engage in casual sex
2. men more likely to initiate sex
3. men more likely to perceive warm responses as sexual advances

Example: grocery store in Green Bay

Gender Differences in Sexuality, 110

Males and females, to a large extent, behave and think similarly. Differences in sexes arise in regards to reproductive behaviors.

Question (summarized)	Male	Female
Casual sex	60%	35%
Sex for affection	25%	48%
Think about sex everyday	54%	19%

Evolutionary psychology and Mating Preferences, p. 111

Natural selection has caused males to send their genes into the future by mating with multiple females since males have lower costs involved.

Males tend to seek youthful and fertile females.

However, *females select* one mature and caring male because of the higher costs involved with pregnancy and nursing. They also seek more affluent males (wealthier).

Natural selection and “fitness”, 111

Natural Selection (evolutionary psychology)

- the principle that, among the range of possible behavioral traits, those contributing to survival will most likely be passed on to succeeding generations
- Those who are best suited to an environment, have a reproductive advantage.



Fitness: our ability to survive and reproduce

Critiquing the Evolutionary Perspective, 112-113

1. Evolutionary psychologists take a behavior and work backward to explain it in terms of natural selection. These are known as “after-the-fact” explanations.

Example: they start with an effect, like the differences between male and female sexual behavior and then work backwards to propose an explanation. But if men were loyal to their mates, they would say those behaviors were selected for.

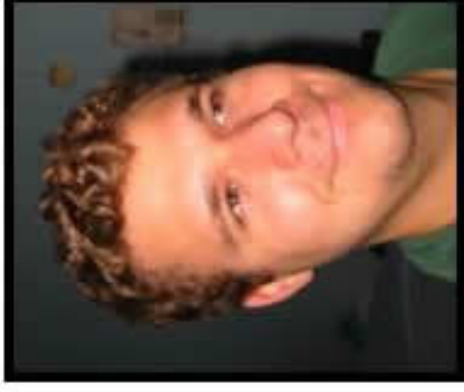
More criticisms of evolutionary psych

2. Evolutionary psychology proposes genetic determinism (biology controls everything) and undercuts morality in establishing society. Much of who we are is not hard wired into our personalities.
3. Gender differences in behavior are usually the result of culture practices and influences. Thus, some cultures have literally no gender differences in how they express sexual behavior.

Parental influences on us



SEPARATED BY BIRTH



Prenatal Influences, 114

1. *Identical twins* who share the same placenta are more alike than those who do not, suggesting *prenatal influences* on psychological traits such as temperament.



Parental influences



adam.com

2. Another kind of influence is physiological. An influence on physiological traits would be when the mother doesn't eat well, and as a result her child has a low birth weight.

Parental influence on personality, 116-117

Parental influence is largely genetic. This support is essential in nurturing children. However, other socializing factors also play an important role.

Thus, the role of parents' influence on their children's personality is more limited than popular psychology asserts (affecting such things as politics, religion and manners.)



Culture, 119

- the enduring behaviors, ideas, attitudes, and traditions shared by a large group of people and transmitted from one generation to the next



Personal Space, 120

- the buffer zone we like to maintain around our bodies;
- Q: How does American concept of this compare to other cultures?
- A: We like more personal space than Latin American, the French and Arabs.

Norms and personal space, 120

Cultures differ. Each culture develops **norms** – rules for accepted and expected behavior. Men holding hands in Saudi Arabia is the norm (closer **personal space**), but not in American culture.



Jason Reed/ Reuters/Corbis

Personal space violation?

- Larry Sabato, professor of politics at the University of Virginia commented:
“(A)lmost any male alive today knows that you don’t offer uninvited massages to any female, much less the Chancellor of Germany.”



Individualism v. collectivism, 123

Several questions will ask you to interpret this chart. Individualists are usually American or European. Collectivists relate to Asian cultures.

VALUE CONTRASTS BETWEEN INDIVIDUALISM AND COLLECTIVISM

Concept	Individualism	Collectivism
Self	Independent (identity from individual traits)	Interdependent (identity from belonging)
Life task	Discover and express one's uniqueness	Maintain connections, fit in, perform role
What matters	Me — personal achievement and fulfillment; rights and liberties; self-esteem	Us — group goals and solidarity; social responsibilities and relationships; family duty
Coping method	Change reality	Accommodate to reality
Morality	Defined by individuals (self-based)	Defined by social networks (duty-based)
Relationships	Many, often temporary or casual; confrontation acceptable	Few, close and enduring; harmony valued
Attributing behavior	Behavior reflects one's personality and attitudes	Behavior reflects social norms and roles

Sources: Adapted from Thomas Schoeneman (1994) and Harry Triandis (1994).

Individual v. collective, 123

If a culture nurtures an individual's personal identity, it is said to be **individualist**, but if a group identity is favored then the culture is described as **collectivist**.

A collectivist support system can benefit groups who experience disasters such as the 2005 earthquake in Pakistan.



Gender, 126 ff.

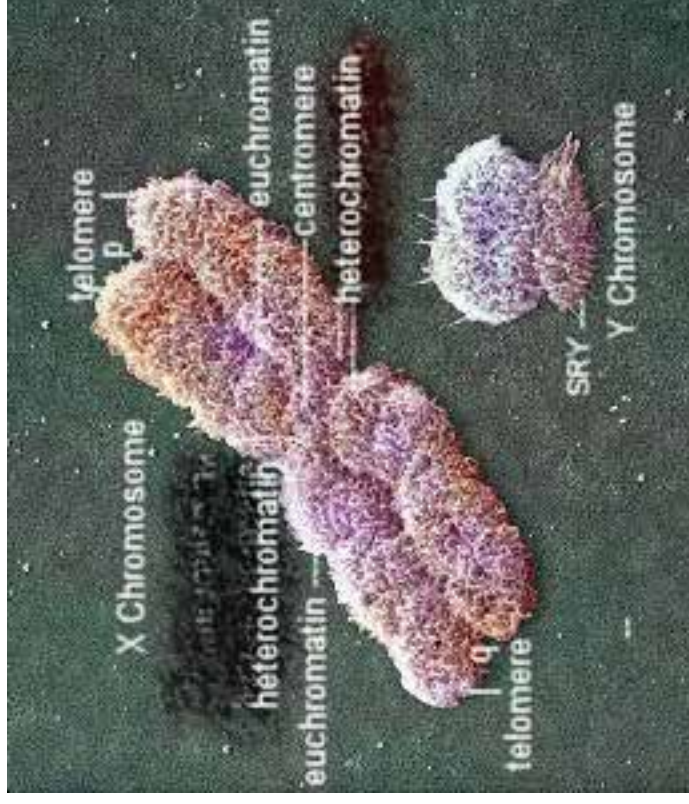
- in psychology, the characteristics, where biologically or socially influenced, by which people define male and female
- (This was the focus of the *Sex and Gender* video.)



Protection and food used to be enough, but now, they want romance and time for themselves as well...
What are we to do?

Biology of Sex, see 129-130

Biological sex is determined by the twenty-third pair of chromosomes. If the pair is XX, a female is produced. If the pair is XY, a male child is produced.



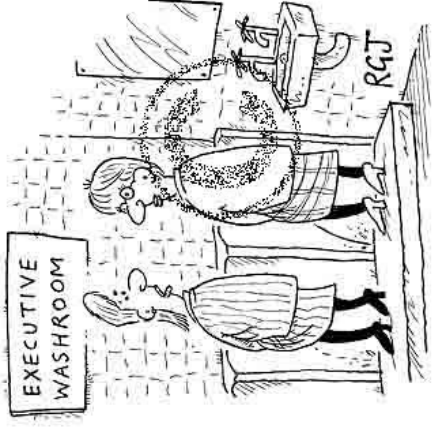
The Nature of Gender: *Testosterone*, 130

- 1 the most important of the male *sex hormones*
- 2 both males and females have it
- 3 additional testosterone in males stimulates
 - growth of male sex organs in the fetus
 - development of male sex characteristics during puberty

The Nurture of Gender: Gender Role,

131

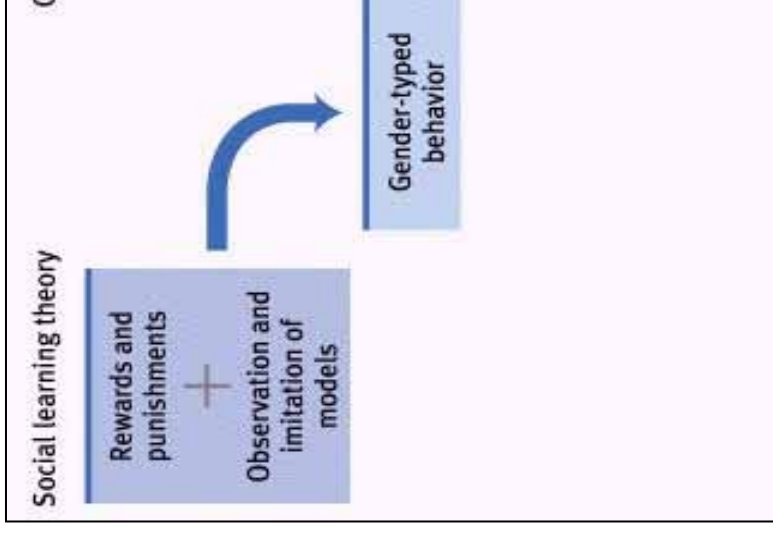
- a set of expected behaviors (based on norms) for males and females about a *social position*
- defining how those in the position ought to behave



"Do you ever worry you've had to sacrifice your femininity to succeed in the male business world."

Gender Roles: Theories, 132

1. **Social Learning Theory** proposes that we learn gender behavior like any other behavior—reinforcement, punishment, and observation.



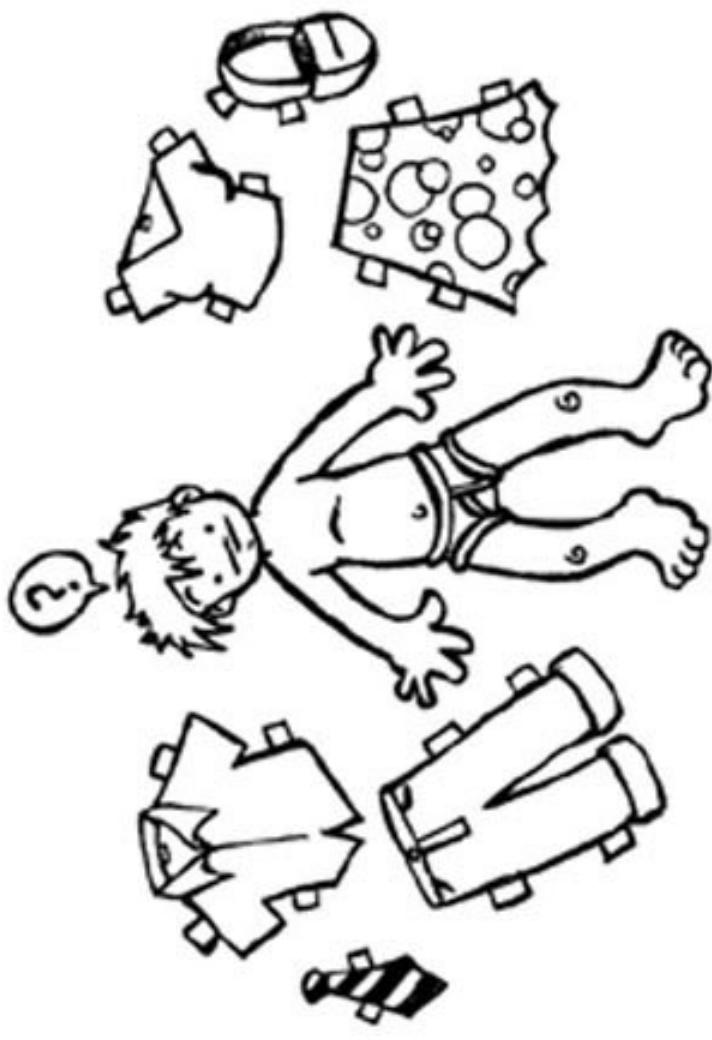
Gender-typing, 132

- the acquisition of a traditional masculine or feminine role
- Example: Boys and girls will do this when classifying toys as either for boys or girls; boys play with trucks, girls with dolls.
- According to social learning theory: Even when parents try to discourage gender typing, children will still organize their world around boys' and girls' roles.



Gender Identity, 132

– one's sense of being male
or female



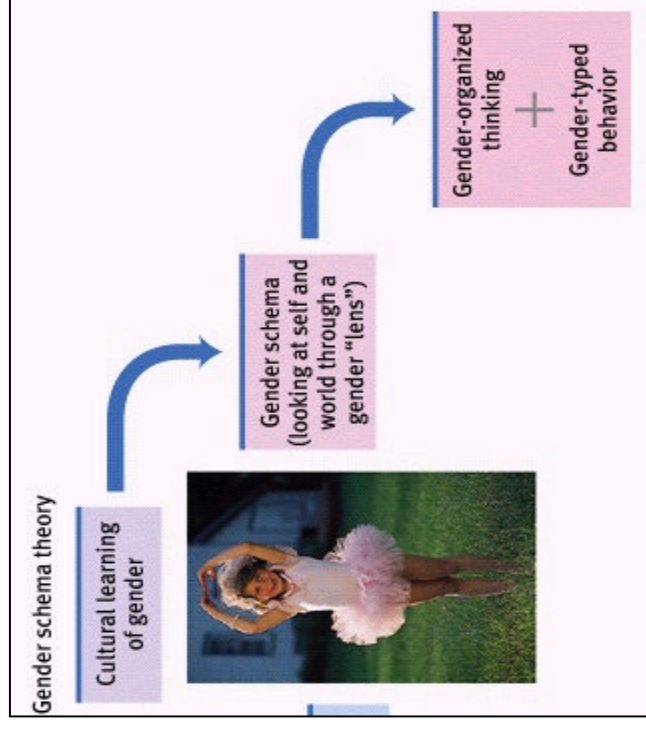
Short Answer questions on the test. 5 points each

- 1. How do twin and adoption studies help us understand individual differences? In several sentences, give several examples of findings.
- Just tell me what the research shows about our differences from a twin study and one adoption study. **See pages 97-101 and/or the notes for some ideas.**



Theory of Gender role

- Gender Schema Theory suggests that we learn a cultural “recipe” of how to be a male or a female, which influences our gender-based perceptions and behaviors. This theory combines the idea from above with *cognition*. You form *schemas* of how you should view the world as a boy or girl.



Short Answer questions on the test. 5 points each

- 2. What are *nature* and *nurture*, and what does it mean to say they work together to make us who we are? This one asks you to define these two terms and tell how they are both involved in our personality. How do they contribute to it? **See page 96 and 114 and following.**
- Hint:

