#### **Parkland College**

Psychology Faculty Psychology

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#### "But I already know all about sex!" Distinguishing Beliefs from Empirical Facts when Teaching Sex, Gender, and Sexuality

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# "But I already know all about sex!"

Distinguishing Beliefs from Empirical Facts when Teaching Sex, Gender, and Sexuality

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February, 2016





TCCTA's 69th Annual Convention:
"Power of Partnerships"
Westin Galleria Hotel; Houston, Texas

# A gradual change in teaching sex, gender, & sexuality



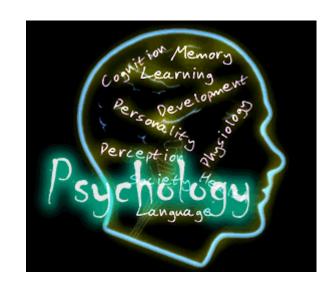
At first: "Yikes!"



And now: "Yes!"

I began to ask myself some questions:

Are these psychological topics?



I began to ask myself some questions:

- Are these psychological topics?
- Are they relevant to students' professional development?







#### I began to ask myself some questions:

- Are these psychological topics?
- Are they relevant to students' professional development?
- Can they help improve students' personal relationships?







#### I began to ask myself some questions:

- Are these psychological topics?
- Are they relevant to students' professional development?
- Can they help improve students' personal relationships?
- Will learn about these topics help students understand themselves?



Niko



Rhi



Cole

# What about you?

#### Do you....



- Teach some aspect of sex, gender and sexuality in Introductory Psychology?
- Or teach a dedicated class on sex, gender and sexuality?
- Have you been wrestling with issues about teaching sex, gender & sexuality?

### There are unique challenges of teaching the topics

- Many students say "I already know about sex!"
- Students vary in religious, political, and cultural views
- Students may be shy or feel very uncomfortable discussing topics
- Students personally relate to the material – weakly or strongly!









# An approach that can help address these challenges

- Many students say "I already know about sex!"
- Students vary in religious, political, and cultural views
- Students may feel very uncomfortable discussing these topics
- Some students personally relate to the material

Create a safe environment and help them differentiate between beliefs and empirical facts about sex, gender, and sexuality.

#### What is the difference?

#### **Beliefs**

- Personal convictions based on culture, faith, morality, and/or values
- These viewpoints are <u>not</u> based on scientific evidence
- Because of this, they cannot be verified from a scientific standpoint

Is this a belief or an empirical fact?



#### **Empirical facts**

Facts that can be verified as "true" or "false" based on scientific evidence

- Evidence is obtained from data collection & measurement
- In psychology, this occurs through the scientific method

# How can we take a beliefs vs facts approach to teaching sex, gender, & sexuality?

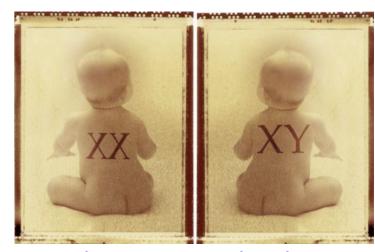
#### Focus on three main questions:

- How can we understand biological sex?
- How do we vary in gender identity?
- What are our sexual orientations?

#### Help them realize what they do & do not know

True or False?

- A person's biological sex is either male or female.
- The same prenatal tissue becomes either the female or male genitals.
- Brain differences between males and females have a large impact on how they think and act.

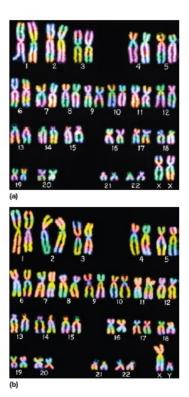


Babies conceived with sex chromosomes of XX are considered female and XY are considered male.

How well do you think students know the answers to these questions?

#### Start to replace beliefs with empirical facts

- Biological sex A person's biological status, related to three factors:
  - 1. Genetics:
    - Sex chromosomes & gonads
  - 2. Hormones:
    - Secondary & primary sex characteristics
  - 3. Interactive effects of brain & environment:
    - Brain structure & function



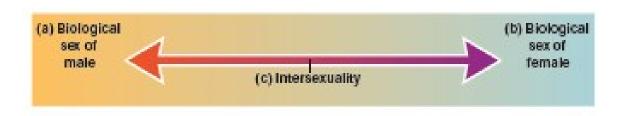
#### Develop visuals that organize the information

Learning Tips are a great way to help students mentally organize and understand information

FIVE ASPECTS OF BIOLOGICAL SEX	TYPICALLY FEMALE	TYPICALLY MALE
	GENETIC INFLUENCES	
Sex chromosomes: genetic material determined at conception by the 23rd pair of chromosomes in the new zygote	XX sex chromosomes	XY sex chromosomes
Sex glands: organs that release sex hormones and contain the cells used for sexual reproduction	Ovaries release more estrogens and develop mature egg cells.	Testes release more androgens and develop mature sperm cells.
	HORMONAL INFLUENCES	
Secondary sex characteristics: changes during puberty that are indirectly related to sexual reproduction	Increased release of estradiol	Increased release of testosterone
	Defining of waist	Greater muscle mass
	Increase in fat	Facial hair
	Breast development	Deepening voice
	Body hair (armpits)	Angular jaw
	Pubic hair	Body hair (armpits and chest)
		Pubic hair
Primary sex characteristics: changes during puberty that are directly related to sexual reproduction	Mature internal organs (uterus and ovaries with egg cells)	Mature internal organs (testes with sperm cells)
	Mature genitals (vagina)	Mature genitals (penis)
	Menarche	Spermarche
INTERACTIV	E INFLUENCES OF BRAIN AND EN	/IRONMENT
<b>Brains:</b> differences in brain structure and in mental processes	Less reactive amygdala and larger and more reactive orbito- frontal cortex create a tendency toward less physical aggression. This biological factor interacts with environmental factors.	More reactive amygdala, smaller orbit frontal cortex, and reduced coupling of amygdala and prefrontal cortex create a tendency toward greater physical aggression. This biological factor inter acts with environmental factors.

#### Relate the information to real world examples

- Intersexuality: When people experience contradictions/ ambiguities in biological sex
- This indicates that biological sex is NOT just male or female - instead, it exists on a continuum





Caster Semenya is a
South African runner who
may have a hormone
dysfunction that has led
to intersexuality.

# Support working with concepts actively & repeatedly to ensure learning

checks, for example with clickers, are a fast way to get feedback on whether students understood the information

#### Did You Get it?

- Pat and Chris have a new baby. They take one look at the genitals and declare "It's a boy!" Based on this, the parents have decided
- A. that the baby is experiencing intersexuality
- B. on the baby's biological sex
- C. that the baby has androgen insensitivity syndrome
- D. on the baby's gender

# What about you?

### Have you....



- Had opportunities to teach about biological sex?
- Used any of these methods or examples?
- Had success with any other tools to teach these concepts?

# How can we take a beliefs vs facts approach to teaching sex, gender, & sexuality?

#### Focus on three main questions:

- How can we understand biological sex?
- How do we vary in gender identity?
- What are our sexual orientations?

#### Help them realize what they do & do not know

#### True or False?

- Children start to develop a gender identity by about age 3.
- A child's gender identity is primarily a result of the way they are raised.
- A person who is transgender will be diagnosed with a psychological disorder.



Click to read about 4-year old transgender female Coy Mathis' fight to use the girls' restroom at school

How well do you think students know the answers to these questions?

#### Start to replace beliefs with empirical facts

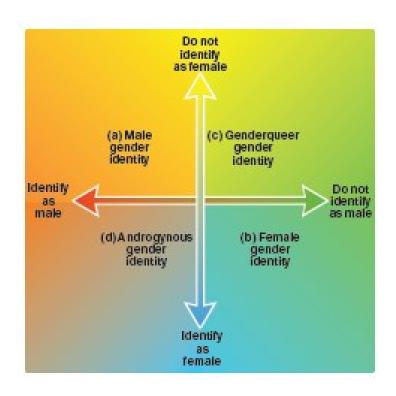
- Gender identity A person's thoughts and feelings about being more male or female
- Begins to develop at about 2-3 years old
- Research indicates this is substantially influenced by biological factors
  - ✓ Case study of David Reimer
  - ✓ Reiner & Gearheart (2004) research with 14 genetic males with ambiguous genitals



Click to hear the case study of Bruce/Brenda/David Reimer.

#### Develop visuals that organize the information

- Some people identify as male or female
- Others identify neither as male nor female – genderqueer
- And some identify as both male and female <u>– androgynous</u>
- Gender identity is NOT just male or female – it exists on a continuum



#### Relate the information to real world examples

- Transgender People who have a gender identity that is not consistent with biological sex, which is NOT a psychological disorder
- Gender dysphoria A sustained period of significant distress about gender, usually brought on by lack of social acceptance





In 2015 Bruce Jenner transitioned to female and named herself Caitlyn.

# Support working with concepts actively & repeatedly to ensure learning

#### **Think-Pair-Share**

Turn to your neighbor and discuss how you would describe Ruby Rose in terms of:

- Biological sex
- Gender identity



Watch Ruby Rose's video

Break Free here

# What about you?

#### Have you....



- Had opportunities to teach about gender identity?
- Used any of these methods or examples?
- Had success with any other tools to teach these concepts?

# How can we take a beliefs vs facts approach to teaching sex, gender, & sexuality?

#### Focus on three main questions:

- How can we understand biological sex?
- How do we vary in gender identity?
- What are our sexual orientations?

#### Help them realize what they do & do not know

#### True or False?

- A male who is romantically attracted to other males is gay
- A person's sexual orientation is most likely associated with biological factors
- A person who experiences no sexual attraction will be diagnosed with a disorder.

How well do you think students know the answers to these questions?

#### Start to replace beliefs with empirical facts

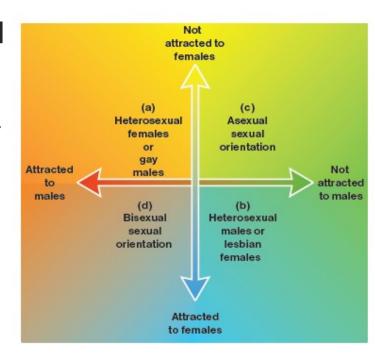
- Sexual orientation is an enduring physical, romantic and/or sexual attraction to another person
- Research suggests that it is likely
   associated with biological factors David Jay (with his girlfriend),
  - ✓ Genetics
  - ✓ Prenatal hormones
  - ✓ Childhood hormones
  - ✓ Maternal immune hypothesis



avid Jay (with his girlfriend)
who in 2002 founded the
Asexual Visibility and
Education Network.

#### Develop visuals that organize the information

- Common orientations are: heterosexual, gay, lesbian & bisexual
- Asexual person with no sexual attraction, but may have romantic & emotional attractions
- Variations are NOT psychological disorders!
- Sexual orientation also exists on a continuum
- And it can change fluidly over time and situations



#### Relate the information to real world examples



#### **Think-Pair-Share**

Turn to your neighbor and discuss how you would describe Caitlyn Jenner in terms of sexual orientation.

How might Caitlyn describe her sexual orientation?





Caitlyn has states that she is sexually attracted to females.

# Support working with concepts actively & repeatedly to ensure learning

# How would you identify your sexual orientation?

- A. Mainly heterosexual
- B. Mainly gay or lesbian
- C. Mainly bisexual
- D. Mainly asexual
- E. I do not wish to answer



Click here to access Poll

Everywhere

URL:

www.polleverywhere.com

# What about you?

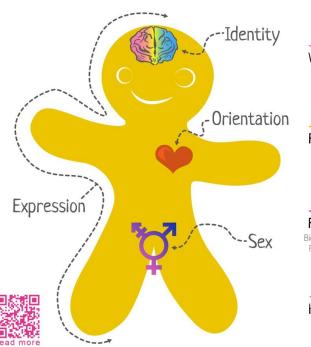
### Have you....

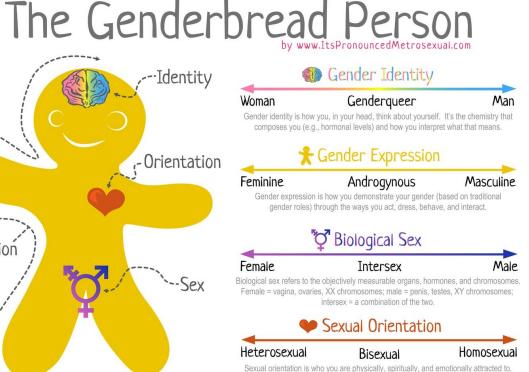


- Had opportunities to teach about sexual orientation?
- Used any of these methods or examples?
- Had success with any other tools to teach these concepts?

## The take home message for beliefs vs facts

Biological sex, gender identity, and sexual orientation are all different things!





based on their sex/gender in relation to your own.

# Why does it matter so much to teach about sex, gender & sexuality?

"If I had learned about this it would have made me much more accepting of who I was at a younger age."

"So much good information...knowing these facts may make a huge difference in people's lives."



Niko



Rhi



Cole

# Thank you very much!

- Thank you for the opportunity to work with you.
- Please feel free to contact me with any thoughts or to share resources

sgrison@parkland.edu

