

# **Chapter Outline**

How Does Sex Develop?

Sex, Gender Identity, and Gender Typing

Sex and Sexual Orientation

Sex as a Social Construction

Beyond the Binary

Making a Difference

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# **ASSUMPTIONS ABOUT SEX**



There are only two sexes

Bodies always fall into two clear, natural categories, based on biological

Sex exists as a biological fact independently of anyone's beliefs about it

Sex and gender *naturally* go together

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## **HOW DOES SEX DEVELOP? 1**

**Sexual differentiation:** genetic, hormonal, and anatomical components that develop gradually before birth

**Autosomes:** 22 pairs of non-sex chromosomes inherited by each human being

**Sex Chromosomes**: one pair of chromosomes, usually called X and Y chromosomes

- Female: Person who has two X chromosomes, X X
- Male: Person who has one X and one Y chromosome, X Y

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# **HOW DOES SEX DEVELOP? 2**

#### Sex-differentiation region of the Y chromosome or S R Y

- Gene that stimulates the embryonic sex glands or gonads to grow and develop into testes
  - Testes: Pair of male sex glands that begin producing sperm starting at puberty
- Develops at about the sixth week of pregnancy

#### Androgens: steroid hormones produced by the testes

- Testosterone: androgen that stimulates the development of internal structures of the male sexual anatomy
- Dihydrotestosterone: androgen the stimulates the growth of the penis and the formation of testicles

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#### **HOW DOES SEX DEVELOP? 3**

 Mullerian duct inhibiting hormone or M I H: prevents the internal embryonic structures from developing into female organs

In female fetuses, the gonads develop into ovaries

- Ovaries: pair of female sex glands containing eggs
- Estrogens: steroid hormones produced by the ovaries
  - Female structures of vagina, labia, and clitoris develop largely before the ovaries are formed

**Assigned sex:** label of female or male given to a baby based on the appearance of its genitals

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# **HOW DOES SEX DEVELOP? 4**

*Intersexuality*: number of specific *variations* on the theme of biological sex

· Intersexed individuals: people with any of these variations

## Variations in Fetal Development

- Klinefelter's syndrome: X X Y chromosomal irregularity in men that causes them to have a less masculine physique and appearance
- Complete androgen insensitivity syndrome or C A I S:
   Condition in which androgens fail to prompt development of male reproductive structures

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#### **HOW DOES SEX DEVELOP? 5**

- Turner's syndrome: missing sex chromosome
  - Fetus with this condition lacks androgens and estrogens during development and does not develop complete internal reproductive structures
- Hermaphrodites: historical label for people with sexually ambiguous bodies

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# **HOW DOES SEX DEVELOP? 6**

- Partial androgen insensitivity or P A I S: causes an ambiguous sex organ externally, which could be classified as either a large clitoris or a small penis
  - Internally, the testes may be located in the abdomen or the labia, instead of a scrotal sac
- Congenital adrenal hyperplasia or C A H: genetically inherited malfunction of one or more of the enzymes needed to make the steroid hormone, cortisol
  - Causes the mother's body to overproduce other hormones, which act as androgens on the developing fetus

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# Sex, Gender Identity, and Gender Typing, 1

**Core Gender Identity:** fundamental sense of belonging to a biological sex

 Underlying assumption is that all the components of sex and gender should fit together

#### Growing up with Turner syndrome

- One does not need two X chromosomes to develop a core gender identity as female
- Turner syndrome may cause developmental problems



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# Sex, Gender Identity, and Gender Typing, 2

Androgen insensitivity and identity

- Androgen insensitivity occurs in fewer than 1 in every 100,000 births
- Infants with C A I S are almost always classified as female and raised as girls

Gender identity in intersex children seems to be largely, but not entirely, dependent on social factors

 Does not mean that gender identity and gender typing are unrelated to biological sex

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# **Transgender Identity**

**Transgender**: general term referring to a variety of gender variant identities

**Gender Dysphoria or G D**: official psychiatric category for those individuals who experience a disjunction between their assigned sex and their core gender identity

 Strong and persistent desire to be the other sex or belief that one is really the other sex

**Gender affirmation surgery**: surgery to change genital anatomy and secondary sex characteristics to conform to gender identity

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# Sex and Sexual Orientation, 1

**Sexual orientation:** multidimensional concept involving erotic attraction, affectional relationships, sexual behavior, erotic fantasies, and emotional attachments

#### Is There a Gay Gene?

- Several studies have shown that same-sex sexual orientation runs in families
- Studies suggest that either particular family environments or genetic factors could increase the likelihood of L G B orientations, but cannot distinguish between the two kinds of factors.

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## Sex and Sexual Orientation, 2

- Recent studies of genetic sequencing have identified specific linkages on the X chromosome related to gay sexual orientation in men
  - Twin studies help separate the influences of genes and environment by comparing monozygotic, or M Z, with dizygotic, D Z, twins
  - If M Z twins share the same sexual orientation more often than D Z twins do, it suggests that there is some genetic contribution to sexual orientation
  - 66 percent of the M Z co-twins of gay men were also gay, compared with 30 percent of the D Z co-twins (Whitam et al., 1993)
- For females, there is little or no relationship between genetic similarity and lesbian or bisexual orientation

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## **Hormones and Sexual Orientation**

Individuals with partial androgen insensitivity syndrome are X Y males who effectively receive little androgen during fetal development

Develop ambiguous genitalia

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## **SEX as a SOCIAL CONSTRUCTION**



underlying our commonsense beliefs about sex are products of a specific culture, not universal or fixed truths about nature

When an intersexed child is born, physicians attempt to decide the **optimal gender** for the child

Criteria for best fit are flexible

**Social Construction**: assumptions

 Reproductive potential, sexual function, appearance, and the person's core gender identity need to be considered

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## **Rethinking Gender Dysphoria**

There is no evidence that cross-gender identity or behaviors in themselves create psychological problems or distress

- · Being stigmatized creates such problems
- G D diagnostic category remains controversial

Medical and psychiatric treatment of intersex and transgender provides evidence that both sex and gender are processes of social consensus and social enforcement

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# Beyond the Binary, 1

# Third sexes across cultures

- In many cultures, the idea that people come in more than two sexes is common
- Hijras or Aravanis in India
  - Third sex or "third nature" people who are neither men nor women
     Adopt female names and clothes, but they differ from women by behavior and their non-childbearing status
- fa'afafine in Samoa
  - Translates as "in the way of a woman"
  - Biological males who dress and behave as women and take up women's tasks such as caregiving and teaching
  - Treated like women in social interactions, and they are clearly differentiated from biological women and men

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# Beyond the Binary, 2

- Berdache in North American Indian culture

  - Third sex category also called the **two-spirit people**Biological males who dress as women and adopt flexible gender roles
- Pledged virgin in the Balkans, or former Yugoslavia and Albania
  - Third sex category for women
  - Nonsexual
  - Involves adopting the men's role when there is no man available
  - No longer considered or treated as a woman (Malfatto and Prtoric,

Various third-sex categories around the world challenge the assumption that sex is a binary category

Third-sex people are not considered to be gay in their respective cultures



## Genderqueer

People whose gender identities are neither exclusively male nor female, but instead are outside the gender binary

Also referred to as gender-expansive, non-binary, or agender

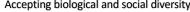
Genderfluid: person who moves between genders or whose gender fluctuates and changes across time



# **Making a Difference**

## **Equality for Gender Minorities**

- Transphobia or genderism: negative attitudes toward gender-variant people, are prevalent, and a threat to the safety of transgender individuals (Levitt and Ippolito, 2014a)
- The American Psychological Association has stated a non-discrimination policy on the basis of gender identity (A P A, 2009)



- Acceptance must grow

