THE PSYCHOLOGY OF GENDER (2 Ed.)

THE PSYCHOLOGY OF GENDER (2 ED.)

Suzanne Valentine-French and Martha Lally

COLLEGE OF LAKE COUNTY

GRAYSLAKE, ILLINOIS









THE PSYCHOLOGY OF GENDER (2 Ed.) by Suzanne Valentine-French & Martha Lally is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License, except where otherwise noted.

The book is created with a Creative Commons License, we ask for attribution if using material from the book, and that you abide by the non-commercial and share-alike the state of the properties of the propertlimitations on any derivative work from this text.

Contents

	Authors & Acknowledgement	VI
	Modules	1
	2nd Edition Changes	2
	Module 1 What is the Psychology of Gender?	3
	Module 2 How Do We Study Gender?	21
	Module 3 What are the Effects of Chromosomes and Hormones on Gender?	29
	Module 4 What are the Theories for Gender Identity?	41
	Module 5 How Accurate are Gender Differences in Physical, Cognitive, and Emotional Abilities?	56
	Module 6 How Does Gender Affect Sexual Behavior?	73
	Module 7 How Does Gender Affect Adult Interpersonal Relationships?	87
	Module 8 How Does Gender Operate in College and the Workplace?	109
	Module 9 How Does Gender Affect Physical Health?	125
1.	Module 10: How does Gender Affect Mental Health?	142
	Module 11: How Does Gender Play a Role in Aggression and Crime?	152
		152
	Gender Timeline	171
	Glossary	173
2.	Resources	187
	References	193

Authors & Acknowledgement

Authors

Suzanne Valentine-French has a MSc in Psychology from the University of Calgary. She currently teaches *Introduction to Psychology, Lifespan Development,* and the *Psychology of Gender* at the College of Lake County.

Martha Lally has PhD. in Psychology from the University of Rhode Island. She currently teaches *Introduction to Psychology*, *Lifespan Development*, *Abnormal Psychology*, and *Brain and Behavior* at the College of Lake County.

Funding & Support

Funding for this OER text has come from the College of Lake County, with the support from the Dean of Business & Social Sciences, Dr. Jeffrey Stomper.

Modules

Table of Contents

Front Matter (Authors & Acknowledgements; Table of Contents; Changes in the 2nd Edition).

The text is divided into 10 modules.

- 1. What is the Psychology of Gender?
- 2. How do we Study Gender?
- 3. What are the Effects of Chromosomes and Hormones on Gender?
- 4. What are the Theories of Gender Identity?
- 5. How Accurate are Gender Differences in Physical, Cognitive, and Emotional Abilities?
- 6. How does Gender affect Sexual Behavior?
- 7. How does Gender affect Adult Interpersonal Relationships
- 8. How does Gender operate in College and the Workplace?
- 9. How does Gender affect Physical Health?
- 10. How does Gender affect Mental Health?
- 11. How does Gender play a role in Aggression and Crime?

Gender Timeline

Student Resources

Glossary

References

2nd Edition Changes

Throughout	Added alt text to all images, made sure headings are ADA compliant for screen readers. Corrected typographical and other errors.	
Module 1	Added definition of feminism and expanded information on fourth wave feminism.	
Module 2	Guidelines for Representative Participants	
Module 3	Expanded information on transgender children and pubertal blockers and hormone treatment	
Module 4		
Module 5		
Module 6		
Module 7	Information on the Respect for Marriage Act, 2022. Effect of the pandemic shutdown on divorce court proceedings.	
Module 8	Updated news on pay equity for US women's soccer team.	
Module 9	Module 9 was split into two separate modules: Physical Health (9) & Mental Health (10). Added information on the politicization of reproduction. Roe v. Wade and recent mid-term election results on abortion rights.	
Module 10	Moved information on mental health to a separate module. Information on abortion and mental health was added.	
Module 11	Prior Module 10	
Gender Timeline	Added more recent Supreme Court Rulings	
Resources	Added this module based on information from another OER text by McRaney, K., Bridley, A., & Daffin, L.W. Jr. (2021). <i>The psychology of gender</i> (2nd ed.). Washington State University.	
Glossary & References	Updated and added in new references and glossary terms	

Module 1 What is the Psychology of Gender?

What are little boys made of? Snips and snails And puppy-dogs' tails That's what little boys are made of

> What are little girls made of? Sugar and spice And everything nice That's what little girls are made of



Sex and gender are both central to our lives, but they are often a source of controversy. Reflect on how dramatically our attitudes and beliefs regarding sex and gender have changed in the last few years. In 2016, a woman was on the final ballot representing a major political party for president. In 2017, the Boy Scouts of America opened their organization to transgender children. In the 2018 mid-term election, more women were elected to serve in congress than in any prior election in American history. In the 2020 election, a woman of color was elected as Vice President, and on January 20, 2021 Kamala Harris took the oath of office. The concepts of sex and gender shape our identities, our opportunities, and our relationships.

The Central Concepts

Sex is used to categorize people based on genetic, chromosomal, and anatomical differences as male, female, or intersex, often thought of as biologically determined. Gender refers to the social meanings ascribed to people who belong to a particular sex. The reality of these two terms is more complicated. While traditionally, sex has been thought of as untainted by societal influences, and gender as socially constructed, the argument can be made that both terms are socially constructed. As you will see in a later module, there are several biological markers

for femaleness and maleness, but most cultures use only one of those markers to assign babies to a particular sex, the external genitalia. However, nature lies. There may be a mismatch between internal and external reproductive systems, or between chromosomes and external genitalia. The **sex and gender binaries** are a social system that consists of two non-overlapping, opposing groups. Male and female, and masculine and feminine are used in most, but not all cultures, as they simplify interactions between societal members, aid in organizing division of labor, and help maintain social institutions (Bosson et al., 2019). However, our understanding of research into sex and gender has moved beyond the constraints of a binary system. Both variables currently include a range of categories that better fit to an individual's own self-identification.

Gender Identity *refers to a person's psychological sense of being male, female, both, or neither.* Categories of gender identity include:

- **Cisgender** or **cis** refers to individuals who identify with the gender assigned to them at birth. Some people prefer the term non-trans.
- **Transgender** generally *refers to individuals who identify as a gender not assigned to them at birth.* A gender transition is based on one's identity and social expressions. Some individuals who transition do not experience a change in their gender identity since they have always identified in the way that they do. The term is used as an adjective (i.e., "a transgender woman," not "a transgender"), however some individuals describe themselves by using transgender as a noun. The term transgendered is not preferred because it undermines self-definition.
- **Trans** is an abbreviated term, and individuals appear to use it self-referentially more often than transgender (Tompkins, 2014).
- Non-binary and genderqueer refer to gender identities beyond binary identifications of man or woman. The term genderqueer became popularized within the queer and trans communities in the 1990s and 2000s, and the term non-binary became popularized in the 2010s (Roxie, 2011).
- **Agender**, meaning "without gender," can describe people who do not have a gender identity, while others identify as non-binary or gender neutral, have an undefinable identity, or feel indifferent about gender (Brooks, 2014).
- **Genderfluid** which highlights that people can experience shifts between gender identities.

Additional gender identity terms exist; these are just a few basic and commonly used terms. Again, the emphasis of these terms is on viewing individuals as they view themselves and using self-designated names and pronouns.



Similar to the sex-binary, the gender-binary assumes that individuals are either masculine or feminine. However, gender identity is currently viewed to be thought of as being on a continuum. Masculinity refers to the attributes most commonly associated with men in a culture. **Femininity** refers to the attributes a culture most commonly associates with women. Androgyny refers to possessing both stereotypical masculine and feminine traits. As some stereotypical masculine traits, such as being analytical or independent, and some stereotypical feminine traits, such as being nurturing or affectionate, predict more positive outcomes for people, researchers have wanted to know if being more androgynous is psychologically healthier. Scott et al. (2015) found in their study of over 4,800 young people

in the United States, that androgyny was associated with more positive outcomes for White and Latinx girls, but not among boys. Boys who fit the more traditional masculine gender role predicted a better quality of life.

A Brief History of the Women's Movement in the U.S.



NewZealandwasthefirstnationtograntwomenthe righttovotein1893.WomeninSaudiArabiawere giventhatrightin2011.

Feminism, also known as the feminist or women's movement, encompasses many social movements that emphasize improving women's lives and rectifying gender inequality in society (Young,

1997). Overtime the focus has shifted as gains were made, or circumstances changed. The issues have ranged from women's right to vote, hold property, receive equal pay and employment opportunity, reproductive rights, domestic violence, sexual harassment, and sexual violence and exploitation. Given the diversity of issues and voices that have been added to the movement it is described as having four waves.

First Wave

What has come to be called the "first wave" of the feminist movement in the Unites States began in the mid-19th century and lasted to the passage of the 19th Amendment in 1920, which gave women the right to vote. White middle-class suffragists, such as Elizabeth Clay Stanton and Susan B. Anthony, focused on women's **suffrage**, that is, the *right to vote*. Suffragists also worked on striking down **coverture laws**, which stated upon marriage a woman could no longer own property or enter into contract in her own name, and a woman's right to education and employment (Kang et al., 2017).

Demanding women's equality, the abolition of coverture, and access to employment and education were quite radical demands at the time. These demands confronted the ideology of the **cult of true womanhood**, summarized in four key tenets: piety, purity, submission and domesticity. These held that women were rightfully and naturally located in the private sphere of the household and not fit for public, political participation, or labor in the waged economy (Kang et al., 2017). However, this emphasis on confronting the ideology of the cult of true womanhood was shaped by the white middle-class standpoint of the leaders of the movement. This leadership shaped the priorities of the movement, often excluding the concerns and participation of working-class women and women of color.

Second Wave



The "second wave" of feminism, from 1920-1980, focused generally on fighting patriarchal structures of power, and specifically on combating occupational sex segregation in employment and fighting for reproductive rights for women (Kang et al., 2017). The Civil Rights Act of 1964, a major legal victory for the civil rights movement, not only prohibited employment discrimination based on race, but Title VII of the Act also prohibited sex discrimination. When the Equal Employment Opportunity Commission (EEOC), the federal agency created to enforce Title VII, largely ignored women's complaints of employment discrimination, 15 women and one

man organized to form the National Organization of Women (NOW). NOW focused its attention and organizing on the passage of the Equal Rights Amendment (ERA), fighting sex discrimination in education, and defending *Roe v. Wade*, the Supreme Court decision of 1973 that struck down state laws that prohibited abortion within the first three months of pregnancy.

White women were not the only women spearheading feminist movements. As historian Thompson (2002) argues, in the mid and late 1960s, Latinx women, African American women, and Asian American women were developing multiracial feminist organizations that would become important players within the U.S. second wave feminist movement. However, during this era Black women writers and activists such as Alice Walker, bell hooks, and Patricia Hill Collins developed Black feminist thought as a critique of the ways in which some second wave feminists still ignored racism and class oppression and how they uniquely impact women and men of color and working-class people. bell hooks (1984) argued that feminism cannot just be a fight to make women equal with men, because such a fight does not acknowledge that all men are not equal in a capitalist, racist, and homophobic society. Sexism cannot be separated from racism, classism and homophobia, and that these systems of domination overlap and reinforce each other. These critiques led to the third wave of feminism.

Third Wave

"Third wave" feminism came directly out of the experiences of feminists in the late 20th century who grew up in a world that supposedly did not need social movements because "equal rights" for racial minorities, sexual minorities, and women had been guaranteed by law in many countries (Kang et al., 2017). However, the gap between law and reality, between the abstract proclamations of states and concrete lived experience, revealed the necessity of both old and new forms of activism. Moreover, third-wave feminism criticized second wave feminism's focus on the universality of women's experiences. Emerging from the criticism of Black feminists, third wave feminism emphasized the concept of intersectionality. **Intersectionality** views race, class, gender, sexuality, age, ability, and other aspects of identity as mutually constitutive; that is, people experience these multiple aspects of identity simultaneously and the meanings of different aspects of identity are shaped by one another.

Fourth Wave

Currently we are in the "fourth wave", and fourth wavers are not just the reincarnation of their second and third wave grandmothers and mothers. There is a greater emphasis on intersectionality and the diversity of women (Ramptom, 2015). It has borrowed from third wave feminist and understanding that feminism is part of a larger context of oppression, along with ageism, racism, ableism, classism, and those of different sexual orientations. But fourth wave feminism also rejects the gender binary and focuses on transgender issues. As Ramptom writes "feminism no longer just refers to the struggles of women; it is a clarion call for gender equity" (p.7). Gender equality was the focus of much of the women's movement. **Gender equality** refers to not discriminating on the basis of a person's gender when it comes to access to services, the allocation of resources, or opportunities (McRaney et al. 2021). **Gender equity** refers to there being fairness and justice in the distribution of resources and responsibilities on the basis of gender (McRaney, et al., 2021).

Fourth wavers have also capitalized on technological advances to promote their campaigns and raise public awareness to gain support (National Women's History Museum, 2021). Hashtags such as #YesAllWomen, #BringBackOurGirls, and #MeToo have promoted the experiences that women have with violence and harassment. Social media has also galvanized marches in various cities and in the nations capital. Fourth wavers are now more global in their message and in their membership (National Women's History Museum, 2021).

Feminist Theories

Feminist theory grew out of the feminist/women's movement that began around 1830 in the United States and Europe. Feminist theory actually consists of many different perspectives, as no single person or perspective is the main authority. Although focusing on different aspects of the female experience, all feminist theories advocate for eliminating gender inequalities and oppression. According to Else-Quest and Hyde (2018), the following are the major points of feminist theories:

- **Gender is socially constructed.** Feminist theories emphasize that individual cultures and societal influences create and maintain gender roles that perpetuate gender inequality, male domination, and female subjugation. Due to women's perceived lower status, they are discriminated against in diverse ways, including academically, politically, economically, and interpersonally.
- Men exercise power and control over women. Because men have seized power, they use that power in interpersonal relationships, including rape and domestic violence, in politics by passing laws that harm women, and economically by supporting different pay scales for jobs reflecting traditional gender roles. Men's sense of entitlement and privilege allow them to exert power without fear of consequences.
- Women's problems are due to external factors rather than internal factors. Mental health disorders in women, and being the victims of violence, are often viewed as being due to internal/personal reasons. This includes that women are naturally more emotional, and therefore more likely to suffer from a mental health disorder, or they dressed provocatively and therefore were responsible for being raped. Instead, feminist theories see external factors, such as sexism, discrimination, male aggression, and female inequality as the reasons for problems faced by women.
- Consciousness raising is an important aspect of all theories. Consciousness raising involves women first sharing their experiences and reflecting on them. Next, they engage in an analysis of their feelings and experiences. Lastly, they develop action plans to address any negative consequences from their experiences. This could include political or social actions, as well as making changes in interpersonal relationships.

Others have noted that feminist theory, as a collective, is a theoretical position which examines the world through the lens of gender but has a focus that is varied and wide-ranging (Evans, 2014). Thus, feminism is not afraid to engage in issues outside of gender, and understands that changes in the everyday circumstances of people's lives, such as technology and even the outward trappings of society, does not inevitably bring with it changes in power, privilege, and authority. Many view that it is the role of feminist theory to challenge much of our social knowledge, which has always been supported by, and maintained, the authority of men.

According to Else-Quest and Hyde (2018), Renzetti et al. (2012), and Kang et al., (2017) there are several major types of feminist theory and they include:

Liberal Feminism holds that women and men are equal and should have the same opportunities. Liberal feminists tend to work within the current system for change to ensure that women have full access to legal, educational and career opportunities. The National Organization for Women (NOW) reflects liberal feminism, and this organization worked to pass the Equal Rights Amendment (ERA) which states, "Equality of rights under the law shall not be denied or abridged by the United States or by any state on account of sex" (Else-Quest & Hyde, 2018, p. 6). The ERA was passed in the House of Representatives and Senate in 1972, and finally has been ratified by all the 38 states needed to pass it, with Illinois becoming the 37th state May 30, 2018,

and Virginia becoming the 38th on January 27, 2020. However, Congress set a 1982 deadline to ratify ERA, so the gesture by these states may be more symbolic. Moreover, several states (Idaho, Kentucky, Nebraska, South Dakota, and Tennessee) have voted to rescind their earlier ratification. However, states can only ratify an amendment, according to Article V of the constitution; they do not have the power to rescind a ratification (Equal Rights Amendment.org, 2018). This means the question of ERA is still in legal limbo.

Cultural Feminism, unlike liberal feminism, believes that women have special and unique qualities that have been devalued by a patriarchal society. The emphasis of cultural feminism is that these qualities, including nurturing, connectedness, and intuition, need to be elevated in society.

Radical Feminism opposes current political and social organizations because they are tied to patriarchy and the domination of women by men. Radical-cultural feminism argues that feminine values, such as interdependence, are preferable to masculine values, such as autonomy and dominance, and therefore men should strive to be more feminine. In contrast, Radical-libertarian feminism focuses on how femininity limits women and instead advocates for female androgyny. Because changing the current patriarchal society will be a difficult process, some radical feminists advocate for separate societies where women can work together free from men.

Women-of-Color Feminism promotes an intersectional model of feminism that emphasizes the unique situation of women of color being in multiple marginalized groups. The diversity of women's experiences is considered more important than universal female experiences.

Marxist/Socialist Feminism concludes that the oppression of women is an example of class oppression based on a capitalist system. Women's lower wages, for example, benefit corporate profits and the current capitalist economic system. Marxist/Socialist feminists argue that there should be no such category as "women's work", and they believe that women's status will only improve with a major reform of American society.

Postmodern Feminism views sex and gender as socially determined scripts. They do not support a dualistic view of gender, heteronormativity, or biological determinism Instead, postmodern feminists see gender and sexuality as more fluid. Postmodern feminism is part of the fourth wave of feminism that is evident today.

Ecofeminism is concerned with environmentalism, and some of the most powerful leaders in the environmental movement have been women. Ecofeminism emerged in the 1970s and supports an earth-based spirituality movement that incorporates goddess imagery, female reproduction, healing, and a belief that all living beings are equal and should be respected. Ecofeminism also incorporates a wide range of intersectionality, including women of color, poor women, women with disabilities, and those who are trans and non-gender conforming. Historically, marginalized groups have experienced the brunt of extreme weather, unlawful working conditions, and exposure to toxins and pollution. Ecofeminism looks at these environmental issues through a social justice lens, critically analyzes their effects, and supports the needs of affected, marginalized people (Villalobos, 2017). Additionally, ecofeminism analyzes how western economic models have exploited and discriminated against those in economically underdeveloped societies

Ecofeminism also rejects a patriarchal society that is believed to harm both women and nature. The same societal structures (sexism, racism, classism) that oppress women and minorities, are also believed to be exploiting the environment. Applying ecofeminism in practice incorporates the blending of **biocentricism**, which endorses inherent value to all living things, and **anthropocentricism**, which focuses on humans being the most

important entity in the universe. Ecofeminists support the needs of both nature and humans, and they encourage those with privilege to use it for good by advocating with, and on behalf of, others.



Black Feminism focuses on the interconnections among race, gender, class, sexual orientation and geography, as well as how they affect the wellbeing of Black women, Black families, and Black communities (Few, 2007). Even though they possess varying levels of privilege, black women still experience oppression unique to their identity. Specifically, Black men and women both experience racism and classism, but sexism exists in both personal and public settings. Although all women are affected by sexism, the relationship between Black and White women is influenced historically by

enslavement and the emergence of the White women's liberation movement. White feminist groups focused on White, middle class experiences that did not address the issues of poor and working-class Black women or address racism. Black feminists detailed how women experienced sexism differently based on their racial identity. Few (2007) stated: "Black and White womanhood differ and traditional housewife models of womanhood are not applicable to most Black women. In addition, historically, Black women have been more likely to be heads of household than White women and their labor contribution to the marketplace has always exceeded that of White women," (p. 308).

Because the women's liberation movement was seen as a white movement, and the black liberation movement was largely seen as a black male movement, Black feminist activists founded the National Black Feminist Organization (NBFO) in 1973. The NBFO was the first explicitly Black feminist organization in the United States (Few, 2007). The NBFO resulted not only from Black women's frustration with racism in the women's movement, but also a desire to raise the consciousness and connections of all Black women. Black feminists focused on defining themselves and rejecting internalized oppression as a way of fighting sexism and racism. Current Black feminists look to popular culture (e.g., hip-hop) and art (e.g., performance, photography, dance) to analyze black women's lives, activism, and the development of Black female identity.

A Brief History of Men's Movements in the U.S.

In the early 1970s informal discussion groups of men at colleges and universities started to question how male gender role stereotypes and norms were harmful to men (Renzetti et al., 2012). By the end of the decade, two camps had formed among Men's Movement groups and writers. The male-identified camp is highlighted by writers like Goldberg (1976) who wrote "The Hazards of Being Male". However, the subtitle of his book, "Surviving the Myth of Male Privilege," suggests that while he recognized the toxicity of the masculine gender role for men, he did not believe that the same role was the main reason why women were suffering under the patriarchal system. To him, and other members of this camp, patriarchy is a myth (Edley, 2017). It is men who are the subordinated sex; women are more advantaged and protected. It is women who seduce men then claim rape, women who make false claims to the courts about spousal abuse, and child abuse, to gain sole custody of their children, but it is men who are expected to pay to support the family they are no longer allowed to see (Renzetti

et al., 2012). The male-identified camp is antifeminist, and includes a number of faith based men's groups, such as the Promise Keepers and the Nation of Islam, along with groups helping men find their inner wild man.

In contrast, the female-identified camp is explicitly pro-feminist, and examines both men's relationships with women, and with other men. These groups recognize that there needs to be social changes to remove the gender inequalities. They also recognize that this domination and subordination is not just along gender lines, but also along racial, ethnic, social class, and sexual orientation. Groups such as the National Organization of Men Against Sexism (NOMAS) advocate "a perspective that is pro-feminist, gay affirmative, anti-racist, dedicated to enhancing men's lives, and committed to justice on a broad range of social issues including class, race, age, religion, and physical abilities" (NOMAS, 2017, Principles, para. 1). The Good Men Project started as research for a book by Matlack and colleagues in 2009, The Good Men Project: Real Stories from the Front Lines of Modern Manhood (Houghton et al., 2009). Matlack was interested in telling the stories of the defining moment in men's lives. Matlack said that there was a point in every man's life when he looks in the mirror and says "I thought I knew what it meant to be a man. I thought I new what it meant to be good. And I realize that I don't know either" (The Good Men Project, n.d., About us, para. 1). The Good Men Project tackles issues relevant to men's lives, from fatherhood, sex, ethics, aging, gender, sports, pornography, and politics. In their view men are neither "mindless, sex-obsessed buffoons nor the stoic automatons our culture makes them out to be" (The Good Men Project, n.d. About us, para. 4). Both groups challenge the traditional gender role for men. While NOMAS directly confronts how that role negatively impacts the lives of men and women, the Good Men Project helps men navigate the changing social landscape of sex and gender.

Masculinity Theories

Many of the early psychological theorists and researchers in psychology, as well as their research participants were men, and typically white males of a higher socioeconomic status (Pleck, 2017). So it may not seem surprising that psychology viewed men's reactions and development as the human norm and basis for psychological theories. However, given that this norm was also embedded within a particular social class, ethnic group, and sexual orientation, many men did not fit the profile for this norm. This spawned renewed interest in studying the lives of men, as men, not as the stand-in for all humans.

Over 80 years ago, the trait of masculinity-femininity (m-f) was first introduced to psychology by Terman and Miles (1936). Many studies in the 1940s focused exclusively on how males scored on measures of this trait. As many fathers had been absent in World War II, psychologists wanted to know how this impacted the gender role development of boys. As women took to the factories during the war, researchers also looked at how having a mother who worked outside of the home impacted the gender role development of boys.

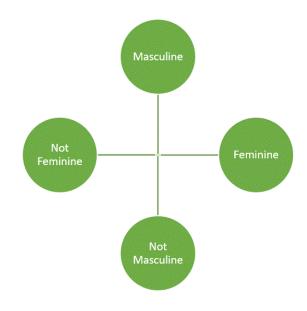


The progression of views regarding masculinity and femininity began as conceptualizing the two on opposite sides of a continuum (Else-Quest & Hyde, 2018). This one-dimensional, bipolar continuum was supported by survey questions indicating that men responded "yes" to questions related to stereotypical

masculine identities, while women responded "yes" to questions that were more stereotypical feminine.

Are masculinity and femininity really opposites of each other or can individuals demonstrate both characteristics? Of course, individuals can demonstrate androgyny, as they exhibit both masculine and feminine behaviors. The concept of androgyny is based on a two-dimensional model of masculinity-femininity instead of the one-dimensional model previously illustrated. With this representation, a person can have a high score on both femininity and masculinity and would fall in the upper right quadrant of this model.

According to Pleck (2017), research on male gender identity, using trait m-f measures, grew to link it to a wide range of phenomena: Male psychological adjustment, male homosexuality, male



transsexuality, male delinquency and hyper-masculinity, male initiation rites in non-Western cultures, boys' difficulties in the schools, and racial/ethnic and social class differences among males (Pleck, 2017, p. xii).

The research on trait m-f in men was embedded in what has come to be called the gender role identity paradigm, and this paradigm dominated ideas, theories, and research on development, personality, and clinical psychology during this time. **Gender role identity paradigm (GRIP)** made the assumption that successful personality development hinged upon the formation of a gender role that was consistent with the person's biological sex (Levant & Powell, 2017). GRIP was based on Freudian psychoanalytic theory. The failure of men to achieve a masculine identity was believed to be the root of homosexuality, negativity toward women, or hypermasculinity to compensate for this failure. This view emerged from an essentialist view about sex and gender. It assumed that "there is a clear masculine "essence" that is historically invariant, that is, that biological sex determined gender" (Levant & Powell, 2017, p. 16-17).

Gender Role Strain Paradigm (GRSP): Pleck (1981) in his book, *The Myth of Masculinity*, introduced the concept of sex-role strain. Pleck (1995) later referred to this idea as the gender role strain paradigm (GRSP). **Gender role strain** refers to *the pressure to live up to gender role ideals, and often results in psychological distress*. Pleck drew from feminist and constructionist ideologies and applied them to masculinity and the lives of men (Levant & Powell, 2017). At the heart of this paradigm is the notion that traditional gender roles serve to maintain and protect patriarchal social order. Rewards are bestowed on those who conform to sex-typed behavior, while those who challenge them are ignored or punished. Overtime, these socially constructed gender-roles are seen as the norm, natural, and expected.

According to the GRSP (Levant & Powell, 2017):

- Gender roles are defined and constructed by the stereotypes and norms of the culture
- Gender roles are contradictory and inconsistent
- · Violation of gender roles leads to social condemnation, and negative psychological consequences
- Violating gender roles have more negative consequences for men than for women

- Most people do not always act consistent with the gender roles
- Certain gender role traits are dysfunctional
- Each gender experiences gender role strain in the workplace and relationships
- Historical changes cause gender role strain

From this perspective, the traditional masculine gender role is impossible to achieve and is inherently harmful, leading men to experience gender role strain. This strain may lead men to experience pressure to conform to the male gender role, and in an effort to avoid social rejection and to gain the social reward of being considered a "man", over time men will adopt a more rigid gender role (Isacco & Wade, 2017).

Pleck identified three sources of gender role strain: Discrepancy strain, dysfunction strain, and trauma strain.

Discrepancy strain occurs when a person fails to live up to the social standards for the gender role. As gender role norms are sometimes contradictory and inconsistent, men will invariably violate the norms. Pleck proposed that this discrepancy would lead to lower-self-esteem and other negative psychological issues when men fail to live up to the standards of the masculine gender role.

Dysfunction strain suggests that some of the gender role norms are inherently psychologically and physically harmful (Levant & Powel, 2017). Consider the main components of the traditional masculine gender role.

- Men should not be feminine
- Men should not show weakness
- Men should always strive for respect and success
- Men should always seek adventure, and never shy away from risk

Within each of these components are traits that can have negative side-effects on both men and those around them. This "dark side of masculinity" (Brooks & Silverstein, 1995) involves various types of violence, relationship failures, and socially irresponsible actions. Men who fail to achieve the ideals of manhood frequently have their status as a "real" man questioned. This is the **precarious manhood hypothesis**, a tenuous social status that is difficult to attain, but easy to lose (Vandello & Bosson, 2013). Men's status as men requires validation, as a result men are constantly being asked to prove their manhood. This is something that women rarely encounter. Moreover, men who lose certain social achievements, such as employment, are more likely to expect that others will see them as less of a man.



Land diving is a rite of passage for boys on the South Pacific Island of Pentecost.

Trauma strain refers to the notion that the socialization of males to achieve the traditional masculine gender-role is traumatic (Levant & Powel, 2017). In some societies males may have to go through some rite of passage to achieve manhood. This may involve taking them away from their mothers at a young age, or facing danger or withstanding pain to prove they are a man. Even in societies that do not have a specific rite of passage, males are expected to shield their emotions, to not flinch in the face of danger, and to never show weakness.

Pleck (1995) later created the notion of masculine ideology. **Masculine ideology** is defined as "the individual's endorsement and internalization of cultural

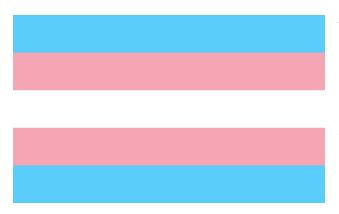
belief systems about masculinity and the male gender" (p. 19). Masculinity, like femininity, is tied to the cultural and historical context. Thus, there may be many masculinities. However, in many cultures there is often a dominant set of expectations that serve as the foundation of cultural beliefs about what it means to be a man. This has often been referred to as **hegemonic masculinity** or traditional masculinity ideology (Rowbottom et al., 2012). Pleck's concept of masculine ideology led others to consider how the extent to which men hold such beliefs affects their self-worth and is dependent on the reference group men are using.

Masculinity Contingency: This concept refers to the extent to which a man's sense of self-worth is related to his sense of masculinity (Isacco & Wade, 2017). This concept hypothesizes that a man who is high in masculinity contingency would experience more fluctuations to self-worth because it would be contingent on his masculinity being validated by others. Masculinity contingency involves both **contingency threat**, which refers to the extent to which a lack of masculinity threatens a man's self-worth, and **contingency boost**, where confirmation of masculinity elevates a man's self-worth.

Male Reference Group Identity Dependence: This theory was proposed by Wade (1998) and is based on Erikson's ego identity theory and Sherif's reference group theory (Isacco & Wade, 2017). Ego identity is the self-image that we form in adolescence and young adulthood that is the integration of our ideas about who we are and who we want to be (Schultz & Schultz, 1994). A reference group is the group we use for comparison. It provides us with the norms, expectations, beliefs, and customs. The "extent to which a male is dependent on a male reference group for his gender role self-concept" defines male reference group identity dependence (Isacco & Wade, 2017, p.144).

According to this theory there are three levels of psychological relatedness: psychological relatedness to all males, to just some males, or no sense of connection to other males (Isacco & Wade, 2017). The theory hypothesizes that when males feel relatedness to just some groups of men their gender role self-concept is likely to conform to that group's norms, and such men will hold more rigid views about what is appropriate, expected, or desired behavior in men. When the connection is to all males, since there is no single reference group, the gender self-concept is likely to be more self-defined, and such men's gender-related attitudes will be more flexible and autonomous. If there is no male reference group there may be confusion with regard to gender-related norms and attitudes, and the male may experience feelings of alienation and insecurity.

Gay Rights and Transgender Movements



According to Morris (2016), there is historical evidence of same-sex relationships in every documented culture. Further, there is evidence of individuals living as a gender different than the one assigned at birth. Females lived as males in order to be part of the military, attend schooling and work, while males also exhibited transgender behavior, especially in the performance arts. Despite the presence of LGBTQ individuals in diverse cultures, European and Christian colonizers rejected behaviors that deviated from their views of

masculine and feminine roles and enforced sodomy laws, which defined certain sexual acts as crimes. Consequently, through much of history, LGBTQ individuals were stigmatized, arrested and labeled deviant.

Although there had been organizations that advocated for the acceptance of same sex relationships since the late 19th century, the uprising at the Stonewall Inn in New York's Greenwich Village on June 28, 1969 was an important turning point (Morris, 2016). Fed up with ongoing police raids, patrons of the bar fought back and galvanized the gay liberation movement. The 1970s saw the creation of political organizations focused on gay rights. Lesbian movements also emerged as many females felt excluded from the leadership of most gay liberation groups. Another important turning point was in 1973 when the American Psychiatric Association removed homosexuality from the Diagnostic and Statistical Manual of Mental Disorders. No longer would the LGBTQ community be at risk for a psychiatric diagnosis, job dismissal, or loss of a child custody case.

New legal gains for gay and lesbian couples in America occurred in 2000 when same-sex civil unions were recognized in Vermont. By 2004, same-sex marriages took place in Massachusetts and on June 26, 2015, the United States Supreme Court ruled that the Constitution guarantees same-sex marriage. The 21st century has also seen the emergence of greater transgender visibility and support for transgender equal rights, as well as the increased use of non-binary terms (Morris, 2016). On June 15, 2020, the United States Supreme Court ruled that gay, lesbian, and transgender people are protected from employment discrimination. A majority of the court justices determined that the Civil Rights Act of 1964, barring discrimination based on sex, included discrimination against people based on their sexual orientation or gender identity (Sherman, 2020).

Despite these gains and visibility, there is still a perception held by many that a transwoman is not really a woman. For example, author J. K. Rowling was criticized for emphasizing the definition of a woman based on menstruation. In fact, some feminists do not include transwomen as women and align with gendercritical feminism, which advocates reserving women's spaces for ciswomen (Zanghellini, 2020). Reasons given for the exclusion of transwomen as women, is that transwomen were socialized as cismales and not as women. Therefore, transwomen lack the distinctive experience of sex-based subordination faced by ciswomen. Additionally, gender-critical feminism asserts that transwomen would undermine the safety of ciswomen by accessing women-only spaces (e.g., bathrooms and changing rooms), and thus women's bodies. Consequently, ciswomen would be vulnerable to enduring predatory male behavior. Further discussions of individuals in the LGBTQ community occur in later modules.

Main Themes of Gender Studies

There are a few themes that run throughout the text. The first theme, essentialism versus constructivism, centers on how we perceive the true nature of gender. This central belief strongly impacts how we interpret and react to the concept of gender, gender issues, and the people who occupy various gender categories. The second theme focuses on the dynamics of power in a society and how certain forms of power often reside with one gender more than the other. One dynamic of power is demonstrated through sexism. This shapes the experiences, opportunities, and developmental course for people. The final theme is intersectionality. Gender is but one of a myriad of other social categories (e.g., age, race, ability, wealth) that influence people's lives. These themes underlie many of the topics and issues discussed in the rest of the text.

Essentialism vs. Constructivism:

Identities are the categories we use to define both ourselves and other people. In many societies the boundaries between different categories of people seem clear and straightforward. Someone is a male, Hispanic, heterosexual, and Catholic. This "black and white" way of thinking about the world is at the heart of essentialism. In **essentialism** the characteristics that are a part of a category are assumed to be universal, inherent, and unambiguous (Newman, 2017). These characteristics are viewed as part of the individual, not embedded within a social context. The categories in which we place ourselves and others are also assumed to be immutable. For example, the essentialist view assumes that people cannot change their sexual orientation. If someone later in life enters into a same-sex relationship, from the essentialist view, this person has always been homosexual. Sex, gender, and sexual orientation are viewed as unchanging characteristics of the individual.

This essentialist view can have important consequences. If one believes that an inherent characteristic of a man is to be dominant and assertive, then should they not, by the very virtue of being men, hold the positions of power? If it is an essential quality of women to nurture, should they not be given the role of caregiver? From this perspective it is only "natural" that women take care of others and that men lead. This can lead to, and be used to, justify social inequalities between groups in a society.

In contrast, **constructivism**, also called social constructivism, *argues that society creates what we believe to be true* (Newman, 2017). Thus, what we believe to be reality is always a creation of our culture and time period. Geocentricity, the belief that the sun and other planets revolved round the earth, was a commonly held view until it was eventually displaced by the work of Copernicus, Galileo, and Kepler. Just like our knowledge of the universe has changed over time, so too has our understanding of sex and gender. The constructivist view recognizes that such identifiers depend on the context. The meaning of such categories are different between cultures and can change over time. For instance, the original definition of heterosexual was someone who preferred both sexes (Katz, 2003). This means these categories are historically or culturally specific and, contrary to the essentialist view, are often fluid rather than fixed. This book will take the constructionist view about sex and gender, and you will see that "gendered behavior results from a complex interplay of genes, gonadal hormones, socialization, and cognitive development related to gender identification" (Hines, 2011, p. 70).

Dynamics of Power:

Human societies throughout the ages have typically been based on hierarchies with dominant groups holding power over subordinate groups. Power can come in many forms in a society. **Structural power** determines

who makes the decisions and laws that govern the society and can also determine who holds, and metes out, resources. Structural power controls society at large and this is typically in the hands of men. **Dyadic power** refers to the power to initiate intimate relationships and control the decisions in those relationships. Dyadic power controls more the family and home. In many, but not all cultures and families, women control more of the dyadic power (Wingood & DiClemente, 2000).



Khasi people follow a matrilineal system of descent and inheritance.

Patriarchy is the term used to describe societies that place power and resources in the hands of males. Most patriarchal societies are also patrilineal, meaning that lineage and wealth in a family is passed down from fathers. Patrilocal describes cultures where women leave their families to live with or near their husband's family. Matriarchy is the term used to describe societies that place structural power and resources in the hands of females. There is little evidence that true matriarchal societies occurred in human history (Bosson et al., 2019). However, there is evidence of matrilineal societies, even today, where the lineage and wealth is passed down from mothers, and matrilocal cultures where men move to live with or near their wife's family.

Sexism:



The dynamics of power in a culture influences the experiences of different genders. This is illustrated in the concept of sexism. **Sexism or gender discrimination** is a form of prejudice and/or discrimination based on a person's sex or gender (Bosson, et al., 2019). Sexism can affect any sex that is marginalized or oppressed in a society; however, it is particularly documented as affecting females. It has been linked to stereotypes and gender roles and includes the belief that males are intrinsically superior to other sexes and genders. Extreme sexism may foster sexual harassment, rape, and other forms of sexual violence.

Sexism can exist on a societal level, such as in hiring, employment opportunities, and education. In the United States, women are less likely to be hired or promoted in male-dominated professions, such as engineering, aviation, and construction (Funk & Parker, 2018). In many areas of the world, young girls are not given the same access to nutrition, healthcare, and education as boys. Sexism also includes people's expectations of how members of a gender group should behave. For example, women are expected to be friendly, passive, and nurturing; when a woman behaves in an unfriendly or assertive manner, she may be disliked or perceived as aggressive because she has violated a gender role (Rudman, 1998). In contrast, a man behaving in a similarly unfriendly or assertive way might be perceived as strong

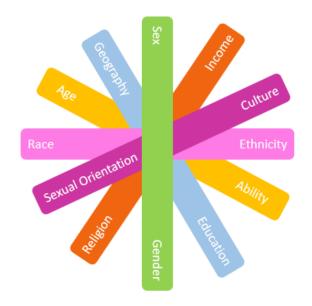
or even gain respect in some circumstances.

Glick and Fiske (1997) proposed the theory of **ambivalent sexism**, which explains how sexism can simultaneously take the form of both hostility and benevolence. Ambivalent sexism includes both **benevolent sexism**, that is, positive attitudes toward an individual in a gender group often when they engage in traditional roles and **hostile sexism**; that is, negative attitudes toward an individual in a gender group often when they engage in non-traditional roles. For example, King (2015) investigated how store employees view pregnant women when applying for a job and when asking for help. In field experiments, women wearing a pregnancy prosthesis encountered more subtle forms of discrimination, including rudeness, hostility, and decreased eye contact, when applying for a retail job than when they did not appear pregnant. Conversely, when the same women asked for help finding a gift, she received more positive reactions and greater assistance when appearing to be pregnant. Ambivalent sexism explains these results by focusing on how the women demonstrated traditional gender roles. The women were "punished" when asking for a job (hostile sexism) and "rewarded" when asking for assistance (benevolent sexism). Both types of sexism support patriarchy and maintain traditional gender roles for both women and men.

Intersectionality:



Kimberlé Williams Crenshaw



In 1976, five Black women from Missouri filed a law suit alleging that General Motors discriminated against Black women. In DeGraffenreid v. General Motors, these women argued they were excluded from employment due to compound discrimination. They contended that only white women were hired for office and secretarial jobs. The courts weighed the allegations of race and gender discrimination separately and found that the employment of Black male factory workers disproved racial discrimination, and the employment of White female office workers disproved gender discrimination. The court declined to consider compound discrimination and dismissed the case. Kimberlé Williams Crenshaw often refers to this case as an inspiration for developing **intersectional theory**, or the study of how overlapping or intersecting social identities relate to oppression, domination or discrimination.

According to Crenshaw (1991), the concept of intersectionality, arising from intersectional theory, identifies a mode of analysis integral to gender and sexuality studies. Notions of gender, and the way a person's gender is interpreted by others, are always impacted by the way that person's race is interpreted. For example, a person is never received as just a woman, but how that person is racialized impacts how the person is

received as a woman. So, notions of blackness, brownness, and whiteness always influence gendered experience, and there is no experience of gender that is outside of an experience of race. In addition to race, gendered experience is also shaped by age, sexuality, class, and ability; likewise, the experience of race is impacted by gender, age, class, sexuality, and ability (Kang et al., 2017).

Older, minority women can face ageism, racism, and sexism, often referred to as **triple jeopardy** (Hinze, et al., 2012), which can adversely affect their life in late adulthood. Older adults who are African American, Mexican American, and Asian American experience psychological problems that are often associated with discrimination by the White majority (Youdin, 2016).

When socioeconomic status is added into the mix, the experiences of older men and women can greatly differ. According to Quinn and Cahill (2016), the poverty rate for older adults varies based on gender, marital status, race, and age. Women aged 65 or older were 70% more likely to be poor than men, and older women aged 80 and above have higher levels of poverty than those younger. Married couples are less likely to be poor than nonmarried men and women, and poverty is more prevalent among older racial minorities. In 2017 the poverty rates for White older men (5.8%) and White older women (8.0%) were lower than for Black older men (16.1%), Black older women (21.5%), Hispanic older men (14.8%), and Hispanic older women (19.8%) (Li & Dalaker, 2019).

Understanding intersectionality requires a particular way of thinking. It is different than how many people imagine identities operate. An intersectional analysis of identity is distinct from single-determinant identity models and additive models of identity. A **single determinant model of identity** presumes that one aspect of identity, say, gender, dictates one's access to or disenfranchisement from power. An example of this idea is the concept of "global sisterhood or brotherhood," or the idea that all women or all men across the globe share some basic common political interests, concerns, and needs (Morgan 1996). Unfortunately, if the analysis of social problems stops at gender, what is missed is an attention to how various cultural contexts shaped by race, religion, and access to resources may actually place some men's and women's needs at cross-purposes to other men's and women's needs. Therefore, this approach obscures the fact that men and women in different social and geographic locations face different problems. Although many white, middle-class women activists of the mid-20th century US fought for freedom to work and legal parity with men, this was not the major problem for women of color or working-class white women who had already been actively participating in the US labor market as domestic workers, factory workers, and enslaved laborers since early US colonial settlement. Campaigns for women's equal legal rights and access to the labor market at the international level are shaped by the experience and concerns of white American women, while women of the global south (a term used to replace third world nations), in particular, may have more pressing concerns: access to clean water, access to adequate health care, and safety from the physical and psychological harms of living in tyrannical, war-torn, or economically impoverished nations.

In contrast to the single-determinant identity model, the **additive model of identity** simply adds together privileged and disadvantaged identities for a slightly more complex picture. For instance, a Black man may experience some advantages based on his gender, but has less access to power based on his race. The additive model does not take into account how our shared cultural ideas of gender are racialized and our ideas of race are gendered and that these ideas influence access to resources and power, such as material, political, and interpersonal. We cannot simply pull these identities apart because they are interconnected and mutually enforcing. In summary, an intersectional perspective examines how identities are related to each other in our own experiences and how the social structures of race, class, gender, sexuality, age, and

ability intersect for everyone. As opposed to single-determinant and additive models of identity, an intersectional approach develops a more sophisticated understanding of the world and how individuals in differently situated social groups experience differential access to both material and symbolic resources.

The following chapters will discuss the contemporary theories and research on gender.

Module 2 How Do We Study Gender?

Case Study: Bias in Medical Research



If these rabbits are like most animals in medical research, they are likely to be male.

It may surprise some consumers that "there are no mandatory FDA requirements for prospectively designing clinical trials to investigate the impact of one's sex on drug receptivity or adverse effects or for conducting appropriate and complete analysis by sex" (McGregor et al., 2016, p.xx). Not surprisingly most participants in clinical trials are male, unless the drug or treatment is targeted for a problem faced only by females. Research with animals shows the same gender bias, with studies using only males, not reporting the gender of the animals, or not reporting whether gender had any impact on outcomes (Beery & Zucker, 2011). In response to this growing concern, the National Institute of Health (NIH, 2015) has made

the government funding of research contingent on sex being "factored into research designs, analyses, and reporting in vertebrate animal and human studies. Strong justification from the scientific literature, preliminary data, or other relevant considerations must be provided for applications proposing to study only one sex" (para. 4). While the topic of health and gender will be considered in more detail in a later module, a growing body of research is showing that there is a reason to be concerned about the absence of females in clinical trials (Regitz-Zagrosek, 2012).

Another source of bias is how researchers, and the general public, interpret findings of gender differences. When researchers find a difference in the performance between groups in their study they often report whether the finding was statistically significant. What does that mean? Was there a big difference in performance; a slight difference? As you learned in Introduction to Psychology, statistical significance only tells you how unlikely this difference was due to chance. What it does not tell you is how large or important is this difference. This is a point we will come back to later in the module. Some people, including scientists, when ascribing meanings to findings of gender differences take a maximalist approach, emphasizing differences and often assuming no real overlap in the performance of different genders, while others take a minimalist approach, and assume that although the difference is statistically significant, there is likely considerable overlap (Unger & Crawford, 1996). The maximalist approach can lead people to ignore the similarities between genders. This can lead to the perpetuation of stereotypes and exaggerate beliefs about the genders. However, the minimalist approach

also has its risks as differences do exist among the sexes and genders. Consequently, either bias in interpreting differences is helpful. What researchers and the general public need to ask is how important are these differences, and what do these differences mean.

Research in the Psychology of Gender

An important part of learning any science, including psychology, is having a basic knowledge of the techniques used in gathering information. The hallmark of scientific investigation is that of following a set of procedures designed to keep questioning or skepticism alive while describing, explaining, or testing any phenomenon. Science involves continuously renewing our understanding of the subjects in question and an ongoing investigation of how and why events occur. The **scientific method** is *the set of assumptions, rules, and procedures scientists use to conduct research* (Lally & Valentine-French, 2019). The following information explains the different types of research designs (Lally & Valentine-French, 2019):

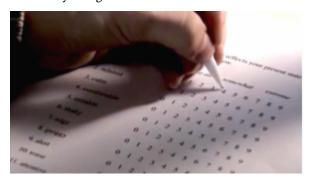
- **Research design** is the specific method a researcher uses to collect, analyze, and interpret data. Psychologists use many types of research designs in their research, and each provides an essential avenue for scientific investigation.
- **Descriptive research** is research that describes what is occurring at a particular point in time.
- **Correlational research** is research designed to discover relationships among variables and to allow the prediction of future events from present knowledge.
- **Experimental research** is research in which a researcher manipulates one or more variables to see their effects.
- **Ex post facto research** is research in which groups of people are compared on a participant variable, such as men and women.
- **Quasi-experimental research** *includes both participant variables and experimental (manipulated) variables* (Bosson et al., 2019). These main methods and examples will be examined below.

Descriptive Research

Case Study: Sometimes the data in a descriptive research project are based on only a small set of individuals. These research designs are known as **case studies** which are descriptive records of one or a small group of individuals' experiences and behavior. Sometimes case studies involve ordinary individuals, but more frequently, case studies are conducted on individuals who have unusual or abnormal experiences. The assumption is that by carefully studying these individuals, we can learn something about human nature. Case studies have a distinct disadvantage in that, although it allows us to get an idea of what is currently happening, it is usually limited to static pictures. Although descriptions of particular experiences may be interesting, they are not always transferable to other individuals in similar situations. They are also time consuming and expensive, as many professionals are involved in gathering the information.

Observations: Another type of descriptive research is known as observation. When using **naturalistic observation**, *psychologists observe and record behavior that occurs in everyday settings*. However, naturalistic observations do not allow the researcher to have any control over the environment. **Laboratory observation**, unlike the naturalistic observation, is *conducted in a setting created by the researcher*. This permits the researcher to control more aspects of the situation. Concerns regarding laboratory observations are that the participants

are aware that they are being watched, and there is no guarantee that the behavior demonstrated in the laboratory will generalize to the real world.



How many surveys have you taken?

Survey: In other cases the data from descriptive research projects come in the form of a survey, which is a measure administered through either a verbal or written questionnaire to get a picture of the beliefs or behaviors of a sample of people of interest. The people chosen to participate in the research, known as the sample, are selected to be representative of all the people that the researcher wishes to know about called the population. A representative sample would include the same percentages of genders, age groups, ethnic groups, and socio-economic groups as the larger population.

Surveys gather information from many individuals in a short period of time, which is the greatest benefit for surveys. Additionally, surveys are inexpensive to administer. However, surveys typically yield surface information on a wide variety of factors, but may not allow for in-depth understanding of human behavior. Another problem is that respondents may lie because they want to present themselves in the most favorable *light, known as* **social desirability**. They also may be embarrassed to answer truthfully or are worried that their results will not be kept confidential. Additionally, questions can be perceived differently than intended.

Interviews: Rather than surveying participants, they can be interviewed which means they are directly questioned by a researcher. Interviewing participants on their behaviors or beliefs can solve the problem of misinterpreting the questions posed on surveys. The examiner can explain the questions and further probe responses for greater clarity and understanding. Although this can yield more accurate results, interviews take longer and are more expensive to administer than surveys. Participants can also demonstrate social desirability, which will affect the accuracy of the responses.

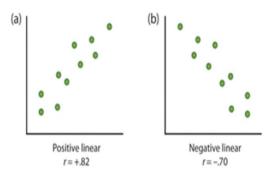
Psychophysiological Assessment: Researchers may also record psychophysiological data, such as measures of heart rate, hormone levels, or brain activity to help explain behavior. These measures may be recorded by themselves or in combination with behavioral data to better understand the bidirectional relations between biology and behavior.

Secondary/Content Analysis involves analyzing information that has already been collected or examining documents or media to uncover attitudes, practices or preferences. There are a number of data sets available to those who wish to conduct this type of research. For example, the U. S. Census Data is available and widely used to look at trends and changes taking place in the United States. The researcher conducting secondary analysis does not have to recruit participants, but does need to know the quality of the information collected in the original study.

Correlational Research

In contrast to descriptive research, which is designed primarily to provide static pictures, correlational research involves the measurement of two or more relevant variables and an assessment of the relationship between or among those variables. For instance, the variables of height and weight are systematically related (correlated) because taller people generally weigh more than shorter people.

The **Pearson Correlation Coefficient**, symbolized by the letter r, is the most common statistical measure of the strength of linear relationships among variables. The value of the correlation coefficient ranges from r= –1.00 to r = +1.00. The strength of the linear relationship is indexed by the distance of the correlation coefficient from zero (its absolute value). For instance, r = –.54 is a stronger relationship than r= .30, and r = .72 is a stronger relationship than r= –.57. The direction of the linear relationship is indicated by the sign of the correlation coefficient. Positive values of r (such as r = .54 or r = .67) indicate that the relationship is positive (i.e., the pattern of the dots on the scatter plot runs from the lower left to the upper right), whereas negative values of r (such as r = –.30 or r = –.72) indicate negative relationships (i.e., the dots run from the upper left to the lower right).



Some examples of relationships between two variables as shown in scatter plots

When individuals have high values for one variable also tend to have high values for the other variable, as in part (a), the relationship is said to be **positive correlation**. In contrast, **negative correlations**, as shown in part (b), occur when high values for one variable tend to be associated with low values for the other variable.

An important limitation of correlational research designs is that they cannot be used to draw conclusions about the causal relationships among the measured variables. Consider, for instance, Swartout's (2013) study where he surveyed college men about their

peer's attitudes toward women and measured the male respondents own hostility toward women. Swartout found that men whose peers held more hostile views toward women were positively correlated with the men's own hostility toward women. While it is possible that the views of peers may influence an individual's views and actions, it is possible that these men selected peers who held similar views to their own. Still another possible explanation for the observed correlation is that it has been produced by the presence of a *third variable*.

A **third variable** is a variable that is not part of the research hypothesis but produces the observed correlation between them. In our example, a potential third variable is men's adherence to the male gender role norms. Their adherence to such norms may shape their attitudes toward women; it may also lead them to associate with peers who hold similar views. While it may appear that peers' views influence individual views on women, it may be due to the unmeasured variable of adherence to the male gender role that is causing both individual and peer attitudes.

For this reason, we are left with the basic limitation of correlational research: **Correlation does not demonstrate causation**! It is important that when you read about correlational research projects, you keep in mind the possibility of third variables.

Correlational research can be used when experimental research is not possible because the variables cannot be manipulated or it would be unethical to use an experiment. Correlational designs also have the advantage of allowing the researcher to study behavior as it occurs in everyday life. We can also use correlational designs to make predictions. For instance, we can predict from the scores on a measure of masculinity, men's body image issues. However, we cannot use such correlational information to determine whether one variable caused another variable. For that, researchers rely on an experiment.

Experimental Research

The goal of the experimental method is to provide more definitive conclusions about the causal relationships among the variables in a research hypothesis than what is available from correlational research. Experiments are designed to test **hypotheses**, or *specific statements about the relationship between variables*. Experiments are conducted in a controlled setting in an effort to explain how certain factors or events produce outcomes. A **variable** is anything that changes in value. In the experimental research design, the variables of interest are called the independent variable and the dependent variable. The **independent variable** in an experiment is the causing variable that is created or manipulated by the experimenter. The **dependent variable** in an experiment is a measured variable that is expected to be influenced by the experimental manipulation.

A good experiment randomly assigns participants to at least two groups that are compared. **Random assignment** refers to using chance to determine which condition of the experiment research participants receive. The **experimental group** receives the treatment under investigation, while the **control group** does not receive the treatment the experimenter is studying as a comparison. Additionally, experimental designs control for **extraneous variables**, or variables that are not part of the experiment that could inadvertently effect either the experimental or control group, thus distorting the results.

A psychologist studying gender might be interested in whether people perceive males and females differently, and whether those perceptions influence people's interpretation of the behavior of someone they have been told is male or female. The psychologist could videotape two children dressed in snowsuits throwing snowballs and engaged in rough and tumble play. The psychologist would then randomly assign some research participants to a group that is told that the children are boys, while other participants are randomly assigned to a group that is told that the children are girls. The psychologist might then measure how aggressive the participants in both groups label the children's behavior. In this study, the variable being manipulated (independent variable) is whether participants are led to believe the children are male or female. The variable that is expected to change (dependent variable) as a result of that manipulation is the participants' ratings of aggressiveness. This was the scenario behind a landmark study by Condry and Ross (1985). Adults gave lower ratings of aggression in the play behavior when they were lead to believe that the two children were boys, than when they were lead to believe that at least one or both children were girls. Rough and tumble play is often seen as more typical play behavior for boys, thus is viewed as "playful" rather than aggressive.

Despite the advantage of determining causation, experiments do have limitations. One is that they are often conducted in laboratory situations rather than in the everyday lives of people. Therefore, we do not know whether results that we find in a laboratory setting will necessarily hold up in everyday life. In addition, some variables are not experimental variables as we cannot randomly assign people to these variables. Such variables include age, gender, sex, ethnicity, race, and socioeconomic status. These are called **participant variables** as they are naturally occurring characteristic of the research participant, and they are measured rather than manipulated.

Ex Post-Facto Research

In ex post-facto research the researcher uses pre-existing groups, such as men and women, and compares them on a dependent variable (Bosson et al., 2019). For instance, psychologists might want to test whether women talk more than men. The researcher might watch men and women interacting with a target person

and count the number of words they use in a set time interval. On the surface, these studies look like experiments, but the absence of random assignment makes them more correlational than experimental.

Quasi-experimental research

Psychologists might incorporate both experimental and participant variables into their research. This is the quasi-experiment. In a Quasi-experiment only some variables are actually manipulated by the experimenter, and participants are randomly assigned to these variables only. Participants cannot be randomly assigned to variables like age or gender. These variables are not truly experimental, but are being used to understand participants reactions in the study. The value of quasi-experiments is that they allow researchers to examine the interaction between experimental variables and participant variables.

Meta-analysis and Effect Size

Interpreting Effect Sizes		
d value	Meaning	
0.00-0.10	Near Zero	
0.11-0.35	Small	
0.36-0.65	Medium	
0.66-1.00	Large	
>1.00	Very Large	
Source: Hyde (2005)		

Once several studies have been conducted on a topic, such as whether there are gender differences in math skills, researchers can combine the results of these studies to look for general trends in the research. A meta-analysis is a technique for analyzing and integrating the results from several studies (Hyde, 2005). The unit of analysis in meta-analysis is effect size, which is a way of quantifying the difference between two groups. For instance, a study may find a statistically significant difference between the performance of males and females on a measure of arithmetic. While statistical significance tells us that the observed difference was unlikely due to chance, it does not tell us whether the

difference was meaningful or trivial. One common method for calculating the effect size is the **d statistic**, which *quantifies the difference between group means in standardized units*. In a single study, the d statistic would express the difference between the average female and the average male score in units of standard deviation. In meta-analysis, the d statistic is the average sex difference in standard deviation units across all the studies that were used in the meta-analysis. A negative d value shows a female advantage and positive d value conveys a male advantage.

Let us look at some examples:

- Height is 2.0. These means that the average male is taller than the average female. This difference would be considered a very large difference.
- Perceptual speed is -.48. This indicates that the average female responds quicker to perceptual tasks than the average male. This difference represents a medium effect size.
- Self-esteem for those aged 60 and over is .03. This indicates a negligible difference between males and females.

The d statistic will be used throughout the textbook to indicate the significance of gender differences.

Between Group and Within Group Variance

Another way to consider effect size is in terms of how much overlap there is between comparison groups. The more overlap between the distribution of scores of two groups the more similar are the performance of the two groups. **Between-group variance** refers to the difference between the average score of each group, while the **within-group variance** refers to how spread out are the scores within a group. For instance the average American male weighs 197.8 pounds and the average American female weighs 170.5 pounds (CDC, 2020). This would describe the between group variance. Yet, not all American men weigh 197.8 pounds. This would describe the within-group variance.

APA Guidelines for Conducting Ethical Research

One of the issues that all scientists must address concerns the ethics of their research. Research in psychology may cause some stress, harm, or inconvenience for the people who participate in that research. Psychologists may induce stress, anxiety, or negative moods in their participants, expose them to weak electrical shocks, or convince them to behave in ways that violate their moral standards. Additionally, researchers may sometimes use animals, potentially harming them in the process.

Decisions about whether research is ethical are made using established ethical codes developed by scientific organizations, such as the American Psychological Association, and federal governments. In the United States, the Department of Health and Human Services provides the guidelines for ethical standards in research. The following are the American Psychological Association code of ethics when using humans in research (APA, 2016).

- **No Harm:** The most direct ethical concern of the scientist is to prevent harm to the research participants.
- **Informed Consent:** Researchers must obtain **informed consent**, which explains as much as possible about the true nature of the study, particularly everything that might be expected to influence willingness to participate. Participants can withdraw their consent to participate at any point.
- **Confidentiality:** Researchers must also protect the privacy of the research participants' responses by not using names or other information that could identify the participants.
- **Deception: Deception** occurs whenever research participants are not completely and fully informed about the nature of the research project before participating in it. Deception may occur when the researcher tells the participants that a study is about one thing when in fact it is about something else, or when participants are not told about the hypothesis.
- **Debriefing:** At the end of a study **debriefing**, which is a procedure designed to fully explain the purposes and procedures of the research and remove any harmful aftereffects of participation, must occur.

Guidelines for Gender-Fair Research

Bosson et al. (2019) outline five guidelines to promote gender-fair research.

• **Researchers should always report the demographics of their sample.** Studies that use only one gender should not generalize to others. In addition, samples should not be selected because of assumptions

based on the topic, such as studying only mothers when the topic is on parenting. Researchers should also examine whether their findings differ based on the demographic samples.

- Researchers should use "non-gender biased, non-evaluative terminology" (Bosson et al, 2019, p.67), when describing their sample or findings. Researchers should avoid androcentric, hetero-centric terminology or avoid interpreting their findings from a andro- or heteronormative model.
- Researchers should avoid exaggerating the rate and size of gender differences. Researchers need to make clear the distinction between statistical significance and substantive significance. Not all statistically significant results are large or have practical importance. Researchers need to report effect sizes.
- Researchers should avoid implying gender differences are due to biological causes if biological factors were not examined. This is a particular caution when examining some of the claims made by evolutionary psychologists. Discovering a gender difference among 21st century men and women does not imply a biological underpinning. Biological explanations should only be given if biological variables were measured.
- Researchers should reflect on their assumptions that may underlie their research questions, methods, and interpretation of the findings. Researchers should examine both confirming and disconfirming evidence. They should critically review how their assumptions about gender or other social issues may influence the questions they ask in their research. Researchers should also consider the intersectionality of gender with other variables.

Guidelines for Representative Participants

An important area that especially needs to be addressed is the lack of participant diversity in psychological research (Andoh, 2021). Meaningful psychological research requires a representative sample of the population. Unfortunately, most standardization samples in psychological research are made up of individuals from Western, educated, industrialized, rich, and democratic (WEIRD) societies (Henrich et al., 2010). In reviewing databases from across the behavioral sciences, Heinrich and colleagues found that there was substantial variability in results, and WEIRD participants were unusual compared to other members of the species. Heinrich et al. reviewed research on visual perception, fairness, cooperation, spatial reasoning, categorization and inferential induction, moral reasoning, reasoning styles, self-concepts and related motivations, and the heritability of IQ. They found that members of WEIRD societies, who were predominantly from American universities and Europe, were less representative of the world populations as a whole. The results obtained from WEIRD participants often distort the generalizations made about mental processes and human behavior, and consequently more research on Black, Indigenous, and other people of color (BIPOC) is needed (Andoh, 2021).

In the next module we will examine the role of biology on gender, including genes, prenatal hormones, and the variations in sexual development. The module will also consider how biology affects sexual development across the lifespan.

Module 3 What are the Effects of Chromosomes and Hormones on Gender?

Case Study: Pidgeon Pagonis

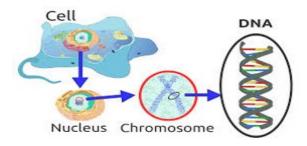


Pidgeon Pagonis, an intersex activist, was born in Chicago in 1986 and declared female at birth. At three months of age, their (preferred pronoun) mother was concerned that Pidgeon's genitals looked swollen. Tests indicated that Pidgeon was genetically male with XY chromosomes and internal testes. Doctors at the time recommended that Pidgeon receive surgery to appear fully female. Further, doctors told Pidgeon's parents that the surgery would not harm them sexually and it would allow them to have a "normal life" as a female. Consequently, Pidgeon had two surgeries at the ages of 4 and 11. However, according to Pidgeon the surgeries resulted in "scarring, loss of sensation, emotional trauma, and severe sexual impairment" (Schoenberg, 2018, p. 1).

Attempting to normalize external genitalia through surgery has typically been recommended for children who display differences in sexual development, but many of the individuals who underwent this surgery identify significant negative experiences. Consequently, this standard procedure has recently been criticized by individuals with differences in sexual development who believe that they, and not doctors, should make decisions about whether to have surgery or not. According to Schoenberg (2018), The United Nations High Commissioner for Human Rights, former surgeon generals, and Human Rights Watch have all called for the end of these childhood surgeries. California became the first state to pass a resolution discouraging the surgeries. Pidgeon will continue to be active in the fight for stopping these purely cosmetic and unnecessary surgeries.

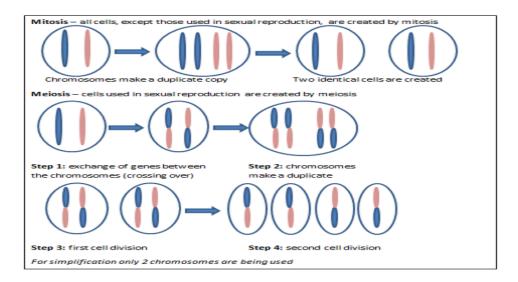
Heredity

As you learned in Introduction to Psychology, an individual's development is affected by both nature and nurture. **Nurture** *refers to all the environmental influences that affect an individual*, and nurture influences will be discussed in future modules. **Nature** *refers to the contribution of genetics to one's development*. The basic building block of the nature perspective is the gene. **Genes** are *recipes for making proteins*, while proteins influence the structure and functions of cells. Genes are located on the **chromosomes**, *which are strands of DNA*. There are an estimated 20,000-25,000 genes for humans, according to the Human Genome Project (NIH, 2020).



Normal human cells contain 46 chromosomes (or 23 pairs; one from each parent) in the nucleus of the cells. After conception, most cells of the body are created by a process called mitosis. **Mitosis** is defined as the cell's nucleus making an exact copy of all the chromosomes and splitting into two new cells. However, the cells used in sexual reproduction, called the gametes (sperm or ova), are formed in a process called meiosis. In **meiosis** the gamete's chromosomes duplicate, and then divide twice resulting in four cells containing only half the genetic material of the original gamete. Thus, each sperm and egg possesses only 23 chromosomes and combine to produce the normal 46.

Mitosis and Meiosis



Of the 23 pairs of chromosomes created at conception, 22 pairs are similar in length. These are called autosomes. The remaining pair, or sex chromosomes, may differ in length. If a child receives the combination of XY the child will be identified as genetically male. If the child receives the combination XX the child will be identified as genetically female.

Genotypes and Phenotypes

The word **genotype** refers to the sum total of all the genes a person inherits. The word **phenotype** refers to the features that are actually expressed. Look in the mirror. What do you see, your genotype or your phenotype? What determines whether or not genes are expressed? Because genes are inherited in pairs on the chromosomes, we may receive either the same version of a gene from our mother and father, that is, be **homozygous** for that characteristic the gene influences. If we receive a different version of the gene from each parent, that is referred to as **heterozygous**. In the homozygous situation we will display that characteristic. It is in the heterozygous condition that it becomes clear that not all genes are created equal. Some genes are dominant, meaning they express themselves in the phenotype even when paired with a different version of the gene, while their silent partner is called recessive. Recessive genes express themselves only when paired with a similar version gene. Geneticists refer to different versions of a gene as alleles. Some dominant traits include having facial dimples, curly hair, normal vision, and dark hair. Some recessive traits include red hair, being nearsighted, and straight hair.

Most characteristics are not the result of a single gene; they are **polygenic**, meaning they are the result of several genes. In addition, the dominant and recessive patterns described above are usually not that simple either. Sometimes the dominant gene does not completely suppress the recessive gene; this is called **incomplete dominance**. An example of this can be found in the recessive gene disorder sickle cell disease. The gene that produces healthy round-shaped red blood cells is dominant. The recessive gene causes an abnormality in the shape of red blood cells; they take on a sickle form, which can clog the veins and deprive vital organs of oxygen and increase the risk of stroke. To inherit the disorder a person must receive the recessive gene from both parents. Those who have inherited only one recessive-gene are called **carriers** and should be unaffected by this recessive trait. Yet, carriers of sickle cell have some red blood cells that take on the c-shaped sickle pattern. Under circumstances of oxygen deprivation, such as high altitudes or physical exertion, carriers for the sickle cell gene may experience some of the symptoms of sickle cell disease (Berk, 2004).

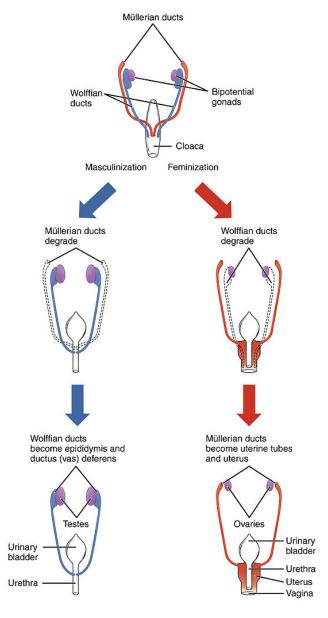
Prenatal Exposure to Hormones

Just how important are genes and hormones to the development of gender identification? The answer is quite important, especially during the prenatal period. According to Hines (2011), "Growing evidence shows that prenatal exposure to the gonadal hormone, testosterone, contributes to the development of sex differences, including sexual orientation, core gender identity, and some sex-related cognitive and personality characteristics. In addition to these prenatal hormonal influences, early infancy and puberty may provide additional critical periods when hormones influence human neurobehavioral organization," (p.69).

You might be surprised to learn that gender development occurs at the moment of conception. At that time either two X chromosomes or an X and a Y chromosome unite. This union is important in determining what the **gonads**, or reproductive organs, will become. This occurs during the fifth and sixth weeks of gestation. Two X chromosomes typically result in the development of **ovaries**, or the gonads that produce ova and ovarian hormones. An X and Y chromosome pattern typically results in the development of **testes**, or gonads inside the scrotum that produce sperm amd testosterone. The amount of testosterone produced is very different depending on the whether the embryo has an XX or XY pattern, and this difference appears to be at its maximum between weeks 8 and 24 prenatally (Hines, 2011).

Interestingly, at least 1 in every 1,000 conceptions results in a variation of chromosomal sex beyond the typical XX or XY sets. Some of these variations include, XXX, XXY, XYY, or even a single X (Dreger, 1998). In some cases, people may have unusual physical characteristics, such as being taller than average, having a thick neck, or being sterile (unable to reproduce), but in many cases, these individuals have no cognitive, physical, or sexual issues (Wisniewski et al, 2000).

Mullerian and Wolffian Ducts:



Until the seventh week, there is an innate tendency for all embryos to have female internal sex organs, unless there is the presence of the SRY gene, located on the Y-chromosome (Grumbach & Conte, 1998; Wizemann & Pardue, 2001). The SRY gene causes XY-embryos to develop the testes. The testes emit testosterone which stimulates the development of the Wolffian ducts, or primitive male internal sex organs. The Wolffian ducts then transform into the epididymis, seminal vesicles, and vas deferens. If the SRY gene is not present or active, which is typical for chromosomal females, then XX-embryos develop ovaries and the primitive female internal sex organs, or the Mullerian ducts, which transform into the fallopian tubes, uterus, cervix, and inner two-thirds of the vagina (Carlson, 1986). Without a burst of testosterone from the testes, the Wolffian ducts naturally deteriorate (Grumbach & Conte, 1998; Wizemann & Pardue, 2001). For XY-embryos, the testes also emit a Mullerian inhibiting substance, a hormone that causes the Mullerian ducts to atrophy. The concentration of androgens is especially high between weeks 8 and 24 (Hines, 2015).

By the 20th week of gestation, the external sex organs are fully formed. Formation of male external sex organs (e.g., the penis and scrotum) is dependent upon high levels of testosterone, whereas female external sex organs (e.g., the outer third of the vagina and the clitoris) form without hormonal influences (Carlson, 1986). When we think of

identifying a newborn as a girl or boy, it is based on these external sex organs that are present at birth.

Because of the ethical concerns of manipulating gonadal hormones in humans, research done with nonhuman mammals provide hypotheses regarding the hormonal influences on brain development and behavior for humans. Specifically, estrogens during the early developmental period do not promote female typical behavior. Rather, female typical development occurs when there is an absence of male hormones (Hines, 2011). Consequently, high levels of estrogen do not feminize behavior. In contrast, the more testosterone an animal is exposed to, the more male typical behavior is demonstrated, such as rough and tumble play (Hines, 2015).

As described, levels of sex hormones, such as estrogen, testosterone, and progesterone, begin affecting the brain prenatally and are thought to impact future emotions, behaviors, and thoughts related to gender identity and sexual orientation (Swaab, 2004). However, it is important to understand that the interactions of chromosomes, gonads, hormones, internal sex organs, external sex organs, and brain differentiations during

this developmental stage are too complex to readily conform to the familiar categories of sex, gender, and sexual orientation historically used to describe people (Herdt, 1996).

Differences in Sexual Development

The international scientific and medical communities, including the World Health Organization, World Medical Association, World Psychiatric Association, and Association for Psychological Science, view variations of sex, gender, and sexual orientation as normal. Furthermore, variations of sex, gender, and sexual orientation occur naturally throughout the animal kingdom. More than 65,000 animal species are **intersex**; that is born with either an absence or some combination of male and female reproductive organs, sex hormones, or sex chromosomes (Jarne & Auld, 2006). In humans, differences in sexual development make up more than 150 million people, or about two percent of the world's population (Blackless et al., 2000). There are dozens of conditions, and such individuals demonstrate the diverse variations of biological sex. Some examples of differences in sexual development, include Turner syndrome, Triple X syndrome, Klinefelter's syndrome, Jacob's syndrome, Complete and Partial Androgen Insensitivity syndrome, and Congenital Adrenal Hyperplasia,. The term "syndrome" can be misleading; although such individuals may have physical limitations (e.g., about a third of Turner's individuals have heart defects; Matura et al, 2007), they otherwise lead relatively normal intellectual, personal, and social lives.

Turner syndrome (XO) is the absence of, or an imperfect, second X chromosome. Turner syndrome leads to ovarian regression either impairing or eliminating the production of ovarian hormones. Turner syndrome occurs in 1 of every 2500 live births of individuals identified as female at birth and affects the individual's cognitive functioning and sexual maturation (Lally & Valentine-French, 2019). The external genitalia appear normal, but breasts and ovaries do not develop fully and the individual typically does not menstruate, causing infertility. Turner syndrome also results in a short stature and other physical characteristics. During development, those with Turner syndrome exhibit reduced performance on tasks at which females excel and males excel, while sex-neutral tasks are not affected (Hines, 2011).

Triple X syndrome (XXX) is the presence of an additional X chromosome in the cells of a female and occurs in 1 out of 1000 female births. Other than being taller than average, there are no unusual physical features associated with Triple X syndrome. Sexual development and conception rates are normal, however there is an increased risk of delays in learning, motor skills, and speech and language development. In approximately 10% of females with Triple X syndrome, seizures or kidney abnormalities occur (National Institutes of Health, 2020).

Klinefelter syndrome (XXY) results when an extra X chromosome is present in the cells of a male and occurs in 1 out of 650 male births. The Y chromosome stimulates the growth of male genitalia, but the additional X chromosome inhibits this development. An individual with Klinefelter syndrome typically has small testes, some breast development, infertility and low levels of testosterone. Additionally, motor delays and learning disabilities are often present (National Institutes of Health, 2019).

Jacob's syndrome (XYY) results when an extra Y chromosome is present in the cells of a male and occurs in 1 out of 1000 male births. Males with this condition tend to be taller than average, and a large head, large teeth, flat feet, widely spaced eyes, and scoliosis have also been noted in some males. While normal testosterone production and sexual development occur, Jacob's syndrome is associated with an increased risk of learning disabilities and delayed speech, language, and motor skills. An increased risk of motor tics, seizures, asthma,

attention-deficit/ hyperactivity disorder, depression, and autism spectrum disorder occur (National Institutes of Health, 2020).

Androgen Insensitivity Syndrome (AIS) occurs when a person has one X and one Y chromosome, but is resistant to the male hormones or androgens. Individuals with AIS lack the receptors that enable androgens to activate genes in the cell's nucleus. This results in the partial or complete inability of the cell to respond to androgens and affects approximately 1 in 20,000 XY individuals (Carroll, 2016). Because the Wolffian ducts do not respond to the testosterone, male genitalia do not develop. Because the gonads did produce the Mullerian inhibiting substance, the Mullerien ducts do not develop into normal female internal organs. Consequently, the individual appears to be female at birth, but has an XY chromosomal pattern. It is often not until puberty, when there is a lack of menstruation due to the missing ovaries and other internal reproductive systems, that AIS is detected (Hines, 2015)..

Partial Androgen Insensitivity syndrome (PAIS) and mild forms of androgen insensitivity syndrome *result* when the body's tissues are partially sensitive to the effects of androgens (National Institutes of Health, 2020). Individuals with partial androgen insensitivity can have genitalia that look typically female, typically male, or have both male and female characteristics. Individuals with mild androgen insensitivity are born with male sex characteristics, but are often infertile and experience breast enlargement at puberty.

Congenital Adrenal Hyperplasia (CAH) is a group of genetic disorders which cause increased production of androgens due to an enzymatic deficiency (21-hydroxylase) resulting in an inability to produce cortisol and the overproduction of androgens (Hines, 2015). CAH occurs in between 1/5000 and 1/20,000 births in the United States and Europe. High androgen levels are expected in embryos with an XY pattern. For those embryos with an XX-pattern, however, an increase in androgens results in females exhibiting an increase in male-typical play and reduced female-typical play. Also, women who took an androgenic progestin, that mimics androgen, during pregnancy have children who exhibit an increase in male-typical toys and activities, while women who took antiandrogenic progestins, that mimic progesterone, show a decreased interest in male-typical activities and toys. Additionally, females with CAH show greater levels of physical aggression, increased accuracy in throwing objects at targets, and some studies have indicated enhanced mental rotation abilities (Hines, 2011).

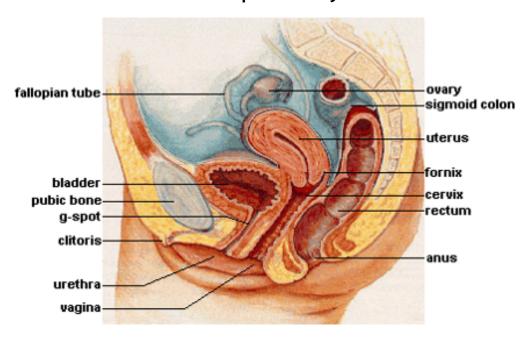
Convincing evidence indicates that both prenatal and postnatal exposure to testosterone influences the development of children's sex typical toy and activity interests. For example, boys prefer toys that move and "prenatal androgen exposure may increase interest in watching things move in space by altering development of the visual system," (Hines, 2011, p. 74). Additionally, boys spend more time in "rough and tumble" play and prefer cars over dolls. For females, higher levels of testosterone in the blood and amniotic fluid in pregnant women, was correlated with higher levels of male typical play behavior and reduced female typical play behavior in their daughters (Hines, 2015).

Puberty

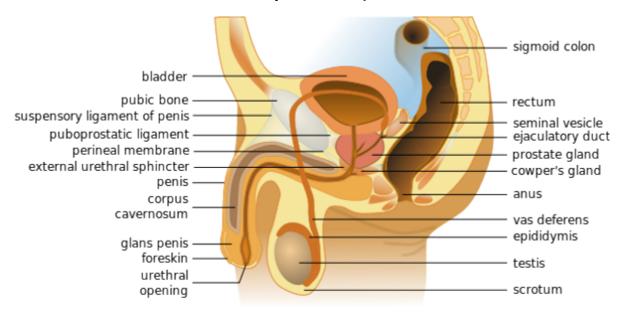
Puberty is a period of rapid growth and sexual maturation. These changes begin sometime between eight and fourteen. Girls begin puberty at around ten years of age and boys begin approximately two years later. Pubertal changes take around three to four years to complete. Adolescents experience an overall physical growth spurt first. Sexual changes that occur at puberty are divided into two categories: Primary sexual characteristics and secondary sexual characteristics.

Primary sexual characteristics are changes in the reproductive organs. For males, this includes growth of the testes, penis, scrotum, and **spermarche** or first ejaculation of semen. This occurs between 11 and 15 years of age. For females, primary characteristics include growth of the uterus and **menarche** or the first menstrual period. The female gametes, which are stored in the ovaries, are present at birth, but are immature. Each ovary contains about 400,000 gametes, but only 500 will become mature eggs (Crooks & Baur, 2007). Beginning at puberty, one ovum ripens and is released about every 28 days during the menstrual cycle. Stress and higher percentage of body fat can bring menstruation at younger ages.

Female Reproductive System



Male Reproductive System



Secondary sexual characteristics are visible physical changes not directly linked to reproduction, but signal sexual maturity. For males this includes broader shoulders and a lower voice as the larynx grows. Hair becomes coarser and darker, and hair growth occurs in the pubic area, under the arms and on the face. For females breast development occurs around age 10, although full development takes several years. Hips broaden and pubic and underarm hair develops and also becomes darker and coarser.



Not surprisingly, puberty has a tremendous affect on gender identity. For cisgender adolescents, males typically welcome the physical transition as their bodily changes represent the masculine ideal, especially regarding increased muscularity. In contrast, the physical changes experienced by females often take them further away from the feminine ideal of being very thin. Additionally, girls who develop earlier than their peers tend to be sexualized and harassed for their development.

Gender Role Intensification: At about the same time that puberty accentuates gender identity, role differences also accentuate for at least some teenagers. Some girls who excelled at math or science in elementary school, may curb their enthusiasm and displays of success at these subjects for fear of limiting their popularity or attractiveness as girls (Taylor et al., 1995; Sadker, 2004). Some boys who were not especially interested in sports previously may begin dedicating themselves to athletics to affirm their masculinity in the eyes of others. For trans adolescents, puberty can be especially difficult if the physical changes experienced do not align with the adolescents' gender identification. These changes can cause distress in the adolescent, especially if transaffirmative care is not being provided.

Pubertal Blockers and Hormone Treatment: Increasingly, transgender children, or those who identify with a gender that is different than the one assigned at birth, are socially transitioning to reflect their gender identity. This includes changing names, pronouns, clothing, hairstyles, and peer groups. Needless to say, the changes that occur during puberty can cause significant distress for transgender and gender nonconforming children and adolescents. Consequently, pubertal blockers or medications that suppress puberty by halting the production of estrogen or testosterone, have been prescribed to peripubertal transgender youth. The medications mostly commonly used to suppress puberty are known as gonadotropin-releasing hormone (GnRH) analogues (Mayo Clinic, 2022). When taken regularly, GnRH analogues suppress the body's release of sex hormones during puberty by desensitizing the stimulatory effects of GnRH on the pituitary gland, which secretes reproductive hormones. In those identified as male at birth, GnRH analogues decrease the growth of facial and body hair, prevent voice deepening, and limit the growth of genitalia. In those identified as female at birth, treatment limits or stops breast development and stops menstruation. The medications may be given as shots in a doctor's office every one, three or six months, or in a yearly implant (Wilson, 2021).

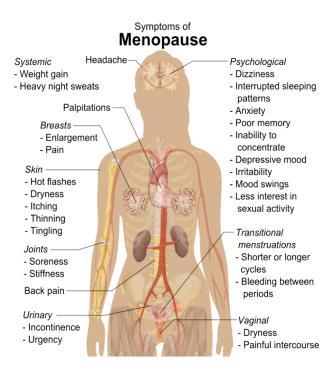
By temporarily pausing development, the use of GnRH analogues allows preadolescents more opportunity to further explore and confirm their gender identity before the use of other treatments. Pubertal blockers are associated with improved behavioral and emotional functioning in transgender youth, including decreased rates of depression and suicidal ideation (Roberts, 2022). When puberty blockers are initiated in the early stages of puberty, physicians suggest that patients stop using them by age 14 (Wilson, 2021). At that point,

patients, parents and physicians need to decide whether to introduce hormones that align with their gender identity, or resume puberty in the gender assigned at birth.

Because **gender-affirming hormone treatment**, which aligns one's physical body with their gender identification, results in fertility and appearance changes, adolescents should understand the implications of the treatments. According to Roberts (2022), by age 16 adolescents are considered to possess the mental capacity to understand the hormonal effects and provide informed consent. Gender-affirming hormone treatment, has also been shown to increase mental health functioning among transgender youth.

Female Sexual and Reproductive Health at Midlife

The **climacteric**, or the midlife transition when fertility declines, is biologically based but impacted by the environment. Women, however, lose their ability to reproduce once they reach menopause. **Perimenopause** refers to a period of transition in which a woman's ovaries stop releasing eggs and the level of estrogen and progesterone production decreases. **Menopause** is defined as 12 months without menstruation. The average age of menopause is approximately 51, however, many women begin experiencing symptoms in their 40s. These symptoms occur during perimenopause, which can occur 2 to 8 years before menopause (Huang, 2007). A woman may first begin to notice that her periods are more or less frequent than before. After a year without menstruation, a woman is considered menopausal and no longer capable of reproduction.



Symptoms: The symptoms that occur during perimenopause and menopause are typically caused by the decreased production of estrogen and progesterone (North American Menopause Society, 2016). The shifting hormones can contribute to the inability to fall asleep. Additionally, the declining levels of estrogen may make a woman more susceptible to environmental factors and stressors which disrupt sleep. A **hot flash** is a surge of adrenaline that can awaken the brain from sleep. It often produces sweat and a change of temperature that can be disruptive to sleep and comfort levels. Unfortunately, it may take time for adrenaline to recede and allow sleep to occur again (National Sleep Foundation, 2016).

The loss of estrogen also affects vaginal lubrication which diminishes and becomes waterier and can contribute to pain during intercourse. The vaginal

wall also becomes thinner, and less elastic. Estrogen is also important for bone formation and growth, and decreased estrogen can cause osteoporosis resulting in decreased bone mass. Depression, irritability, and weight gain have been blamed on menopause, but they are not menopausal (Avis et al., 2001; Rossi, 2004). Weight gain can occur due to an increase in intra-abdominal fat followed by a loss of lean body mass after menopause (Morita et al., 2006). Consequently, women may need to change their lifestyle to counter any weight gain. Depression and mood swings are more common during menopause in women who have prior histories of these conditions rather than those who have not. Additionally, the incidence of depression and

mood swings is not greater among menopausal women than non-menopausal women. Women vary greatly in the extent to which these symptoms are experienced. Most American women go through menopause with few problems (Carroll, 2016). Overall, menopause is not seen as universally distressing (Lachman, 2004).

Hormone Replacement Therapy: Concerns about the effects of hormone replacement has changed the frequency with which estrogen replacement and hormone replacement therapies have been prescribed for menopausal women. Estrogen replacement therapy was once commonly used to treat menopausal symptoms. However, more recently, hormone replacement therapy has been associated with breast cancer, stroke, and the development of blood clots (NIH, 2007). Most women do not have symptoms severe enough to warrant estrogen or hormone replacement therapy. If so, they can be treated with lower doses of estrogen and monitored with more frequent breast and pelvic exams. There are also some other ways to reduce symptoms. These include avoiding caffeine and alcohol, eating soy, remaining sexually active, practicing relaxation techniques, and using water-based lubricants during intercourse.

Menopause and Ethnicity: In a review of studies that mentioned menopause, symptoms varied greatly across countries, geographic regions, and even across ethnic groups within the same region (Palacios et al., 2010). For example, the Study of Women's Health across the Nation (SWAN) examined 14,906 white, African American, Hispanic, Japanese American, and Chinese American women's menopausal experiences (Avis et al., 2001). After controlling for age, educational level, general health status, and economic stressors, white women were more likely to disclose symptoms of depression, irritability, forgetfulness, and headaches compared to women in the other racial/ethnic groups. African American women experienced more night sweats, but this varied across research sites. Finally, Chinese American and Japanese American reported fewer menopausal symptoms when compared to the women in the other groups. Overall, the Chinese and Japanese group reported the fewest symptoms, while white women reported more mental health symptoms and African American women reported more physical symptoms.

Cultural Differences: Cultural influences seem to also play a role in the way menopause is experienced. Further, the prevalence of language specific to menopause is an important indicator of the occurrence of menopausal symptoms in a culture. Hmong tribal women living in Australia and Mayan women report that there is no word for "hot flashes" and both groups did not experience these symptoms (Yick-Flanagan, 2013). When asked about physical changes during menopause, the Hmong women reported lighter or no periods. They also reported no emotional symptoms and found the concept of emotional difficulties caused by menopause amusing (Thurston & Vissandjee, 2005). Similarly, a study with First Nation women in Canada found there was no single word for "menopause" in the Oji-Cree or Ojibway languages, with women referring to menopause only as "that time when periods stop" (Madden et al., 2010).

While some women focus on menopause as a loss of youth, womanhood, and physical attractiveness, career-oriented women tend to think of menopause as a liberating experience. Japanese women perceive menopause as a transition from motherhood to a more whole person, and they no longer feel obligated to fulfill certain expected social roles, such as the duty to be a mother (Kagawa-Singer et al., 2002). In India, 94% of women said they welcomed menopause. Aging women gain status and prestige and no longer have to go through self-imposed menstrual restrictions, which may contribute to Indian women's experiences (Kaur et al., 2004). Overall, menopause signifies many different things to women around the world and there is no typical experience. Further, normalizing rather than pathologizing menopause is supported by research and women's experiences.

Male Sexual and Reproductive Health at Midlife

During midlife, men may experience a reduction in their ability to reproduce. Although males can continue to father children throughout middle adulthood, erectile dysfunction (ED) becomes more common. **Erectile dysfunction** refers to the inability to achieve an erection or an inconsistent ability to achieve an erection (Swierzewski, 2015). Intermittent ED affects as many as 50% of men between the ages of 40 and 70. About 30 million men in the United States experience chronic ED, and the percentages increase with age. Approximately 4% of men in their 40s, 17% of men in their 60s, and 47% of men older than 75 experience chronic ED.

Causes for ED are primarily due to medical conditions, including diabetes, kidney disease, alcoholism, and atherosclerosis (build-up of plaque in the arteries). Plaque is made up of fat, cholesterol, calcium and other substances found in the blood. Over time plaque builds up, hardens, and restricts the blood flow in the arteries (NIH, 2014). This build-up limits the flow of oxygenated blood to organs and the penis. Overall, diseases account for 70% of chronic ED, while psychological factors, such as stress, depression and anxiety account for 10%-20% of all cases. Many of these causes are treatable, and ED is not an inevitable result of aging.

Men during middle adulthood may also experience prostate enlargement, which can interfere with urination, and deficient testosterone levels which decline throughout adulthood, but especially after age 50. If testosterone levels decline significantly, it is referred to as andropause or late-onset hypogonadism. Identifying whether testosterone

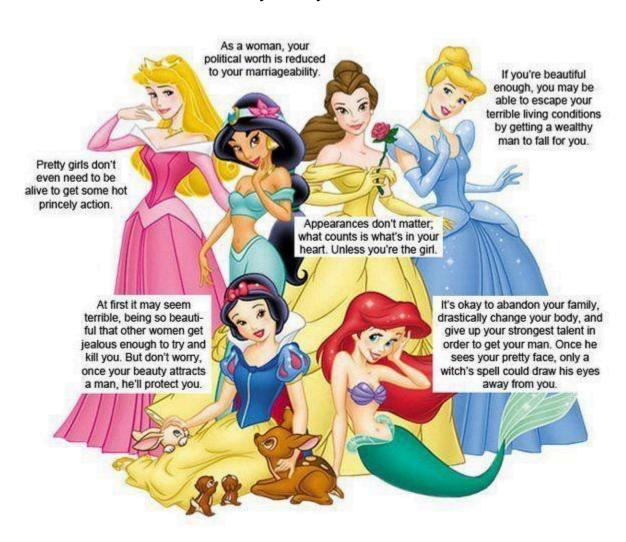


levels are low is difficult because individual blood levels vary greatly. Low testosterone is not a concern unless it accompanied by negative symptoms such as low sex drive, ED, fatigue, loss of muscle, loss of body hair, or breast enlargement. Low testosterone is also associated with medical conditions, such as diabetes, obesity, high blood pressure, and testicular cancer. The effectiveness of supplemental testosterone is mixed, and long term testosterone replacement therapy for men can increase the risk of prostate cancer, blood clots, heart attack and stroke (WebMD, 2016). Most men with low testosterone do not have related problems (Berkeley Wellness, 2011).

In the next module we will consider the various theories that have been proposed to explain the development of gender identity. In addition, we will examine the sources of gender socialization.

Module 4 What are the Theories for Gender Identity?

Case Study: Disney Princess Culture



This chapter will discuss the socialization process for gender identity in children. A person's sense of self as a member of a particular gender is known as gender identity. The development of gender identity appears to be due to an interaction among biological, social and representational influences (Ruble, et al., 2006). Gender **roles**, or *the expectations associated with being male or female*, are learned in one's culture throughout childhood and into adulthood. The above image identifies an alternative spin on the endings for the Disney princesses. Does exposure to these Disney princesses affect gender roles and identity in children?

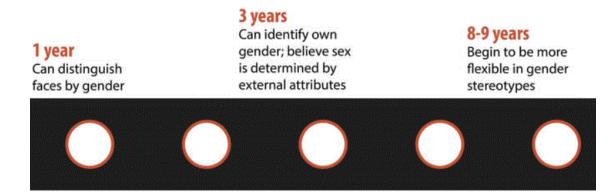
To answer that question, Coyne et al. (2016) first assessed how much preschoolers interacted with Disney princess culture, which was defined as watching movies and playing with toys. The researchers found that 96 percent of girls and 87 percent of boys had viewed Disney princess media. Additionally, more than 61 percent of girls played with princess toys at least once a week, but only four percent of boys did the same. Next, assessments of princess engagement and gender-stereotypical behavior were made based on reports from parents and teachers as well as an interactive task where the children would sort and rank their favorite toys from a varied collection of "girl" toys (dolls, tea sets), "boy" toys (action figures, tool sets) and gender-neutral options (puzzles, paint). The results indicated that for both boys and girls, the more interactions with the princesses predicted more female gender-stereotypical behavior a year later, even after controlling for initial levels of gender-stereotypical behavior. Parental mediation strengthened associations between princess engagement and adherence to female gender-stereotypical behavior for both girls and boys.

Gender Identity and Age

When do children start to learn about gender? Very early (Brown et al., 2020). Starting in infancy, children are learning about gender by observing the appearance, activities, and behavior of their caregivers and others around them (National Center on Parent, Family and Community Engagement, 2020). By their first birthday, children can distinguish faces by gender (Brown et al., 2020). As toddlers develop a sense of self, they use gender as one way to understand group belonging. Consequently, by their second birthday, they can label others' gender and even sort objects into gender-typed categories. By the third birthday, children can consistently identify their own gender. At this age, children believe sex is determined by external attributes, such as appearance and specific behaviors, not biological attributes.

By five and six years of age, children hold the most rigid beliefs about what each gender can wear and behave, and they believe others may react negatively to any deviation from stereotypical gender norms (National Center on Parent, Family and Community Engagement, 2020). Stereotypes can refer to play (e.g., boys play with trucks, and girls play with dolls), traits (e.g., boys are strong, and girls like to cry), and occupations (e.g., men are doctors and women are nurses). Not surprisingly, children who exhibited the most gender stereotypical behavior at 3.5 years continued to demonstrate the most gender stereotypical behavior at 8 years of age. Similarly, those who exhibited the least gender typical behavior earlier also continued that way (Hines, 2015).

Adults may consciously, and unconsciously, encourage gender stereotypes (National Center on Parent, Family and Community Engagement, 2020). Girls are more likely to receive comments regarding their appearance, such as "What a pretty dress!" and "You are so cute!" In contrast, boys hear comments related to their abilities, such as "You are so smart!" or "You are so strong!" Further, the same behavior engenders different adult responses. When young children behave assertively, girls are criticized for being bossy, while boys are praised for being a leader. These stereotypes stay rigid until children reach about age 8 or 9. Then they develop cognitive abilities that allow them to be more flexible in their thinking about others (Brown et al., 2020).



Transgender Children: Many young children do not conform to the gender roles modeled by the culture and even push back against assigned roles. However, a small percentage of children actively reject the toys, clothing, and anatomy of their assigned sex and state they prefer the toys, clothing and anatomy of the opposite sex. Approximately 0.3 percent of the United States population identify as transgender (Olson & Gülgöz, 2018). Transgender adults have stated that they identified with the opposite gender as soon as they began talking (Russo, 2016). Some of these children may experience **gender dysphoria**, or distress accompanying a mismatch between one's gender identity and biological sex (APA, 2013), while other children do not experience discomfort regarding their gender identity.

Current research is now looking at those young children who identify as transgender and have socially transitioned. In 2013, a longitudinal study following 300 socially transitioned transgender children between the ages of 3 and 12 began (Olson & Gülgöz, 2018). Socially transitioned transgender children identify with the gender opposite than the one assigned at birth, and they change their appearance and pronouns to reflect their gender identity. Findings from the study indicated that the gender development of these socially transitioned children looked similar to the gender development of cisgender children. These socially transitioned transgender children exhibited similar gender preferences and gender identities as their gender matched peers. Further, these children who were living everyday according to their gender identity and were supported by their families, exhibited positive mental health.

How Do We Learn about Gender?



Gender socialization focuses on what young children learn about gender from society, including parents, peers, media, religious institutions, schools, and public policies. Children learn about what is acceptable for females and males early, and in fact, this socialization may even begin the moment a parent learns that a child is on the way. Knowing the sex of the child can conjure up images of the child's behavior, appearance, and potential on the part of a parent, and this stereotyping continues to guide perception through life. Consider parents of newborns, shown a 7-pound, 20-inch baby, wrapped in blue (a color designating males) describe the child as tough, strong, and angry when crying. Shown the same infant in pink (a color used in the United States for baby girls), these parents are likely to describe the baby as pretty, delicate, and frustrated when crying (Maccoby & Jacklin, 1987). Female infants are held more, talked to more frequently and given direct eye contact, while male infant interactions are often mediated through a toy or activity. As they age, sons are given tasks that take them outside the

house and that have to be performed only on occasion, while girls are more likely to be given chores inside the home, such as cleaning or cooking that are performed daily. Sons are encouraged to think for themselves when they encounter problems and daughters are more likely to be given assistance, even when they are working on an answer. Parents also talk to their children differently according to their gender. For example, parents talk to sons more in detail about science, and they discuss numbers and counting twice as often than with daughters (Chang et al., 2010). How are these beliefs about behaviors and expectations based on gender transmitted to children?

Theories of Gender Development

Developmental Intergroup Theory:

Many of our gender stereotypes are so strong because we emphasize gender so much in culture (Bigler & Liben, 2007). For example, males and females are treated differently before they are even born. When someone learns of a new pregnancy, the first question asked is "Is it a boy or a girl?" Immediately upon hearing the answer, judgments are made about the child: Boys will be rough and like blue, while girls will be delicate and like pink. **Developmental Intergroup Theory** postulates that adults' heavy focus on gender leads children to pay attention to gender as a key source of information about themselves and others, to seek out any possible gender differences, and to form rigid stereotypes based on gender that are subsequently difficult to change.



Gender Schema theory:

There are also psychological theories that partially explain how children form their own gender roles after they learn to differentiate based on gender. The first of these theories argues that children are active learners who essentially socialize themselves. In this case, children actively organize others' behavior, activities, and attributes into gender categories, which are known as **gender** schemas (Bem, 1981). As children learn various gender related information they build their gender schemas, which enables them to seek out and notice other gender related information. These gender schemas come to guide understanding and memory of gender relevant information (Bem, 1981). People of all ages are

more likely to remember schema-consistent behaviors and attributes than schema-inconsistent behaviors and attributes. So, people are more likely to remember men, and forget women, who are firefighters. They also misremember schema-inconsistent information. If research participants are shown pictures of someone standing at the stove, they are more likely to remember the person to be cooking if depicted as a woman, and the person repairing the stove if depicted as a man. By only remembering schema-consistent information, gender schemas strengthen more and more over time. Children may also begin to incorporate this information into their self-concept. However, people differ in the degree to which they use gender schemas to interpret both themselves and the world (Bem, 1983). Bem proposed that some people are more gender **schematic**, that is they are especially attuned to gender, and use it as a way of organizing and understanding the world. In contrast, those who are **gender aschematic** do not use gender as a dimension for interpreting the world.

Social Learning Theory:

Another theory that attempts to explain the formation of gender roles in children is **Social Learning Theory**, which argues that behavior is learned through observation, modeling, reinforcement, and punishment (Bandura, 1997). **Sex typing** (Mischel, 1966) is the process by which individuals acquire patterns of gendered behavior. Children are rewarded and reinforced for behaving in concordance with gender roles and punished for breaking gender roles. In addition, social learning theory argues that children learn many of their gender roles by modeling the behavior of adults and older children and, in doing so, develop ideas about what behaviors are appropriate for each gender. Children can also observe the behavior of models, but not perform these behaviors for sometime. Parents are an important source of the punishments and rewards for children's gendered behavior. Parents influence the toys, décor of bedrooms, clothing, and activities that children are allowed to engage in.

Cognitive Social Learning Theory also emphasizes reinforcement, punishment, and imitation, but adds cognitive processes. These processes include attention, self-regulation, and self-efficacy. Once children learn the significance of gender, they regulate their own behavior based on internalized gender norms (Bussey & Bandura, 1999). Social learning theory has less support than gender schema theory; research shows that parents do reinforce gender-appropriate play, but for the most part treat their male and female children similarly (Lytton & Romney, 1991).

Objectification Theory focuses on how the female body has become an object of the male gaze (Else-Quest & Hyde, 2018). When objectified, female attractiveness is valued above all other factors. Living in a culture that objectifies women, young girls internalize the beauty standards they see in the media and around them. Consequently, they attempt to attain these standards and regularly monitor and change their bodies as a way to conform. Because these standards are unrealistic, girls and women feel shame, anxiety, or depression for not achieving the cultural ideal. Additionally, internalizing one's body as an object impairs cognitive performance.

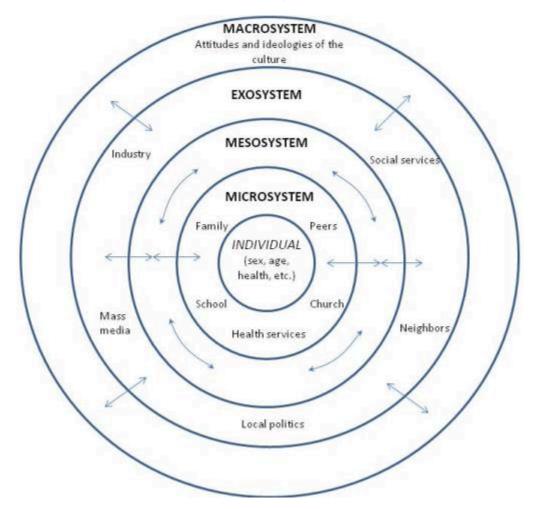
Ecological Systems Theory:

Bronfenbrenner developed the **Ecological Systems Theory**, which provides a framework for understanding and studying the many influences on human development (Bronfenbrenner, 1979). Bronfenbrenner recognized that human interaction is influenced by larger social forces and that an understanding of these forces is essential for understanding an individual. The individual is impacted by several systems including:

- **Microsystem** *includes the individual's setting and those who have direct, significant contact with the person, such as parents or siblings.* The input of those is modified by the cognitive and biological state of the individual as well. These influence people's actions, which in turn influence systems operating on them.
- **Mesosytem** *includes the larger organizational structures, such as school, the family, or religion.* These institutions impact the microsystems just described. The philosophy of the school system, daily routine, assessment methods, and other characteristics can affect the child's self-image, growth, sense of accomplishment, and schedule thereby impacting the child, physically, cognitively, and emotionally.
- Exosystem includes the larger contexts of community. A community's values, history, and economy can impact the organizational structures it houses. Mesosystems both influence and are influenced by the exosystem.
- **Macrosystem** *includes the cultural elements*, such as global economic conditions, war, technological trends, values, philosophies, and a society's responses to the global community.
- **Chronosystem** *is the historical context in which these experiences occur.* This relates to the different generational time periods, such as the baby boomers and millennials.

In sum, a child's experiences are shaped by larger forces such as the family, schools, religion, culture, and time period. Bronfenbrenner's model helps us understand all of the different environments that impact each one of us simultaneously. Despite its comprehensiveness, Bronfenbrenner's ecological system's theory is not easy to use. Taking into consideration all the different influences makes it difficult to research and determine the impact of all the different variables (Dixon, 2003). Consequently, psychologists have not fully adopted this approach, although they recognize the importance of the ecology of the individual. Below is a model of Bronfenbrenner's Ecological Systems Theory.

Bronfenbrenner's Ecological Systems Theory



Using Bronfenbrenner's Ecological Systems Theory as a guide, children learn the social meanings of gender from adults and their culture starting at birth. Gender roles and expectations are especially portrayed in children's toys, books, commercials, video games, movies, television shows and music (Knorr, 2017). Therefore, when children make choices regarding their gender identification, expression, and behavior that may be contrary to gender stereotypes, it is important that they feel supported by the caring adults in their lives. This support allows children to feel valued, resilient, and develop a secure sense of self (American Academy of Pediatricians, 2015).

Sources of Socialization

Parents:

Brody's Transactional Model explains how children learn gender roles by focusing on the bidirectional influences between parents and children (Brody, 1999). Brody's transactional model indicates that the infant's gender and temperament begin the socialization process as parents reinforce temperamental qualities. For example, girls tend to be more sociable, talkative, and develop self-control earlier. Consequently, parents encourage their social skill development and emotional control, which align with female gender roles. Boys are more physically active, which is also encouraged through parenting.

Parents often have different expectations and perceptions based on the child's gender. Boys are encouraged to be more independent, while girls are reinforced for staying close and being more dependent (Hines, 2015). A recent study (MacPhee & Prendergast, 2019) found that children's bedrooms were still as gendered today as they were over 40 years ago. Additionally, girls receive more positive reinforcement when they play with girls' toys, and boys receive such reinforcement when they play with boys' toys (Hines, 2015). Girls tend to receive toys that highlight nurturing behavior and physical attractiveness, such as baby dolls and dress-up, while for boys the toys focus on competitiveness and action, such as sports equipment and racing cars. Boe and Woods (2018) found that even by 12 ½ months of age infants were already showing clear gender-stereotypical toy preferences. According to Hines (2015), parents encourage the most gender stereotypical toy choices when the child is two years of age. Preschool children can predict how parents might respond if they were to play with cross-gender toys (Freeman, 2007). Fathers, in particular, react more strongly to their son playing with a doll, than their daughter playing with a truck (Basow, 2008). Thus, boys are more gender socialized than are girls, and may explain the greater sex-typed behavior, attitudes, and preferences of boys (Bosson et al., 2019).

Parents own gendered behavior also influences their children's gender development. Parents who split household chores along traditional gender roles have children with more gender typical behavior (Hines et al., 2002). The same longitudinal study also found that children of mothers who work outside of the home, or who are more educated display less gender stereotypical behavior. Children raise by same-sex parents also display less gender stereotypical behavior and attitudes (Sutfin et al., 2008) as they presumably see both parents engaging in traditionally male and female tasks.

Siblings:



Siblings can serve as role models, companions, and sources of advice, especially in areas that parents may seem as being less knowledgeable, such as peers and social trends (Marks et al., 2009). In their research Marks and colleagues assessed the gender role attitudes of siblings in families with children who were no more than four years apart in age, and the youngest was at least school age. Female siblings (whether first or second born) were more egalitarian in their gender role views than were male siblings. However, they found that regardless of gender, sibling dyads were

consistent in their gender role attitudes. In fact, no sibling dyad was incongruent, yet at least a quarter of sibling pairs were inconsistent with their parents' views. This is consistent with an earlier study (McHale et al., 2001) who reported more evidence for sibling than parental influence on gender role attitudes.

Peers:

Brody's Transactional Model (1999), focusing on bidirectional interactions, also holds true for peers. Children tend to play with others of the same gender, and through their play, children observe, practice, and encourage each other to engage in gender-typical behavior (Hines, 2015). At 4.5 years of age, children play with same gender peers three times more than other-gender peers, and by 6.5 years, they play ten times more with same gender peers. As children become older, peers reinforce gender stereotypes, especially emotional displays. Girls will reinforce warm interactions and the display of emotional expressions, including sadness. Conversely, boys will



reinforce competition among each other and discourage displays of sadness. In fact, boys who do express sadness are less accepted, less popular, and more likely to be teased. Consequently, children and adolescents will adhere to these gender roles so they are not ostracized from their peers.

Lee and Troop-Gordon (2011) studied how children reacted to peers who chastised them for gender atypical behavior. They found that boys with many male peers were more likely to punish behavior that was seen as being feminine, and as a result these boys were less likely to exhibit gender atypical behavior in front of other boys. In contrast, boys with few male friends, even when punished for gender atypical behavior, did not reduce this behavior. Having fewer male peers meant these boys experienced less pressure to conform to the stereotypes and thus, were less likely to display gender stereotypical behavior. For girls, female peers were less likely to criticize female or male friends who acted atypical for their gender. However, girls with many male friends were more likely to be criticized for not acting like a girl, and thus were more likely to exhibit a behavioral change. It appears that male friendships demand more gender role conformity, while female friendships may allow for greater flexibility.

Teachers:

Gender stereotypes regarding academic performance assume that boys demonstrate higher mathematics ability, while girls exhibit higher language-related skills. Not surprisingly, the academic strengths students possesses correlate with their self-concept in these areas. Specifically, boys demonstrate higher mathematics self-concepts and girls exhibit higher language-related self-concepts (Watt & Eccles, 2008). Is it just ability, or are there other factors that contribute to students' self-concept in specific academic areas? In a longitudinal study, Retelsdorf et al. (2015) found a negative correlation between teacher's gender stereotypes regarding boys' reading ability at the beginning of fifth grade, and boys' reading self-concept at the end of sixth grade. The authors concluded that gender differences in self-concept held by students are correlated to the stereotypical beliefs held by teachers. Consequently, they encourage teachers to counteract prior gender stereotypes and become aware of their own potentially discriminatory behaviors.

In another longitudinal study, Garcia et al. (2019) reported that teachers viewed boys as having worse executive functions than girls have. **Executive functions** are higher order cognitive skills, including planning, cognitive flexibility, working memory, inhibitory behavior, goal-setting and problem solving, that contribute to classroom success. The authors contend that the teachers' perceptions of male students possessing lower executive functions contributed to the persistent gender disparities in academic and behavioral outcomes. Again, gender role stereotypes appear to adversely affect school achievement for boys. It must also be noted that African American students, and those with limited English proficiency, were also rated as having lower executive functions demonstrating the intersectionality of the results.



Focusing on mathematics achievement, results from the Early Childhood Longitudinal Study, Kindergarten Class of 1998–1999, indicate the average mathematics achievement of boys and girls is similar in kindergarten, but by the spring of third grade, a male advantage of approximately one quarter of a standard deviation has developed (Robinson-Cimpian et al., 2014). What accounts for this difference? According to Robinson-Cimpian and colleagues, elementary school teachers' perceptions are the reason. Teachers rate boys as more proficient in mathematics, and they view girls as mathematically competent, only when the girls

are also seen as hard working, well behaved, and more eager to learn. The authors concluded that the underrating of girls' mathematical proficiency accounts for the resulting gender achievement gap in the early grades.

An additional factor contributing to academic performance differences between boys and girls include teacher-student relationships. According to McCormick and O'Connor (2015), an overall higher quality relationship, characterized by low levels of conflict and high levels of closeness, occurs between girls and their teachers. This stronger relationship contributes to teachers rating girls higher on assessments of academic competence. One reason given for this difference is the increased level of disruption demonstrated by boys, and the resulting belief that girls are the easier students to teach. Not surprisingly, when girls have a poor relationship with a teacher, they may internalize negative feelings toward school, which can adversely affect their academic performance. Consequently, stereotypes regarding who is a "model student" in the classroom affects the achievement for both boys and girls. As can be seen in the above research, teachers hold gender stereotypes that negatively affect student academic achievement.

Media:

Another significant way gender role socialization occurs is through media. Television, movies, advertisements, music, magazines, books, video games, and social media all contribute to gender stereotypes, and this exposure begins very early in a child's life. Kirsch and Murnen (2015) reviewed the research on how female and male characters are represented across a variety of children's programming and found that females are more likely to be depicted as frail, attractive, emotional, and worried about their appearance. Additionally, female characters demonstrate deference, dependence and nurturance. They also show fear, politeness, and act



romantic and supportive. In contrast, male characters were more likely to exhibit dominance, aggression, and attention-seeking behaviors. Both cultivation theory, which states that repeated exposure to media encourages beliefs depicted in that reality, and objectification theory explain the effects of sexist media on gender stereotypes (Stermer & Burkley, 2015). Frequent exposure to sexist media that focus on male dominance and female sexual and submissive attributes, correlates with the objectification of women and reinforcement of rigid stereotypes.

Common Sense, a nonprofit organization focused on how children are affected by media and technology, analyzed the research on how the gender stereotypes shown in movies and television actually affect children's development. The report from Common Sense (2017) made the following conclusions:

"Findings indicate that heavier TV viewing, especially of content that features traditional gender representations, can lead children and adolescents to hold more rigid or stereotypical beliefs about what each gender can and should do; leads to more stereotypical toy, activity, and occupation preferences; and limits children's perceptions of their own abilities and future options. For girls, this often means that they steer their focus onto their appearance, bodies, and sexiness and away from their competencies, especially in academics, science, and math. For boys, this means drawing a narrow construction of what both femininity and masculinity are and steering away from "softer" values such as nurturance, compassion, and romantic love," (p. 38).

Because gender stereotypes in advertising perpetuate gender-role stereotypes in a culture, do countries with greater gender equality experience less sexist commercials? Matthes et al. (2016) studied the depiction of men and women in 1755 television advertisements in 13 countries by analyzing the gender of the primary character and voiceover, characters' ages, product categories, home- or work setting, and the working role of the primary character. The authors found that gender stereotypes in TV advertising can be found around the world, independent of a given gender equality status in a particular country. Contrary to what was expected, more progressive countries did not depict women in more progressive ways in television advertising. Clearly, gender role stereotypes in media are a significant socializing factor for children acquiring and internalizing these stereotypes.

Video Games:

When reviewing different types of popular media, some of the most blatant examples of sexism is considered to occur in video games (Stermer & Burkley, 2015). From the birth of video games, Stermer and Burkley state they have portrayed females in sexist ways, including as damsels in distress, rewards for male characters, and an object of men's fantasies. In their review of the research, the authors include studies showing that males who frequently play sexualized video games were higher in rape inclination and rape myth acceptance. Additionally, study participants also viewed a rape victim more negatively, exhibited greater tolerance of sexual harassment, exhibited higher levels of benevolent sexism, thought of women as sex objects, and attributed less cognitive capability to the character when playing as a sexualized female character compared to a nonsexualized female character.

To explain these results, Stermer and Burkley also endorse cultivation theory. For video games, this means that players repeatedly shown sexist imagery and characterizations will embrace these images and internalize the sexist beliefs. Social learning theory, which explains how observing others affects one's attitudes and behavior, is also provided as a reason why playing sexualized video games correlates with sexist attitudes. Lastly, objectification theory, which views women as sexualized objects for the male gaze, explains how sexist video games reinforce female stereotypes as sexual and submissive beings.

Media and the Thin Ideal:

For women in Western cultures, a common attitude is that thinness is beauty. Advertisers focus on this belief and create ads based on the "thin ideal" as a way to market what is deemed attractive and desirable to others (Mills et al., 2017). Thin ideal images often accompany various advertised products, the pairing of which reinforces the idea that if you buy or use a particular product, you, too, can be beautiful. Television and movies also encourage the thin ideal as both female models and actresses possess a lower Body Mass Index (BMI) than what is actually measured for women and what is considered ideal for women (CDC, 2020).

Female Category	BMI Range
Average Weight of Models	BMI=15-16
Average Weight of Actresses	BMI=17-20
CDC Healthy Female Weight	BMI=18.5-24.9
Average Female Weight	BMI=29.6

How does idealized body images affect one's self-perception? According to Mills et al. (2017), there is robust empirical support for the idea that exposure to idealized body images in traditional forms of media (e.g. magazines and television) affects perceptions of beauty and appearance concerns by leading women to internalize a very slender female body type as ideal or beautiful. There is also support for the idea that exposure to the thin ideal is associated with body dissatisfaction in the moment among women. While most of the research on this topic has been conducted with female participants, there is also some research on male participants. Men's and women's body ideals vary considerably in Western cultures, where most of this research has been conducted. While women's body ideal is slim, men's is lean, but well-defined and muscular. In sum, the association between exposure to idealized body images in the media and body dissatisfaction holds true for both men and women, with the effect in women being slightly stronger than in men.

Social Media:



In line with research on traditional forms of mass media and body image, recent correlational studies reveal that social media use, including Facebook, Instagram, YouTube, Snapchat and Pinterest, is linked to body image and appearance concerns among both men and women. One of the unique aspects of social media, versus traditional media, is that they are made up of communication with peers and/or public figures. It is the elements of interactivity and connectedness that make social media distinct from other media forms and rife with opportunities for users to perceive, compare, and internalize standards of beauty. Traditional media literacy efforts may have helped people think critically about how photos of models and celebrities are frequently edited by advertisers and editors, and how they display completely unrealistic standards of beauty. However, social media platforms expose users to photos of real-world peers, which may dissuade people from critically analyzing the images they see on social media. In truth, users

can present their ideal selves through editing, enhancing, and embellishing their online images and appearance. Whether social media users engage in selective presentation of their own appearance, but overlook the notion that other users have done the same, still needs to be researched (Mills et al., 2017).

Religion:

According to Haggard et al. (2019), "many world religions endorse sex segregated worship practices, gendered standards of sanctification, and strict patriarchal family life" (p. 392). Judaism, Christianity, Mormonism, and Islam account for more than half of the world's religious believers, and all four religions support an organizational structure that endorses separate expectations for men and women in both the home and sacred spaces. Overall, religiosity is correlated with negative attitudes toward women and



less access to education, employment, and maternal care for women, regardless of a country's economic development. Additionally, there is an increase in positive feelings toward women, or benevolent sexism, who follow gendered stereotypes and rules. Religious beliefs and culture are often difficult to separate, and many religious practices that oppress women are often reflective of the culture rather than the religion. This is especially true for Muslim women who, in many countries, are subjected to strict behavioral control based on the culture and not the Quran, Islam's holy book (Else-Quest & Hyde, 2018).

Gendered Language Development

Language contributes to children's beliefs about gender by treating gender as a binary, thus leading to gender

stereotypes and biases. In a review of how languages vary in their marking of gender, Bigler and Leaper (2015) identify three types of languages:

- Gendered languages mark nouns and pronouns for gender
- Natural Gender languages mark gender with third-person singular pronouns (e.g., he, she, his, her)
- Genderless languages do not mark either nouns or pronouns for gender

The English language is categorized as a natural gender language, while Spanish would be considered a gendered language. In English, many nouns reflect the gender binary, including names of family members (daughter, wife, sister) and careers (fireman, congressman). For those who do not identify with the gender binary, or who prefer not to be identified by their gender, these words would not be appropriate. Switching to the use of gender-neutral nouns is possible in most situations, and there is growing support to refrain from marking gender unnecessarily. Replacements for gendered language are listed below:

Gender-Neutral Language	Gendered Language
Children	Daughter and Son
Spouse or Partner	Wife, Husband, Girlfriend, Boyfriend
Fire Fighter or Police Officer	Fireman, Police woman
Students	Girls and Boys
People	Men and Women
Chair	Chairman and Chairwoman
Mx.	Ms. And Mr.

Observational research has also indicated that gendered nouns can appear with descriptors that indicate broad generalizations about those on the gender binary (Bigler & Leaper, 2015). Children hear such statements as, "Girls wear pink" or "Boys like trucks", and they do not readily hear statements that reflect within-gender variability, such as "Some girls like to wear pink" or overlap between the binary genders, "Both girls and boys like to play with trucks". These descriptive gender-generic noun phrases can promote gender stereotypes in children. Other examples of gendered language children hear include honorific titles, such as Miss, Mrs., Ms., and Mr., which mark the gender of the individual. For females, these titles can also indicate marital status not reflected in the male title.

Pronoun use in English, which focuses on only one individual, has traditionally reflected the gender binary using the following terms: he, she, his, or her. Consequently, using these pronouns makes assumptions about the gender of the individual that may be wrong. Therefore, using the pronouns 'they" and "their" to reflect single individuals is now advocated. The American Psychological Association (APA) endorses the use of generic third-person pronouns in the latest edition of their publication manual. According to the APA (2020), "The use of the singular 'they' is inclusive of all people, helps writers avoid making assumptions about gender, and is part of APA Style" (p. 121).

Another concern with the use of masculine generic nouns and the pronouns "he" or "him", is that they have historically been used as a replacement for all individuals, not just males. When this occurs, children imagine the individual (including animals) as a male rather than as a representative of all people. Additionally, the

frequent use of masculine generic nouns promotes a higher status of males compared to females (Bigler & Leaper, 2015)

Research has also looked at gender differences between affiliative and self-assertive speech patterns in children. According to Leaper and Smith (2004), affiliative speech refers to language used to establish or maintain connections with others, while **self-assertive speech** refers to language used to influence others. In a review of three sets of meta-analyses, Leaper and Smith came to the following conclusions. First, girls were only slightly more talkative than boys were, and they used more affiliative speech. Second, there was a significant, but small, indication that boys used self-assertive speech more than girls did. These results were interpreted according to traditional gender socialization that emphasizes girls playing in more communal and nurturing ways, while dominance and instrumentality are encouraged in the play of boys. However, group size was important to the type of speech used. Specifically, boys used speech that was more assertive in dyads than when they were in groups of three or more children or in mixed gender groups. The authors hypothesized that both boys and girls may demonstrate self-assertive speech in larger groups to maintain their position within the group.

What happens to our gender identity as we age?



There are two theories with regard to lifespan gender development: cross over and degendering. Cross over theory (Gutmann, 1975) suggests that the changes in our social roles as we move through middle and late adulthood would likely lead to greater similarity between the genders in terms of how they see themselves. Degendering theory (Silver, 2003) proposes that as people age, gender and the social expectations of gender becomes less central to people's self-concept. The personality research does suggest a degree of gender convergence with men and women becoming more similar with age, in line with the predictions of cross over theory. Lemaster el al. (2015)

found little support for degendering. In their research men and women often saw themselves as more typical of their gender group the older they were, suggesting that gender was still very central to their self-concept even in their 60s. They also found that this tendency was stronger for men than for women as they aged, suggesting that the need to validate manhood is still present even in middle aged and older males.

This module focused on how we develop our gender identity. In the next module, we will focus on the expectations and characteristics associated with being male or female, and the accuracy of these expectations.

Module 5 How Accurate are Gender Differences in Physical, Cognitive, and Emotional Abilities?

Case Study: Harvard's President Sparked a Gender Controversy



Woman teaching geometry: Illustration at the beginning of a medieval translation of Euclid's Elements (c. 1310 AD) Source

In January 2005, the president of Harvard University, Lawrence H. Summers, sparked an uproar during a presentation at an economic conference on women and minorities in the science and engineering workforce (Goldin et al., 2005). During his talk, Summers proposed three reasons why there are so few women who have careers in math, physics, chemistry, and biology. One explanation was that it might be due to discrimination against women in these fields, and a second was that it might be a result of women's preference for raising families rather than for competing in academia. In addition, Summers also argued that women might be less genetically capable of performing science and mathematics, and that they may have less intrinsic aptitude than men.

Summers's comments on genetics set off a flurry of responses. One of the conference participants, a biologist

at the Massachusetts Institute of Technology, walked out on the talk, and other participants said that they were deeply offended. Summers replied that he was only putting forward hypotheses based on the scholarly work assembled for the conference, and that research has shown that genetics have been found to be very important in many domains, compared with environmental factors. As an example, he mentioned the psychological disorder of autism, which was once believed to be a result of parenting but is now known to be primarily genetic in origin.

The controversy did not stop with the conference. Many Harvard faculty members were appalled that a prominent person could even consider the possibility that mathematical skills were determined by genetics and the controversy and protests that followed the speech led to the first ever faculty vote for a motion expressing a "lack of confidence" in a Harvard president. Summers resigned his position in 2006, in large part as a result of the controversy.

Lawrence Summers's claim about the reasons why women might be underrepresented in the hard sciences was based in part on the assumption that environment, such as the presence of gender discrimination or social norms, was important but also in part on the possibility that women may be less genetically capable of performing some tasks than are men. Is this true?

In this module, we will discuss the content of gender stereotypes. We will then consider what the research has to say about the accuracy of these beliefs.

Content of Gender Stereotypes

A **stereotype** is a shared belief about a social group. **Gender stereotypes** are shared beliefs about the traits, abilities, and characteristics associated with men and women. Noticed that in the definition of stereotypes it states that these are shared beliefs, not personal beliefs. Psychologists do not consider personally held beliefs to be stereotypes unless they are shared by many other people in your culture.

In the last several decades more women have entered the labor force. In 1950 about one in three women were in the workforce, which jumped to almost six out every ten women in 2018, according to the US Bureau of Labor Statistics (2018). Women now earn more college degrees at every degree level (Bachelor's Master's and Doctoral) than do men (Okahana & Zhou, 2018). Have the cultural stereotypes changed to reflect these changes in the lives of women and men?

Most of the research on the content of gender stereotypes has highlighted two themes: agency and communion. **Agency** includes characteristics such as assertiveness and effectiveness, *traits that facilitate leadership and success*. **Communion** includes characteristics such as kindness and warmth, *traits that facilitate connection with and concern for others*. It is important to note that communion and agency are not polar opposites; they are separate dimensions that social groups fall along. Fiske et al. (2002) found that the elderly are viewed as more "warm", a trait of communion, while they are viewed as less competent, a trait found in agency. Those who are wealthy are viewed as less warm, but more competent; as are men. Those who are poor are viewed as low on both traits. While women are viewed as moderately competent, but high in warmth. These beliefs about social groups influence our expectations and behaviors when we interact with people. Moreover, these two dimension underlie many of our gender stereotypes. In the US culture, and many other Western cultures, "masculine" traits often reflect agency, while many of the "feminine" traits

reflect communion. Even the social roles and occupations typical of men and women highlight these two dimensions.

Male Stereotype: Social Role	Female Stereotype: Social Role
Financial provider	Tends to the home
Leader	Provides emotional support
Makes major decisions in the home	Takes care of children
Male Stereotype: Occupations	Female Stereotype: Occupations
Construction worker	Secretary
Firefighter	Nurse
Politician	School teacher

Have Gender Stereotypes Changed?

As mentioned above, women have entered the labor force and levels of professional education in greater numbers. Have the gender stereotypes changed at all to reflect the reality of our society? In 2016, Haines et al. compared social perceptions of men and women in 2014 to data from the 1980s. The researchers compared people's perceptions on eight components: agency traits, communal traits, male gender role, female gender role, male-typed occupations, female-typed occupations, male-typed physical characteristics, and female-typed physical characteristics. Their findings suggest that even in 2014 people still saw large differences between men and women that are consistent with the traditional gender stereotypes. For all eight components the differences in how people viewed men and women were statistically significant and the effect sizes were medium to large on all but agency. Moreover, the 2014 data looked remarkably similar to the data from 1983. The researchers also found that the participants' sex had little impact on how they viewed men and women. However, men were more likely to view females as having more feminine physical traits than were women.

Components Assessed	Effect Size (d value)
Agency Traits	+.27 (small)
Communal Traits	57 (medium)
Male gender role	+.56 (medium)
Female gender role	75 (large)
Male-typed occupations	+.58 (medium)
Female-typed occupations	55 (medium)
Male-typed physical characteristics	+.63 (medium)
Female-typed physical characteristics	60 (medium)
+ effect sizes denote males rated more likely, – effect sizes denote females rated more likely	

In an effort to have a more culturally representative sample, Eagly et al. (2020) compared opinion polls from

large national surveys across 7 decades, from 1946 to 2018. Their research suggests some stability, but also that there have been some changes in people's perceptions of men and women over time. Questions in these surveys that assessed perceptions of communion showed that women were, and still are, viewed as possessing more of these traits. In fact, more people today ascribe these traits to women than in the past. In 1946, 54% of respondents who saw a gender difference in these traits said they were truer of women, in 1989, 83% did, and in 2018, 97% did. In addition, fewer people today than in the past see the sexes as equal on communal traits. The survey questions on agency traits suggest that over time there was little change in ascribing these traits to men, however, there has been an increase in the number of people saying the sexes are equal on these traits. However, in a reversal of gender stereotypes among those who saw a gender difference, they were more likely to rate women as being more competent and intelligent in 2018 (65%) than there were in 1946 (34%). With the exception of communion and to a lesser extent agency, people are more likely to view men and women as equal in competence and intelligence than to see a sex difference today than in the past.

These studies suggest that there are areas of stability, such as the greater tendency to ascribe agency traits to males and communal traits to females, and that certain occupations and characteristics are still viewed as more typical of men or women along traditional gender stereotypes. While at the same time there has been some change. More people see men and women as being equal than was the case in the past.

Is the Content of Gender Stereotypes Universal?

Most of the research on gender stereotypes has been conducted in the US (Bossen, et al., 2019). What about other cultures? There is some evidence to suggest that many cultures hold similar views about the content of gender stereotypes. Women are often seen as affectionate and more agreeable, while men are viewed as being more dominant and adventurous (Cuddy, et. al., 2009). These similarities reflect the agency and communion distinction. However, there are some notable differences in how cultures view the genders. Nations differ in certain core cultural values. Some nations are described as being collectivistic cultures, such as many African, East Asian, and Middle Eastern nations, who value the needs of the group over individuals. As a result, such cultures would value more communal traits. In contrast, other nations are described as individualistic cultures, such as the United States, Canada, and many Western European countries, who emphasize the individual rather than the group. These nations are more likely to value agentic traits. Cuddy et. al. (2015) analyzed the responses to 21 traits that clearly captured individualism, and 27 traits that captured collectivism and they found an interesting pattern. The researchers predicted that the more dominant group (men) would be seen as holding more of the traits valued in that society. In collectivistic cultures people were more likely to associate collectivistic traits to men, while in individualistic cultures more individualistic traits were assigned to men. While this seems to challenge research showing considerable similarity across cultures in the content of gender stereotypes, it does reveal a universal tendency. Whatever traits are valued by a culture they are more likely to be ascribed to men than to women.

Physical Abilities

Activity Level:



A common stereotype is that males, especially younger males, are much more active than females. Research does indeed support the finding that males exhibit a higher activity level than females (Else-Quest & Hyde, 2018). However, age is a determining factor when measuring just how much more active males are, as the smallest difference occurred between infants and the largest difference for those oldest. What accounts for the gender differences? Else-Quest and Hyde provide two hypotheses. First, they propose that the **gender**

segregation effect, which states that children seek out and play with other children of the same gender, results in boys encouraging other boys to be more and more active. The second hypothesis focuses on the advanced physical development of girls, especially in brain development, that allows girls a greater ability to control their activity level due to their greater maturity. Gender differences associated with specific ages are presented in the following table:

Age of Participants	Effect size (d value)
Infants	.29 (small)
Preschoolers	.44 (medium)
Older Children and Adults	.64 (medium)
All Ages	.50 (medium)

Strength, Endurance, and Movement:

Courtright et al. (2013) analyzed data from 113 studies using 140 unique samples assessing the physical abilities of men and women. They found substantial differences between the genders on many of the measures. Overall, men showed more muscle strength, although it varied by body area, muscle tension (exerting force against an object), muscle power (exerting force quickly), and muscular and cardio endurance. Movement quality, including flexibility, coordination, and balance showed slight to moderate gender differences, with some measures favoring women and others favoring men. Others, like Hyde (2005) or Hines (2015) show a slight female advantage for balance, which challenge the findings of Courtright et al. on this measure.

Physical Ability Measure	Effect Size (d value)
Muscle strength (Upper)	1.88 (very large)
Muscle strength (Lower)	1.60 (very large)
Muscle strength (Core)	.25 (small)
Muscle strength (Total body)	2.22 (very large)
Muscle tension	2.13 (very large)
Muscle power	1.11 (very large)
Muscle endurance	1.47 (very large)
Cardio endurance	1.81 (very large)
Movement quality (Flexibility)	15 (small)
Movement quality (Coordination)	.64 (medium)
Movement quality (Balance)	.31 (small)
Source: Courtright et al., 2013.	

Who is better at running a marathon, women or men? As Hubble and Zhao (2016) suggest, the answer depends on how you define "better". Men are faster, even at ultra-long distance they often finish the race first. While women have better strategy and pacing throughout the race. They show less variation in their speeds, while men tend to slow down as the race progresses. It may be that the success of men in their race times is due to their faster initial speed. Hubble and Zhao note that some researchers have suggested that the female body's ability to store and metabolize fat more efficiently than the male body may allow women to keep a steady pace throughout the race. However, others have suggested that men's overconfidence may also be a factor in their less efficient race strategy. In most ultra-endurance events men are faster, whether it be cycling, running, or triathlon (Knechtle et al., 2015). However, the story is different when it comes to open water ultra-distance swimming. Here women achieve and even surpass the performance of men. In the Catalina Channel Swim, one of the legs of the "Triple Crown of Open Water Swimming" the average race times of the fastest women were faster by almost 53 minutes than the average race times of the fastest male swimmers (Knechtle et al., 2015). Women also hold many records for longest distance or durations in the water. The longest continuous and unaided ocean swim is held by Chloe McCardel, 77.3 miles/124.4 km, and the longest continuous and unaided open water and lake swim is held by Sarah Thomas, 104.6 miles/168.3 km (Marathon Swimmers Federation, 2020).

Throwing:

Throwing requires the coordination of the whole body and is a physical skill used in many team sports and games (Gromeier, et al., 2017). Meta-analyses have revealed gender differences in velocity in children by age three, and in distance by age 2, with males exceeding the abilities of females (Morris et al., 1982; Thomas & French, 1985). Similar results have been shown in adults (van den Tillaar & Ettema, 2004). Are males more accurate at hitting a target than females? Previous research has found that males, both children and adults, show greater accuracy, although many of these studies used novices (Morris et al., 1982; Thomas & French, 1985, Robertson & Konczak, 2001). As males are more likely to have been shown how to throw in childhood this finding is not surprising. Gromeier and colleagues (2017) assessed throwing in children age 6-16 who were

all aspiring athletes in sports that involved throwing. They found no difference in the accuracy at all ages. However, they did find gender differences in the developmental pattern of throwing and in the quality of movement that favored males.

Pain:

Clinical settings: Large-scale epidemiological studies often reveal that women report experiencing more pain than do men (Bartley & Fillingim, 2013). Women are more likely than men to report having experienced pain in the last week, and report having more chronic health conditions such as migraine and chronic tensiontype headache, irritable bowel syndrome, and fibromyalgia. In their overview of the pain literature Bartley and Fillingim reported that the trend is towards greater pain in women. However, do women experience more severe pain than men, or are they just more willing to report experiencing pain? It is harder to assess the question of pain severity, as there really is no standard measure of pain perception. Research comparing pain experiences following the same surgical procedures have yielded inconsistent results as to which gender experiences more pain. Part of the problem with such research is that across these studies there were different surgical procedures and pain medications and treatments used.

Experimental settings: Another way to assess pain tolerance and perception is to study men and women under more controlled laboratory conditions. Researchers have used a variety of methods to inflict pain (chemical, electrical, pressure, temperature), and measures of pain (length of time to report pain sensation, how long the participant is willing to experience the pain (tolerance), and self-reports of unpleasantness). The results have suggested than women have more pain sensitivity than do men (Rahim-Williams et al., 2012). In their study of healthy young men and women, women reported more pain and less pain tolerance, although the effect sizes were from small to large depending on the method and type of measure. The mechanisms behind the gender differences in pain in both clinical and experimental settings are not clear. It has been suggested that both biological, psychological, and sociocultural factors may contribute (Bartley & Fillingim, 2013).

Measure of Pain	Effect Size (d value)
Heat pain	.48 (medium)
Heat pain tolerance	.98 (large)
Cold pain	.41 (medium)
Cold pain tolerance	.55 (medium)
Pressure pain (trapezius muscle)	.90 (large)
Pressure pain (masseter muscle)	.98 (large)
Ischemic pain (lack of circulation)	.24 (small)
Ischemic pain tolerance	.52 (medium)
Source: Rahim-Williams et al., 2012	



The Polar Bear Plunge.

Differences in the relative levels of sex hormones has been touted as one possible source for the gender differences in pain. Estrogen and progesterone have a complex effect on pain, in that they can both enhance or inhibit pain perception (Smith et al., 2006). This may explain why the research findings are often mixed on how this relates to women's experience of pain depending on the levels of these two hormones, with some research suggesting that women show greater sensitivity to pain depending on the phase of the menstrual cycle (Riley et al., 1999), and others not finding any consistent pattern between menstrual cycle hormone levels and pain perception (Bartley & Rhudy, 2013). In contrast, studies have shown that

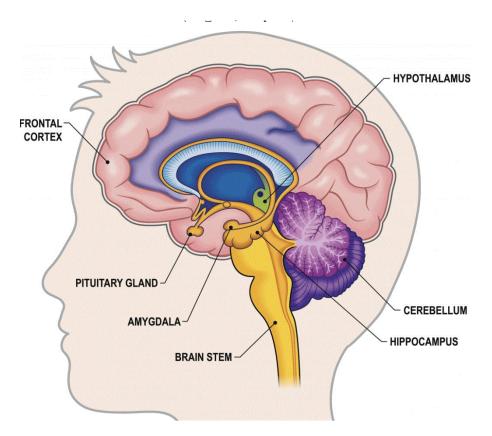
testosterone appears to be more protective from pain sensitivity (Cairns & Gazerani, 2009).

Comparing the coping styles used by men and women reveals that women catastrophize more than men (Forsythe et al., 2011). **Catastrophizing** refers to assuming the worst case scenario when faced with a challenge, and research has tied this tendency with greater pain sensitivity, lower pain tolerance, and greater pain-related disability (Keefe et al., 1989). In addition, self-efficacy, the belief that you can achieve certain outcomes, has been studied with regard to ability to cope with pain. Those with lower self-efficacy report more pain and other physical symptoms (Somers et al., 2012). Finally cultural expectations about masculinity and femininity may also play a role. Expression of pain is typically more acceptable for women, which may lead more women to report that they are in pain (Bartley & Fillingim, 2013).

Brain Areas: Relative Size and Functioning

Looking at overall brain volume, the male brain is slightly larger as brain size correlates with body size (Hines, 2011). Magnetic resonance imaging (MRI), which uses magnetic fields and radio waves to create images of the body, have identified some gender differences in brain size and performance. Although males and females perform equally on tests of intelligence, females with higher IQ scores show more gray matter (neuronal cell bodies) and white matter (myelinated axons) in frontal brain areas associated with language. For males, higher IQ scores correlate with more gray matter in posterior areas that integrate sensory information (Haier, 2009). However, when comparing males and females directly on tasks, anatomical and functional differences typically do not result in differences in performance (Hines, 2011). It may be that these differences allow male and female brains to behave the same way despite being physiologically different.

Looking at cortical size differences in specific brain areas, MRI research has identified some variations between male and female brains (Cahill, 2012). However, size differences in specific brain areas are relative to the overall brain size, and there are certainly individual differences. In males, the amygdala, which responds to emotional arousal, and sections of the parietal cortex, involved in spatial perception, are usually larger.



In females, parts of the **frontal cortex**, responsible for higher-level cognitive skills, and **limbic cortex**, involved in emotional processing, are typically larger. Additionally, females exhibit a greater density of neurons in the **temporal lobe**, which is associated with language comprehension and processing. This greater density correlates with tests that demonstrate a verbal fluency advantage for females. Lastly, females tend to possess a larger **hippocampus**, which is responsible for memory processing and storage. Reviewing the research on male and female navigation, this difference support the theory that the larger hippocampus for females may be why they navigate using landmarks. In contrast, males tend to navigate by "**dead reckoning**" or estimating distances using space and orientation cues (Cahill, 2012).

What causes these anatomical differences? Research has identified the importance of sex hormones released during the prenatal period. Researchers theorize that the hormones "help direct the organization and wiring of the brain during development and influence the structure and neuronal density of various regions," (Cahill, 2012, p. 25). Consequently, these brain differences appear to have been present since birth rather than acquired due to socialization or hormonal changes at puberty. However, other differences may be due to numerous environmental influences that affect the size and functioning of specific brain areas. Even with these differences, male and female brains function similarly for most tasks (Hines, 2011).

Are there gender differences during sexual activity? During sexual arousal, the ventromedial area of hypothalamus is activated in women, while the medial pre-optic region of hypothalamus is activated during men's sexual responses (Petersen & Hyde, 2011). Additionally, the hypothalamus and the amygdala are activated more in men than women. Lastly, the **cingulate gyrus**, *important in processing emotions and regulating behaviors*, and **thalamus**, the *relay station for sensory information*, are also activated more in men.

Cognitive Abilities

Cognition is thinking, and it encompasses the processes associated with perception, knowledge, problem solving, judgment, language, and memory (Lally & Valentine-French, 2018). Given the variety of tasks included in these processes, it is not surprising that gender differences have been researched. According to Hyde (2005), most results reflect the **gender similarities hypothesis**, which states that females and males are similar on most, but not all, psychological variables. After reviewing 46 meta-analyses of gender-based research, Hyde found that 78% of the gender differences noted were small or very close to zero. Below we will consider performance on intelligence, mathematical, spatial, and verbal abilities to determine if gender differences are evident. Explanations for those gender differences are also examined.

Intelligence:

Intelligence is the ability to think, learn from experience, solve problems, and adapt to new situations (Lally & Valentine-French, 2018). The study of gender differences in intelligence has a lengthy and checkered past. In the 1800s women were viewed as intellectually inferior to men and some early researchers attempted to use the new science of psychology to justify women's lower social status (Bosson et al., 2019). However, men and women have almost identical intelligence as measured by standard IQ and aptitude tests (Hyde, 2005). Despite this, there is variability in intelligence, in that more men than women have very high, as well as very low, intelligence, known as the greater male variability hypothesis (Gray et al. 2019). There are also observed gender differences on some types of tasks. Women tend to do better than men on some verbal tasks, including spelling, writing, and pronouncing words (Halpern et al., 2007; Nisbett et al., 2012), and they have better emotional intelligence in the sense that they are better at detecting and recognizing the emotions of others (McClure, 2000).

Mathematical Performance:



Computations and the understanding of math concepts for grades 2 through 11 show no significant gender differences. Complex mathematical problem solving in high school do show a slight advantage for males in some, but not all, national assessments, and this difference is lower than in previous analyses, according to Hines (2015). Advanced tests, such as the Scholastic Aptitude Test (SAT) and Graduate Record Exam (GRE) do show differences that favor males on the math portions of the tests (Hines, 2015). These differences may be inflated because of self-selection, in that more males than females drop out of education. Consequently, a smaller number of lower achieving males actually take these tests. It also must be noted that gender differences in math self-confidence (higher in males) and math anxiety (higher in females) are actually larger than any gender difference in actual math performance (Hyde, 2014). In addition, cross-cultural research does not always show a male advantage in math, and nations with greater gender equality show less of a gap in math performance (Reilly, 2012).

Spatial Performance:

There are several measures of spatial ability, and gender differences vary based on the aspect being assessed. **Mental rotation** *refers to the ability to rotate an object in one's mind* and is a frequent way to measure spatial skills by assessing a person's ability to mentally rotate a three-dimensional object to match a target. Males have consistently demonstrated stronger skills on mental rotation tasks, and this gender difference is one of the largest in cognitive skills, with effect sizes often ranging from .47 to .73 (Lauer et al., 2019). However, this gap may be due to a lack of training provided by out-of-school experiences that favor males, such as playing video games. Researchers have also found that the male advantage in mental rotation in middle-school predicted gender differences in science achievement (Geer et al., 2019). **Spatial perception** *refers to the ability to perceive and understand space relations between objects.* An example would be the ability to identify the true horizontal water level in a tilted container. Males show a small advantage in childhood (d=.33) which increases in adulthood (d=.48; Voyer et al., 1995). **Spatial visualization**, which *refers to complex, sequential manipulations of spatial information* including embedded figures, shows only a small to negligible difference between genders (d<.20; Hines, 2015). **Spatial location memory**, which is the ability to remember the location of objects in physical space, shows a slight female advantage (d=-.27; Voyer et al., 2007). This difference has often been attributed to women's historical division of labor as gatherers, but not all researchers agree with this explanation.

Verbal Skills:

In children, girls acquire language earlier than boys and demonstrate a larger vocabulary between the ages of 18 to 60 months (Hines, 2015). Reilly et al. (2018) analyzed 27 years of data from the National Assessment of Educational Progress on reading and writing skills. This analysis involved 3.9 million United States students in the fourth, eighth, and twelfth grades. Results indicated that girls, on average, scored significantly higher than boys in both reading and writing at the fourth grade. This gap increased further at the eighth grade level and then even further at the twelfth grade. At all three grade levels, differences were greater for writing than reading skills. Additionally, a review of international data consisting of 65 nations indicated that female 15-year-olds scored higher in reading comprehension (Hyde, 2014). Females also show a small to moderate (-.24 to -.45; Weiss et al., 2003) advantage on measures of **verbal fluency**, *the ability to generate words*. Overall, verbal skills appear to be an exception to the Gender Similarities Hypothesis.

Non-Verbal Communication:

Females smile more and the effect size is medium (d=-.41; LaFrance et al., 2003) and this holds across cultures and ethnicities (Tsai et al., 2016). LaFrance et al. (2003) found that this may be due to women being more likely to occupy nurturing and caring roles, as both sexes smiled more when parents, therapists or medical professionals. Women make more eye contact than do men when interacting with others, with the highest eye contact occurring between female dyads (LaFrance & Vial, 2016). Although males tend to look more at females when speaking to them, and look away when women are talking to them, while women do the reverse, they are more likely to look at their partner when listening than when speaking (Bosson et al., 2019).

Explanations for Gender Differences in Cognitive Abilities

Why might we find gender differences in cognitive abilities? There are likely to be several factors at play. As mentioned previously, when given the opportunity to participate in boys' activities, such as video games,

girls improve on visual spatial tasks. Further, more females with varied academic competencies take advanced achievement tests (e.g., SAT and GRE), while lower achieving males do not. This difference demonstrates a male self-selection bias, especially in mathematics. When reviewing cultural differences, gender differences are not consistent across countries. In nations with greater gender equality, gender differences are nonexistent or favor females. Specifically, the female advantage in writing correlates positively with gender equality, while the male advantage in mathematics correlates negatively with gender equality (Hines, 2015). Lastly, males do show greater variation in intelligence, perhaps because of the greater tendency toward learning disabilities, autism spectrum disorders, and fragile X syndrome than females (Bosson et al., 2019).

Gender stereotypes also play a role in performance. For instance, the poorer math performance by females on high stakes tests, such as the SAT, despite often having equivalent math grades in high school with males, may reflect females' lack of confidence rather than actual ability. Could this lack of confidence be due to the cultural stereotypes about females and math? **Stereotype threat** refers to the anxiety that people feel when they risk confirming the cultural stereotype for their group. When females are reminded of the negative stereotypes associated between their gender group and math their performance drops (Keller, 2002). Smeding and colleagues (2013) found that even the order of administration of math and verbal tests can affect the test scores of females. Placing the math test first reduced performance on the math test for females, but females' performance on the math test was as good as the males' performance when the verbal test came first. The order of the tests did not affect females' performance on the verbal test, nor males' math or verbal scores. Metanalyses reveal that stereotype threat on women's math performance ranges from small to moderate (Picho et al., 2013).

How willing are you to guess when you do not know the answer on an important test? When there is no penalty for guessing, research shows that everyone attempts the questions, but when there is a penalty, males are more likely to take the risk (Baldiga, 2013). Overall, guessing may be the better strategy. People tend to do better on a test when guessing the answer than when leaving the question blank and as a result of men's willingness to take risks they may score slightly higher on some high stakes tests. This may explain an interesting paradox. In general, females get better grades in high school and college, but score slightly lower on tests like the SAT than males (Bosson et al., 2019). Females' unwillingness to take a chance might explain this discrepancy.

Is there a gender difference in achievement motivation? **Achievement motivation** *refers to an individual's needs to meet goals and accomplish things*. Some scholars have thought that the male advantage in spatial skills and math might reflect less motivation by females to continue to complete work when faced by failure. Yet the research does not support this. In school, females show greater intrinsic motivation to succeed than do males; it is males who are more likely to avoid completing work in the face of failure (Spinath et al., 2014).

Of all things that people can fear, success is not usually at the top of people's lists. However, fear of success has been studied since the 1960s when Horner (1969) initially described it as women's motivation to avoid being too successful for fear of social rejection. In Horner's classic study women were presented with a story about Anne, and men were presented with a story about John, both were described as being at the top of their class in medical school. Participants were asked to complete the story about the character they had been given. Men wrote about how John was happy and satisfied with his success, while 65% of women's stories reflected concerns that Anne might be rejected by others or even denied the reality of her being successful. Given the time period, the results are not really that surprising. Despite the women's movement, many women were still limited in their career choices. Their concerns often reflected the reality Anne might face.

Later research expanded **fear of success** to include the anxiety that women and men might feel when achieving success in an atypical gender situation (Cherry & Deaux, 1978). In their study participants read about Anne and John being at the top of either their nursing or medical school class. As expected the stories of both men and women contained more concerns and fears when Anne or John were successful in atypical gender careers of that time.

Since this early research, others have expanded the concept beyond academic success. André and Metzler (2011) examined this concept in tennis players. What they found was that fear of success was not so much related to gender, as it was to already being more anxious, having self-doubts, or being preoccupied with rewards. As gender role norms continue to evolve we may see less fear of success being experienced.

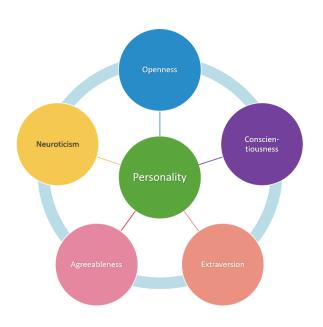
Personality Traits

Temperament:

Our temperament is the biologically based emotional and behavioral ways we respond to our environment. Temperament occurs early in life and is correlated with our later personality. For children younger than 13, gender differences are observed in the areas of inhibitory control and attention with females exhibiting higher scores in both areas. In contrast, no differences are noted in the areas of persistence and negative affect (Hyde, 2014).

Five Factor Model of Personality:

The Big Five model of personality measures the degree to which an individual demonstrates the following personality attributes: Openness, conscientiousness, extraversion, agreeableness, and neuroticism. American data demonstrate that gender differences, when present, are small and tend to get even smaller with age. This is a phenomenon called gender convergence. When difference are found women tend to score slightly higher than men on conscientiousness, agreeableness and neuroticism. Some studies show women may be slightly higher on extraversion, but only on the aspects of extraversion that involve gregariousness, warmth, and positive emotions, while men score higher on the assertiveness and excitement seeking aspects of extraversion (Costa et al., 2001; Weisberg et al., 2011). In contrast, gender differences were not found for Japanese or black South Africans



indicating the importance of culture in affecting these gender measurements. Gender stereotypes regarding greater emotionality and tender-mindedness of women are observed in the United States, and they most likely contributed to the gender differences found (Hyde, 2014). Other cultures may not share these stereotypes.

Helpfulness:

Who are more helpful, males or females? Gender stereotypes point to females being more caring and nurturing, and consequently they are perceived as more helpful. However, research studies demonstrates the opposite (Else-Quest & Hyde, 2018). Explanations for males engaging in more helping behavior align with male gender roles of being heroic and chivalrous. Research indicated that males were especially likely to assist in situations that involved danger and when onlookers were present, thus encouraging heroism. Else-Ouest and Hyde concluded that the types of behaviors researched favoring males were short-term situations with strangers. In contrast, the frequency of long-term helping behaviors, favoring the nurturing behavior demonstrated by females, are difficult to research.

Emotions

People believe that women are more emotional than are men (Brody & Hall, 2008), but is this true? When we say that women are more emotional do we mean they feel more emotions, they express more emotions, or that they are better at decoding emotions? Men report feeling more pride and anger, while women report feeling more warmth, sadness and anxiety (Brody & Hall, 2010). Given that emotion is highly subjective, selfreport measures of emotion are problematic and may reflect gender socialization and stereotypes than true differences (Chaplin et al., 2005).

Emotional Experiences and Expression:

According to Else-Quest and Hyde (2018), the stereotype that females are more emotional than males is among the most pervasive of all stereotypes. Across most cultures, gender stereotypes suggest that females exhibit many more emotions than males, both positive and negative, and most of these emotions reflect powerlessness. In contrast, males are seen as demonstrating fewer emotions, and the ones they do demonstrate reflect dominance. This includes exhibiting more anger, contempt, and pride. However, there are differences among ethnicities indicating that beliefs regarding gendered behavior are socially created rather than biologically based. For example, white women are not supposed to demonstrate anger, but the expressions of anger in other ethnic groups are not seen as a trait only for males.

Research looking at the intensity of emotional expressions found a positive correlation between the level of agreement with gender stereotypes and the intensity of emotional displays for females, but a negative correlation for males (Grossman & Wood, 1993). Specifically, women who held strong gender stereotypes expressed more intense emotions, while men who held strong gender stereotypes exhibited less emotional expression. Does this mean that males do not experience strong emotions? When presented with pictures designed to evoke certain emotions, research does indicate that females are more emotionally expressive than males, but males showed more autonomic nervous system reactivity (MacArthur & Shields, 2015). The authors concluded that males do experience emotions, but societal expectations that they not show them results in males refraining from exhibiting emotional expressions.

Gender differences are also found in how others perceive the emotional expressions exhibited by males and females. Rather than rate women as expressing anger, which goes against gender stereotypes, laboratory experiments demonstrate that participants rate females' anger expressions as exhibiting sadness instead. Further, when shown pictures of blended emotions, research participants identified males as being angry and females as feeling sad. Not adequately identifying someone's emotions can interfere with communication

patterns and interpersonal relationships. Study participants have also attributed internal versus external factors for reasons why an individual would feel a certain emotion. Participants made more **dispositional attributions**, *or internal reasons*, for a female's expression of emotion, while they assigned more **situational attributions**, *or external reasons*, for why a male would exhibit a similar emotion. This would then justify a male's emotional reaction to a particular situation, whereas for the same response, a female is just being emotional (Barrett & Bliss-Moreau, 2009).

In many cultures, women are socialized to be more people/relationship oriented. As a result one would expect females to express more positive emotions that would encourage others to maintain social harmony. Chaplin et al. (2005) state that females are encouraged to exhibit **submissive emotions** that communicate vulnerability, such as anxiety or sadness, whereas males are encouraged to display **disharmonious emotions** that convey a highly competitive motivation to achieve and dominate others, such as anger, or gloating when defeating an opponent. Thus, when upset a female may cry while a male may get angry. In their research, Chaplin and colleagues observed how parents responded to their preschool children's submissive and disharmonious emotions and found that fathers, in particular, were more attentive and supportive of their daughters' submissive emotions, while ignoring such expressions in their sons. They also were more attentive of son's disharmonious responses while ignoring such displays in their daughters. These findings would suggest that females are being rewarded when expressing submissive emotions, while boys are rewarded for more disharmonious displays. There is considerable psychological and anthropological research to suggest that emotional expression is culturally constructed (Mesquita et al., 2016).

There is also an assumption that women are better at identifying emotion in others. Male and female participants were equally accurate and quick in identifying anger in the faces of both male and female adults and children, while females were slightly faster at identifying sadness in the faces of females (Parmley & Cunningham, 2014). Wells et al. (2016) also found that women were slightly faster and more accurate at identifying the emotions of other women, than were men in identifying the emotions of either men or women. Overall, research indicates that gender differences in the experience and expression of emotions are exaggerated, and those that are observed often reflect gender roles within the culture rather than an innate difference between males and females.

Empathy:

Who is more empathetic? **Empathy** refers to our ability to feel what others feel. Empathy involves both understanding how someone might feel in a given context, and feeling those emotions yourself. As many people assume that women are more attuned to the emotions of others, the reasoning goes that women would be more empathetic. However, the answer to the question of who is more empathetic depends on how we measure empathy. On self-reports, women and girls report more empathy for others than do men and boys (Baron-Cohen & Wheelwright, 2004). Self-report research also finds that females who have CAH, thus higher levels of testosterone, report less empathy than other women (Hines, 2015). Experimental research shows women are slightly better than men at determining what someone might be feeling when watching interviews, but this gender difference increases when participants are told that the study is assessing empathy (Bosson et al., 2019). While, brain imaging research reveals no overall gender difference in empathy when observing others who are suffering (Lamm et al., 2011).

Self-Esteem:

Recent research has focused on how adolescent females lose confidence in themselves and experience lower levels of self-esteem, or the positive regard one has for oneself. Media, especially messages regarding attractiveness, and the sexualization of girls that objectify their bodies, negatively affect young female selfperceptions (American Psychological Association, 2007). If self-esteem plummets during adolescence, what happens in adulthood? To assess developmental changes, males and females at various ages rated their overall self-esteem. Results indicated that females do rate themselves lower on self-esteem in early to late adolescence, but then self-esteem rises in adulthood and late adulthood to levels equal to those of males (Else-Quest & Hyde, 2018). However, looking at gender and ethnicity, while white participants demonstrated a small difference favoring males (+0.20), Blacks demonstrated no difference (-0.04) in self-esteem. These results demonstrate how important intersectionality is when reviewing research results.

Age of Participants	Effect Size (d value)
7-10	.16 (small)
11-14	.23 (small)
15-18	.33 (small)
23-29	.10 (close to zero)
60 and Over	.03 (close to zero)
Allages	.21 (small)

Self-Confidence:

While self-esteem measures an overall feeling of self-worth, self-confidence pertains to a belief that one can be successful in a specific area. Not surprisingly, gender differences in self-confidence varied based on the specific area assessed (Else-Quest & Hyde, 2018). For example, females exhibited higher self-confidence in the areas of behavioral control (d = -.17) and morals/ethics (d = -.38), while males possessed stronger self-confidence in physical appearance (d = .35) and athletics (d = .41). As previously indicated, males rate themselves higher in self-confidence than females in mathematics, and this difference has been interpreted as a female-deficit. However, new perspectives look at this difference as males overestimating their performance and females having a more accurate view of their performance.

Self-Efficacy:

An important area of social cognitive theory is self-efficacy, which refers to one's belief about being able to accomplish some task or produce a particular outcome (Bandura et al., 2001). Self-efficacy beliefs determine one's goals and willingness to achieve them. Those with high self-efficacy are more willing to persevere when faced with adversity when others might give-up. Career aspirations are correlated with self-efficacy and often reflect traditional gender roles. When girls observe female nurses, their efficacy for becoming a nurse increases, but when they observe few women doctors, their sense of efficacy for becoming a doctor diminishes.

In the next module we will consider how gender influences sexual behavior. The module starts with

describing some of the more common sexual orientation labels, theories on the development of sexual				
orientation, factors that affect mate selection, and levels of sexual activity.				

Module 6 How Does Gender Affect Sexual Behavior?



Sexual Orientation

Sexuality is defined in many ways including the capacity for sexual responses and experiences (Bosson et al. 2019) and a general term for the feelings and behaviors of humans concerning sex (Carroll, 2016). Sexual Orientation refers to the direction of emotional and erotic attraction toward a particular gender. It is a personal quality that inclines people to feel romantic or sexual attraction (or a combination of these) to persons of a given sex or gender. According to the American Psychological Association (APA) (2016), sexual orientation also refers to a person's sense of identity based on those attractions, related behaviors, and membership in a community of others who share those attractions. Sexual orientation is independent of gender; for example, a transgender person may identify as heterosexual, homosexual, bisexual, pansexual, polysexual, asexual, or any other kind of sexuality, just like a cisgender person.

Sexual orientation labels:

• **Queer** signifies a range of different sexual orientations and gender behaviors, identities, or ideologies.

- **Gay** refers to men who are sexually attracted to other men.
- **Lesbian** refers to women who are sexually attracted to other women.
- **Bisexual** was a term traditionally used to signify being sexually attracted to both men and women, but it has recently been used in nonbinary models of sex and gender to refer to attraction to any sex or gender.
- **Polysexual** is an alternative term to bisexual that signifies being sexually attracted to people of many sexes and gender identity.
- **Pansexual** is an alternative to the term to bisexual that refers to being sexually attracted to all sexes and gender identities.
- **Heterosexual**, which is often referred to as being straight, *indicates that the individual is sexually attracted to the other sex*.
- **Asexual** signifies little desire or sexual associations.

Sexual Orientation on a Continuum:

Sexuality researcher Alfred Kinsey was among the first to conceptualize sexuality as a continuum rather than a strict dichotomy of gay or straight. To classify this continuum of heterosexuality and homosexuality, Kinsey et al. (1948) created a seven-point rating scale that ranged from exclusively heterosexual to exclusively homosexual. Research done over several decades has supported this idea that sexual orientation ranges along a continuum, from exclusive attraction to the opposite sex/gender to exclusive attraction to the same sex/gender (Carroll, 2016).

Development of Sexual Orientation

In reviewing the origins of sexual orientation, research has focused on same-sex orientations. According to Farvid (2015), "Historically, heterosexuality has largely been ignored in psychological theory and research as a topic of, or for, analysis. Psychological theory has assumed that heterosexuality is a 'given' and 'normal', and focused its research on sexualities that sit outside this supposed norm (e.g. homosexuality, lesbianism). Such research has functioned to further normalize heterosexuality, while pathologizing other ways of being sexual, without taking into account the historical conditions that have produced heterosexuality as the norm" (p. 92). Consequently, theories have attempted to explain the sexual orientation of LGBTQ individuals rather than opposite sex orientations.

According to current scientific understanding, individuals are usually aware of their sexual orientation between middle childhood and early adolescence (APA, 2016). However, this is not always the case, and some do not become aware of their sexual orientation until much later in life. It is not necessary to participate in sexual activity to be aware of these emotional, romantic, and physical attractions; people can be celibate and still recognize their sexual orientation. Some researchers argue that sexual orientation is not static and inborn but is instead fluid and changeable throughout the lifespan.

There is no scientific consensus regarding the exact reasons why an individual holds a particular sexual orientation. Research has examined possible biological, developmental, social, and cultural influences on sexual orientation, but there has been no evidence that links sexual orientation to only one factor (APA, 2016). However, biological explanations, that include genetics, birth order, and hormones will be explored further as

many scientists support biological processes occurring during the embryonic and and early postnatal life as playing the main role in sexual orientation (Balthazart, 2018).

Genetics:

Using both twin and familial studies, heredity provides one biological explanation for same-sex orientation. Bailey and Pillard (1991) studied pairs of male twins and found that the concordance rate for identical twins was 52%, while the rate for fraternal twins was only 22%. Bailey et al., (1993) studied female twins and found a similar difference with a concordance rate of 48% for identical twins and 16% for fraternal twins. Schwartz et al., (2010) found that gay men had more gay male relatives than straight men, and sisters of gay men were more likely to be lesbians than sisters of straight men.

Fraternal Birth Order:

The **fraternal birth order effect** indicates that the probability of a male identifying as gay increases for each older brother born to the same mother (Balthazart, 2018; Blanchard, 2001). According to Bogaret et al. "the increased incidence of homosexuality in males with older brothers results from a progressive immunization of the mother against a male specific cell-adhesion protein that plays a key role in cell-cell interactions, specifically in the process of synapse formation," (as cited in Balthazart, 2018, p. 234). A meta-analysis indicated that the fraternal birth order effect explains the sexual orientation of between 15% and 29% of gay men.

Hormones:

Excess or deficient exposure to hormones during prenatal development has also been theorized as an explanation for sexual orientation. One-third of females exposed to abnormal amounts of prenatal androgens, a condition called congenital adrenal hyperplasia (CAH) described in module 3, identify as bisexual or lesbian (Cohen-Bendahan et al., 2005). In contrast, too little exposure to prenatal androgens may affect male sexual orientation by not masculinizing the male brain (Carlson, 2011).

Same Sex Discrimination:

The United States is **heteronormative**, meaning that society supports heterosexuality as the norm. Consider, for example, that homosexuals are often asked, "When did you know you were gay?" but heterosexuals are rarely asked, "When did you know you were straight?" (Ryle, 2011). Living in a culture that privileges heterosexuality has a significant impact on the ways in which non-heterosexual people are able to develop and express their sexuality.



Open identification of one's sexual orientation may be hindered by **homophobia** which encompasses a range of negative attitudes and feelings toward homosexuality or people who are identified or perceived as being lesbian, gay, bisexual, or transgender (LGBT). It can be expressed as antipathy, contempt, prejudice, aversion, or hatred; it may be based on irrational fear and is sometimes related to religious beliefs (Carroll, 2016). Homophobia is observable in critical and hostile behavior, such as discrimination and violence on the basis of sexual orientations that are non-heterosexual. Recognized types of homophobia include **institutionalized homophobia**, such as religious and state-sponsored homophobia,

and **internalized homophobia** in which people with same-sex attractions internalize, or believe, society's negative views and/or hatred of themselves.

Sexual minorities regularly experience stigma, harassment, discrimination, and violence based on their sexual orientation (Carroll, 2016). Research has shown that gay, lesbian, and bisexual teenagers are at a higher risk of depression and suicide due to exclusion from social groups, rejection from peers and family, and negative media portrayals of homosexuals (Bauermeister et al., 2010). Discrimination can occur in the workplace, in housing, at schools, and in numerous public settings. Much of this discrimination is based on stereotypes and misinformation. Major policies to prevent discrimination based on sexual orientation have only come into effect in the United States in the last few years.

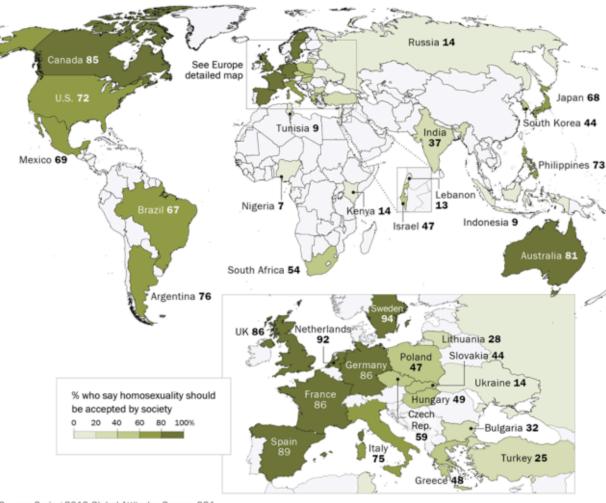
The majority of empirical and clinical research on LGBT populations are done with largely white, middle-class, well-educated samples. This demographic limits our understanding of more marginalized populations that are also affected by racism, classism, and other forms of oppression. In the United States, non-Caucasian LGBT individuals may find themselves in a double minority, in which they are not fully accepted or understood by Caucasian LGBT communities and are also not accepted by their own ethnic group (Tye, 2006). Many people experience racism in the dominant LGBT community where racial stereotypes merge with gender stereotypes.

A Growing Acceptance:

According to a recently published PEW Research Center report (Poushter & Kent, 2020) there has been an increase in acceptance of same-sexuality, although it varies widely by region. In many nations this acceptance is also influenced by respondents' age, level of education, religious affiliation, and to some degree gender. In general, older adults, those with less education, those affiliated with a religious group, and in nations where gender differences were found, men are less accepting. Right leaning political groups, both within the U.S. and Europe, are also less accepting.

The global divide on acceptance of homosexuality

% who say homosexuality should be accepted by society



Source: Spring 2019 Global Attitudes Survey. Q31.

PEW RESEARCH CENTER

Attraction

Mate Preferences in Heterosexual Relationships:

According to evolutionary psychology's sexual strategies theory (Buss & Schmitt, 1993), gender differences in mate preferences reflect the evolutionary roles of men and women. Specifically, men value a fertile partner, thus youthfulness as displayed in appearance and age would be highly sought after, while women seek a partner that offers greater stability, and thus can protect and provide for both her and her offspring (Buss & Bames, 1986). Is this still the case today? Bech-Sorenson and Pollet (2016) found that little had really changed. Heterosexual women and men were asked whether they would consider marrying someone who had certain characteristics. Consistent with the predictions of evolutionary psychology, even today, women seek a more mature male who has resources, while men seek a younger, more attractive mate. However, the researchers did discover that not everything had stayed the same. In contrast with earlier research, both men and women

seemed less concerned about their mate having been married before, already having children, or being of a different religion or race. Overall, these gender differences in mate selection preferences are robust and occur across many nations (Gallant et al., 2011).

Characteristic	Effect Size d value	
Older by 5 or more years	74 (large)	
Younger by 5 or more years	1.02 (very large)	
Had been married before	.08 (close to zero)	
Already had children	17 (small)	
Was not likely to hold a steady job	.80 (large)	
Was of a different religion	05 (close to zero)	
Was of a different race	.20 (small)	
Would earn much less than you	.52 (moderate)	
Would earn much more than you	55 (moderate)	
Was not good looking	72 (large)	
Had more education than you	47 (moderate)	
Had less education than you	.34 (small)	

Those from a sociocultural perspective challenge the narrowness of evolutionary psychology's theory of mate selection (Zentner & Eagly, 2015). They suggest that like all things psychological, both nature and nurture are at the heart of mate preferences, and that these preferences are often shaped by current environmental forces that sometimes reflect gender-differences, and sometimes reflect gender-similarities. From this approach, human mate preferences are driven by the opportunities and customs provided to people by the surrounding society. Where there is greater gender inequality, one might expect to find greater gender differences in mate preferences that follow traditional divisions of labor whereby males seek young fertile women and women seek a provider. As a culture reaches greater parity between the genders, however, traditional mate preferences may become less pronounced. According to cross-cultural studies reported by Zenter and Eagly, this generally is what is found. Similarly, the age gap in a preferred mate (males seeking a younger female, females seeking older males) has been declining, especially in nations with greater gender equality. For instance, in Turkey (a nation with less gender equality) males seek a female that is about 4 years younger, but in Iceland (a nation with the greatest gender equality) the difference is about 1 and half years. The changes reported by Bech-Sorenson and Pollet (2016) above also reflect cultural changes in attitudes regarding cross-racial and religious relationships.

A significant factor contributing to a culture's gender parity, and thus marriage trends, is the increased educational attainment by women. In the United States, men with higher earnings and greater education have traditionally been more likely to marry. The recent increase in education and earnings by women are indicative of a woman's increased likelihood of marrying. Couples are now more likely to demonstrate **homogamy**, that is, *marriage between individuals who are similar on various indicators*. Consequently, the tradition of **hypergamy**; that is, *women "marrying up" in educational attainment*, has been replaced by, homogamy; that is, women marrying someone with equal education, and even **hypogamy**; that is, *women "marrying down"* (Zentner

& Eagly, 2015). Women are seen as providing valuable educational and financial resources to the marriage. In contrast, those who lack education and financial attributes are less likely to marry.

The research regarding gender parity and the greater educational attainment of women is a more recent explanation for the reasons why individuals marry. In the past, evolutionary theory was proposed as the primary explanation for marriage (or a partnership) between a man and woman. Evolutionary theory states that gender differences are due to certain behaviors being more adaptive to females compared to males based on evolutionary selection (Hyde, 2014). Two important concepts, sexual selection and parental investment, are facets of evolutionary theory that have implications for gender differences. Sexual selection refers to members of one gender (usually males) competing among themselves for mating access to the other gender (usually females). Also, those being competed for (usually females) having preferences for and actively choosing to mate with members of the opposite gender (usually males). Gender differences in physical aggression have been identified as being due to sexual selection. **Parental investment** refers to the amount of investment a parent makes that will increase the survival of the offspring. Human females invest significantly more than human males in the survival of the offspring to reproduction age, and thus allowing the parent's genes to be passed on to future children. Females have fewer eggs to use and a long gestational and nursing period to ensure the offspring's health and survival. The parental investment theory has been used to explain why males prefer a larger number of sexual partners as a way to produce more offspring, while females prefer less partners to ensure the long-term survival of fewer offspring (Hyde, 2014). Overall support for an evolutionary explanation for gender differences in sexuality and other behaviors has been mixed.

Mate Preferences in Sex and Gender Minorities:

Prior research (Bailey et al., 1997) has shown that gay men and lesbian women are similar to their heterosexual counterparts in terms of what they are seeking in both a dating and more long-term relationship partner. Similar to heterosexuals, attractiveness is more crucial in short-term relationships than in long-term partnerships. Gay men are also more likely to place importance on physical appearance in their partner, similar to heterosexual men. Lippa (2007) found that lesbians, like heterosexual women, emphasize personality and seek a mate who is kind, honest, and has a good sense of humor. What the research also finds is that like heterosexuals, gay men and lesbian women often seek someone who is sex-typical in appearance (Bailey et al., 1997; Lippa, 2007; Zhang, et al., 2019). Just as heterosexual males seek a feminine female, and heterosexual females seek a masculine male, gay men also seek a male partner who is typical in appearance for a male, and lesbian women seek a female partner who is typical in appearance for a male, and lesbian women seek a female partner who is typical in appearance for a female.

As reported elsewhere in the text, there is little research on transgender people, and the research on mate selection is no exception. However, as Aristegui et al. (2018) note this is surprising as studying transgender people offers an opportunity to assess whether biological gender or chosen gender has an impact of mate preferences. Aristegui and colleagues examined the mate selection preferences of transgender adults in Argentina and found that they value the same attributes that are chosen by heterosexual, gay, and lesbian people. Personality factors, such as dependability, kindness, and being sociable, were highly sought. Moreover, they were similar to these groups in the least important characteristics, such as chastity, sharing the same religion, political backgrounds, or level of education.

One interesting finding was that the second most important attribute was seeking someone who could provide a satisfying sexual relationship. Aristegui et al. (2018) wondered if this might have reflected the higher rate of current and prior sex workers in their sample. Those who were male to female (MTF) were more likely

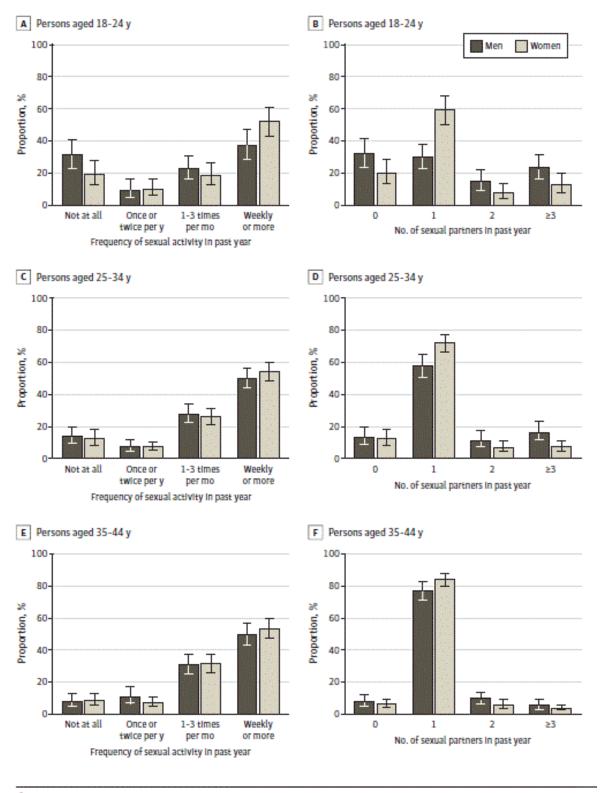
to emphasize looks and a satisfying sexual relationship, consistent with the pattern shown in other people who are born male, while those who were female to male (FTM) sought greater dependability, consistent with those who are born female. This would suggest that biological sex is still influencing mate preferences. However, the study also found that MTF, more so than FTM, respondents sought many qualities typical of females, such as a partner with ambition, resources, and social status. Similar results have been found in research with gay males, in that while attractiveness is highly sought, so is the ability to obtain and provide resources (Lippa, 2007). Could mate selection be more a function of the partner's sex, the person being chosen, than that of the chooser's sex? Clearly more research needs to be done on this topic.

Current Sexual Activity

A common stereotype is that males are significantly more interested in sex than females. Yet, the research indicates only moderate differences, including males being more likely to masturbate, use pornography, have more sexual partners, and have more favorable attitudes toward casual sex, although that gap has been narrowing (Hyde, 2014). Because research on sex is typically based on self-reports, gender differences may in fact represent biases. In contrast, recent research found no gender differences when participants completed an anonymous questionnaire while attached to a fake polygraph and told that the machine could detect false responses. Consequently, gender differences in sexuality may merely represent gender role biases.

The General Social Survey is a nationally representative, biennial survey of US adults 18 years or older administered by the National Opinion Research Center (NORC) at the University of Chicago. To examine trends in sexual activity, study participants were asked questions pertaining to sexual frequency and number of sexual partners in the past year (Ueda et al., 2020). Results from the 2016-2018 survey were compared to previous results from the 2000-2002 survey.

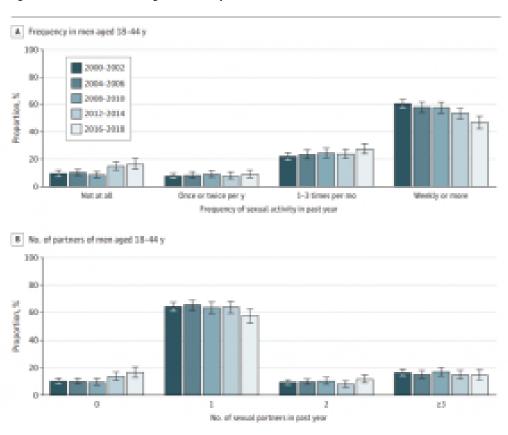
The 2016-2018 results indicated that most men and women reported having had one sexual partner and engaged in weekly or more sexual activity in the past year. However, these percentages increased with the participant's age. The authors estimated that for those aged 18-24, 30.9% of men and 19.1% of women were sexually inactive in the past year. For those aged 25-34, it was 14.1% of men and 12.6% of women, and for those 35-44 years of age, 8.0% of men and 8.5% of women were sexually inactive. Frequency of sexual activity and number of sexual partners in the past year among US men and women by age group in 2016-2018 are shown below.

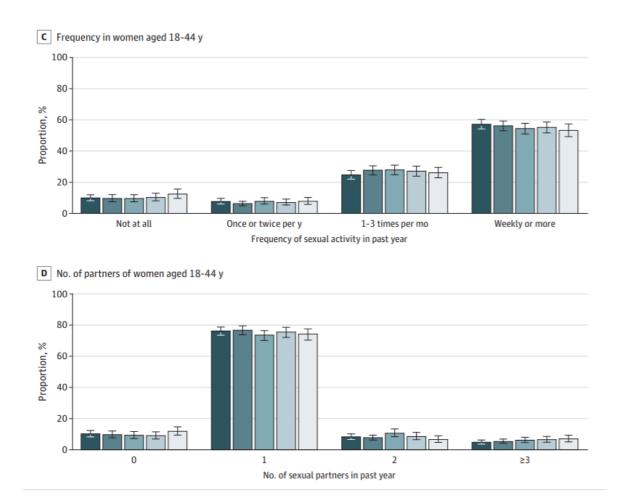


JAMA Network Open. 2020;3(6):e203833. doi:10.1001/jamanetworkopen.2020.3833

Looking at specific demographic information, more men than women reported having both no sexual partner and three or more partners. Gay and bisexual men were less likely to report having no sexual partners. Black men compared to white men were more likely to indicate three or more sexual partners, as were men and women identifying as gay, lesbian or bisexual. A higher percentage of women reported having only one sexual partner. Men with lower income, part-time employment, and no employment, were less likely to be sexually active compared to men and women with full-time employment. Additionally, both men and women who identified as students were less sexually active.

How do these results compare to previous data? Between 2000-2002 and 2016-2018, the percentage of 18- to 24-year-old men who reported having had no sexual activity in the past year increased, but not for women (Ueda et al., 2020). Less sexual activity was also observed among those aged 25 to 34 years for both men and women, but not among those aged 35 to 44 years. The decrease in sexual activity occurred mainly among unmarried men, as rates of sexual activity were unchanged for unmarried women. Among married men and women, weekly or more sexual frequency decreased for both, regardless of sexual orientation. Instead, married individuals were more likely to engage in sexual activity one to three times per month rather than multiple times per week. Trends in the frequency of sexual activity and number of sexual partners in the past year among US men and women aged 18 to 44 years are shown below.





Ueda et al. (2020) proposed several hypotheses for the decrease in sexual activity. These included the stress and busyness of modern life, the supply of online entertainment competing with sexual activity, increased rates of depression and anxiety, adolescents increasingly postponing the start of adult activities, such as dating, and the use of smartphones that decrease opportunities in real-world human interactions. For women, sexual inactivity may be associated with not wanting to engage in the "hooking up" culture, which has generally been reported to be less pleasurable for women, and concern about sexual aggression directed toward them. The authors expressed concern regarding these recent results given that sexual relationships positively correlate with life satisfaction, happiness, lowered heart rate and blood pressure, and stress reduction through the release of oxytocin. Further, a lack of sexual activity has been associated with an increased risk of death, and may be a sign of serious health problems.

Hooking Up



United States demographic changes have significantly affected the romantic relationships among young adults. The age for puberty has declined, while the times for one's first marriage and first child have been pushed to older ages. This results in a "historically unprecedented time gap where young adults are physiologically able to reproduce, but not psychologically or socially ready to settle down and begin a family and child rearing," (Garcia et al., 2012, p. 172). Consequently, according to Bogle (2007, 2008) traditional forms of dating have shifted to more casual hookups that involve uncommitted sexual encounters.

Booty calls refer to relationships that are non-committal nor are they expected to be monogamous, but involve repeated

sexual encounters (March et al., 2018). They are often thought of as a "compromise" relationship between the genders. The relationship offers sex with lower investment than a committed relationship, which might appeal to males. At the same time has a sense of commitment that is greater than a one-night stand, which might appeal more to females. There is also more emotional expression, such as holding hands and kissing than in one night stands. However, those who engage in booty calls, often do not consider the other party as a friend and thus do not socialize with them. Hookups do not include a friendship relationship.

In contrast, **friends with benefits** (FWB) are relationships that involve friends having casual sex without commitment. Bisson and Levine (2009) found that 60% of 125 undergraduates reported a FWB relationship. While young adults today do not report more sexual partners, they do report engaging in more casual sex with a friend (Monto & Carey, 2014). The concern with FWB is that one partner may feel more romantically invested than the other (Garcia et al., 2012), and this partner is more likely to be a woman (Williams & Jovanovic, 2015). In their study, Williams and Jovanovic found that men were more likely to report entering into a FWB relationship because it was easier (d=.47), while women were more likely to hope that the relationship might become more (d=-.53). Males also reported more overall satisfaction in FWB relationships (d=.42). However, both men and women were equally satisfied with the sex. This is unlike hookups where women report more pressure to engage in sex, are likely to be more sexually submissive, and report less sexual pleasure (Wade, 2017).

What is the longevity of FWB relationships? Do they become what people want them to be? The answer depends on what the person wants them to be. Machia et al. (2020) sampled over 500 young adults, almost 200 allowed them to reassess their relationships with their FWB partner about a year later. They asked participants at Time 1 what type of relationship were they were hoping this would become: just a friend, a continuation of FWB, a romantic partner, or no relationship. They then assessed at Time 2 what type of relationship were they in with this partner. Those who indicated at Time 1 that they just wanted to be friends, 59% were in such as relationship at Time 2. Those who had indicated that they wished for no relationship, 43% reported this at Time 2. Forty percent of those who had wanted the relationship to stay the same, reported that it was at Time 2. Only 15% of those who had wanted a romantic relationship obtained this. Machia and colleagues report that failure to clearly define what the relationship was and was not, and failure to

communicate between the partners what they wanted the relationship to be were big factors in relationships not changing in the direction that people hoped it would.

Hooking up Gender Differences:

When asked about their motivation for hooking up, both males and females indicated physical gratification, emotional gratification, and a desire to initiate a romantic relationship as reasons (Garcia & Reiber, 2008). Although males and females are more similar than different in their sexual behaviors, a consistent finding among the research is that males demonstrate a greater permissiveness to casual sex (Oliver & Hyde, 1993; Hyde, 2014). In another study involving 16,288 individuals across 52 nations, males reported a greater desire of sexual partner variety than females, regardless of relationship status or sexual orientation (Schmitt et al., 2003). This difference can be attributed to gender role expectations for both males and females regarding sexual promiscuity. Additionally, the risks of sexual behavior are higher for females and include unplanned pregnancy, increased sexually transmitted diseases, and susceptibility to sexual violence (Garcia et al., 2012).

In addition among college females, their overabundance on college campuses, 56% of college students in the US are female (Snyder & Dillow, 2015), does not translate into greater sexual power. Males have more power in negotiating partner selection and initiating a relationship, often creating a climate that is more sexually permissive and less beneficial for females (Jenkins Hall & Tanner, 2016). Sutton and Simmons (2014) found that participation in hook-ups was associated by increased sexual victimization by women and perpetration by men. Alcohol use and hook-ups often co-occur (LaBrie et al., 2014).

Although hooking up relationships have become normalized, some research indicates that the majority of men and women would prefer a more traditional romantic relationship (Garcia et al., 2012). Additionally, Owen and Fincham (2011) surveyed 500 college students with experience with hookups, and 65% of women and 45% of men reported that they hoped their hookup encounter would turn into a committed relationship. Further, 51% of women and 42% of men reported that they tried to discuss the possibility of starting a relationship with their hookup partner.

Emotional Consequences of Hooking up:

Concerns regarding hooking up behavior certainly are evident in the research literature. One significant finding is the high comorbidity of hooking up and substance use. Those engaging in non-monogamous sex are more likely to have used marijuana, cocaine, and alcohol, and the overall risks of sexual activity are drastically increased with the addition of alcohol and drugs (Garcia et al., 2012). Regret has also been expressed, and those who had the most regret after hooking up also had more symptoms of depression (Welsh et al., 2006). Hook ups were also found to lower self-esteem, increase guilt, and foster feelings of using someone or feeling used. Females displayed more negative reactions than males. Overall, "the gender gap in hookup regret is mostly a function of gender differences in sexual initiation, sexual agency, sexual enjoyment, loss of respect from one's partner, and loss of self-respect" (Uecker & Martinez, 2017, p. 470).

Hooking up can best be explained by a biological, psychological, and social perspective. Research indicates that young adults feel it is necessary to engage in hooking up behavior as part of the sexual script depicted in the culture and media. Additionally, they desire sexual gratification. However, they also want a more committed romantic relationship and may feel regret with uncommitted sex.

LGBTQ hookup:

The research on hooking up is decidedly heteronormative, and male focused. Few studies have examined the percentage of LGB adults who hookup and the consequences of such encounters, and even less is known about experiences of transgender young adults (Watson et al., 2017). One of the few studies to examine hookups among sexual minorities reported that 74% of the gay men in their sample, compared to 64% of heterosexual males reported having engaged in a hookup (Barrios & Lundquist, 2012). Gay males also reported having more partners than heterosexual males. This study did not consider women or those who identify as bisexual. Watson et al. (2017) report that the hookup research needs to pay heed to intersectionality, as most of the research focuses on the experiences of college educated White males.

In the next module we will examine interpersonal relationships. We will consider the role of friendship, the lifestyles of singlehood, cohabitation, marriage and divorce, and the role of parenthood and caregiving in the lives of the genders.

Module 7 How Does Gender Affect Adult Interpersonal Relationships?



Friendships

Friends play a central role throughout our lives. The term "friend" is often used broadly by people to refer to family members, partners, co-workers, and close acquaintances. However, social researchers use the term to refer to voluntary, informal relationships of a non-sexual nature that we have with people, to distinguish it from relationships we have with relatives and romantic partners (Wrzus et al., 2017). For those in late adulthood, friends continue to provide emotional as well as physical support. Being able to talk with friends and rely on others is very important during this stage of life. Bookwala et al. (2014) found that the availability of a friend played a significant role in protecting the health from the impact of widowhood. Specifically, those who became widowed and had a friend as a confidante, reported significantly lower somatic depressive symptoms, better self-rated health, and fewer sick days in bed than those who reported not having a friend as a confidante. In contrast, having a family member as a confidante did not provide health protection for those recently widowed.

Same-gender Friendships:

In our twenties, intimacy needs may be met in friendships rather than with partners. This is especially true in the United States today as many young adults postpone making long-term commitments to partners, either in marriage or in cohabitation. The kinds of friendships shared by women tend to differ from those shared by men (Bosson et al., 2019). Friendships between men are more likely to involve sharing information, providing solutions, or focusing on activities rather than discussion of problems or emotions. Men tend to discuss opinions or factual information or spend time together in an activity of mutual interest. Friendships between women are more likely to focus on sharing weaknesses, emotions, or problems. Women talk about difficulties they are having in other relationships and express their sadness, frustrations, and joys.

One explanation for these differences is that the masculine gender role discourages men from opening up to others, especially to other men, as this may be seen as a sign of weakness. However, others have suggested that men and women do not differ in the level of intimacy in their friendships, they differ in how they display their closeness (Bosson et al., 2019). This would suggest that the difference found in the research reflects a bias in how closeness/intimacy is often measured. Is willingness to self-disclose the only way we can show intimacy in our friendships? As Bosson and colleagues suggest, "perhaps men and women do have similarly close friendships, but they achieve closeness in somewhat different ways" (p. 335). Moreover, this difference in self-disclosure may be waning. In an analysis of the *Facebook* posts of young adults, Farber and Nitzburg (2016) found no discernable gender difference in amount of personal information that was being shared with others.



What about bromances? A **bromance**, or *close* heterosexual friendship between males, provides males with a social space for intimacy and emotional disclosure outside of a heterosexual relationship (Robinson et al., 2017). Intimate male friendships are more acceptable now than in previous generations, and males engaged in bromances identify emotional satisfaction and social fulfillment in these relationships. Further, they feel less judged by their close male friends in comparison to their girlfriends. They also indicated they would be more likely to share

personal matters and sensitive health information within a bromantic, rather than romantic, relationship. Robinson et al. concluded that men benefit from same-sex relationships, especially if they are not comfortable being emotionally intimate with women, and these relationships can last a much longer time than a romance.

Cross-gender Friendships:

Eighty percent of adults have, or have had, at least one cross-gender friendship (Halatsis & Christakis, 2009) and 40% of all adult friendships are cross-gender (Lenton & Weber, 2006). The challenge for cross-gender relationships is to create a friendship that outsiders and both parties within the relationship can understand (Reeder, 2017). Unlike other social relationships, such as parent-child or romantic partners, there is no clear

social script for cross-gender friendships. How do adults in cross-gender friendships conceptualize the relationship? Reeder (2017) found that the most common themes were:

- As family. Often the friend was described as just being like a brother or sister, or in the case of friendships with larger age differences, parent-child. This family-like construction of the friendship helps to explain to both others and each friend the non-sexual nature of the relationship.
- **Just like same-sex friends.** Here the cross-gender friend is described as being "just like one of the girls/guys". For many this also helps explain the more platonic nature of the relationship.
- **Just as friends.** This theme did not borrow from scripted social roles, but was an attempt to show that the relationship was not masking something else.

All of these themes suggest that cross-gender friends were seen as close, equal, and non-sexual. A fourth theme, Reeder called *role conflict*, highlighted the inability of some adults in cross-gender friendships to create a clear narrative about the friendship because of their own ambiguity about the relationship.

In a second study, Reeder asked college aged men and women about their cross-gender friendships and whether they would characterize them as like a sibling, one of guys/girls, just as friends, romantic partner, parent, or competitor. The same three themes emerged as the primary themes. Women were most likely to describe a male friend as being like a brother, followed by just a friend, and like one of the girls. Men were most likely to describe a female friend as just a friend, then like a sister, and like one of the guys. Males and females were equally satisfied in their cross-gender friendships. However, those who described the friendship in more romantic terms had the lowest rating of satisfaction. Such adults were perhaps experiencing role conflict and were having difficulty "creating a perception and experience of the friendship that [was] distinct from romance." (p. 157). There were few respondents who described their friendship as like a romantic relationship and there was no gender difference on this in Reeder's study. However, other researchers have noticed a difference.

As previously indicated, cross sex friendships among straight individuals are common (Bleske-Recheck et al., 2012). However, concerns have been raised that one member of the friendship has romantic, rather than platonic, desires. To test this, Ward (2012) interviewed a large cohort of friends and found that males see many opportunities for romance in their platonic opposite-sex friendships. The women in these friendships, however, seem to believe they are just platonic. Results indicated that the two people were experiencing the same relationship in different ways, and men have a difficult time being "just friends". According to Ward,

"The results suggest large gender differences in how men and women experience opposite-sex friendships. Men were much more attracted to their female friends than vice versa. Men were also more likely than women to think that their opposite-sex friends were attracted to them—a clearly misguided belief. In fact, men's estimates of how attractive they were to their female friends had virtually nothing to do with how these women actually felt, and almost everything to do with how the men themselves felt—basically, males assumed that any romantic attraction they experienced was mutual, and were blind to the actual level of romantic interest felt by their female friends. Women, too, were blind to the mindset of their opposite-sex friends; because females generally were not attracted to their male friends, they assumed that this lack of attraction was mutual. As a result, men consistently overestimated the level of attraction felt by their female friends and women consistently underestimated the level of attraction felt by their male friends" (p. 1).

Bleske-Rechek et al. (2012) also found that emerging adult males reported more attraction to their female friend than emerging adult females did. This attraction was regardless of their own or their friend's current relationship status. When assessing whether attraction affected the friendship, both emerging and middleaged adult males and females indicated that an attraction to their cross-sex friend was more of a cost to the relationship than a benefit. Additionally, emerging adult females and middle-aged participants who reported more attraction to a cross-sex friend reported less satisfaction in their current romantic relationship. The authors concluded that there were potential negative consequences to cross-sex friendships.

Friendships for Sexual and Gender Minorities:

An important psychological function of friendship is social support outside of the family (Wrzuz et al., 2017), and for gender and sexual minorities this may be crucial if it is lacking from their family. Gillespie et al. (2015) used a large scale survey to examine gender, age, and sexual orientation differences in the number of same-gender and cross-gender friendships, and the extent to which people felt they could rely on their same-gender and cross-gender friends. They looked at three areas of friendship: expressive (could discuss personal issues with their friends), instrumental (they could turn to their friends to help them), and companionate (they would do things with their friends). Overall, what they found was greater similarity than difference in friendship across all genders and sexual orientations, with a few notable differences.

- **Homophily**, the notion that people affiliate more with those like themselves was more common among heterosexual survey respondents, as they reported more same-gender friends than cross-gender friends. This is not surprising given the added complication for heterosexuals of managing both the real, and possibly assumed, sexual attraction in cross-gender friendships.
- In terms of the dimensions of expressive, instrumental, and companionate support, very little difference was found between men and women, with the exception that women reported that they had more friends that they could talk to about very intimate issues such as one's sex life, regardless of their age or sexual orientation.
- For all groups, overall life satisfaction was related to friendship satisfaction, regardless of the number of friends. The strongest association between life and friendship satisfaction was found for lesbians and bisexual men and women. This may support the idea that friendship may be especially important psychologically for sexual and gender minorities, who may experience less acceptance from their families.

In high school and college, students who are attracted to the same sex, often seek out other students with same sex attractions (Martin-Storey et al., 2015). In adulthood, sexual and gender minority members may form an intentional **chosen family**, a circle of friends who understand the challenges of being LGBTQ+ and who can support them (Frost et al., 2016).

Adult Lifestyles

There is a diversity of adult lifestyles, and many adults experience not just one but several over the course of their life. For some adults a deliberate decision is made to stay single, cohabitate, get married, or become a parent. For others, circumstances determine that choice. For example, in cultures where same-sex marriage is not allowed, cohabitation becomes the only option available. When a marriage sours, divorce or the prospect

of living alone is the possible lifestyle. This section will also examine dating relationships, and the forms of caregiving adults provide to children and to other adults.

Singlehood:

The number of young adults (age 18-34) who are not in a committed or dating relationship is more than 50%, according to a recent survey (NORC, 2020). This has been trending upward since 2004 when it was a third of young adults. The NORC survey also found that more women than men reported that they were neither dating nor in a committed relationship (55% of female, 40% of male respondents). A Pew Research survey of Americans (Wang & Parker, 2014) found that while just over half (53%) of unmarried adults say they would eventually like to get married, 32 percent are not sure, and 13 percent do not want to get married. It is projected that by the time current young adults reach their mid-40s and 50s, almost 25% of them may not have married. Recent Pew Research (Brown, 2020a) shows that half of singles are not even interested in dating, especially women over age 40. A number of older singles, both men and women feel they are "too old", "just like being single" or like young adults, "have more priorities right now".

The U.S. is not the only country to see a rise in the number of single adults. The following table lists some of the reasons young adults give for staying single.

Have not met the right person	30%
Do not have financial stability	27%
Not ready to settle down	22%
Too young to marry	22%

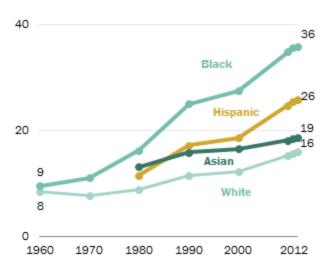
In addition, adults are marrying later in life, cohabitating, and raising children outside of marriage in greater numbers than in previous generations. Young adults also have other priorities, such as education, and establishing their careers. This may be reflected by changes in attitudes about the importance of marriage. In the same Pew Research survey (Wang & Parker, 2014), respondents were asked to indicate which of the following statements came closer to their own views:

- "Society is better off if people make marriage and having children a priority"
- "Society is just as well off if people have priorities other than marriage and children"

Slightly more adults endorsed the second statement (50%) than those who chose the first (46%), with the remainder either selecting neither, both equally, or not responding. Young adults age 18-29 were more likely to endorse this view than adults age 30 to 49; 67 percent and 53 percent respectively. In contrast, those age 50 or older were more likely to endorse the first statement (53 percent).

Rising Share of Never-Married Adults, Growing Race Gap

% of adults ages 25 and older who have never been married



Note: Data on Hispanics and Asians prior to 1980 are not plotted given the small sample sizes.

Source: Pew Research Center analysis of the 1960-2000 decennial census and 2010-2012 American Community Survey, Integrated Public Use Microdata Series (IPUMS)

PEW RESEARCH CENTER

There may be an added problem for never-married young women. Many are seeking a similar male with a steady job. However, for every 100 never-married females, there are only 91 never-married young men who are steadily employed (Wang & Parker, 2014). It is important to note that those who are single now, may have once been among the ranks of the married, and some never-married adults may be willing to consider someone who is divorced. In addition, not all young adults will necessarily be limiting their search to those from their own age group, or even the opposite gender. However, it appears that the pool for potential mates is narrower for some young women, and thus the odds of staying single, and even never-married single, seems higher.

The increase in never married adults shows a difference among racial groups. In most racial and ethnic groups, men are more likely than women to have never been married. The major exception is among Blacks. In 2012, an approximately equal share of black men (36%) and black women (35%) ages 25 and older had never been married. In 1960, black men were more likely than black women to have never been married (12% vs. 8%). Among Whites,

Hispanics and Asians, men are more likely than women to have never been married, and the gender gap among Whites and Hispanics has widened in recent decades (Wang & Parker, 2014).

Dating in Young Adults:

The ways people are finding love has changed with the advent of the Internet. Nearly 50 million Americans have tried an online dating website or mobile app (Bryant & Sheldon, 2017). Online dating has also increased dramatically among those age 18 to 24. Today, one in two young adults report using a mobile dating app or website (Vogels, 2020), almost triple the rate in 2013 (Smith & Anderson, 2016). However, a number of users of online dating sites have reported being harassed by others on the site. Women almost twice as likely to report being harassed, with 18-34 year-old females reporting the highest level of harassment.

Type of Harassment	Percentage of Women	Percentage of Men
Continued to contact them after being told they were not interested	48	27
Sent sexually explicit images or materials they did not ask for	46	26
Called them offensive names	33	22
Threatened to physically harm them	11	6

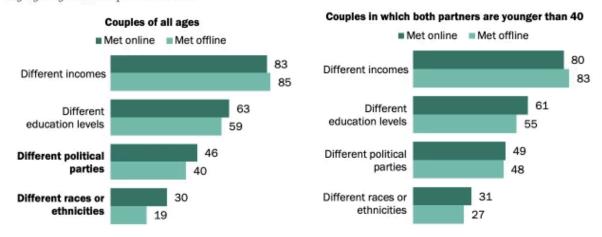
Online dating apps are especially popular among those who identify as lesbian, gay, or bisexual, with 55% saying that they had used such apps in comparison of 28% who identify as straight (Anderson et al., 2020). They are also twice as likely as those who identify as straight to report having found a partner using online dating apps (21% vs. 11%). However, they have also more likely to report having been the victims of harassment (Brown, 2020b).

Type of Harassment	Percentage of LGB	Percentage of Straights
Continued to contact them after being told they were not interested	48	35
Sent sexually explicit images or materials they did not ask for	56	32
Called them offensive names	41	25
Threatened to physically harm them	17	7

According to a recent survey of couples who met online versus offline (Brown, 2020a), those who met online tended to have slightly different levels of education and political views from their partners, but the biggest difference was that they were much more likely to come from different racial and ethnic backgrounds. This is not surprising as the average age of the couples who met online was 36, while the average age of couple who met offline was 51. Young adults are more likely to seek, and be in, a relationship with people who are different from them, regardless of how they met.

Couples who meet online are more likely to be of different races or ethnicities and political parties, but these differences disappear among young couples

% of U.S. adults who have ever been in a relationship and met their current or most recent partner online/offline saying they and their partner have ...



Note: Bold labels indicate that the difference between those who met online and offline is significant for those items. Source: How Couples Meet and Stay Together 2017 survey (fresh sample), conducted by Stanford University July 13-Aug. 1, 2017.

PEW RESEARCH CENTER

To evaluate what heterosexual individuals are looking for online, Menkin et al. (2015) reviewed data from an eHarmony.com relationship questionnaire completed by a cross-sectional representation of 5,434 new users. Their results indicated that users consistently valued communication and characteristics, such as personality and kindness over sexual attraction. Females valued communication over sexual attraction, even more when compared to males, and older users rated sexual attraction as less important than younger users. Alterovitz and Mendelsohn (2011) analyzed 600 Internet personal ads across the lifespan and found that men sought physical attractiveness and offered status related information more than women, while women were more selective than men and sought status more than men. These findings were consistent with previous research on gender differences regarding the importance of physical/sexual attraction.

Dating in Later Life:



Most research on dating, and especially those studies that use online dating sites, focus on the dating habits of young adults. However, online dating is becoming an increasingly popular option for older adults (Gewirtz-Meydan & Ayalon, 2018). Older women (over age 50) are more likely to use online dating sites than are older men (AARP, 2012). A possible reason for this gender difference may be that women tend to be more cautious in moving toward a new relationship (McWilliams & Barrett, 2014), and online dating sites

may allow them to dip their toes to test the waters. In addition, women have a smaller dating pool from which they can choose, as there are fewer single men their age in their local communities. Online dating sites widen the pool.

Research shows that older adults do realize the "age penalty" they face when trying to navigate the dating market. McWilliams and Barrett (2014) found that older adults may downplay or misrepresent their age, and will highlight the more youthful activities they engage in. These researchers also found that the gender stereotypes play a role in how older men and women present themselves, with men emphasizing their socioeconomic status and women their attractiveness. All of this highlights a cultural paradox which implies "that while sexuality [is] crucial to remaining youthful and aging successfully, youth and beauty [are] essential requisites for active sexual engagement" (Gewirtz-Meydan & Ayalon, 2018, p. 487). In addition, many online dating sites perpetuate this stereotype in how they market themselves to older singles. In their analysis of home page photos on 39 dating sites geared toward older adults, Gewirtz-Meydan and Ayalon found that most sites portray older adults as younger and active, but more conservatively dressed to downplay the sexuality of older adults. In addition, the sites are also very heteronormative in the images they display to prospective users, even though some of their clients are not heterosexual.

Forming Relationships:

The development of romantic relationships is a significant milestone for young adults. However, our knowledge of relationship development is largely based on heterosexuals, and what research does exist on sexual and gender minorities focuses on negative outcomes, such as HIV. Do relationships develop and progress in a similar manner in heterosexual and LGBT couples? First let us consider the models for heterosexual relationships.

There are two models used to describe the development of romantic relationships among heterosexual couples, the stage model of romantic relationships and the process model of romantic relationships. The

stage model (Levinger, 1980) proposes that there is a linear sequence of stages that are associated with increasing commitment. In this model individuals are attracted to each other, build up their relationship by engaging in behaviors that promote bonding and interdependence, assess the suitability of the partner, and continue to deepen their commitment, or eventually the relationship deteriorates and ends. The process model (Baxter & Bullis, 1986) proposes that interpersonal processes, such as closeness, trust, commitment, and interdependence are the mechanisms that can guide relationships in different directions. This suggests that the direction is not always linear and that events can become a "turning point" in the relationship depending on these internal processes such as trust or commitment.

Macapagal et al. (2015) assessed whether these models explain the development of relationships among LGBT couples. The authors found that both models had support, although there was more support for the process model. They also found that here were some unique experiences of LGBT couples that were not completely captured by some of the research with heterosexuals.



In terms of the stage model, their interviews with couples did provide clear support for there being a progression toward more serious commitment, such as eventually living together, or discussion of getting married. However, there were several factors that moderated this progression that would not be found in heterosexual relationships. For instance, most LGBT couples met through LGBT social networks, meaning that the individual had to have come out about their LGBT status. Cisgender heterosexuals do not have to make such a proclamation, nor do they need to seek out a "heterosexuals only" social network to find a

potential partner. Thus, even starting a relationship may have additional obstacles for LGBT adults. In addition, cohabitation in their sample often occurred among LGBT youth who lacked family support about their gender or sexuality, meaning it may have occurred earlier before the relationship was fully committed. The progression of commitment was also often stymied if at least one partner was still concealing their LGBT status to family or friends. This can lead to low relationship visibility and can make it harder for a couple to invest in the relationship (Macapagal et al., 2015).

There was also support for the process model. Interpersonal processes, such as trust and interdependence, were common themes in the interviews with LGBT couples, just as they are with heterosexual couples (Macapagal et al., 2015). Similar to heterosexual couples, ambivalence about the relationship could stall its progression. Finally, LGBT couples often found that working together to overcome disapproval, or other social stressors, because of their gender or sexual minority status often strengthened their relationship. A finding that is consistent with research showing that shared problems can sometimes strengthen relationships in heterosexual couples (Frost, 2011).

Cohabitation:

In American society, as well as in a number of other cultures, cohabitation has become increasingly commonplace (Gurrentz, 2018). For many young adults, cohabitation has become more commonplace than marriage. While marriage is still a more common living arrangement for those age 25-34, cohabitation has

increased, while marriage has declined. Gurrentz also found that cohabitation varies by socioeconomic status. Those who are married tend to have higher levels of education, and thus higher earnings, or earning potential. Many cohabitating adults (44%) see cohabitation as a step toward marriage (Graff 2019). However, this too varies greatly by level of education attained. Only 28% of those with only a High School diploma or less, while 50% of those with a Bachelor's degree or higher entered into cohabitation with eventual marriage in mind. Similar increases in cohabitation have also occurred in other industrialized countries. For example, rates are high in Great Britain, Australia, Sweden, Denmark, and Finland. In fact, more children in Sweden are born to cohabiting couples than to married couples. The lowest rates of cohabitation in industrialized countries are in Ireland, Italy, and Japan (Benokraitis, 2005). Until recently, for many sexual minorities cohabitation was, and still is, the only option as many nations define marriage as between a man and a woman.

Marriage:

Cohen (2013) reviewed data assessing most of the world's countries and found that marriage has declined universally during the last several decades. This decline has occurred in both poor and rich countries, however, the countries with the biggest drops in marriage were mostly rich: France, Italy, Germany, Japan and the U.S. Cohen states that the decline is not only due to individuals delaying marriage, but also because of high rates of non-marital cohabitation. Delayed or reduced marriage is associated with higher income and lower fertility rates that are reflected worldwide.

All major racial and ethnic groups have experienced a decline in marriage. Currently-married adults under age 65 dropped about 10 percentage points for Whites, Blacks, and Hispanics since 1990. For Asians, the drop was 3 percentage points. In 2016, more than half of Asians (60%) and Whites (53%) were married, compared with 45% of Hispanics and 29% of Blacks (Wang, 2018). For comparison, in 1960, 72% of adults age 18 or older were married (Wang & Taylor, 2011). In 2020, the US saw a 12% decline in the rate of marriage (Westrick-Payne & Manning, 2022). This decline likely reflects the difficulty in having a wedding during the pandemic.

Americans adults ages 65 and older are slightly more likely to be married today than older adults a few decades ago. This change is largely due to a decline in the share of widowed adults. Those ages 75 and older benefit most from this trend: 39% were widowed in 2016, down from 53% in 1960. During the same period, the proportion of currently-married adults ages 75 and older has increased from 36% to 45%.

Men and women ages 18 to 64 are equally likely to be married, and the marriage share has declined for both genders over the years. In 2016, 48% of men and 49% women ages 18 and older were married, down from 59% and 60% in 1990, respectively. At the same time, the age of first marriage has been increasing for both men and women. In 1960, the average age for first marriage was 20 for women and 23 for men. By 2018 this had increased to 28 for women and 30 for men (Geiger & Livingston, 2019). Many of the explanations for increases in singlehood and cohabitation previously given can also account for the drop and delay in marriage.



In June 26, 2015, the United States Supreme Court ruled that the Constitution guarantees same-sex marriage. The decision indicated that limiting marriage to only heterosexual couples violated the 14th amendment's guarantee of equal protection under the law. This ruling occurred 11 years after same-sex marriage was first made legal in Massachusetts, and at the time of the high court decision, 36 states and the District of Columbia had legalized same sex marriage. Worldwide, 29 countries currently have national laws allowing gays and lesbians to marry (Pew Research Center,

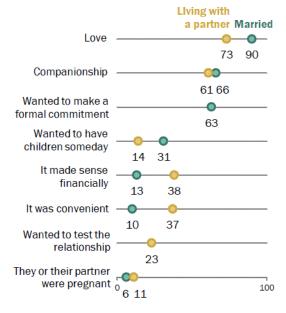
2019). In 2022, both the House and Senate passed The Respect for Marriage Act, which protects same-sex marriage after the Supreme Court overturned Roe v. Wade and Judge Thomas quipped that this could be a sign of things to come (Warburton, 2022).

Many cultures have both explicit and unstated rules that specify who is an appropriate mate. Consequently, mate selection is not completely left to the individual. Rules of **endogamy** indicate the groups we should marry within and those we should not marry in (Witt, 2009). For example, many cultures specify that people marry within their own race, social class, age group, or religion. Endogamy reinforces the cohesiveness of the group. Additionally, these rules encourage homogamy or marriage between people who share social characteristics. The majority of marriages in the U. S. are homogamous with respect to race, social class, age and to a lesser extent, religion. Homogamy is also seen in couples with similar personalities and interests.

Marriage vs. Cohabitation:

Love and companionship are among top reasons for marriage and cohabitation

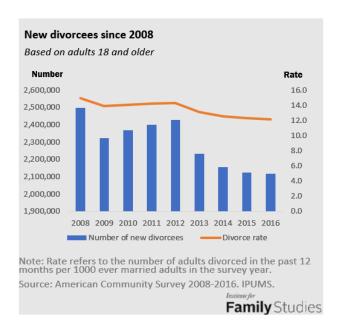
% of adults who are married or living with a partner saying each of the following was a major reason why they decided to get married or move in with their partner



Note: "Wanted to make a formal commitment" was asked of married adults only; "Wanted to test the relationship" was asked of cohabiting adults only.

Source: Survey of U.S. adults conducted June 25-July 8, 2019. "Marriage and Cohabitation in the U.S."

PEW RESEARCH CENTER



Both love and companionship are the main reasons why adults choose to marry or cohabitate, although both are lower among those who choose to cohabitate rather than marry (Horowitz et al., 2019). Finances (38%) and convenience (37%) are the main reasons why adults choose to cohabitate. In contrast, only 13% of married adults cite finances and 10% cite convenience as reasons why they chose to marry.

Married adults are more likely than those who are cohabitating to indicate that things are going very well in their relationship (Horowitz et al., 2019). They report higher levels of satisfaction with their relationship, including communication between partners, how household chores are divided, parenting styles, and work-life balance. Both married and cohabiting adults report that they are equally satisfied with their sex life. Married adults are also more likely to report trusting their partner to be faithful, to be honest with them, and to act in their best interest. Horowitz reports that this link between marriage and trust remains even after controlling for demographic differences (e.g., education, age, race, religion, and gender).

Divorce:

Although a smaller share of adults is married today, among those who are married, their likelihood of divorce is also lower. After increasing between 2009 to 2012, the number of new divorcees has dropped every year, reaching a record low of 2.1 million in 2016 (Wang, 2018). The divorce rate (measured by the number of adults who got a divorce in the past 12 months per 1,000 ever married adults) is also down from 14 to 12 per 1,000 ever-married adults during the same period. The drop in the divorce rate is mostly relevant for adults under age 64. The number of new divorcees per 1,000 ever-married adults declined from 18 in 2008 to 15 in 2016 in this age group.

In 2020, the US saw a 12% decline in the rate of divorce, which corresponded to a similar drop in the rate of new marriages (Westrick-Payne & Manning, 2022). The difficulty in meeting with lawyers or in obtaining a court date for divorce during the pandemic is a likely reason for this drop in the divorce rate. Westrick-Payne and Manning noted that several US states have reported a backlog in divorce cases.

Livingston (2014) found that 57% of divorced adults were women. This reflects the fact that men are more likely to remarry than are women. Almost 70% of divorces are initiated by women (Rosenfeld, 2017). This is nothing new. Goode's (1956) survey of women in the 1940s found two-thirds of the divorces were initiated by women. Moreover, this gender difference is not just applicable to the US. More women in England, Australia, Canada, and Europe are initiated by women (Rosenfeld, 2017). In his survey of American women, Rosenfeld found that married women reported much lower levels of "quality" of the relationship than did married men, or men and women in non-martial relationships. Rosenfeld note that his results support the feminist assertion that some women experience heterosexual marriage as oppressive or uncomfortable, and that husbands are still expecting women to take on the bulk of housework and child care at a time when her roles outside of the home have changed.

Most divorces take place within the first 5 to 10 years of marriage (AARP, 2009). This time line reflects people's initial attempts to salvage the relationship. After a few years of limited success, the couple may decide to end the marriage. It used to be that divorce after having been married for 20 or more years was rare. In recent years the divorce rate among more long-term marriages has been increasing, with the divorce rate among those ages 65 and older has been stable in recent years, staying around 3 new divorcees per 1,000 ever-married adults each year since 2008. At the same time, the rise of so-called "gray divorce" among those ages 50 and older seems to have leveled off. The divorce rate among this group has been around 7 per 1,000 ever-married adults in the past 8 years after an increase since 1990 (Brown & Lin, 2013).

Brown and Lin suggest several reasons for the "graying of divorce". There is less stigma attached to divorce today than in the past. Some older women are out-earning their spouses, and thus may be more financially capable of supporting themselves, especially as most of their children have grown. Finally, given increases in human longevity, the prospect of living several more years or decades with an incompatible spouse may prompt middle-aged and older adults to leave the marriage.

A survey by AARP (2009) found that men and women had diverse motivations for getting a divorce. Women reported concerns about the verbal and physical abusiveness of their partner (23%), drug/alcohol abuse (18%), and infidelity (17%). In contrast, men mentioned they had simply fallen out of love (17%), no longer shared interests or values (14%), and infidelity (14%). Both genders felt their marriage had been over long before the decision to divorce was made, with many of the middle-aged adults in the survey reporting that they stayed together because they were still raising children. Females also indicated that they remained in their marriage due to financial concerns, including the loss of health care (Sohn, 2015).



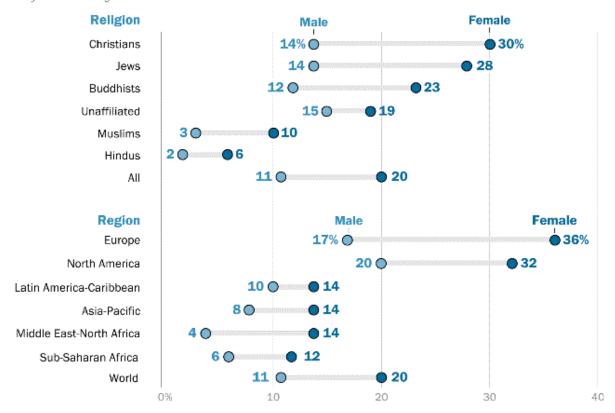
Living Alone:

Across the world, women are twice as likely as men to age alone (Ausubel, 2020). For women aged 60 and older, 20 percent live alone compared to 11 percent of men. All 20 countries with the highest percentages of older

women living alone are in Europe, including Lithuania (where 50% of older women live alone), Denmark and Hungary (both 47%). The smallest number of older women living alone are in Afghanistan, Mali and Pakistan, at roughly 1%. The fact that women live longer and are typically younger than their male partners may explain this difference. However, cultural norms and countries that offer fewer retirement benefits or support for older adults place greater responsibility on families to provide care for their elders.

Older women live alone more often than older men

% of individuals ages 60 and older in solo households



Source: Pew Research Center analysis of 2010-2018 census and survey data. See Methodology for details. "Religion and Living Arrangements Around the World"

PEW RESEARCH CENTER

Parenthood

The majority of American mothers and fathers (58%) say being a parent is extremely important to their identity, and another 36% say it is very important (Pew Research Center, 2015). For fathers, 57% say being a dad is extremely important to their overall identity, and 58% of mothers say the same about being a mom. Additionally, black and white parents are equally likely to say being a parent is an extremely important part of their identity (61% and 62%, respectively).

Motherhood:



Most women in the Unites States become a mother at some point in their adult lives. According to 2018 data from the US Census (2019) by age 50 only 15% of American women were still childless, meaning being a mother is a common experience and social role for women. Becoming a mother is a life-changing event for most women that can trigger a transition in identity (Hennekam et al., 2017). Women need to incorporate this new role and new relationship, along with the sociocultural expectations of being a mother into their identity.

Most of the childcare, as with other domestic duties, is performed by women, although the gender gap for childcare between mothers and fathers has narrowed in recent years. However, parents are not the only people who take care of children, and these people are usually female, either a relative or paid caregiver (Bosson et al., 2019).

Today, most mothers work. Depending on the organizational climate, women who work during pregnancy or return to work after giving birth, may find the workplace less inviting. The maternal body, both during and after birth, can be viewed as disruptive to an organization, and thus women may experience subtle but hostile reactions in the workplace (Joshi et al., 2015). Workplaces also vary in how family-friendly are their policies, and spouses and partners differ in how they help working mothers who are juggling family and work responsibilities.

What determines who does what when diving up domestic labor? What accounts for the vast difference in how couples answer this question? Three general theories have been suggested.

- 1. The time-availability theory: Couples may decide how much domestic work a partner does based on how much time each person has available. Research does show that men and women who spend more time in employed work do spend less time on household and childcare duties (Aassve et al., 2014). However, this does not explain why in heterosexual couples, women still do the bulk of domestic chores. Moreover, couples who work different shifts may find that it is not so much the time that you have available that determines household chores, but when you have the time available.
- 2. **The relative income theory:** Couples may exchange household duties in lieu of income. This could explain why even women who work do more of the domestic work as well. Women typically make less than their husbands. However, do women who make more income than their male partners do less household work? Most of the research on this topic is prior to 2005, yet it suggests that the answer is no. In fact, two studies found that when the woman makes more money, the husband does even less housework (Bittman, et al., 2003; Brines, 1994).
- 3. The gender role ideology theory: Couples' beliefs about gender roles influences their division of domestic work. Aassve and colleagues (2014) did find that couples with more egalitarian beliefs did tend to divide the housework more evenly. An answer to the paradox identified in the previous item may be found here with the gender role ideology theory. Men whose wives earn more, or on whom they are more financially dependent may feel their sense of being a man threatened. One way to

restore their sense of masculinity is to avoid "women's work".

While becoming a parent is a desire of many women, regardless of what a woman achieves in education or work there is still the **motherhood mandate**, the social expectation that she will have children. Ultimately women are viewed in relation to motherhood no matter what is their chosen role (Drury, 2016). Friends, family, even total strangers may bring up the question of children, and women who remain child-free by choice elicit feelings of contempt and moral outrage by others (Ashburn-Nardo, 2017). Ashburn-Nardo found that people appear to believe that becoming a parent is a moral imperative.

For women who chose to work, the motherhood mandate can become a double edged sword. In a society that often determines worth by how much money someone makes, women who choose to stay-at-home with their children may run the risk of being viewed as unproductive (Ruitenberg, 2014). Mothers who choose to work, may be seen as neglecting their children (Drury, 2016), or not as committed to their jobs (Gatrell et al., 2017), and those who choose to work and remain childless are viewed as being selfish and unfulfilled (Drury, 2016). This is not something that fathers experience should they choose to work, or if men decided to remain childless. One reason for this difference is that the institution of motherhood, with its roles, rules, and prohibitions, is not the same as the act of mothering. Motherhood is viewed in most cultures from the perspective of essentialism; as something that is the natural state of being a woman (Drury, 2016). As a result, women experience considerable social pressure to become a mother (Drury, 2016).

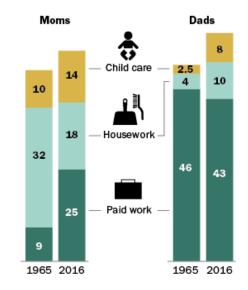
As noted above, the motherhood mandate requires women to become mothers. However, some women are often considered exempt, such as lesbians. This is because motherhood is shaped by heteronormativity. Lesbian mothers are constantly confronted with the definition of motherhood that assumes heterosexuality. In addition, lesbians are often considered unfit to be parents as they do not fit the standard of heterosexuality (Rogalin & Brooks, 2018). Interestingly by becoming a parent, lesbians may gain social acceptance from family and others (Hayman & Wilkes, 2017), and may be redefining what constitutes family, motherhood, and reproduction (Rogalin & Brookes, 2018).

This heteronormative view of motherhood can even affect some lesbians' views about their infertility. Toadvine (2015) found that the internalization of homophobia by some lesbian women struggling with infertility led them to assume that being lesbian was the cause of their inability to conceive or maintain a pregnancy. These women's explanations ranged from "it was probably for the best as they would probably be a terrible mother" to their bodies were "homophobic".

Fatherhood:

For both moms and dads, more time spent on child care

Average number of hours per week spent on ...



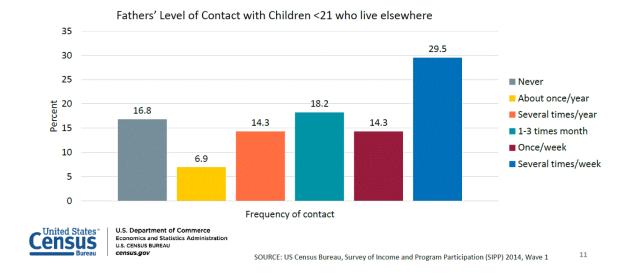
Note: Paid work includes commute time. Source: 1965 data from table 5A.1-2, Bianchi, S.M. et al., "Changing Rhythms of American Family Life" (2006). 2016 data from Pew Research Center analysis of American Time Use Survey (IPUMS).

PEW RESEARCH CENTER

About 62% of men (approximately 75 million) are fathers to biological, step, or adopted children (Monte, 2019). Research on fathers has focused on both direct and indirect influences (Else-Quest & Hyde, 2018). Indirect factors include the father's behavior affecting some other factor in the child's life, such as the mother. Direct factors are the behaviors and attitudes modeled by the father, as well as the father-child interactions. Direct involvement with their children can positively affect child development, especially when fathers are sensitive and responsive to their child's needs. Loving fathers promote their child's overall well-being, while decreasing aggressiveness and behavioral concerns. Further, children of involved fathers possess higher IQs, more advanced language and cognitive skills, and stronger self-regulation. In contrast, when fathers are less engaged and negative, children are more likely to develop externalizing problems.

Fathers, Childcare and Housework: In reviewing how parents spent their time in 2016, fathers reported spending an average of eight hours a week on child care, which is three times the amount of time they provided in 1965 (Livingston & Parker, 2019). Fathers also indicated that they put in about 10 hours a week on household chores in 2016, which increased from four hours in 1965. By comparison, mothers spent an average of about 14 hours a week on child care and 18 hours a week on

housework in 2016. While they're spending more time with their children, many dads still feel they are not as involved as they would like. Most fathers (63%) said they spend too little time with their children compared with 35% of mothers. Work obligations were most often given as the reason for the lack of involvement. Among fathers of biological children below the age of 18, about 25% do not live with all of their minor biological children. The amount of time spent with their children who reside with their mother varies, although the majority of fathers indicate they see their children several times per week (Monte, 2019).



Stay-at-Home Fathers: According to a Pew Research Center analysis of U.S. Census Bureau data, 17% of all stay-at-home parents in 2016 were fathers, up from 10% in 1989 (Livingston, 2018a). This modest increase is due to both fathers' unemployment and fathers saying they are home specifically to care for their home or family. This difference suggests that changing gender roles appear to be a factor as 24% of stay-at-home fathers indicated they are home specifically to care for the family. Fathers who stay-at-home are more likely to have a college degree (25%) compared with the 17% of dads who are home for other reasons. In addition, fathers who stay at home to care for family are far more likely than those at home for other reasons, such as being unemployed or having health issues, to have a working spouse. Consequently, they are less likely to be living in poverty.



Stay-at-home fathers are often subjected to stigma and stereotyping as they challenge the male role model of being the "breadwinner" (Matilla, 2020). Some stay-at-home dads identify loneliness and social isolation, while others report high levels of life satisfaction. How the father's felt was often connected to the social setting. Matilla examined social spaces and places where stay-at-home fathers experienced social dynamics that oppressed, affirmed or validated their identities as male caretakers. Based on these spaces, five distinct identities emerged:

- **Hero:** In gender neutral public spaces, such as stores and restaurants, stay-at-home fathers were seen as engaging and nurturing and were celebrated as heroic. Fathers indicated that they often drew positive attention from others and were complimented on their caretaking roles.
- **Pervert of the Playground:** In playgrounds dominated by mothers and female nannies with children, stay-at-home fathers felt shunned and judged, especially when they were the only male present. Some fathers stopped going to the playground because they felt they were perceived as pedophiles, creeps, or predators that would harm the females and children present.
- Unwelcome Intruder: In play groups that are typically arranged for mothers to interact with other

mothers, a stay-at-home dad is considered an unwelcome intruder. Fathers who attempted to join play groups felt alienated and keenly aware of being different from the moms in the group.

- Man among Men: As a response to the loneliness experienced by stay-at-home fathers, formal male-only groups of primary caregivers have been established in several metropolitan areas. These men-only groups of caregivers offer a place for men to express a form of masculinity reflecting their sense self as nontraditional caretakers. Men identified feeling safe with other men as they were not continually being scrutinized by others.
- Communal Father: Volunteering at a child's educational setting has traditionally been a role for stay-athome mothers. Stay-at-home fathers have also begun to volunteer at school, and once they have proven they do not constitute a risk of sexual inappropriateness for children, their presence becomes that of a communal, respected and wise father. Unlike the playground, which is informal, the school is a formal institution where rules regarding conduct and a hierarchy are maintained. Consequently, fathers may be placed into leadership positions because of their gender and ride the glass elevator to the top of the volunteers.

Lesbian and Gay Parents:

Research has consistently shown that the children of lesbian and gay parents are as successful as those of heterosexual parents, and consequently efforts are being made to ensure that gay and lesbian couples are provided with the same legal rights as heterosexual couples when adopting children (American Civil Liberties Union, 2016).

Patterson (2013) reviewed more than 25 years of social science research on the development of children raised by lesbian and gay parents and found no evidence of detrimental effects. In fact, research has demonstrated that children of lesbian and gay parents are as well-adjusted overall as those of heterosexual parents. Specifically, research comparing children based on parental sexual orientation has not shown any differences in the development of gender identity, gender role development, or sexual orientation. Additionally, there were no differences between the children of lesbian or gay parents and those of heterosexual parents in

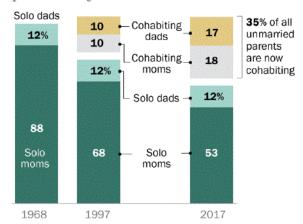


separation-individuation, behavior problems, self-concept, locus of control, moral judgment, school adjustment, intelligence, victimization, and substance use. Further, research has consistently found that children and adolescents of gay and lesbian parents report normal social relationships with family members, peers, and other adults. Patterson concluded that there is no evidence to support legal discrimination or policy bias against lesbian and gay parents.

Unmarried Parents:

Growing share of unmarried parents are cohabiting

% cohabiting/solo, among all unmarried parents living with a child



Note: "Parents" are all U.S. parents living with at least one child younger than 18. Data regarding cohabitation available since 1997 only. Figures may not add to 100% due to rounding. Source: Pew Research Center analysis of Current Population Survey March Supplement (IPUMS).

"The Changing Profile of Unmarried Parents"

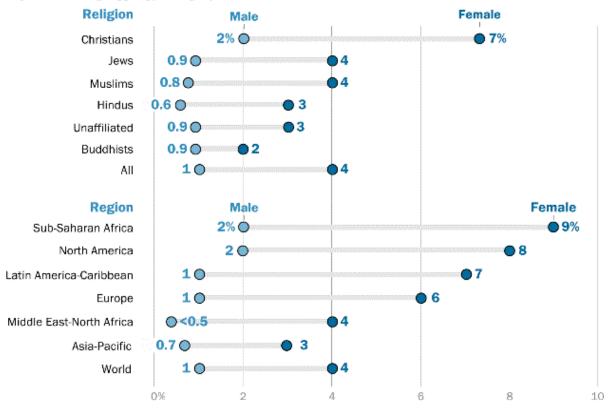
PEW RESEARCH CENTER

Although the majority of children in America reside with parents who are married, the percentage of children residing with a single mother, single father, or cohabitating parents has risen (Livingston, 2018b). In 2017, 25% of all parents in the United States were unmarried. Also in 2017, the share of unmarried parents who were solo mothers declined to 53%. This decline was due to an increases in cohabiting parents as 35% of all unmarried parents were living with a partner. Unmarried parents who are solo fathers has remained at 12% for almost 50 years. The makeup of U.S. families are very changeable, and according to Livingston, by the time they turn 9 more than 20% of U.S. children born to a married couple and over 50% of those born to a cohabiting couple will have experienced the breakup of their parents. The declining stability of families is due to increases in cohabitation, which tend to be less long-lasting than marriages, as well as parental divorce. In fact, half of solo parents in 2017 (52%) and one-third of cohabitating parents (35%) had been married at one time.

Women are more likely to be single parents: Across the world, women ages 35 to 59 are more likely than their male counterparts to live in single-parent households (Ausubel, 2020). World wide, women are four times as likely as men to live with one or more minor children and no other adults (4% of women vs. 1% of men). This gap is biggest among Christians (7% of women vs. 2% of men), especially in sub-Saharan Africa where single-parent households are common. Gaps are smaller, but still notable among Jewish, Muslims, Hindus and the religiously unaffiliated. However, Buddhist men and women do not differ much on this measure. In sub-Saharan Africa, 9% of middle-aged women and 2% of middle-aged men live in single-parent households, followed closely by North America (8% of women vs. 2% of men) and the Latin America-Caribbean region (7% of women vs. 1% of men). Men tend to live in single-parent homes at about the same rate all over the world, and any differences in rates of single parenthood affect women almost exclusively.

Women live as single parents more often than men





Source: Pew Research Center analysis of 2010-2018 census and survey data. See Methodology for details "Religion and Living Arrangements Around the World"

PEW RESEARCH CENTER

Caregiving

The **sandwich generation** refers to adults who have at least one parent age 65 or older and are either raising their own children or providing support for their grown children. According to a Pew Research survey, nearly a half of middle-aged adults are part of this sandwich generation (Parker & Patten, 2013). In addition, 15% of middleaged adults are providing financial support to an older parent while raising or supporting their own children. According to the same survey, almost half of middle-aged adults, have supported their adult children in the past year, and over a quarter are the primary source of support for their grown children.

Women are more likely to take on the role of care provider for older parents in the U.S. and Germany (Pew Research, 2015). About 20% of women say they have helped with personal care, such as getting dressed or bathing, of aging parents in the past year, compared with 8% of men in the U.S. and 4% in Germany. In contrast, in Italy men are just as likely (25%) as women (26%) to have provided personal care. The Pew survey (Parker & Patten, 2013) found that almost a third of the sandwich-generation adults were more likely to say they always feel rushed, while less than a fourth of other adults said this. However, the survey suggests that those who were supporting both parents and children reported being just as happy as those middle-aged adults who did not find themselves in the sandwich generation. However, adults who are supporting both parents and children did report greater financial strain.



According to the National Alliance for Caregiving (2015), 40 million Americans provide unpaid caregiving, and much of this falls on the shoulders of women. The typical caregiver is a 49 year-old female currently caring for a 69 year-old female who needs care because of a long-term physical condition. Looking more closely at the age of the recipient of caregiving, the typical caregiver for those 18-49 years of age is a female (61%) caring mostly for her own child (32%) followed by a spouse or partner (17%). When looking at older recipients (50+) who receive care, the typical caregiver is female (60%) caring for a parent (47%) or spouse (10%).

When caring for a disabled spouse, gender differences have also been identified. Female caregivers of a spouse with dementia experienced more burden, had poorer mental and physical health, exhibited increased depressive symptomatology, took part in fewer health-promoting activities, and received fewer hours of help than male

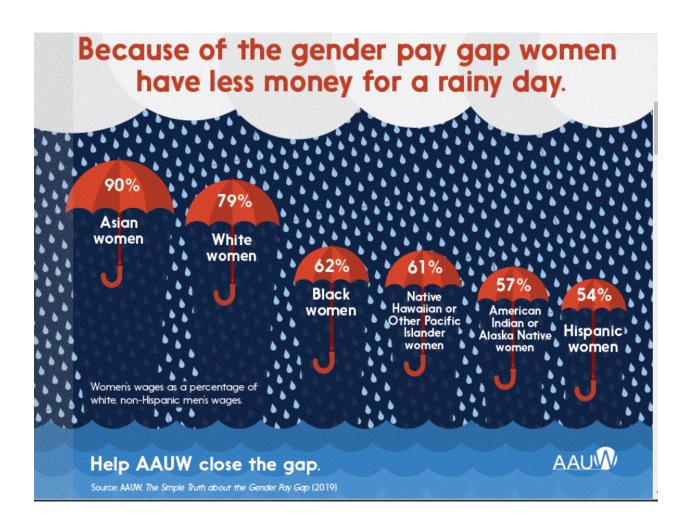
caregivers (Gibbons et al., 2014).

Care for chronically ill or aging family members takes its toll physically, emotionally, and financially. Daughters are more likely to provide basic care, such as dressing, feeding, bathing, and transporting, and sons are more likely to provide financial assistance (Schulz & Eden, 2016). Some adult children choose to leave the work force, however, the cost of leaving the work force early to care for an aging or ill family member is high. For females, lost wages and social security benefits equals \$324,044, while for men it equals \$283,716 (Metlife, 2011). This loss can jeopardize the adult child's financial future.

Similar to caregiving, in all families there is a **kinkeeper**, a person or persons who keep the family connected and who promote solidarity and continuity in the family (Brown & DeRycke, 2010). Who in your own family do you count on to organize family gatherings? Who knows the history of your family? Who do people turn to in your family for advice and support? Who works to strengthen the bonds between members of your family? These are your family's kinkeepers, and they are usually women (Leach & Braithwaite, 1996; Brown & DeRycke, 2010). Leach and Braithwaite found that 86% of their respondents named a woman as their family's kinkeeper, and Brown and DeRycke found that mothers, maternal grandmothers, and paternal grandmothers were more likely to be a family's kinkeeper than were fathers, young adult children, and grandfathers combined. Brown and DeRycke also found that among young adults, women were more likely to be a kinkeeper than were young adult men.

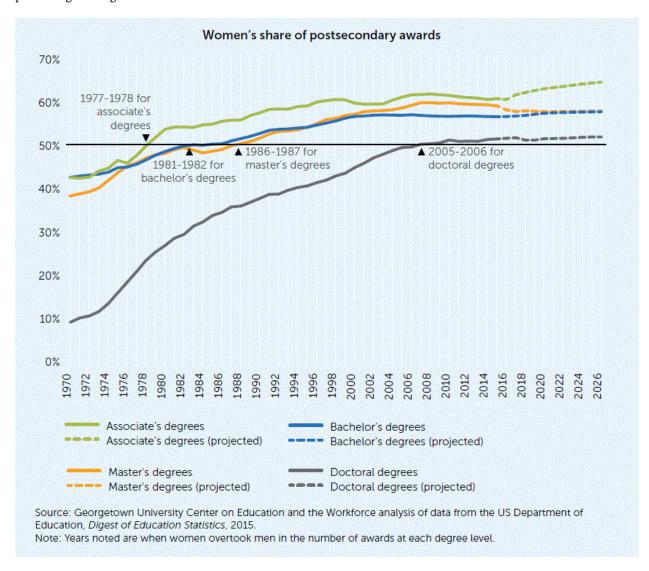
In the next module we will examine how gender influences people's experiences in college and in the workplace. We will consider how it influences people's choices in careers, and the unique challenges faced by the genders.

Module 8 How Does Gender Operate in College and the Workplace?



College and Career Interests

To improve women's financial earnings, they now attend and complete college at higher levels compared to men. Currently women obtain 61% of Associate's degrees, 57% of Bachelor's degrees, 60% of Master's degrees, and 52% of Doctoral degrees (Carnevale et al., 2018). Despite greater levels of college attendance, women still earn only 81 cents for every dollar earned by men. Even when women and men have the same college majors and work in the same occupation, women still earn only 92 cents for every dollar men earn. Carnevale et al. concluded that the main reason for this gender gap is pay discrimination, despite the same sets of qualifications and experience. This section will explore the reasons why women continue to lag behind men in wages and career advancement, despite educational advancement. The following chart illustrates the higher percentage of degrees that women obtain.



STEM:

Careers in the fields of science, technology, engineering and math, known as STEM, provide high-paying jobs (Carnevale, 2018). However, looking at data from 47 interest inventories, consistent findings indicate that females are more interested in people and males are more interested in things (Hyde, 2005). Along with this dichotomy, large gender differences favor males for interest in STEM fields. Further, large gender gaps are especially evident in engineering, mathematics, computer science, and physics (EMCP), which is a subset of STEM. This lack of interest may be one explanation for female under representation in these fields. Additionally, in societies in which people choose careers they feel will be highly interesting and fun, the largest gender gaps are found. In contrast, gender gaps are smaller in countries with developing economies where a stable salary is most important. All of these differences reflect cultural variables (Hyde, 2014). According

to Master et al. (2016), adolescent females may avoid computer science courses because current prevailing stereotypes indicate to them that they do not belong. Consequently, computer science has one of the lowest percentages of women among STEM fields. Further, beliefs that STEM fields are not family-friendly and would interfere with family life may also keep females from pursuing these careers, and thus not earning high paying salaries.



Parents' and teachers' gender stereotypes regarding STEM fields may also discourage females from entering these fields. Female students may have internalized beliefs about female's possessing less ability in STEM and other science fields, even if the evidence does not match these results and females are the majority in a science class. Colorado State University (2020) surveyed male and female students in science classes that were composed of majority female students and majority male students. In physical sciences classes, female students were in the

minority and they had higher average GPAs. They were also 1.5 times more likely to earn an A or A- than the male students. However, both males and females in the class indicated that males performed better, that they would seek help from a male student more than a female student, and a male student was "best in class". In biology classes, in which females outnumbered the males and performed better, females still identified a male student as someone they would seek help from and were more knowledgeable. Male students chose male and female students equally on all three measures.

Interestingly, when females perform well in STEM areas, the reasons given are that they work harder, are more attentive, and study harder than males. No mention is made regarding them being "naturally" strong in these areas. However, when females perform less well, the reasons given are that they are "naturally" less capable in STEM areas than males (Colorado State University, 2020). It is no wonder that these negative perceptions about female competence in science keeps women from pursing these fields.

Premed:

By the end of high school, females have higher grades, are more likely to attend college, and are more likely than males to indicate an interest in a medical career (Witherspoon et al., 2019). However, by the end of college, only 3.5 percent of the women who said they were interested in medical school took the Medical College Admission Test (MCAT), while 10 percent of males did. Female high school students' overrepresentation in interest in medicine largely disappeared by the time students finished college and applied to medical school. The authors found that males and females enrolled in science courses required for their degree at the same rate in the first year of college. However, differences in retention begin to be noted during the second year of college, and it was not due to poor grades. Witherspoon et al. found that 96% of male students who earned an A in organic chemistry I went on to organic chemistry II, while 89% of female students earning an A moved on to the next course. This pattern of dropping out of classes continued, even when males and females earned the same grade. Why? Witherspoon et al. theorized that women dropping out was due to a lack of confidence in their abilities and not lower grades. Stereotype threat, and the belief that high grades were achieved only through effort and not ability, contributed to females leaving a premed program.

The authors concluded that the loss of females in health care contributes to a significant loss in contributions to the field. Additionally, high performing women end up graduating with lower status, and thus lower paying careers.

Graduate Students and Faculty:

What happens when women pursue STEM, EMCP, and medical fields? Unfortunately, female graduate students and faculty often face an unwelcoming institutional climates. To investigate gender and racial bias in hiring in physics, Eaton et al. (2019) asked professors to read and evaluate the CV of a hypothetical recent Ph.D. Questions asked included the individual's overall competitiveness, competence, likability, and the likelihood the person would be hired. All the information on the CV was the same except the gender and race of the person, which varied by manipulating the first and last name. Ninety percent of physics respondents were male, and they exhibited a gender bias favoring the male candidates as more competent and more hireable than the identical female candidates. An interaction between gender and race also occurred whereby Black and Latinx women and men candidates were rated the lowest in hireability. Because postdocs are a way to enter university faculty positions, not being hired for these positions can derail the careers for women and minorities.

Once women enter STEM fields, women scientists receive less federal funding for research. Oliveira et al. (2019) reviewed National Institutes of Health grants from 2006 until 2017 and found that first time female principal investigators received a median grant of \$126,615, while first time male investigators received \$165,721. Previous research had indicated that male researchers received higher financial startup support than females. This financial difference already places women at a disadvantage at the beginning of their careers as they have fewer resources for their research.

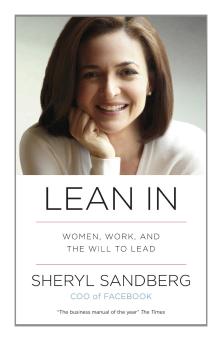
UCLA's Higher Education Research Institute surveyed 20,771 full-time undergraduate faculty members at 143 college and universities between 2016 and 2017, and significant differences between male and female responses were found (Stolzenberg et al., 2019). When asked if they needed to work harder than their colleagues to be seen as a legitimate scholar, 61% of females agreed, while only 43.6% of males agreed. More than twice the number of females (36.2%) indicated they experienced either somewhat or extensive stress due to subtle discrimination than males (18%). Additionally, 60% of female faculty of color reported stress due to discrimination (60.1% of Black, 60.1% of Latina, 56.0% of Native American, and 59.0% of multiracial). Female faculty were also less satisfied with job benefits and salary than male faculty (43.5% versus 52.1%). Lastly, a significantly greater proportion of men (83.5%) than women (69.3%) agreed that female faculty were treated fairly at their institution.

What other role does gender play on career interest and employment? Despite the rise in the number of women who work outside of the home, there are some career fields that are still pursued more by men than women. Jobs held by women still tend to cluster in the service sector, such as education, nursing, and child-care worker. These jobs traditionally held by women tend to have lower status, pay, benefits, and job security (Bosson, et al., 2019). In recent years, women have made inroads into fields once dominated by males, and today women are almost as likely as men to become medical doctors or lawyers. Despite these changes, women are more likely to have lower-status, and thus less pay than men in these professions. For instance, women are more likely to be a family practice doctor than a surgeon or are less likely to make partner in a law firm (Ceci & Williams, 2011). In business, they are more likely to work in human resources than finance.

Women's Lack of Career Advancement

What are the effects of internalized gender roles and stereotypes?

Since childhood, males and females have been socialized to adhere to gender roles. Managerial positions are seen as masculine and male leaders are expected to be assertive, dominant, competitive and achievementoriented, while these same attributes are negatively ascribed to females. Further, compared to men, women are less likely to see themselves in positions of power and high status (Kossek et al., 2017). Even when qualified, women often choose not to enter male-dominated roles or seek high-level positions because of gender socialization. In addition to internalized gender roles, women may also face stereotype threat, or detrimental performance due to being judged and treated in ways that confirm negative stereotypes. Dealing with negative assumptions regarding one's performance consume cognitive resources that could be directed toward work tasks, and instead these assumptions negatively affect work performance. Stereotype threat has resulted in anxiety, stress, negative thoughts and emotions, and a decrease in leadership aspirations among working women.



Do women prioritize their families over their careers?

In 2013, Sheryl Sandberg wrote a best-selling book encouraging women to "lean into" their careers in order to break through persistent glass ceilings (King, 2015). Sandberg identified institutional factors that hold women back occupationally, but also stated that women hold themselves back by not reaching for higher positions. In contemplating future families, Sandberg reflected that women make many small career decisions along the way they believe will be required to have a family, and thus actually "leave before they leave" (Sandberg, 2013, p. 93). Are women prioritizing families over careers, thus contributing to them "opting out" of their careers, or are there cultural and institutional factors that contribute to women being "pushed out" of their careers? Research indicates that there may be more of the latter.

In a review of the literature researching whether women "opt out" or are

"pushed out" of careers, Kossek et al. (2017) identified several individual and organizational factors. At an individual level, women are more likely to prioritize a balance between their work and home life, while men are more likely to prioritize their careers. This dual centric identity requires women to choose positions that allow for greater work-family flexibility, thus limiting them from pursuing more advanced positions. At the same time, employers value work-centric employees who are committed to make work the main focus of their lives. Consequently, women are overlooked for advanced positions if they prioritizes both work and family equally.

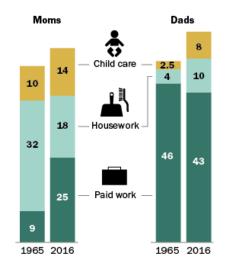
The current trend of employers expecting workers to be available 24/7 affects women more as they do the majority of the child care and typically do not benefit from the financial incentives that go along with the longer hours. **Work-family conflict theory** states, "work and family roles are incompatible, given conflicting expectations for time, energy, and behaviors," (Kossek et al., 2017, p. 236). Although both mothers and fathers have increased the amount of time spent in child care, working mothers spend more time on child care and housework than working fathers (Livingston & Parker, 2019). Consequently, the level of stress resulting from a poor work-life balance can lead women to leave a job.

What are some hindrances to women's career advancement?

The term "glass ceiling" was coined in 1984 by Gay Bryant, the former editor of Working Woman magazine (Kaiser & Wallace, 2016). The **glass ceiling** refers to the invisible barrier that prevents women from advancing into top positions. Women hold only 4.5% of CEO positions and 14% of top executive positions around the world (Noland, et al., 2016). In addition, Noland and colleagues found that in a study of nearly 22,000 companies worldwide, in 77% of those firms only 30% of women held an executive position

For both moms and dads, more time spent on child care

Average number of hours per week spent on ...



Note: Paid work includes commute time.
Source: 1965 data from table 5A.1-2, Bianchi, S.M. et al.,
"Changing Rhythms of American Family Life" (2006). 2016
data from Pew Research Center analysis of American Time
Use Survey (IPUMS).

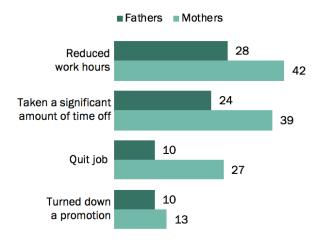
PEW RESEARCH CENTER

or board seat. There were only 11 companies, or 0.05% of all the firms studied, where women held all the executive positions and board seats. Some researchers see the root cause of this situation in the tacit discrimination based on gender, conducted by current top executives and corporate directors, who are primarily male.

Morgan (2015) attributed this barrier to (1) male managers holding negative biases regarding the performance of female managers, and (2) male managers' personal preferences not to work with women. These negative biases are also referred to as **implicit bias**, or *unconscious attitudes and stereotypes*. Implicit bias affects how women are perceived in leadership positions, even though leadership research indicates no gender differences in ability to lead. Because women are not implicitly associated with traits of successful leaders, they are not hired. Additionally, women are less likely to receive a mentor or have female role models that would assist them in moving into positions of leadership.

Mothers, more than fathers, experience career interruptions

% of fathers/mothers saying they have done each of the following in order to care for a child or family member



Note: Based on those who have ever worked and have children of any age, including adult children.

Source: Survey of U.S. adults conducted Oct. 7-27, 2013.

PEW RESEARCH CENTER

Other factors that may reduce women's chances of top-level positions include a lack of participation in expatriate jobs, which are important to advancement in many companies. Because 90% of women professionals are in dual-career marriages compared to only 50% of men, finding a spousal job abroad is difficult and adversely affects a women's ability to work overseas (Kossek et al., 2017). Further, more women than men experience career interruptions. Women who take time off from work to care for children or other family members indicate they are penalized, both financially and in career advancement (Pew Research Center, 2013).

Women also face what is known as the broken rung, or not being able to take the first step up into a management position. Without being able to move up the corporate ladder, they will not reach the top roles in management. Instead, they remain in positions with little opportunity for advancement. According to the most recent Women in the Workplace report (McKinsey & Co., 2019), only 72 women are promoted or hired into a manager role for every 100 men. Further, only 1

in 5 top executives are women, and for women of color, the number is only 1 in 25.

How are women judged when they attain a position of power?

When hired, women often face a hostile working environment. This is due to the **role congruity theory**, in which one's characteristics should align with typical social roles. The perceived role of a "leader" is incongruent with the perceived role and stereotypical characteristics of a woman (Kossek et al., 2017). Women and men are expected to differ on the dimensions of communality and agency; that is, women should be nice and nurturing, while men should be competent and assertive (Parks-Stamm & Grey, 2016). In the workplace, women are penalized if they show low communality and high agentic behavior. Women are expected to assist others, and therefore are not rewarded for this behavior, but they will be penalized if they do not help others. However, males are rewarded not only for their agency, but also if they show helpful behavior, such as assisting a colleague. Men are not penalized if they are not helpful because they are not expected to be. Women leaders are constantly placed in this double-bind of needing to be communal and showing agency, without experiencing a backlash.

When women are hired for leadership positions, they may also face a glass cliff in which they are placed in precarious positions after a crisis and are set-up to fail (Ryan & Haslan, 2007). For instance, female lawyers are more likely than their male counterparts to lead a high-risk cases, and female politicians are more likely to be recommended to run in unwinnable seats (Bruckmuller et al., 2014). Female leaders are also more likely to be denied credit for their successes, and the display of negative emotions are attributed to their internal characteristics rather than external factors, while the opposite is true for males. Women in managerial positions face less feedback and fewer business connections (Novotney, 2019). Despite these perceptions and hindrances, there are no differences in leadership styles according to the research (Hyde, 2014). Not surprisingly, male leaders were rated somewhat more effective in positions that were consistent with the male role, while females were rated more effective in positions consistent with the female role.

Gender Wage Disparity

Using 2019 data, the American Association of University Women (2019) reported that the typical American woman earns \$45,097, while the typical man earns \$55,291. This discrepancy indicates that American women earn only 82 cents for every dollar earned by men. Using the same rate of increase, the pay gap will not close until 2093. Separating women into ethnic groups identify startling discrepancies. Compared to white, non-Hispanic men:

- Asian women earn 90 cents
- White women earn 79 cents
- Black women earn 62 cents
- Native Hawaiian or Other Pacific Islander women earn 61 cents
- American Indian or Alaska Native women earn 57 cents
- Hispanic women earn 54 cents



Covid-19 and Wages:

Covid-19 has affected women more than men in two main ways: Greater loss of jobs and greater exposure to the virus. During a typical recession, more men lose their jobs than women do because male-dominated manufacturing and construction are the hardest hit (Gupta, 2020). However, the hardest hit sectors with this pandemic include leisure, hospitality, education, and childcare, which are dominated by female employees. Of the 20.5 million jobs lost in April 2020, women held 55% of them. The unemployment rate for women 20 years and older went from 2.8% in February 2020 to 15% in April (Bureau of Labor Statistics, 2020). In contrast, for men 20 years and over, the unemployment rate changed from 2.9% in February 2020 to 13% in April. Women of color fared worse, with April 2020 unemployment rates for black women at 16.4 percent and Hispanic women at 20.2 percent. Because female-dominated jobs pay less, newly unemployed women lack adequate savings, thus increasing their chances of living in poverty.



Ritratto di Annalisa Silvestri, frontline worker in Italy

As part of the precautions to decrease the spread of Covid-19, schools and childcare centers closed making home childcare an essential need. Because women have traditionally provided the bulk of childcare, continued employment for women proved difficult, as they needed to care for their children (Gupta, 2020). However, women working in healthcare and other required sectors remained employed, and consequently fathers increased their childcare responsibilities.

Although women did not lose their jobs working in these front-line positions, they were exposed more to the coronavirus. According to Boniol et al. (2019), women make up the majority of health care workers worldwide at almost 70%. In the U.S., that number is around 78% (Gupta, 2020). Compared to doctors, nurses are more closely involved in providing direct care, which increases females' risk. Further, females are more likely to care for ill family members, also placing them at a higher risk than males.

Factors Affecting Wage Inequality:

There are many possible explanations for the wage gap. Occupational **sexism** involves discriminatory practices, statements, or actions, based on a person's sex, that occur in the workplace. One form of occupational sexism is wage discrimination. In 2008, the Organisation for Economic Co-operation and Development (OECD) found that while female employment rates have expanded, and gender employment and wage gaps have narrowed nearly everywhere, on average women still have a 20 percent less chance to have a job. The Council of Economic Advisors (2015) found that despite women holding 49.3% of the jobs, they are paid only 78 cents for every \$1.00 a man earns. It also found that despite the fact that many countries, including the U.S., have established anti-discrimination laws, these laws are difficult to enforce.

Education:

It has been argued in the past that education may account for the wage gap. However, the wage gap exists at every of education level (Bosson et al., 2019). Men with less than high school to men with graduate degree earn more than women with the same level of education. In addition, women now attain more associates, bachelor's, and master's degrees than men, and very similar levels of professional degrees and doctorates, according to a recent Census survey (U.S. Census Bureau, 2019). As the wage gap still exists in most occupations level of education cannot be the explanation. Instead, occupational segregation is a likely contributor to the overall wage gap, as women tend to work in very different occupations than men, and those jobs tend to have lower wages. In addition, the entry of women into a field tends to reduce the wages and prestige of the job. Mandel (2013) found that jobs typically held by men who saw the biggest influx of women into those careers, also saw the biggest drop in wages. When men enter occupations that have been historically held by women, as was the case with computer programmers, the status and remuneration increased (Bosson et al., 2019).

College Debt:

According to the American Association of University Women, women hold nearly two-thirds of the country's

outstanding student loan debt (Mensik, 2018). Reasons for this are many and include women attending college at higher rates, but then being paid less than men. Working in lower wage occupations, as well as earning less money in male-dominated fields, contributes to this inequity. Females also have additional expenses, especially child care, and are less likely to receive financial assistance from their parents than are males. Having difficulty paying off student loans can negatively affect women's credit, which then makes it difficult to qualify for home mortgages and other loans.

Sticky Floors:



Sticky floors, which keep low-wage workers, who are more likely to be women and minorities, from being promoted contribute to lower wages (Bosson, et al. 2019). disproportionately in low-paid occupations, such as clerical, childcare, and service workers (Hegewisch & Ellis, 2015). They also get paid less than men in the same jobs. Men are not only being paid more in more masculine jobs, but also in jobs typically held by women.

Other factors include that more than half of men report having negotiated their salary when being

hired, compared with 12% of women (Babcock et al., 2006). However, people perceive women who negotiate more negatively then they do men, as assertive women, but not men, are more likely to be penalized. Women are also more likely to have interruptions in their careers either through the birth of children, or relocation due to a change in their partner's job. Women are also less likely to relocate for the sake of their families when a better job offer comes along, and employers know this. It has been suggested that one reason why males may be offered more money is to keep them from leaving (Baldridge et al., 2006). Additionally, men are more likely to work overtime.

Wage Inequality for the United States Women's Soccer Team:

A recent example of significant wage inequality occurred among athletes. The world witnessed the tremendous athleticism and soccer skills demonstrated by female players from 24 different countries during the 2019 Women's World Cup. Amid the cheering at the end of the final match between the United States and the Netherlands, were chants of "equal pay" (Channick, 2019). Throughout the tournament, attention was focused on the discrepancy between what male soccer players earned compared to the female players. In winning the World Cup, the American women's team earned \$4 million as part of a \$30 million prize pool (Peterson, 2019). In contrast, the French men's team, who won the Men's World Cup in 2018, earned \$38 million as part of the \$400 million prize pool. The Federation of Association Football (FIFA) promised to double the prize money to \$60 million for the 2023 Women's World Cup, but that still lags far behind the \$440 million that will be given out for the Men's World Cup in 2022. In the United States, the women's soccer team generates more revenue



and receives higher TV ratings than the men's team, yet the women get paid significantly less. By winning the 2019 Women's World Cup, each woman should receive \$200,000, yet if the American men had won the 2018 Men's World Cup, each would have received \$1.1 million (Hess, 2019). Because of this discrepancy, in March 2019, 28 members of the women's team filed a lawsuit against the United States Soccer Federation for gender discrimination and unequal pay (Channick, 2019). In February 2022, the U.S. women's soccer team won their case and going forward they received back pay and were guaranteed equal pay commensurate with the men's team (Das, 2022).

Worldwide Gender Parity:

The World Economic Forum (2017) introduced The Global Gender Gap Report in 2006 as way of tracking gender based disparities between men and women in the world. The most recent report in 2017 analyzed 144 countries on gender equality in the areas of: economic participation and opportunity, educational attainment, health and survival, and political empowerment. Countries are then ranked to create global awareness of the challenges posed by gender gaps in different areas of the world. A parity rating of 100% would mean that females and males achieved equality on these measures. Results indicated:

- 68% gender parity was found worldwide across the four areas. Specifically, there was 96% parity in health outcomes, 95% parity in educational attainment, 58% parity in economic participation, and only 23% parity in political empowerment.
- The top spots were held by smaller Western European countries, particularly the Nordic countries as Iceland (88% parity), Norway (83% parity) and Finland (82% parity) occupied the top three positions.
- The United States ranked 49th with 72% gender parity.
- Following the current trends, it will take 100 years for global gender parity.
- Improving gender parity is expected to provide significant economic gains for a country and closing the

occupational gender gaps would be one way to achieve this.

Salary History Ban (SHB):

Another way to improve gender parity is through the use of laws banning questions regarding a worker's salary history. Several U.S. states, see table, have enacted a ban on employers asking job seekers this question. As a result employers in these states have switched from wage bargaining to wage posting in job advertisements. In other words, prospective job applicants know the expected salary range before applying for the job. Each state handles the issue differently, some bans only apply to the public sector, while others apply to all jobs in the state. Some states still allow applicants to volunteer this information, while others do not allow such questions on job applications or during interviews. There is no ban on a prospective employer asking an applicant their desired salary.

State	Passed	Enacted	Employees Covered
Massachusetts	8/1/16	7/1/17	All
Puerto Rico	3/8/17	3/8/17	All
Oregon	5/22/17	10/6/17	All
Delaware	6/14/17	12/14/17	All
California	10/12/17	1/1/18	All
District of Columbia	11/17/17	11/17/17	Public Only
Hawaii	1/19/18	1/1/19	All
Vermont	5/11/18	7/1/18	All
Connecticut	5/22/18	1/1/19	All
Pennsylvania	6/6/18	9/4/18	Public Only
New Jersey	1/14/19	1/1/20	All
Illinois	7/31/19	9/29/19	All
North Carolina	4/2/19	4/2/19	Public Only
Maine	4/12/19	9/17/19	All
Washington	4/25/19	7/28/19	All
Colorado	5/22/19	1/1/21	All
Alabama	5/30/19	9/1/19	All
New York	6/15/19	1/6/20	All
Virginia	6/20/19	7/1/19	Public Only
Course states and as Illinois New York and New Jones, an ested CLID laws much as dispute at account and			

Some states, such as Illinois, New York and New Jersey, enacted SHB laws much earlier that covered only the Public sector. Listed here is the current SHB laws for the state. Adapted from Bessen et al. (2020).

These bans were initially pushed by women's advocates to help close the gender wage gap, a recent study has shown that other minority groups have also benefitted from such bans (Bessen et al., 2020). Why the concern about employers asking people their prior salaries when seeking a new job? Many activists believe that that the knowledge about a worker's prior salary history gives employers an unfair advantage in any salary bargaining,

especially for groups, such as women and racial minorities, who may be underpaid due to discrimination in previous jobs. In other words, such questions may perpetuate the wage gap. In their comparison of the wages of workers who switched jobs both prior to and after a SHB had been put into effect, Bessen and colleagues found that women's salaries raised 8.5% on average, and they were able to determine that 48% of the gender wage gap disappeared when an SHB was in effect. African American men and women saw even greater improvements, 16% and 14% average increase in the salary respectively when they switched jobs in states with SHB laws, suggesting that discrimination may play an even greater role for racial minorities. Overall, workers in states with SHB laws saw a 7.9% average increase in salaries when they switched jobs, while those in states without a SHB saw only a 3.9% average increase. SHB laws lift the veil of secrecy in salary negotiation for all groups of workers.

Men's Careers

Due to the greater respect, benefits, and pay inherent in male-dominated careers, women have made strides in entering these fields. Between 2009 and 2017, approximately 23% of jobs traditionally held by men are now held by women (Hedreen, 2019). These include CEOs, lawyers, surgeons, web developers, chemists and producers, What about men entering female-dominated careers? Historically, female-dominated careers were seen as providing less status, less pay, and greater stigma for males to enter. Despite these constraints, 27% of female-dominated professions are now held by men. The table below displays the percentages of both females and males in stereotypical opposite-gender professions.

Percentage of Females in Male-dominated Professions	Percentage of Males in Female-dominated Professions
Lawyers: 48%	Cooks (institution and cafeteria): 64%
Veterinarians: 48%	Merchandise displayers and window trimmers: 59%
Commercial and industrial designers: 48%	Retail salespeople: 58%
Marketing managers: 47%	Pharmacists: 50%
Optometrists: 43%	Education administrators (postsecondary): 49%
Management analysts: 43%	Elementary school teachers: 49%
Sales managers: 43%	Bartenders: 48%
Producers and directors: 42%	Insurance sales agents: 43%
Chemists: 42%	Market research analysts and marketing specialists: 42%
Coaches and scouts: 41%	Accountants and auditors: 41%
Private detectives and investigators: 41%	Technical writers: 42%
Emergency medical technicians and paramedics: 40%	Interior designers: 41%
Financial analysts: 40%	Fitness trainers and aerobic instructors: 40%

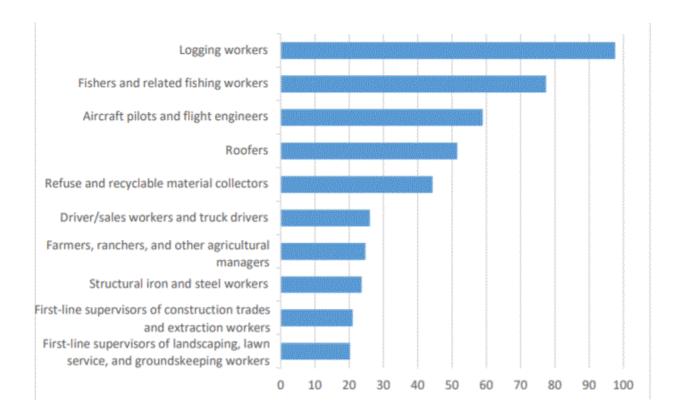
Women who enter traditionally male occupations have faced barriers and discrimination. What are the experiences of men in traditionally female occupations? Many men experience their token status in female occupations as an advantage in hiring and promotion, a phenomenon referred to as the **glass escalator** (Dill et al., 2016). Feminist scholars have commented on how the cultural beliefs about masculinity and femininity are embedded in the structure of the world of work (Dill et al., 2016). Men are often "pushed" in subtle ways

into positions that carry greater authority, prestige, and money. However, not all men experience the same advantage. Racial minorities are less likely to ride the glass escalator than are white males (Dill et al., 2016; Woodhams, et al. 2015) the same is true for disabled males (Woodhams et al., 2015).

Still, many males are uncomfortable entering female dominated occupations. One such career choice that males avoid is nursing, as 90% of all nurses are currently women (Vedantam, 2018). According to the Bureau of Labor Statistics (2020), healthcare occupations account for 13 of the 30 fastest growing occupations from 2019 to 2029. Because of aging baby boomers, demand for healthcare services will drive this projected employment growth, so it would seem a great career choice for everyone. However, women have traditionally held jobs in the health care field, and prior research indicates that if women are attracted to an occupation, then men hesitate to enter. Vandello and Bosson (2012) explain the reluctance of males to enter careers dominated by women as being due to precarious manhood, which was described in module one. Nursing is associated with being a female career, and choosing this occupation can alter a man's perception of his gender status and how he is perceived by others. Consequently, a male is motivated to continually prove his manhood status to others and himself, and thus rejects a stereotypical female career. To encourage more men to enter nursing, Bosson encourages the rewriting of stereotypes by also promoting nursing as a masculine occupation, such as describing nursing as "dangerous" and "physically grueling" (Vedantam, 2018). Gender labeling careers can discourage qualified candidates from participating, and thus hold back both their own personal and financial goals.

Dangerous Jobs:

According to the Bureau of Labor Statistics (2019), there were 5,250 fatal work injuries recorded in the United States in 2018, a 2 percent increase from the 5,147 in 2017. Occupations with the highest death rates are those in male-dominated fields. These include: truck drivers, loggers, fishing workers, aircraft pilots and flight engineers, roofers, police and sheriff patrol officers, and taxi drivers and chauffeurs. The table below lists the fatal work injury rates per 100,000 full-time equivalent workers by selected occupations in 2018.



Sexual Harassment

According to the United States Equal Employment Opportunity Commission (2020), **sexual harassment** is a form of sex discrimination that violates Title VII of the Civil Rights Act of 1964. Title VII applies to employers with 15 or more employees, including state and local governments. It also applies to employment agencies and to labor organizations, as well as to the federal government. Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when this conduct explicitly or implicitly affects an individual's employment, unreasonably interferes with an individual's work performance, or creates an intimidating, hostile, or offensive work environment.

Sexual harassment can occur in a variety of circumstances, including but not limited to the following:

- The victim as well as the harasser may be a woman or a man. The victim does not have to be of the opposite sex.
- The harasser can be the victim's supervisor, an agent of the employer, a supervisor in another area, a coworker, or a non-employee.
- The victim does not have to be the person harassed but could be anyone affected by the offensive conduct.
- Unlawful sexual harassment may occur without economic injury to or discharge of the victim.
- The harasser's conduct must be unwelcome (p. 1)

Keplinger et al (2019) further separates the EEOC definition into three main areas:

• Sexual coercion-threats towards those who will not comply with sexual requests or bribes in exchange

for sex

- Unwanted sexual attention-sexual advances including inappropriate comments, staring, and touching
- Gender harassment-general gender hostility that is not necessarily sexual

The sexual mistreatment of women has gained significant attention with the #MeToo movement, begun in October 2017, and the #Timesup movement in January 2018. To determine if sexual harassment toward women subsequently decreased between 2016 and 2018, Keplinger et al. (2019) found that unwanted sexual attention and sexual coercion did in fact decrease, but gender harassment increased. Examples of gender harassment included coworkers making sexist remarks and displaying sexist material. A positive outcome from the study was that women felt more empowered to speak up regarding sexual harassment than previously.

Harassment in Male-dominated Fields:

Catalyst (2020) reported that in a 2017 survey, 28% of women working in male-dominated industries stated they had personally experienced sexual harassment, compared to 20% of women in female-dominated industries. A 2018 report by the National Academies of Sciences, Engineering, and Medicine (NASEM) indicated that 50 percent of female faculty in these fields said they had experienced "sexual coercion, unwanted sexual attention and gender harassment described as verbal and nonverbal behaviors that convey hostility, objectification, exclusion or second-class status from faculty or staff", (Novotney, 2019, p .40). Additionally, sexual and gender minority women indicated higher levels of harassment. The higher rate of sexual harassment for women in these science-heavy fields reflected their college experiences as women pursuing male-dominated university majors experience higher levels of harassment than women earning other degrees (Catalyst, 2020). Moreover, it is not just women who experience greater harassment in such fields. Men in male dominated jobs, such as mining, reported higher rates of sexual harassment than in female dominated jobs, such as healthcare (Center for American Progress, 2018).

In the next module we will consider how gender impacts both physical health, and its role in both seeking and receiving treatment.

Module 9 How Does Gender Affect Physical Health?

Case Study: Men and COVID-19



Worldwide data collected since the beginning of COVID-19 shows that men are more likely to have died of COVID-19 in 41 of 47 countries, and the COVID-19 case-fatality ratio is approximately 2.4 times higher among men than among women (Griffith et al., 2020). In the United States, from the beginning of the pandemic until June 2020, 57% of deaths caused by COVID-19 have been men. Reasons given for the gender difference include men being overrepresented as essential workers in low-skilled

and low-paid occupations, such as food processing, transportation, delivery, warehousing, construction, and manufacturing. Griffith et al. also indicated that men who are marginalized or disadvantaged because of their race, ethnicity, sexual orientation, incarceration, or homelessness, have been particularly vulnerable to COVID-19. Further, because the X chromosome possesses a higher density of immune-related genes, women are thought to have a stronger immune response compared to men.

Behavioral factors traditionally associated with men are also linked with higher rates of contracting COVID-19. Reny (2020) attributes these behaviors to men following masculine norms that encourage risky behavior and discourage seeking out physical and mental health services. These high risk behaviors demonstrated more by men include: Downplaying the severity of the virus's potential to harm them, being less likely to avoid large public gatherings or close physical contact with others, engaging in higher rates of tobacco use and alcohol consumption, and engaging in less handwashing, social distancing, mask wearing, and proactively seeking medical help (Griffith et al., 2020; Reny, 2020).

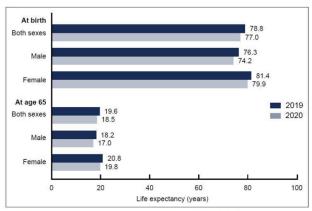
Holding sexist beliefs were also reported as a factor. Using data from a large (N = 100,689) survey of American adults conducted between March and June 2020 by the Democracy Fund and the University of California, Los Angeles, Reny (2020) found that, "sexist beliefs were consistently the strongest predictor of corona virus related emotions, behaviors, policy attitudes, and ultimately contracting COVID-19," (p. 1). Sexist opinions included an affirmation of men's elevated position in social hierarchies and a belief in the biological superiority of men over women. Sexist individuals were not as worried about the virus, engaged in behaviors less likely to protect themselves, were less likely to support state and local government policies enacted to stop the spread of the disease, and were more likely to get sick themselves.

Life Expectancy

The oldest man to have lived was Jiroeman Kimura who died when he was 116 years, 54 days. Eighteen women have exceeded that age, with Jeanne Calment being the oldest at 122 years, 164 days. Among the top 100 Americans to have lived, the top nine are women, and among those in the list who are still alive, all five are women. Around the world, women outlive men. Are the gender differences in longevity due to something biological or environmental? As with most issues regarding gender differences both are likely to influence longevity.

Life expectancy is defined as the average number of years that members of a population (or species) live. According to the World Health Organization (WHO) (2019) global life expectancy for those born in 2019 is 72.0 years, with females reaching 74.2 years and males reaching 69.8 years. Women live longer than men around the world, and the gap between the sexes has remained the same since 1990. Overall life expectancy ranges from 61.2 years in the WHO African Region to 77.5 years in the WHO European Region. Global life expectancy increased by 5.5 years between 2000 and 2016. Improvements in child survival and access to antiretroviral medication for the treatment of HIV are considered factors for the increase. However, life expectancy in low-income countries (62.7 years) is 18.1 years lower than in high-income countries (80.8 years). In high-income countries, the majority of people who die are old, while in low-income countries almost one in three deaths are in children under 5 years of age. According to the Central Intelligence Agency (2019) the United States ranks 45th in the world for life expectancy.

A better way to access health and longevity is to go beyond chronological age and examine how well the person is aging. The **Healthy Life Expectancy** takes into account current age-specific mortality, morbidity, and disability risks. In the U.S., the highest Healthy Life Expectancy (HLE) was observed in Hawaii with 16.2 years of additional good health after age 65, and the lowest was in Mississippi with only 10.8 years of additional good health (CDC, 2013). Females had a greater HLE than males at age 65 in every state and DC. HLE was greater for whites than for blacks in DC and all states from which data were available, except in Nevada and New Mexico. Although improvements have occurred in overall life expectancy, children born in America today may be the first generation to have a shorter life span than their parents. Much of this decline has been attributed to the increase in sedentary lifestyle and obesity. Since 1980, the obesity rate for children between the ages of 2 and 19 has tripled (Henry, 2016).

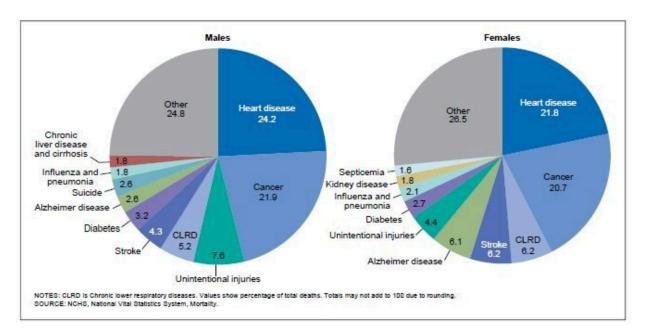


NOTE: Access data table for Figure 1 at: https://www.cdc.gov/nchs/data/databriefs/db427-tables.pdf#1 SQLIRCE: National Center for Health Statistics, National Vital Statistics, System, Mortality

More recently COVID-19 has altered the statistics of life expectancy, especially in the United States, which faired worse than 16 comparable nations, with the life expectancy dropping at a rate not seen since the second World War (Woolf, 2021). The figure to the left shows CDC data comparing 2019 to 2020 and indicates that life expectancy at birth dropped 1.8 years, with males losing 2.1 years, and females losing 1.5 years (Murphy et al., 2021). Among those who had already reached 65, the gender difference is less pronounced, with males losing 1.2 years and females 1 year.

Causes of Death in the United States:

When reviewing the leading causes of death in the United States, males have higher death rates than females in every age group, and sex differences in biology and risk-taking are largely responsible for this discrepancy (APA, 2018a). Listed below are the leading causes of death for men and women in the Unites States in 2017, the most recent year the data has been analyzed (Heron, 2019). Heart disease and cancer are the leading causes of death in both men and women. However, men and women differ in the rankings of many of the other leading causes. For example, dying from unintentional injuries was the third leading cause of death in men, but the sixth leading cause for women. In contrast, chronic lower respiratory disease was the third leading cause of death for women, but fourth in men. Suicide and liver disease do not show up in the top ten causes of death of women, but do for men. Kidney disease and septicemia are among the top ten killers of women, but not men.



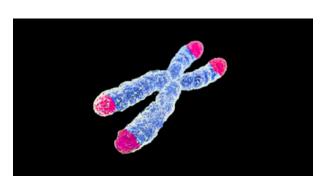
The morbidity-mortality paradox describes how women have higher rates of chronic, nonfatal, but debilitating health problems, such as arthritis, autoimmune disorders, and osteoporosis than men, yet tend to live longer than men. When asked to assess their overall health as either excellent, good, fair, poor, or bad, women are more likely to provide a lower evaluation than men in all ages and in all regions of the world (Boerma et al., 2016). Some have suggested that this gender gap may be the result of women underestimating their health, however, the evidence supports women's self-reports. As noted above women are more likely to suffer from chronic painful conditions. Others have suggested that this gender difference may be the result of men being overconfident in their assessment of their health, or unwillingness to admit to poor health (Bosson et al., 2019). While this may be true, as men's overconfidence has been noted in other aspects of their life, it may reflect the nature of the samples in the survey research and men's comparison group. Most samples in studies on chronic illness are likely to trend toward older populations where there are fewer males. Men who have already outlived many of their peers may think themselves pretty healthy in comparison.

Role of Biology in Gender Differences in Health and Longevity:

Humans are not the only species where females outlive the males (Kawahara & Kono, 2010). This is common in many mammals and even other species. When a gender difference is found in the longevity of a species, it usually favors the female. This would suggest that biological factors are playing a role in longevity. Kawahara and Kono genetically engineered female mice so that they received their genetic material from two females,

meaning they had two mothers but no fathers. The result was mice that lived even longer. They concluded that the female genome plays a role in longevity and that "the sperm genome has a detrimental effect on longevity in mammals" (p. 457).

Another biological advantage for females may come from the final pair of chromosomes. As you learned in module 3, females have two X chromosomes, whereas males have only one X that is paired with a much smaller Y chromosome. Prenatally, males have a higher death rate (Else-Quest & Hyde, 2018). At conception the ratio of male to female zygotes is approximately 120:100, but at birth the ratio is 105:100. Sex-linked genetic defects appear to be the cause. The X chromosome contains genes that influences many important body functions. A defect on one X chromosome might be overridden if a person has a normal second X chromosome. But in males who have only one X, they are much more vulnerable to that defect. As a result, male are at greater risk for x-linked diseases such as fragile X syndrome, hemophilia, and Duchenne muscular dystrophy.



At the end of each of our 46 chromosomes are segments of genetic material that do not code for any particular trait or characteristic. These segments, called **telomeres**, are disposable DNA that protect the genes on the chromosomes. Each time a cell divides it fails to copy some of the DNA material at the end of the chromosome, meaning these telomeres get shorter and shorter. Eventually the cell can no longer divide and it dies. Scientists are learning that shorter

telomeres also show up along with certain diseases, like atherosclerosis and some types of cancer (Srinivas et al., 2020). According to Srinivas and colleagues, it is suspected that shorter telomeres also compromise the health of cells in blood vessels, which may set the stage for clots to form, stick, and block blood flow. Despite length of the telomeres being the same for males and females at birth, the telomeres of males shorten faster with each cell division. Male cells age faster (Barrett & Richardson, 2011) and may also set the stage for certain diseases. It is possible that this might play a role in the greater longevity of females, whether they are humans, mice, or angler fish.

A final biological answer may be found in hormones. Testosterone, which is typically higher in men, increases aggression and risk taking. It also decreases the level of "good" cholesterol while increasing the level of "bad" cholesterol (Vanberg & Atar, 2010). Testosterone also suppresses the immune system, which might account for women's greater ability to fight infections (Furman et al., 2014). In contrast, women typically have higher levels of estrogen. Estrogen provides more health benefits. Prior to menopause, when women have higher levels of estrogen, they have a lower risk of cardiovascular disease compared with men the same age (Xue et al., 2013). However, estrogen can increase the risk for certain forms of cancer (Srinivas et al., 2020).

Role of Environmental Factors in Male Health and Longevity:

Behaviorally, males with the strongest beliefs regarding masculinity were half as likely as men with more moderate beliefs to obtain preventative health care (Pappas, 2019). Additionally, the more men conformed to traditional masculine roles, the more likely they considered heavy drinking, smoking, and avoiding vegetables as normal. Lung cancer and heart attacks, linked to cigarette smoking, are higher in males, as is cirrhosis of the liver due to excessive drinking (Else-Quest & Hyde, 2018). Auto accidents claim more male lives as 71% of motor vehicle deaths are males due to their driving more, driving faster, and taking more risks. Lastly gun

deaths, which will be discussed more in module 10, result in more male deaths. Overall, men who exhibit more masculine traits die younger than those identified as less masculine.

Gender, Race/Ethnicity, and Health

Some diseases and their gender, racial and ethnic differences: (adapted from American Cancer Society, 2020; American Lung Association, 2020; CDC, 2017; Le, 2016; Mamary, et al., 2018; McLeod et al., 2014; NIH, 2020; National Kidney Foundation, 2020; Pappas, 2019; Regitz-Zagrosak, 2012; Spencer-Scott, 2020; Stojan & Petri, 2018).

- Women are affected by all forms of anemia more than are men, with iron deficiency being the most common cause. The highest rate of anemia is found for elderly black women, who have over six times the national average.
- Thyroid disease is more common in women, but thyroid cancer is more common in men. Graves disease is more common in Blacks.
- Overall, more men develop cancer than do women, but that gap is narrowing. Prostate cancer is the most common cancer diagnosed among U.S. men of all races and ethnic groups. The most common cancer diagnosed among U.S. women is breast cancer, but lung cancer is the leading cause of death among cancers in women of all races and ethnic groups except Hispanic women, for which breast cancer is the leading killer. Females appear to be at higher risk of developing lung cancer than males if they smoke.
- Women are more likely than men to get lupus for every age and ethnic group, but men are more likely to have more severe symptoms. World wide epidemiological studies show that people of African ethnicity have the highest incidence of lupus, whereas those with Caucasian ancestry had the lowest incidence.
- There is a higher incidence of asthma in boys, but by young adulthood it is more prevalent in women and the symptoms are often more severe. Blacks and American Indian/Alaska Natives have the highest asthma rates, while Hispanics and Asians have the lowest overall prevalence.
- Chronic obstructive pulmonary disease (COPD), a progressive lung disease in which the airways become damaged making it difficult to breathe, was once considered a "man's disease". However, in the last 20 years 58% of those with COPD are women, in part because the lungs of women are more vulnerable to effect of smoking. Race impacts the rate of diagnosis and treatment of COPD.
- Men experience diabetes at slightly higher rates than women, but it is more likely to cause myocardial infarction (a form of heart disease) in women than in men. Diabetes also varies by race with non-Hispanic Whites being less likely to be diagnosed with diabetes than Asian Americans, Hispanics, non-Hispanic Blacks, and American Indians/Alaskan Natives.
- Myocardial infarction (heart attack) is in decline around the world, except in young women. Young women are more likely to die from their first heart attack, and from the bypass surgery than are young men. Women, of all ages, are also more likely to present with more varied symptoms, making diagnosis and treatment difficult. Non-Hispanic Blacks are more likely to die from a heart attack, even though they have slightly lower rates of heart disease than non-Hispanic Whites.
- Hypertension (high blood pressure) is more common in young men than in young women, but this incidence increases after menopause in women. For African American males, systemic racism

interacting with the masculine traits of stoicism and providing for one's family, has been linked to hypertension.

- Women are three times more likely to have autoimmune disorders and three times more likely to experience headaches and migraines than men.
- Women are more likely to have kidney disease as they age and experience more complications from it than men. Black or African Americans are almost 4 times more likely, and Hispanics or Latinos are 1.3 times more likely to have kidney failure compared to White Americans.
- Gout, a common form of inflammatory arthritis caused by excess uric acid in the bloodstream, is more common in men.
- The severity of osteoarthritis is usually significantly worse in women than in men. However, before age 45, more men than women have osteoarthritis, but after age 45, the condition is more common in women. Black women are at greater risk than white women for developing osteoarthritis and for experiencing complications from the condition.
- Men fall ill at a younger age, have more illnesses in their lifetime, and cost society more in medical costs after the age of 65 than women. Black men have poorer health compared to other demographic groups, and possible reasons are discussed below.

Latinx paradox refers to a tendency of Latinx Americans to have as good, if not better, health than non-Latinx White Americans despite having less education and a lower socioeconomic status. Typically those with less education and income tend to have poorer health. While researchers do not fully understand this paradox, several hypotheses have been proposed regarding diet, family ties, and having less sedentary occupations. Moreover, this health advantage does decline the more the Latinx population adopts the American lifestyle (Gonzalez, 2015).

Black Men

The health of black men consistently ranks lowest across nearly all groups in the United States (Gilbert et al., 2016). On average, black men die younger than all other groups of men, except Native Americans, and they die more than seven years earlier than women of all races. Even as mortality and morbidity have improved in the United States, black men remain more likely to die from cardiovascular disease, diabetes, and cancers. Black men are also more likely than others to have undiagnosed or poorly managed chronic conditions and to delay seeking medical care. Additionally, fewer black men have a usual source of health care (Stewart et al., 2019). The relatively lower socioeconomic status of black men compared with white men, or any differences in patterns of health behaviors, do not explain all the differences (Gilbert et al., 2016). In addition to economic reasons, implicit bias among health care providers has been identified as a significant factor resulting in poorer medical outcomes for Black men and women (Dembosky, 2020; Hall et al., 2015; Schencker, 2020).

The term **implicit bias** was created by Greenwald and Banaji (1995) to explain how *social behavior is largely influenced by unconscious associations and judgments*. These unconscious biases can lead to discriminatory practices. According to Schencker (2020), implicit bias that negatively affects the health care of people of color has been well-documented. Examples of implicit bias include medical personnel adopting a more closed posture and exhibiting reduced eye contact with nonwhite patients. Physicians who are more implicitly biased spend less time with Black patients, are less patient-centered, show less empathy, and spend less time assessing their medical symptoms. Black patients are less likely to receive pain medication or be referred for

additional care than white patients with the same symptoms (Dembosky, 2020). Doctors may also implicitly associate Blacks with self-destructive behaviors, such as drug abuse. Black patients are often aware of this bias and may not trust their physicians, listen to health recommendations, or return for follow-up care, adversely affecting their health.

LGBT Physical Health

Those who are lesbian, gay, bisexual, or transgender (LGBT) come from all walks of life, include all races and ethnicities, ages, and socioeconomic statuses. In addition, members of the LGBT community are at increased risk for a number of health threats when compared to their heterosexual peers (CDC, 2014). The social and structural inequities, such as the stigma and discrimination that LGBT populations experience, along with increased risk of HIV play a large role in this health disparity.

Lesbians

For women, those who identify as lesbian and bisexual have higher rates of smoking, alcohol consumption, asthma, and obesity (Dilley et al., 2010). Additionally, they are less likely to access preventive screenings, such as Papanicolaou (pap) tests and mammograms. According to Boehmer et al. (2007), lesbians have more than twice the odds of being overweight and obese compared to heterosexual women. Boehmer et al. referenced previous research explanations for the increased weight, including that lesbians are less likely to consider themselves overweight compared with women in the general population. Lesbian women also have a better body image than do heterosexual women, and they are more likely to prioritize a body image on the basis of physical function and not aesthetic reasons.

Mereish (2014) found that being overweight or obese was more likely for lesbians who experienced heterosexist discrimination than normal-weight lesbians. The frequency lesbians experienced discrimination, specifically related to their sexual minority status at work, in school, and in other areas of their life, was correlated with their odds of being overweight. Mereish explained that chronic exposure to minority stressors, such as heterosexist discrimination, can result in increased cortisol levels, thus elevating one's risk for obesity. Exposure to discrimination may result in less effective coping strategies, including stress eating. Additionally, lesbians may be reluctant to seek health care services due to potential or perceived heterosexist discrimination from medical providers. Regardless of the reasons, being overweight and/or obese places sexual minority women at an increased risk for medical conditions associated with an elevated risk for suffering or death (Boehmer et al., 2007).

Human Immunodeficiency Virus (HIV):

HIV is a virus that weakens a person's immune system by destroying important cells that fight disease and infection (CDC, 2020). No effective cure exists for HIV. But with proper medical care, HIV can be controlled.

Prevalence

In the Unites States in 2018, the most recent data that has been analyzed, the rate of HIV infection was 11.4 per 100, 000 people (CDC, 2019). The highest rate (32.5) was for persons aged 25–29 years, followed by the rate (27.6) for persons aged 20–24 years. The rates for children, teens, middle aged adults, and seniors decreased from prior years. While the rate for young adults in their 30s remained the same. Males accounted

for 81% of all diagnoses of HIV infection among adults and adolescents, with a rate four times higher than females. Blacks/African Americans had the highest rate, with Asians having the lowest. The highest rates of HIV infection were in Southern states and the lowest rates were in the Midwest.

Rate of HIV Infection by Gender and Race/Ethnicity	
Social Category	Rate per 100,000
Male	22.5
Female	5.1
Black/African American	39.3
Hispanic/Latinx	16.2
Multiple Races	12.4
Native Hawaiian/Pacific Islander	11.8
American Indian/Alaska Natives	7.8
White	4.9
Asian	4.7

AIDS:

The rate of stage 3 HIV (AIDS) in 2018 was 5.2 per 100,000 people in the US (CDC, 2019). The highest rate (10.9) was for persons aged 30–34 years, followed by 10.3 for persons aged 35–39 years. Males account for 76% of all stage 3 HIV infections among teens and adults, with the male rate being more than three times higher than that for females. While the rate of AIDS decreased for Black/African Americans, it was still the highest of all racial and ethnic groups (19.6), with Asians (1.8) being the lowest.

The most common means of HIV transmission among males were male-to-male (70%) and heterosexual sexual contact, while among females the most common reasons were heterosexual contact (85%) and injection drug use (CDC, 2019). This pattern was consistent across different racial and ethnic groups.

Factors Affecting Diagnosis, Care, and Treatment:

There are several factors that influence risk of HIV, the care people with HIV receive, and access and adherence to treatment. As the data above suggest, engaging in unprotected sex with men and injection drug use increase people's risk. However, these are not the only risk factors.

Gender-based violence, which is violence against an individual based on their gender or gender identity, has been shown to increase risk for HIV, as well, as impeding access to testing, care, and treatment (Leddy et al., 2019). Female sex workers, transgender women, and other gender minorities face substantial disparities when it comes to health, including risk for, and treatment of, HIV and other sexually transmitted infections (STI) (Leddy et al., 2019; Nguyen et al., 2018). Nguyen and colleagues found that were was no consistency in how states and counties in states reported the number of cases of a STI by gender status beyond the gender binary of male and female. As a result, the rates of infection of gender minorities are often hidden in the aggregate data. This could hamper public health outreach programs to some of the most vulnerable members in communities.

In the United States there are racial and ethnic disparities when it comes to the diagnosis, treatment, and care of HIV (Bogart et al., 2018). As previously shown, the rate of HIV in Whites and Asians is two to four times lower than found in other racial and ethnic groups (CDC, 2019). According to the CDC (2020), several factors may work against prevention, testing, and treatment initiatives. Both the Black and Latinx community experience high levels of distrust of the health care system (CDC, 2020). This can reduce the likelihood of clinic visits and result in less adherence to antiretroviral treatments. While not unique to minority cultures, stigma, discrimination, and homophobia may also play a role in people's unwillingness to discuss prevention, seek a test, or get treatment from their doctor.

This disparity is even greater when adding in sexual or gender minority status. For example, HIV-positive Black gay and bisexual males' experiences with both racial and sexual discrimination is associated with lower adherence to treatment, increased symptoms of depression, and greater need to be admitted to an emergency room due to worsening health (Bogart et al., 2018).

Racial and ethnic disparities in the rates of infection have often been attributed to risky behaviors such as, drug and alcohol use, or the number of sexual partners. However, even when these factors are controlled for, African Americans still have a higher risk of HIV infection in comparison to other racial and ethnic groups (Gibson et al., 2018). In their study in Milwaukee, Wisconsin, Gibson and colleagues found that regardless of racial or ethnic group, poverty was a better predictor of rates of infection. Eighty percent of the newly diagnosed rates of infection were in the highest poverty areas of the city. This study also found that the highest HIV mortality rates were for African American men who lived below poverty. This finding is consistent with prior research on the contribution of socioeconomic inequities to access to health care and mortality, in general (Mode et al., 2016).

Cancer:

The most common types of cancer among women are skin, breast, lung, colorectal, endometrial (uterine), and cervical cancer. Lesbian and bisexual women may be at increased risk for some cancers, including breast, cervical, and ovarian cancer compared with heterosexual women (American Cancer Society, 2020). Women who have not had children or have not breast-fed are at a slightly higher risk of breast cancer. These factors may be more likely to affect lesbian and bisexual women. Lung, cervical, and ovarian cancer risks may be higher in lesbian and bisexual women as there is evidence to suggest that they are about twice as likely to smoke compared to heterosexual women (American Cancer Society, 2020).

Gay and bisexual males have the same risks of lung, prostate and testicular cancer as heterosexual males, however they are at a heightened risk for anal cancer. The risk factors for anal cancer include the human papillomavirus (HPV), which can spread through sexual activity, including oral and anal sex. Even skinto-skin contact with an infected area can spread the virus. Smoking is another risk factor for anal cancer. However, what puts gay and bisexual males at an even greater risk is a weakened immune system because of HIV (American Cancer Society, 2020).

Seeking and Receiving Health Care

Women are more likely to seek medical treatment for both medical and mental health than are men, even when accounting for health care needs that are unique to women (Thompson et al., 2016). According to the Agency for Healthcare Research and Quality (AHRQ)

- Men are 24 percent less likely than women to have visited a doctor within the past year and are 22 percent more likely to have neglected their cholesterol tests.
- Men are 28 percent more likely than women to be hospitalized for congestive heart failure.
- Men are 32 percent more likely than women to be hospitalized for long-term complications of diabetes and are more than twice as likely as women to have a leg or foot amputated due to complications related to diabetes.
- · Men are 24 percent more likely than women to be hospitalized for pneumonia that could have been prevented by getting an immunization.

Thompson and colleagues also found that women often reported longer consultations with their doctor than did men. Men who endorse more traditional views of masculinity are more likely to hold off seeking treatment (Himmelstein & Sanchez, 2016), which can lead to greater complications with their health. In addition, Himmelstein and Sanchez found that these men are more likely to want a doctor who is male because they believe he would be more competent than a woman. However, in health consultations men reveal more about their health when the doctor is female. This suggests that gender role norms play a role in willingness to seek health care, and may increase the risk of an untreated illness.

However, seeking health care is also influenced by characteristics such as age, race/ethnicity, socioeconomic status, and being LGBTQ+. Older women and men see doctors more than do younger women and men, often because of the presence of chronic illness (Thompson et al., 2016). Black and Latinx males are less likely to have a primary care provider than are White males (McFarlane & Nikora, 2014), thus less likely to seek treatment. In the U.S. those without medical insurance are less likely to seek health care. Despite the known health risks for members of the LGBT community, screening rates are often low for cancer and other health concerns, and there are gaps in the recommendations for screening for LGBT persons (Ceres et al., 2018).

Even where in the nation people reside can impact the rates of seeking and receiving treatment. There are significant differences in the healthcare access in rural and urban America (Douthit et al., 2015). In rural areas there is a greater reluctance to seek healthcare often based on cultural and financial constraints. In addition, a scarcity of resources, being able to maintain trained physicians, and poor transportation options only compound the issue. As a result, rural Americans have poorer overall health. Barefoot et al., (2017) found that lesbians living in rural America, in comparison to their urban counterparts, may experience elevated health risks. They were more likely to report having had at least one previous male sexual partner (78% compared to 69%), but were less likely to be recommended the HPV vaccination by their doctor and engaged in lower rates of regular HIV/STI screenings. Rural lesbians were less likely to have received Pap tests and clinical breast exams. For those 40 or older, they were less likely to receive routine mammogram screenings. Both Douthit et al. and Barefoot et al., suggest that there is a need to engage rural residents and healthcare providers in health promotion.

Trust in doctors also plays a role (Thompson et al., 2016). Black Americans report less trust in doctors than do White Americans. This lack of trust is understandable given the experiences that Blacks, and Black men in particular, have had with the medical community. In what came to be known as the Tuskegee Syphilis Study, from 1932 to 1972 in Alabama, hundreds of poor, illiterate Black men with syphilis were given a placebo rather than the known treatment for the disease, penicillin, so doctors could see the progression of untreated syphilis (Gamble, 1997). The study was eventually halted in 1972



due to its questionable ethnics, and in 1997 President Bill Clinton issued a public apology to the men affected by the study. However, the damage had already been done to sour the view of Blacks in this country toward the medical community.

Trust is also a factor in the willingness of sexual and gender minorities in seeking treatment (American Cancer Society, 2020). Fear of discrimination by the medical community is an important barrier to seeking and receiving treatment. For example, it is often not easy to find a healthcare provider who knows how to treat transgender people, or to even find someone who will agree to treat such patients (Allison, 2012). Doctors and nurses are not immune to the stereotypes that abound in the culture.

People who seek routine health care, develop a rapport with their doctor and become more comfortable talking about their health. This makes future visits more likely. Health care visits also increase the chance that unknown problems may be detected, or detected early. Moreover, disclosure of mental health concerns during routine care is often the main route toward receiving referrals for mental health treatment. When patients do not trust the medical system, none of this is likely to occur.

Medicalization of Reproduction

Medicalization is the process where more normal functions of the body come under medical influence, and treatments emerge for what were previously viewed as non-medical problems (Shainwald, 2014; Waggoner & Stults, 2010). The biomedical approach emphasizes basic biology (e.g., genes, hormones) in illness and excludes contextual factors such as relationships, identity, community, and culture in both health and illness (McHugh & Chrisler, 2015). Moreover, experts and representatives from the pharmaceutical industry serve on the very government panels, task forces, and professional associations that set the criteria for defining illness and disease. An important caveat to make is that medicalization is not the same as the science and practice of medicine. Medical researchers and doctors have contributed greatly to the health and well-being of people. However, driven by profit, medicalization has damaged the integrity of medical science through funding only the more profitable research questions, and in focusing on drugs to deal with life style problems rather than curing illness (Abramson, 2004). The end result is that "functions have become symptoms, and symptoms have become diseases" (Shainwald, 2014, para 10). There are numerous medical interventions for normal female reproductive functions, such as the menstrual cycle, pregnancy, birth, and menopause.

Menstruation:

Menstruation is a stigmatized reproductive event. "It's something polite society normally never speaks about in public. In fact, such is the studied avoidance of the subject of menstruation that one would think it wasn't

something that happened to one half of the world's population for four-six days every month" (Gupta, 2015, para 1). When society does refer to menstruation, we often use words such as the "crimson tide", the "curse", or "code red". Globally, social norms, attitudes, and beliefs relating to menstruation vary widely, and these variations impact women and girls. For example, people in some settings believe that menstruation is dirty and that menstruating women are unclean. This can lead to restrictions, such as seclusion from others, dietary restrictions, and being prevented from full participation in the community (Mohamed et al., 2018). Moreover, the inability to manage menstrual bleeding at school or the workplace in some parts of the world can lead to long-term consequences for economic and health outcomes for women and girls.

Today, some scientists and medical professionals view menstruation as unnecessary, and often discuss the negative effects some women may experience. From this viewpoint, menstruation is something that is harmful and needs treatment. This view was strongly illustrated by Coutinho and Segal's book, *Is Menstruation Obsolete?* To support their view they emphasized disorders, such as endometriosis, premenstrual syndrome, and anemia, and the negative impact these problems have on women's well-being. According to Coutinho and Segal, they set out to educate women on how to suppress menstruation. What was not clearly stated was how both men stood to gain financially, as they were both involved in the creation of methods used to suppress menstruation (Barnack-Tavlaris, 2015).

Opponents of this view have raised the concern that women who are suppressing their menstrual cycle through the use of a continuous oral contraceptive can be exposed to 25% to 33% more estrogen than a traditional oral contraceptive (Barnack-Tavlaris, 2015). Research already shows that women who use traditional oral contraceptives have a slightly higher risk (7%) of breast cancer, and a 2017 study reported that a 20% increase was associated with more recent formulations of oral contraceptives (National Cancer Institute, 2018). Opponents also argue that it is misleading to use disorders related to menstruation to justify the suppression of menstruation in all women (Barnack-Tavlaris, 2015). Menstruation, itself, is not a disorder. It is a normal body function that some elements in the medical community have defined as a disease.

Pregnancy and birth:

One of the most powerful things the female body can do is to become pregnant and give birth. Yet, increasingly this has become medicalized in developed nations. Several changes in how we view pregnancy has been the result of this medicalization and a growing concern is that it may "alienate women from their bodies" (Bosson et al., 2019, p. 437). Home pregnancy tests hasten women's involvement with obstetricians, and into the role of "patient" (Tone, 2012). The use of ultra-sounds during low-risk pregnancies may exaggerate women's perception of risk and danger during pregnancy, and may not always improve outcomes (Fisher et al., 2006; Roberts et al., 2016).

For generations, women gave birth at home with a mid-wife or other female relatives present. This has been replaced by hospitals and doctors. In 2017, 1.6% of births were an out-of-hospital birth (MacDorman & Declercq, 2019). Hospitalized births may create the view that childbirth is high risk and requires expert care. A controversial consequence of the medicalization of pregnancy is the overuse of interventions and treatments during delivery. Fetal heart monitoring, epidurals, episiotomies, and ultra sounds are becoming increasingly a routine part of childbirth. Besides adding to the financial cost of childbirth, there is little consensus that these procedures are always necessary (Bosson et al., 2019).

In the United States, one in three babies are born by **cesarean section** (c-section) a surgery used to deliver the baby

through the mothers' lower abdomen (MedlinePlus, 2020). In 1970, only about 6% of births were via cesarean. In the U.S. that number varies by region, as if women's organs differ on the basis of geography. In Hawaii it is about 22% (lowest rate), while in Mississippi (38%) it is jokingly referred to as the "Mississippi appendectomy" (Shainwald, 2014).

Rate of Cesarean in Selected States in 2018 (CDC, 2020)				
Illinois	31%			
Hawaii	22%			
Wisconsin	27%			
Mississippi	38%			

This increase in the use of c-sections is not just happening in the U.S. Several developed nations show the same trend, with some nations (e.g., China) reporting rates as high as 50% of births (Bosson et al., 2019). As a major surgery, cesareans carry all the same risks as other major surgeries.

Since ancient times some women's pregnancies have ended early. From the standpoint of the medicalization of pregnancy, such pregnancies indicate a flaw in the functioning of women's bodies, and such flaws can be ameliorated via medical intervention. In fact, a growing number of those preterm births are the result of surgeries and other medical interventions in pregnancies where there are complications (Bronstein, 2020). As Bronstein writes, "the popular cultural narrative holds that preterm births are preventable, provided pregnant women "take care of themselves" and follow medical advice" (p. 235). This places the responsibility for carrying a pregnancy to term solely on the mother. One preventative intervention often prescribed by doctors is complete bed rest. Yet research has repeatedly shown that it does little to prevent preterm birth, and it has a negative impact on the mother's health and well-being.

Menopause:

Menopause has been medicalized since the 1930s (Waggoner & Stults, 2010) and is viewed as a *deficiency* from the biomedical model (Shainwald, 2014). As a result women are expected to take medications and supplements to maintain childbearing levels of hormones rather than age normally.

Hormone Replacement Therapy (HRT) is medication that contains female hormones, taken to replace the estrogen that the female body stops making during menopause (Mayo Clinic, 2020). Hormone therapy is most often used to treat common menopausal symptoms, including hot flashes and vaginal discomfort. The initial claims for HRT was to keep women "feminine forever" and to decrease the risks of heart disease, osteoporosis, and breast cancer. In 2001, HRT was prescribed to more than 15 million women in the U.S. However, with the termination of Women's Health Initiative trial in July of 2002 due to increased risk of breast cancer, heart disease, and blood clots in the HRT group, prescriptions for oral estrogen dropped 43% (Waggoner & Stults, 2010), and left many women in limbo about whether HRT was right for them, or were they at risk now because they had been using these medications.

Erectile dysfunction:

Men also experience the medicalization of reproduction, although to a lesser degree. With the introduction of Viagra in 1998, which helps men achieve and sustain an erection, erectile dysfunction (ED) became a medicalized issue. Direct to consumer advertising made Viagra one of the top selling drugs. In 2019, Viagra generated \$500 million for Pfizer (Mikulic, 2020) despite there now being a number of competitors and generic versions of the drug. Advertising has also expanded the market beyond erectile dysfunction by portraying Viagra as an enhancement targeted to younger men (Waggoner & Stults, 2010).

Double Standard of Aging:

The **double standard of aging** refers to the idea that men's social value increases with age, while women's declines. Nolan and Scott (2009) found that women are viewed as being "old" at a younger age than are men. Clarke and Griffin (2008) report that women see aging as having a more negative impact than do men. Many reported feeling invisible in a culture that emphasizes youth and appearance for women. While men reported feeling more distinguished in their appearance as they aged. However, other research show the opposite effect for ratings of competence. For instance, as men age people rate men's competence as declining, while this is not true for people's ratings of women (Kite et al., 2005). Men also express more concern about their physical health and capabilities as they age (Nolan & Scott, 2009). Aging affects men and women in the areas that are relevant to their gender roles; appearance for women, and competence for men.

Politicization of Reproduction

Abortion: A brief history in America leading up to Roe v. Wade

For much of the early 19th century, abortion was legal up to the point where the mother could feel the fetus move, the *quickening*; typically, between 14 and 26 weeks (Gold, 2003). Abortions were usually performed by homeopaths and midwives. By the end of the 19th century, abortion was illegal in most U.S. states, except if it was dangerous to the mother's health to continue with the pregnancy. The criminalization of abortion coincided with the rise in power of doctors and the medicalization of reproduction (Rankin, 2022).

With the criminalization of abortion came an increase in maternal deaths. In the 1930s, the height of the Great Depression, one in five maternal deaths was attributed to abortion (Rankin, 2022). But the advent of penicillin greatly reduced the risk of septicemia and death. By 1968 the National Center for Health Statistics reported 168 abortion-related deaths (Prager, 2021). In addition to the growing safety concerns, an outbreak of rubella, and the devastating effects of the tranquilizer thalidomide on a developing fetus, made people rethink their stance on abortion and whether a mother should be carrying to term a child with severe birth defects (Prager, 2021).

Many individual doctors were sympathetic to the plight of their female patients, but terrified of the consequences for their own careers. No doubt because the American Medical Association (AMA) was not supportive, and had for decades crusaded against abortion (Prager, 2021). Making abortion illegal, except when a mother's life was at risk, empowered the AMA, as only doctors were allowed to determine whether an abortion was medically necessary. However, by the late 1960s, some states were allowing abortion in the case of rape or incest, or if the fetus had severe birth defects. They were also starting to expand the definition of "mother's health" to include her mental health; something the U.S. Supreme Court agreed with in the 1971

United States v. Vuitch ruling (American Civil Liberties Union, ACLU, 2010). By then, the AMA had also changed its stance and was asking doctors to abide by the changing state rules (Prager, 2021).

Roe v. Wade (1973)

Seventeen abortion challenges were making their way to the Supreme Court when the Vuitch ruling was handed-down, including the landmark Roe v. Wade (ACLU, 2010). Roe v. Wade was a constitutional challenge to a Texas law that made it illegal to have an abortion in all but situations where the mother's life was at risk (Brennan Center for Justice, 2022). The court used the 14th Amendment and its implied right to privacy, just had it had years earlier in Griswold v. Connecticut (1965) when it struck down the Barnum Act; a law in the State of Connecticut since 1879 outlawing contraceptives or the distribution of information about contraceptives (Brennan Center for Justice, 2022). Sarah Weddington presented the challenge to Texas abortion laws, and argued that "meaningful liberty must include the right to terminate a pregnancy" (Brennan Center for Justice, 2022, para. 23). In a decision written by Justice Blackmun, seven of the nine justices agreed that the Due Process Clause of the 14th Amendment protects people against states violating the right to privacy, and a woman's choice to have an abortion falls within that right (Oyze, 2022.). However, the justices did recognize the right of a state to regulate access as the pregnancy progressed. After the fetus had entered the third trimester, a state could ban abortion, but even then a woman could have access to an abortion if it was necessary to protect the woman's health or life (ACLU, 2010). Forty-six states had to change their laws after the Supreme court ruling (Brennan Center for Justice, 2022). Since that time states, citizens, and the medical community have fought over what limits governments could place on access to abortion.

Planned Parenthood v. Danforth (1976)

Planned Parenthood v. Danforth (1976) challenged a provision in the State of Missouri's law which required women who wished to terminate a pregnancy in the first trimester needed the written consent of her spouse if she was married. The Supreme Court ruled that this law was unconstitutional as it gave the spouse vetoing power, which even the state itself was prohibited from having during the first trimester of pregnancy (Legal Information Institute, 2022).

Planned Parenthood v. Casey (1992)

In 1992 the Supreme Court upheld the constitutional right to abortion in *Planned Parenthood v. Casey*. However, this case led the court to overturn the trimester framework set in *Roe v. Wade*, and instituted a viability framework ruling that prohibitions on access to an abortion could be made once a fetus reaches viability (Planned Parenthood, 2022). Under *Roe* the state could not restrict access to an abortion in the first trimester. In the second trimester, some restrictions were allowed, but abortions could be performed in the best interest of the mother. In the third trimester, the state could outlaw abortions in the best interest of the fetus, unless it compromised the woman's health (Shivaram, 2022). With the Casey ruling the trimester system was scrapped, and states could use age of viability as the determining factor in restricting abortions.

In addition, it also allowed restrictions as long as there was not an "undue burden" (Shivaram, 2022). This would open the door to states restricting access to abortion. What constitutes a burden is a very grey area and allowed states to add waiting periods, parental notification if a minor, counseling, and additional hospital and doctor restrictions. For a woman who had easy access to clinics and hospitals, and the financial and

transportation resources, very few added requirements by a state would be an undue burden, but for others this would be an obstacle to access.

Dobbs v. Jackson Women's Health Organization (2022)

The Supreme Court in a 6-3 decision upheld a Mississippi Law (2018) that banned abortion at 15 weeks, which is before the age of viability, and in a 5-4 decision to overturn both *Roe* and *Casey*. If *Roe* and *Casey* were wrongly decided, as Dobbs argued and the majority of the Supreme Court agreed, then the age of viability was no longer a limiting factor for State laws. Here is what the Syllabus of the Supreme Court ruling says in regard to *Roe* and *Casey*.

Guided by the history and tradition that map the essential components of the Nation's concept of ordered liberty, the Court finds the Fourteenth Amendment clearly does not protect the right to an abortion. Until the latter part of the 20th century, there was no support in American law for a constitutional right to obtain an abortion. No state constitutional provision had recognized such a right. Until a few years before *Roe*, no federal or state court had recognized such a right. Nor had any scholarly treatise. Indeed, abortion had long been a *crime* in every single State. At common law, abortion was criminal in at least some stages of pregnancy and was regarded as unlawful and could have very serious consequences at all stages. American law followed the common law until a wave of statutory restrictions in the 1800s expanded criminal liability for abortions. By the time the Fourteenth Amendment was adopted, three-quarters of the States had made abortion a crime at any stage of pregnancy. This consensus endured until the day *Roe* was decided. *Roe* either ignored or misstated this history, and *Casey* declined to reconsider *Roe*'s faulty historical analysis (Syllabus for *Dobbs v. Jackson*, 2022, p. 3).

...Roe was also egregiously wrong and on a collision course with the Constitution from the day it was decided. Casey perpetuated its errors, calling both sides of the national controversy to resolve their debate, but in doing so, Casey necessarily declared a winning side. Those on the losing side—those who sought to advance the State's interest in fetal life—could no longer seek to persuade their elected representatives to adopt policies consistent with their views. The Court short-circuited the democratic process by closing it to the large number of Americans who disagreed with Roe (Syllabus for Dobbs v. Jackson, 2022, p.5).

Post Roe v Wade: President Biden's Reactions

President Joe Biden called it "a sad day for the court and for the country" as this was the first time that the Supreme Court had revoked a constitutional right (Bustillo, 2022, para. 3). He asked the Department of Health and Human Services to make sure that abortion and contraceptive medications are available, and that his administration will protect the right to cross state lines to have an abortion. He also asked women to "turn out in record numbers to reclaim the rights that have been taken from them by the court" (Parker et al., 2022, para. 13).

Trigger Bans

Many states had in place laws that were triggered to go into effect when *Roe v. Wade* was overturned. These states are Alabama, Arkansas, Idaho, Kentucky, Louisiana, Michigan, Mississippi, Missouri, Oklahoma, South

Dakota, Tennessee, Texas, West Virginia, and Wisconsin (Jefferies et al., 2022). The Michigan and Louisiana laws are currently tied up in litigation.

The Kansas Vote and other State Initiatives in the 2022 Mid-term Elections

On August 2, 2022, in the first test after the supreme court overturned *Roe v. Wade*, voters in the state of Kansas rejected a ballot measure to remove abortion rights protections from the state constitution. The measure lost by 18%, with the results standing even after a recount (Associated Press, 2022). Voters in four states, California, Kentucky, Michigan, and Vermont, had the opportunity to decide whether a woman's right to an abortion will be part of the state constitution (Long, 2022). Voters in Montana voted on issues related to abortion but it did not address the state constitution.

The Michigan question almost did not make the ballot. Antiabortion group Citizens to Support MI Women and Children raised objections to a proposed question about protecting abortion rights in the state's constitution because of typographical and formatting errors ("DECISIONSABOUTALLMATTERSRELATINGTOPREGNANCY"). The Michigan's State Board of Canvassers, which determines what is be placed on the state's election ballots, was deadlocked when the decision to reject the proposed question split along party lines. The Michigan Supreme Court ordered that the question be placed on the November ballot, and chastised the behavior of the two Republican members of the State Board for using a technical error that did not hamper the intent or meaning of the question to block its inclusion on the ballot for political reasons (Bellware, 2022, September 8).

In all states where abortion rights were on the chopping block in the 2022 mid-term elections the voters in those states chose to protect those rights, signaling a shift in American attitudes about a woman's right to have access to abortion.

In the next module we will consider how gender impacts both mental health, and its role in both seeking and receiving treatment.

Module 10: How does Gender Affect Mental Health?



Mental Health

Girls and women face many challenges and concerns, including interpersonal violence, unrealistic and stereotypical media images, discrimination, oppression, devaluation, limited economic resources, role overload, relationship disruptions, and work inequities, that make them vulnerable to mental health disorders (APA, 2018b). Similarly, traditional masculinity, including stoicism, competitiveness, dominance, and aggression, are associated with less healthy behaviors and more mental health issues in boys and men (APA, 2018a). Further, the extensive stigma and discrimination reported by transgender and gender nonconforming individuals have been correlated with increased rates of depression and suicidality (APA, 2015). The following section will review how gender relates to mental health disorders across the lifespan.

Childhood and Adolescence:

In a review of mental health disorders beginning in childhood and adolescence, Zahn-Waxler et al. (2008) identified gender differences between early-onset and adolescent-onset disorders. Specifically, early-onset disorders are typically exhibited by males, and they include conduct disorder, attention-deficit/hyperactivity disorder, autism, dyslexia, and developmental language disorders. From a biological perspective, prenatal

exposure to testosterone has been theorized as a reason as testosterone may slow biological and physical development, including slower maturation of the temporal lobe involved in language. A reduced ability to use language may make it difficult for boys to verbally problem solve during conflicts. Higher fetal testosterone has also been associated with boy's lower empathy, more restricted interests, and lower quality of social relationships. Infant boys exhibit difficulty regulating and controlling negative emotions, show more anger and irritability, while male preschoolers are more physically active and show less frustration tolerance and impulsivity.

In contrast, adolescent-onset disorders, including depression, anxiety, and eating disorders, are exhibited more by females (Zahn-Waxler et al., 2008). Anxiety problems are also more common in girls than boys at an early age. At puberty, estrogen enhances activity of the hypothalamic-pituitary-adrenal (HPA) axis, which plays an important role in the body's response to stress. Estrogen appears to delay the ability of females to recover from stress and also results in them becoming more affected than males by long-term stress. Also seen at puberty is greater conformity to the feminine ideal, which is reinforced within cultures. Dependent, emotional, helpless, passive, and self-sacrificing attributes are stereotypically female characteristics, and they are also risk factors for depression.

The more rapid maturation of the brain for girls, especially the frontal cortex, is also thought to increase the tendency to view oneself in comparison to others, and thus result in greater distress internalization (Zahn-Waxler et al., 2008). Compared to boys, girls exhibit higher levels of empathy, prosociality, caregiving, guilt and shame, which is due to their greater social awareness. When this increased social awareness is paired with dysfunctional environments, such as marital conflict and parental depression, additional risk for depression occurs. Early maturing girls are especially vulnerable (APA, 2018). Because boys develop later, they are less able to take another's perspective and less aware of negative family environments. Consequently, this continued egocentricity may protect males from internalizing symptoms, including depression.

Gender dysphoria refers to the strong discomfort or distress caused by a discrepancy between a person's gender identity and their biological sex assigned at birth, as described in the Diagnostic and Statistical Manual of Mental Disorders-Fifth Edition Text Revision (DSM-5-TR) (American Psychiatric Association, 2022). Children who actively reject the toys, clothing, and anatomy of their assigned sex and state they prefer the toys, clothing, and anatomy of the opposite sex, may be diagnosed with gender dysphoria in children.

Recent research indicated that 73% of transgender women and 78% of transgender men seeking gender-affirming surgery indicated they first experienced gender dysphoria by age 7 (Zaliznyak, 2020). Childhood gender dysphoria can result in a poor quality of life for the developing child into adolescence. However, some research has indicated that the majority of children with gender dysphoria do not develop gender dysphoria beyond adolescence, and instead these adolescents identify as non-heterosexual (Kaltiala-Heino et al., 2018). Whether gender dysphoria persisted or desisted, typically occurred between the ages of 10 and 13.

Transgender identity persistence in a group of pre-pubertal transgender youth was also analyzed by Steensma et al. (2011, 2013). This research found that 100% of patients who had completely socially transitioned, 60.1% of those who had partially transitioned, and 25.6% of those with who had not socially transitioned reported a transgender identity after 7 years. To further assess persistence, Olsen et al. (2022) followed a cohort of 317 transgender children who completed a social transition prior to age 12. The results indicated that after 5 years of a social transition, 94% of the youth identified as transgender, 2.5% identified as cisgender, and 3.5% identified as nonbinary. The high persistence rates in this study confirmed prior findings and suggested that persistence remains high after starting gender-affirming treatment and socially transitioning.

For adolescents, Santoro (2022) found that transgender and Nonbinary youth experience higher rates of mental health disorders and suicidality. Kaltiala-Heino et al. (2018) reported the results of a school survey indicating that 1.3% of 16–19 year-olds had potentially significant gender dysphoria, and of those adolescents, approximately 40%–45% exhibited clinically significant mental health issues. The most commonly reported conditions were depression, anxiety, self-harm and suicidal ideation/behavior.

Likewise, community-level data indicated that "transgender-identifying youth present four to six times more often with depression and three to four times more often with self-harm and/or suicidal behavior compared with cisgender adolescents" (Kaltiala-Heino et al., 2018, p. 34). Also noted were increased rates of eating disorders and autism spectrum disorders. A lack of parental support was correlated with increased mental health disorders, inadequate housing, and homelessness. In contrast, positive mental health outcomes for transgender adolescents were associated with strong perceived parental support. These outcomes included fewer risk taking sexual behaviors, higher life satisfaction, lower perceived burden of being transgender and fewer depressive symptoms.

Other factors that negatively affect the mental health of transgender youth include a history of being bullied, being afraid for their personal safety, having been hit or harmed, having been in physical fights, having been sexually harassed, and having experienced dating violence (Kaltiala-Heino et al., 2018). Further, transgender youth indicate that school has not been a safe place for them as they have experienced bullying and discrimination by peers and teachers. The negative school environment has resulted in poorer motivation, less ability to concentrate, and school avoidance, all of which has resulted in transgender adolescents dropping-out of school.

Turban et al. (2021) also found that it was not the social transition itself that resulted in mental health concerns for transgender and gender diverse youth. Rather, it was being exposed to an unaccepting school environment. Experiencing bullying and harassment in kindergarten through twelfth grade was correlated with adverse mental health, including increased suicide attempts. Turban et al. emphasized the importance of having safe and affirming school environments to support transgender and gender diverse students' mental health.

Counter to providing supportive environments, 33 states proposed over 100 legislative bills that targeted transgender and nonbinary youth in 2021 (Santoro, 2022). These included prohibiting gender-affirming medical care, restricting access to sports, banning transgender youth from using the bathroom corresponding with their gender, denying individuals the ability to change the sex on a birth certificate, and investigating family members and health care providers who assist transgender youth in receiving gender-affirming care. The American Psychological Association has strongly opposed legislation that does not support gender-affirming care stating, "The proposed bills do not align with international standards of care, research, or clinical practice" (Santoro, 2022, p. 52).

College Students:

According to Sax (2010) women enter college with self-reported higher levels of stress and lower levels of emotional and physical health, and these differences continue during the four years of college. Reasons given for a lack of change over the four years include that men spend more time on stress relieving activities, such as sports, video games, partying and watching television. In contrast, women engage in activities that increase stress, such as studying, homework, community services and family responsibilities.

Using data from over 43,000 college students, Borgona et al. (2019) examined mental health differences among several gender groups, including those identifying as cisgender, transgender and gender nonconforming. Results indicated that participants who identified as transgender and gender nonconforming had significantly higher levels of anxiety and depression than those identifying as cisgender. Borgona et al. explained the higher rates of anxiety and depression using the minority stress model, which states that an unaccepting social environment results in both external and internal stress which contributes to poorer mental health. External stressors include discrimination, harassment, and prejudice, while internal stressors include negative thoughts, feelings and emotions resulting from one's identity. Borgona et al. recommends that mental health services that are sensitive to both gender minority and sexual minority statuses be available.



Adult Women:



Several factors are proposed as to why adult women have higher rates of depression than men. The life time prevalence rate for females is 15.9%, but only 7.7% for males, and these gender differences begin to appear in adolescence (Else-Quest & Hyde, 2018). Important factors described in the research include that females begin puberty earlier and experience more negative life events, such as sexual abuse and sexual harassment. Additionally, they may possess a somewhat more negative cognitive style, including ruminating on these negative life events. Even while

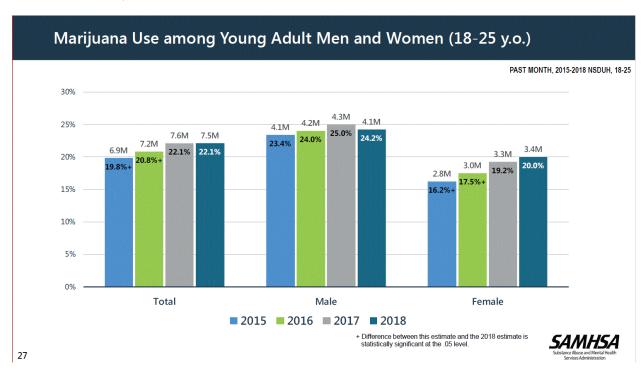
working outside the home, women are over represented in caregiving positions, including caring for children, partners, parents, parents-in-law, and friends (APA, 2018b). The stress of caregiving results in increased mental health issues. Yet, women are repeatedly told they can do it all and they just need to learn how to "juggle" their responsibilities better. Further, the feminization of poverty has also been implicated as there is a strong correlation between poverty and mental health problems. Women who are financially distressed, are single parents, and lack adequate child care demonstrate more depression than women who are financially secure.

Another significant concern for women is the systemic bias in diagnostic assessments. Women tend to be overrepresented in the diagnoses of depression, histrionic and borderline personality disorders, dissociative disorders, somatization disorder, panic disorder, PTSD, and agoraphobia (APA, 2018b). Issues related to the reproductive system, such as menstrual and female sexual disorders, have also been labeled as mental health disorders rather than physical disorders. In addition to these over diagnoses, there is also concern regarding under diagnosis due to gender role biases. A prime example of this is the underrepresentation of females diagnosed with attention-deficit /hyperactivity disorder as it is considered a male disorder.

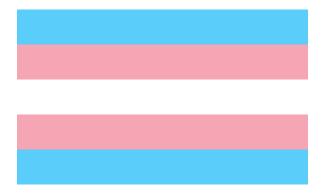
Adult Men:

According to APA (2018a), "research suggests that socialization practices that teach boys from an early age to be self-reliant, strong, and to minimize and manage their problems on their own yield adult men who are less willing to seek mental health treatment" (p. 3). Internalizing disorders, such as depression and anxiety, are stereotyped as female disorders and consequently males are less likely to be diagnosed with them. This occurs even though males are four times more likely to die of suicide than females. Instead, males are more likely to be diagnosed with externalizing disorders, such as conduct disorder, attentiondeficit/hyperactivity disorder, and substance use disorders. These externalizing behaviors may actually mask internalizing problems (Pappas, 2019).

Males have higher rates of substance use disorders for alcohol, cocaine, cannabis, and phencyclidine (APA, 2013). Although inhalant-use disorders are comparable among adolescents, adult males are diagnosed more than adult females. For alcohol, the 2018 National Survey on Drug Use and Health (NSDUH) (SAMHSA, 2018) indicated that for adults 18 and over, 9.2 million men (7.6 percent of men in this age group) and 5.3 million women (4.1 percent of women in this age group) had an alcohol use disorder characterized by an impaired ability to stop or control alcohol use despite negative consequences. Approximately 62,000 men and 26,000 women die from alcohol-related causes annually, making alcohol the third leading preventable cause of death in the United States. Marijuana use among those 18-25 is increasing for women, but more men continue to use. Trends in marijuana use from 2015-2018 can be seen below.



Adult Gender Minorities:



Gender nonconforming people are much more likely to experience harassment, bullying, and violence based on their gender identity; they also experience much higher rates of discrimination in housing, employment, healthcare, and education (Borgogna et al., 2019; National Center for Transgender Equality, 2015). Transgender individuals of color face additional financial, social, and interpersonal challenges, in comparison to the transgender community as a whole, as a result of structural racism. Black transgender

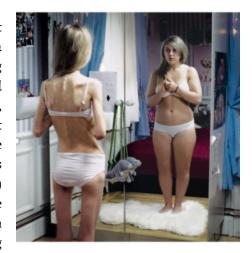
people reported the highest level of discrimination among all transgender individuals of color. As members of several intersecting minority groups, transgender people of color, and transgender women of color in particular, are especially vulnerable to employment discrimination, poor health outcomes, harassment, and violence. Consequently, they face even greater obstacles than white transgender individuals and cisgender members of their own race. All these obstacles can result in psychological distress that manifests as mental health disorders, including being at an increased risk for suicide attempts: 41% as compared to 1.6% in the general population (APA, 2018b).

Eating Disorders:

Although eating disorders can occur in children and adults, they frequently appear during the teen years or young adulthood (National Institute of Mental Health (NIMH), 2016). Eating disorders affect all genders, although rates among women are 2½ times greater than among men. Similar to women who have eating disorders, men also have a distorted sense of body image, including **muscle dysmorphia**, which is an extreme desire to increase one's muscularity (Bosson et al., 2019). Research on gender nonconforming and transgender individuals also indicate increased rates of eating disorders (Diemer, 2018). The prevalence of eating disorders in the United States is similar among Non-Hispanic Whites, Hispanics, African–Americans, and Asians, with the exception that anorexia nervosa is more common among Non-Hispanic Whites (Hudson et al., 2007; Wade et al., 2011).

Risk Factors for Eating Disorders: Because of the high mortality rate, researchers are looking into the etiology of the disorder and associated risk factors. Researchers are finding that eating disorders are caused by a complex interaction of genetic, biological, behavioral, psychological, and social factors (NIMH, 2016). Eating disorders appear to run in families, and researchers are working to identify DNA variations that are linked to the increased risk of developing eating disorders. Researchers from King's College London (2019) found that the genetic basis of anorexia overlaps with both metabolic and body measurement traits. The genetic factors also influence physical activity, which may explain the high activity level of those with anorexia. Further, the genetic basis of anorexia overlaps with other psychiatric disorders. Researchers have also found differences in patterns of brain activity in women with eating disorders in comparison with healthy women.

As discussed in module 4, media promotes the "thin ideal" that equates thinness with beauty. How much influence does media exert regarding the development of clinically diagnosed eating disorders? In a recent literature review, Ferguson (2018) concluded that media effects are not as causal as people believe. Rather, Ferguson concluded that real-life influences are more significant that media influences. Individuals are more likely to compare themselves to peers in their social groups than distant media figures they will never meet. In previous research, Ferguson (2013) concluded that women with preexisting body dissatisfaction may be primed by media ideals, and thus be more susceptible. In both reviews, media promoting the thin ideal did not cause eating disorders in women. Further, the muscularity ideal directed toward men, did not result in the development of eating disorders in males.



The main criteria for the most common eating disorders: Anorexia nervosa, bulimia nervosa, and binge-eating disorder are described in the *DSM-5TR* (American Psychiatric Association, 2022) and listed below:

Anorexia Nervosa	Restriction of energy intake leading to a significantly low body weight Intense fear of gaining weight Disturbance in one's self-evaluation regarding body weight
Bulimia Nervosa	Recurrent episodes of binge eating Recurrent inappropriate compensatory behaviors to prevent weight gain, including purging, laxatives, fasting or excessive exercise Self-evaluation is unduly affected by body shape and weight
Binge-Eating Disorder	Recurrent episodes of binge eating -Marked distress regarding binge eating The binge eating is not associated with the recurrent use of inappropriate compensatory behavior

Health Consequences of Eating Disorders: For those suffering from anorexia, health consequences include an abnormally slow heart rate and low blood pressure, which increases the risk for heart failure. Additionally, there is a reduction in bone density (osteoporosis), muscle loss and weakness, severe dehydration, fainting, fatigue, and overall weakness. Anorexia nervosa has the highest mortality rate of any psychiatric disorder (Arcelus et al., 2011). Individuals with this disorder may die from complications associated with starvation, while others die of suicide. In women, suicide is much more common in those with anorexia than with most other mental disorders.

The binge and purging cycle of bulimia can affect the digestives system and lead to electrolyte and chemical imbalances that can affect the heart and other major organs. Frequent vomiting can cause inflammation and possible rupture of the esophagus, as well as tooth decay and staining from stomach acids. Lastly, binge eating disorder results in similar health risks to obesity, including high blood pressure, high cholesterol levels, heart disease, Type II diabetes, and gall bladder disease (National Eating Disorders Association, 2016).



Eating Disorders Treatment: To treat eating disorders, adequate nutrition and stopping inappropriate behaviors, such as purging, are the foundations of treatment. Treatment plans are tailored to individual needs and include medical care, nutritional counseling, medications (such as antidepressants), and individual, group, and/or family psychotherapy (NIMH, 2016). For example, the Maudsley Approach has parents of adolescents with anorexia nervosa be actively involved in their child's treatment, such as assuming responsibility for feeding the child. To eliminate binge-eating and

purging behaviors, **cognitive behavioral therapy (CBT)** assists sufferers by identifying distorted thinking patterns and changing inaccurate beliefs.

Abortion and Mental Health:

Receiving a wanted abortion does not increase the risk for depression, anxiety or suicidal thoughts. According to Abrams (2022):

More than 50 years of international psychological research show that having an abortion is not linked to mental health problems, but restricting access to safe, legal abortions does cause harm. Research shows that people who are denied abortions have worse physical and mental health, as well as worse economic outcomes than those who seek and receive them. (p. 40)

Rocca et al. (2020) followed 1000 women across 21 states and over 5 years to compare those who obtained an abortion with those who wanted an abortion but were denied. The results indicated that women who had an abortion did not indicate greater negative emotions than those who were denied an abortion, and 97% indicated that having the abortion was the correct decision for them. In fact, five years post-abortion, relief remained the most commonly felt emotion among the women who had an abortion.

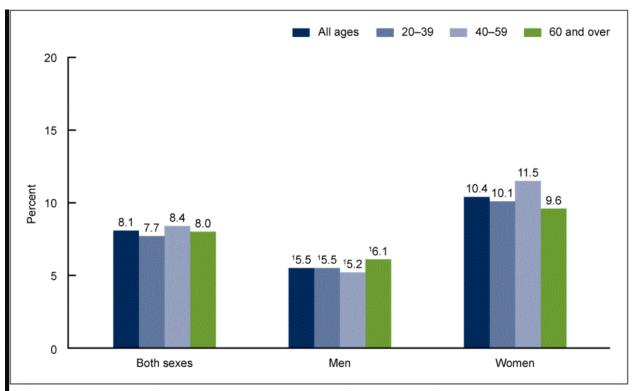
What is harmful is harmful to women is a lack of access to an abortion and lack of accurate knowledge about the procedure. Women denied an abortion reported more anxiety and stress, lower self-concept and life satisfaction, more physical problems, worse credit scores, more frequent bankruptcies and evictions, higher chance of living in poverty, and they were more likely to stay with an abusive partner or raise children alone (Abrams, 2022).

The Dobbs v. Jackson Women's Health Organization ruling is especially concerning to women with fewer economic resources. For women who live in a state that bans abortion, traveling to obtain one requires money to pay for the traveling expenses in addition to the cost of the procedure. Women living in poverty, women of color, those living in rural areas, and younger women are especially vulnerable to abortion bans in their states (Abrams, 2022).

Older Adults:

Older women are more likely to be living in poverty, experience elder abuse and neglect, and endure more

disabilities than older males, which makes them vulnerable to mental health disorders (APA, 2018b). Further, sexism persists and older women experience powerful negative stereotypes regarding their competence, assertiveness, and goals in late adulthood. It is not surprising then that a greater percentage of older females was diagnosed with depression based on scores from the Patient Health Questionnaire (PHQ-9), a symptom-screening questionnaire that allows for criteria-based diagnoses of depressive disorders (Brody et al., 2018). As can be seen below, women at all adult ages exhibited higher rates of depression from 2013-2016 than men.

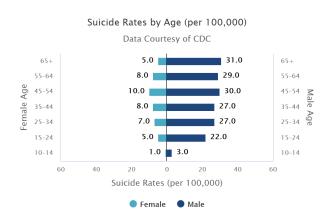


'Significantly different from females in same age group.

NOTES: Depression was defined as a score greater than or equal to 10 on the Patient Health Questionnaire. Access data table for Figure 1 at: https://www.cdc.gov/nchs/data/databriefs/db303_table.pdf#1.

SOURCE: NCHS. National Health and Nutrition Examination Survey, 2013–2016.

Older males have consistently demonstrated the highest rates of suicide than any other age group for both males and females. In 2018, the suicide rates for males were highest for those 75 and over and increased to 39.9 per 100,000 (Hedegaard et al., 2020). Although females attempt suicide at higher rates than males, males succeed more. Reasons for the higher rate of suicidality for older males are that they typically experience higher rates of substance use disorders, do not seek out mental health treatments, and use more lethal means. Retirement



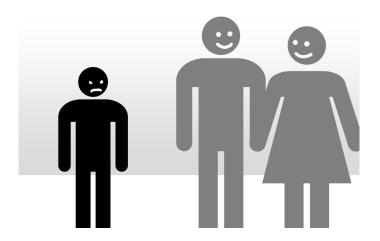
can also be a risk factor for older men who identified as workers and achievers and no longer have that role (Pappas, 2019).

In the final module we will examine the role of gender in aggression and crime. We will consider human

aggression overall and why it occurs, the role of social gender roles in fostering aggression, the types of crime committed by and against those in particular gender groups, and incarceration.

Module 11: How Does Gender Play a Role in Aggression and Crime?

Case Study: Incel



As mentioned in module one, there are a number of men's groups. Some are supportive of women and women's rights, while others disguise their support in thinly veiled benevolent sexism. Incel is neither; it is openly hostile toward women, especially feminists, and toward women and men who engage in sex. Incel means involuntary celibacy. Members blame feminism for their celibacy. They believe that women are genetically inferior to men, and resent that women seek genetically superior males (Scaptura & Boyle, 2020). In online communities, members routinely comment on their frustration and anger of not being able to attract women. If incel was little more than a self-pity stage to vent, people would not be as concerned as they are about this group. A number of incel members hold very radical views; views that endorse the sexual subjugation of women, and that violence against women, especially if they are feminists, is legitimate.

In May of 2014, Elliot Rodger, a self-proclaimed member of incel, killed 6 people and wounded 14 others. His posted manifesto revealed that he held many of these radical views toward women. He became an "incel hero" to tens of thousands of members (BBC, 2018). One member who saw Rodger as a hero drove his van into pedestrians in Toronto, Canada, killing 10 and injuring 15. In a *Facebook* post before the attack he referenced Rodger's actions and the belief that "the incel revolution had begun" (Wendling, 2018). Six months later there was a shooting spree in a Florida yoga studio, killing 2 women and wounding several others. In online videos

the shooter expressed his support of groups like incel, and blamed women's lack of understanding of the societal pressures placed on men (Chavez & McLaughlin, 2018).

According to Hines (2019) in the last decade, seven mass shootings have been perpetrated by men with ties to incel. Mass shooters often have a history of gender-based violence (Scaptura & Boyle, 2020). Moreover, as mass shooters frequently target romantic partners and family members, women and children are disproportionately among the victims. Groups like incel offer insight into the alarming toxicity of traditional views of masculinity.

Human Aggression

Aggression is *behavior that is intended to harm another individual*. Aggression may occur in the heat of the moment, for instance, when a jealous lover strikes out in rage or the sports fans at a university light fires and destroy cars after an important basketball game. Or it may occur in a more cognitive, deliberate, and planned way, such as the aggression of a bully who steals another child's toys, a terrorist who kills civilians to gain political exposure, or a hired assassin who kills for money.

Not all aggression is physical. Aggression also occurs in nonphysical ways, as when children exclude others from activities, call them names, or spread rumors about them. Paquette and Underwood (1999) found that both boys and girls rated nonphysical aggression, such as name- calling as making them feel more "sad and bad" than did physical aggression. Bullying can include physical, verbal, or even cyber-behaviors.

Aggression is Part of Human Nature:

We may aggress against others in part because it allows us to gain access to valuable resources such as food, territory, and desirable mates, or to protect ourselves from direct attack by others. If aggression helps in the survival of our genes, then the process of natural selection may well have caused humans, as it would any other animal, to be aggressive (Buss & Duntley, 2006).

There is evidence for the genetics of aggression. Aggression is controlled in large part by the amygdala. One of the primary functions of the amygdala is to help us learn to associate stimuli with the rewards and the punishment that they may provide. The amygdala is particularly activated in our responses to stimuli that we see as threatening and fear-arousing. When the amygdala is stimulated, in either humans or in animals, the organism becomes more aggressive.

However, just because we can aggress does not mean that we will aggress. It is not necessarily evolutionarily adaptive to aggress in all situations. Neither people nor animals are always aggressive; they rely on aggression only when they feel that they absolutely need to (Berkowitz, 1993a). The prefrontal cortex serves as a control center on aggression; when it is more highly activated, we are more able to control our aggressive impulses. Research has found that the cerebral cortex is less active in murderers and death row inmates, suggesting that violent crime may be caused by a failure or reduced ability to regulate aggression (Davidson et al., 2000).

Hormones are also important in regulating aggression. Most important in this regard is the male sex hormone testosterone, which is associated with increased aggression in both males and females. Research conducted on a variety of animals has found a positive correlation between levels of testosterone and aggression. This

relationship seems to be weaker among humans than among animals, yet it is still significant (Dabbs et al., 1996).

Consuming alcohol increases the likelihood that people will respond aggressively to provocations, and even people who are not normally aggressive may react with aggression when they are intoxicated (Graham et al., 2006). Alcohol reduces the ability of people who have consumed it to inhibit their aggression because when people are intoxicated, they become more self-focused and less aware of the social constraints that normally prevent them from engaging aggressively (Bushman & Cooper, 1990; Steele & Southwick, 1985).

Negative Experiences Increase Aggression:

When asked about the times that you have been aggressive, you would probably state that many of them occurred when you were angry, in a bad mood, tired, in pain, sick, or frustrated. You would be right because we are much more likely to aggress when we are experiencing negative emotions. The following are some causes of aggression:

- One important determinant of aggression is frustration. When we are frustrated we may lash out at others, even at people who did not cause the frustration. In some cases, the aggression is **displaced aggression**, which is aggression that is directed at an object or person other than the person who caused the frustration (Marcus-Maxwell et al., 2000).
- Aggression is greater on hot days than it is on cooler days and during hot years than during cooler years, and most violent riots occur during the hottest days of the year (Bushman et al., 2005).
- Pain also increases aggression (Berkowitz, 1993b).

If we are aware that we are feeling negative emotions, we might think that we could release those emotions in a relatively harmless way, such as by punching a pillow or kicking something, with the hopes that doing so will release our aggressive tendencies. This is incorrect! **Catharsis** or the idea that observing or engaging in less harmful aggressive actions will reduce the tendency to aggress later in a more harmful way, was considered by many as a way of decreasing violence. However, as far as social psychologists have been able to determine, catharsis simply does not work. Rather than decreasing aggression, engaging in aggressive behaviors of any type increases the likelihood of later aggression.

Research indicates that males exhibit greater physical aggression, and this difference appears around the age of two (Hyde, 2014). Although this gender difference in aggression is routinely found, in research in which the context of the situation is changed to reflect greater deindividuation, or greater anonymity, gender differences disappear. This indicates that gender role expectations appear to play a part in how aggressive an individual behaves. The stereotype that females exhibit significantly more **relational aggression**, or verbal aggression that is intended to harm peer relationships, has also **not** been validated in research studies.

Bullying:



According to Stopbullying.gov (2016), a federal government website managed by the U.S. Department of Health & Human Services, bullying is defined as unwanted, aggressive behavior among school aged children that involves a real or perceived power imbalance. Further, the aggressive behavior happens more than once or has the potential to be repeated. There are different types of bullying, including verbal bullying, which is saying or writing mean things, teasing, name calling, taunting, threatening, or making inappropriate sexual

comments. Social bullying, also referred to as relational bullying, involves spreading rumors, purposefully excluding someone from a group, or embarrassing someone on purpose. Physical Bullying involves hurting a person's body or possessions.

A more recent form of bullying is **cyberbullying**, which involves bullying using electronic technology. Examples of cyberbullying include sending mean text messages or emails, creating fake profiles, and posting embarrassing pictures, videos or rumors on social networking sites. Children who experience cyberbullying have a harder time getting away from the behavior because it can occur any time of day and without being in the presence of others. Additional concerns of cyberbullying include that messages and images can be posted anonymously, distributed quickly, and be difficult to trace or delete. Children who are cyberbullied are more likely to: experience in-person bullying, be unwilling to attend school, receive poor grades, use alcohol and drugs, skip school, have lower self-esteem, and have more health problems (Stopbullying.gov, 2016).

The National Center for Education Statistics and Bureau of Justice statistics indicate that in 2010-2011, 28% of students in grades 6-12 experienced bullying and 7% experienced cyberbullying. The 2013 Youth Risk Behavior Surveillance System, which monitors six types of health risk behaviors, indicate that 20% of students in grades 9-12 experienced bullying and 15% experienced cyberbullying (Stopbullying.gov, 2016).

Those at risk for bullying:

Bullying can happen to anyone, but some students are at an increased risk for being bullied including lesbian, gay, bisexual, transgendered (LGBT) youth, those with disabilities, and those who are socially isolated. Additionally, those who are perceived as different, weak, less popular, overweight, or having low self-esteem, have a higher likelihood of being bullied.

Toxic Masculinity

Are traditional masculine norms harmful?

In 2018, the American Psychology Association (APA) provided guidelines to assist psychologists when working with men and boys (APA, 2018). The guidelines were developed over 13 years and were based on 40 years of research. A significant aspect of the guidelines was that traditional masculine norms, such as suppressing their emotions and not seeking help, undermined men's and boy's health. Additionally, stoicism, competitiveness, dominance and aggression were designated as harmful to males (Pappas, 2019). The guidelines further indicated that men are more likely to be victims of violence, suicide, homicide and

substance use. The intent of the guidelines was to provide research and suggest ways that psychologists could assist men and boys (APA, 2019).

These guidelines were approved in August 2018 and were printed in the APA's monthly journal for psychologists in January 2019. Because of the article, social media became aware of the guidelines, and many media outlets asserted that APA had "declared war on men" and was attempting to remake them (APA, 2019). The attack on the APA guidelines coincided with Gillette Razor's ad campaign that addressed toxic masculinity behaviors, such as bullying and "boys will be boys" excuses for inappropriate behavior (Russo, 2019). Both the APA guidelines and the Gillette ad received praise and condemnation from viewers. The same behaviors were either seen as normal masculine gender roles or toxic male expressions. So, when does traditional male behaviors become toxic?

The term toxic masculinity was originally defined by Kupers (2005) while working with prison inmates. Kupers called **toxic masculinity**, "the constellation of socially regressive male traits that serve to foster domination, the devaluation of women, homophobia, and wanton violence" (p. 714). Kupers found that in prison, toxic masculinity is exaggerated and results in prison fights, assaults on guards, prison rapes, hypercompetitive interactions, and resistance to psychotherapy.

According to Parent et al. (2019) toxic masculinity is characterized by the enforcement of rigid gender roles, endorsement of misogynistic and homophobic attitudes, and involves the need to aggressively compete with and dominate others. Parent et al. researched whether there was a relationship between toxic masculinity and negative online interactions. Because many online environments are anonymous, the individuals' pervasive need to dominate and control was hypothesized to promote negative engagement with online materials. Results indicated that "men who more strongly endorsed the dominance–heterosexism–misogyny triad of aspects of conformity to masculine norms were more likely to report negative online interactions," (p. 282). These negative interactions included seeking out and reading content with which one disagreed and making hostile responses to such disagreement.



Mikorski and Szymanski (2017) reviewed the research on the relationships between certain aspects of traditional masculine ideology and sexual violence. They reported that men who scored higher on measures of hypersexuality, toughness, antifemininity, and male dominance were more likely to have committed domestic violence acts against their partners. They also indicated that males whose peer groups reflected toxic behaviors, such as demeaning their female partners, using sexual force against women, and being physically aggressive, were more likely to have engaged in sexual assaults themselves. In their own research, Mikorski and Szymanski also found that having abusive male peer groups and conforming to the masculine norms of power over women, violence, and exhibiting sexual promiscuity, predicted unwanted sexual advances toward women.

Rape

The United States Department of Justice (2012) defines **rape** as the penetration, no matter how slight, of the vagina or anus with any body part of object, or oral penetration by a sex organ of another person, without the consent of the victim.

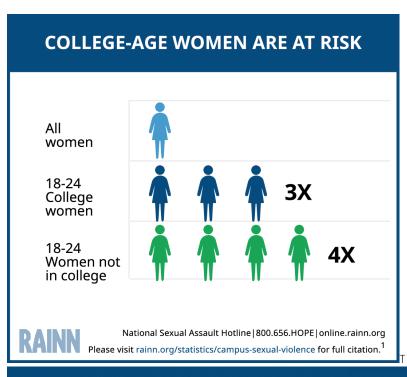
This definition replaced the previous rape definition from 1927 because it was considered outdated and did not reflect the experiences of survivors. According to the Attorney General:

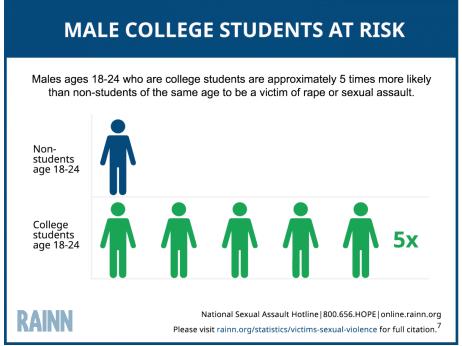
For the first time ever, the new definition includes any gender of victim and perpetrator, not just women being raped by men. It also recognizes that rape with an object can be as traumatic as penile/vaginal rape. This definition also includes instances in which the victim is unable to give consent because of temporary or permanent mental or physical incapacity. Furthermore, because many rapes are facilitated by drugs or alcohol, the new definition recognizes that a victim can be incapacitated and thus unable to consent because of ingestion of drugs or alcohol. Similarly, a victim may be legally incapable of consent because of age. Physical resistance is not required on the part of the victim to demonstrate lack of consent. (para 2)

According to the Bureau of Justice Statistics (2020), the rate of rape and sexual assault victimization in 2019 was 1.7 persons per 1000. This rate was lower than in 2018 when it was 2.7 persons per 1000, and reflected an overall decrease in violent crimes from 2018 to 2019. However, getting accurate statistics on the occurrences of rape and sexual assaults are difficult to obtain as these crimes are under-reported, especially among men (Budd et al., 2017). Further, when looking at research that uses self-report measures, which usually indicate higher rates than official reports, the differences in measurement and definition of sexual assault make it difficult to know the true numbers (Fedina et al., 2016).

College and Sexual Assaults:

The majority of sexual assault victims are between the ages of 18 and 34, and being a college student is a greater risk factor for a males than it is for females (RAINN, 2020). Being an 18-24 year-old female and not in college, results in being four times more likely than the average female to be sexually assaulted. For those in college, they are three times more likely to be assaulted than the average female. For males, being in college makes them five times more likely to be sexually assaulted than their same-aged peers who are not in college. The differences for males may be due to an increased willingness to report sexual assaults in college due to exposure to campus sexual assault prevention programs (Streng & Kamimura, 2015).





Looking at college demographics and sexual assaults, Mellins et al. (2017) found that gender nonconforming students (38%) were assaulted more than women (28%) or men (12.5%). A non-heterosexual identity, difficulty paying for basic necessities, fraternity/sorority membership, participation in more casual sexual encounters versus exclusive/monogamous or no sexual relationships, binge drinking, and experiencing sexual assault before college were also factors associated with higher rates of sexual assault in college. Budd et al. (2017)

found that the average age for male and female victims was approximately 19 years old, but perpetrators who assaulted females tended to be an average of 23 years old, while those assaulting males were 29. Additionally, college sexual assaults with male victims were more likely to include multiple offenders, but less likely to involve a stranger or result in injuries in comparison to sexual assaults with female victims.

Intimate Partner Abuse



Violence in romantic relationships is a significant concern for women in early adulthood as females aged 18 to 34 generally experience the highest rates of intimate partner violence. According to the most recent Violence Policy Center (2018) study, more than 1,800 women were murdered by men in 2016. The study found that nationwide, 93% of women killed by men were murdered by someone they knew, and guns were the most common weapon used. The national rate of women murdered by men in single victim/single offender incidents dropped 24%, from 1.57 per 100,000 in 1996 to 1.20 per 100,000 in 2016. However, since

reaching a low of 1.08 per 100,000 women in 2014, the 2016 rate increased 11%.

Intimate partner violence is often divided into **situational couple violence**, which is the violence that results when heated conflict escalates, and **intimate terrorism**, in which one partner consistently uses fear and violence to dominate the other (Bosson, et al., 2019). Men and women equally use and experience situational couple violence, while men are more likely to use intimate terrorism than are women. Consistent with this, a national survey described below, found that female victims of intimate partner violence experience different patterns of violence, such as rape, severe physical violence, and stalking than male victims, who most often experienced more slapping, shoving, and pushing.

The last National Intimate Partner and Sexual Violence Survey (NISVS) was conducted in 2015 (Smith et al., 2018). The NISVS examines the prevalence of intimate partner violence, sexual violence, and stalking among women and men in the United States over the respondent's lifetime and during the 12 months before the interview. A total of 5,758 women and 4,323 men completed the survey. Based on the results, women are disproportionately affected by intimate partner violence, sexual violence, and stalking. Results included:

- Nearly 1 in 3 women and 1 in 6 men experienced some form of contact sexual violence during their lifetime.
- Nearly 1 in 5 women and 1 in 39 men have been raped in their lifetime.
- Approximately 1 in 6 women and 1 in 10 men experienced sexual coercion (e.g., sexual pressure from someone in authority, or being worn down by requests for sex).
- Almost 1 in 5 women have been the victim of severe physical violence by an intimate partner, while 1 in 7 men have experienced the same.
- 1 in 6 women have been stalked during their lifetime, compared to 1 in 19 men.
- More than 1 in 4 women and more than 1 in 10 men have experienced contact sexual violence, physical

- violence, or stalking by an intimate partner and reported significant short- or long-term impacts, such as post-traumatic stress disorder symptoms and injury.
- An estimated 1 in 3 women experienced at least one act of psychological aggression by an intimate partner during their lifetime.
- Men and women who experienced these forms of violence were more likely to report frequent headaches, chronic pain, difficulty with sleeping, activity limitations, poor physical health, and poor mental health than men and women who did not experience these forms of violence.

Child and Adolescent Abuse and Neglect

The Child Abuse Prevention and Treatment Act (United States Department of Health and Human Services (HHS), 2019) defines **child abuse and neglect** as: Any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation; or an act or failure to act, which presents an imminent risk of serious harm (p. viii). Each state has its own definition of child abuse based on the federal law, and most states recognize five major types of maltreatment: neglect, physical abuse, psychological maltreatment, sexual abuse and sex trafficking. Each of the forms of child maltreatment may be identified alone, but they can occur in combination.

The most recent national child abuse data is from 2018, and these statistics were collected using the annual Child Maltreatment Report Series (HSS, 2020). States provide the data for this report through the National Child Abuse and Neglect Data System. The national number of children who received a child protective services investigation increased 8.4% from 2014 (3,261,000) to 2018 (3,534,000). Of those investigated, approximately 678,000 children were found to be victims of child abuse and neglect. This equates to a national rate of 9.2 victims per 1,000 children in the population. Of those, 48.5% were boys, 51.2% were girls, and the gender of 0.3% children was unknown. This results in a rate of 9.6 girls per 1000 and 8.7 boys per 1000.

The majority of victims (84.5%) suffered from a single maltreatment type (HSS, 2020). Three-fifths (60.8%) of victims were neglected only, 10.7 percent were physically abused only, 7.0 percent were sexually abused only, 0.1% were victims of sex trafficking, and 15.5% experienced multiple types of abuse. Although less in overall number of cases, boys have a higher child fatality rate than girls; 2.87 per 100,000 boys, compared with 2.19 per 100,000 girls in the population. For most of the categories, there were no sex differences, however for sex trafficking, the majority (89.1%) were female, while only 10.4% were male. The largest percentages for victims of sex trafficking (71.9%) are in the age group 14–17, and this is true for both sexes. Sex trafficking will be further discussed as a form of human trafficking.

More than one-half (53.8%) of perpetrators of child abuse are female and 45.3% of perpetrators are male; 0.9 percent are of unknown sex (HSS, 2020). The majority (77.5%) of perpetrators are a parent of their victim, 6.4 percent of perpetrators are a relative other than a parent, and 4.2 percent had a multiple relationship to their victims. Approximately 4.0% of perpetrators have an "other" relationship to their victims, including parent's partner, babysitters, friends, neighbors, foster sibling, etc.

Sexual Abuse:

Sexual abuse is defined as a type of maltreatment that refers to the involvement of the child in sexual activity to provide sexual gratification or financial benefit to the perpetrator, including contacts for sexual purposes, molestation, statutory rape, prostitution, pornography, expo-sure, incest, or other sexually exploitative activities (HSS, 2020). Sexual abuse statistics reflect a greater percentage of girls, as approximately 1 in 4 girls and 1 in 13 boys experience child sexual abuse at some

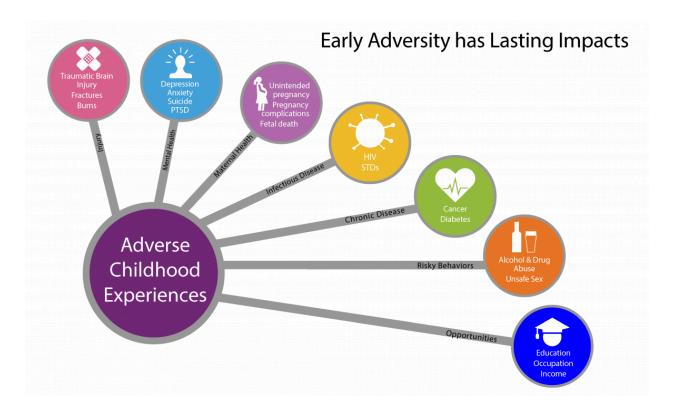


point in childhood (CDC, 2020). The median age for sexual abuse is 8 or 9 years for both boys and girls (Finkelhorn et al., 1990). Unfortunately, many children wait to report or never report child sexual abuse, so these numbers are probably a low estimate.

Most boys and girls are sexually abused by a male. Although rates of sexual abuse are higher for girls than for boys, boys may be less likely to report abuse because of the cultural expectation that boys should be able to take care of themselves and because of the stigma attached to homosexual encounters (Finkelhorn et al., 1990). Girls are more likely to be abused by family member and boys by strangers. According to Valente (2005) sexual abuse can create feelings of self-blame, betrayal, shame and guilt. Further, sexual abuse is particularly damaging when the perpetrator is someone the child trusts and may lead to depression, anxiety, problems with intimacy, and suicide.

ACES:

All types of abuse, neglect, and other potentially traumatic experiences that occur before the age of 18 are referred to as adverse childhood experiences (ACEs) (CDC, 2019). ACEs have been linked to risky behaviors, chronic health conditions, low life potential and early death, and as the number of ACEs increase, so does the risk for these results. When a child experiences strong, frequent, and/or prolonged adversity without adequate adult support, the child's stress response systems can be activated and disrupt the development of the brain and other organ systems (Harvard University, 2019). Further, ACEs can increase the risk for stress-related disease and cognitive impairment, well into the adult years. Felitti et al. (1998) found that those who had experienced four or more ACEs compared to those who had experienced none, had increased health risks for alcoholism, drug abuse, depression, suicide attempt, increase in smoking, poor self-rated health, more sexually transmitted diseases, an increase in physical inactivity and severe obesity. More ACEs showed an increased relationship to the presence of adult diseases including heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease. Those with multiple ACEs were likely to have multiple health risk factors later in life.



According to Merrick et al. (2018), the foundation for lifelong health and well-being is created in childhood, as positive experiences strengthen biological systems while adverse experiences can increase mortality and morbidity. Overall, violence against children has detrimental effects, which can result in long-term negative physical and emotional development.

Human Trafficking

Human trafficking has been referred to as modern day slavery and affects millions of people worldwide, regardless of gender (International Labor Organization, 2020). According to the United Nations (2020):

Trafficking in persons is the recruitment, transportation, transfer, harboring or receipt of persons, by means of the threat or use of force or other forms of coercion, of abduction, of fraud, of deception, of the abuse of power or of a position of vulnerability or of the giving or receiving of payments or benefits to achieve the consent of a person having control over another person, for the purpose of exploitation. Exploitation shall include, at a minimum, the exploitation of the prostitution of others or other forms of sexual exploitation, forced labor or services, slavery or practices similar to slavery, servitude or the removal of organs. (para. 1)

Statistics for human trafficking can be difficult to obtain as survivors of human trafficking are often fearful of seeking help due to threats from their traffickers. According to the International Labor Organization (2020), 21 million people in the world are the victims of forced labor. In the United States, Polaris (2020) operates the National Human Trafficking Hotline, which provides 24/7 support and a variety of options for survivors of human trafficking to get assistance. In 2019, the trafficking hotline received 48,326 individual trafficking-related contacts. Also in 2019, Homeland Security initiated 1,024 human trafficking investigations and recorded 2,197 arrests, 1,113 indictments, 691 convictions and 428 victims were identified and assisted

(United States Immigration and Customs Enforcement, 2020). Throughout the world, agencies are working together to identify survivors of human trafficking and prosecute the traffickers.

A myth of human trafficking is that female sex trafficking is the main type, and the traffickers are always male (Polaris, 2020). In reality there are many types of trafficking including forced work in healthcare, hotels/ motels, house cleaning, agriculture, forestry, construction, landscaping, factories, trucking, child care, massage parlors, pornography, carnivals, outdoor solicitation and begging. Additionally, child soldiers and child brides are included, as well as the removal of organs. Females are overrepresented in sexual exploitation, but males and those who are transgender also are sex trafficked at high levels. Males make up the majority of those in forced labor, as child soldiers, and have their organs removed. Females are also traffickers, and focusing on traditional gender stereotypes ignores the reality that women can be very effective at gaining the trust of survivors and then exploiting them. This includes family members who may sell their children or relatives to traffickers.



Female Survivors of Sex Trafficking:

According to the American Psychological Association (2014), women and children make up the largest group of

survivors in the sex trade. The average entry is 13-16 years of age, but girls as young as 10 have been exploited. There are many factors that contribute to sex trafficking females, and the most frequent include:

- · Widespread objectification of the female body that creates women and girls as products in the economy
- Glamorization of pimping and prostitution within the culture
- · Sexualization of adolescent girls in popular culture
- Pervasive poverty and shifts in economies that force females in rural areas to seek work in urban areas, thus removing them from family and community protection
- Participation in low skilled and low paying jobs that are traditionally associated with female roles of serving and nurturing and thus makes them vulnerable to forced labor
- Use of smugglers to cross into the United States who often work with pimps
- Unstable political environments caused by natural disasters, political conflicts, and wars that disrupt social functioning
- · Corruption among all levels of a government
- Residing in a location where large numbers of military personnel were stationed for a long period of time
- History of past abuse, disabilities, language barriers, undocumented status, parents involved in substance use or criminal activity, abandonment, neglect, and being a runaway

Both significant physical and psychological consequences result from surviving sex trafficking (APA, 2014). Physical and sexual violence, including rapes, assault, gunshots, knife wounds, burns and torture are common, and homicides are the leading cause of premature death for those who are sex trafficked. Posttraumatic stress disorder (PTSD), depression, anxiety, loneliness, dissociation, feelings of worthlessness, loss of memory, and negative beliefs about oneself, others and the world are present in survivors. Additionally, many survivors are diagnosed with Complex PTSD, which results from multiple or persistent trauma. A history of abuse and trust in the trafficker through grooming or being known to them, makes the survivor especially vulnerable to complex trauma. Complex trauma affects an individual's affect regulation, consciousness, self-perception, and relationships with others. Those with complex trauma may turn to substance use, self-abusive behaviors, disordered eating and suicidal gestures.

Male Survivors of Sex Trafficking:

Gender stereotypes reflect the belief that because males are seen as the aggressors, they cannot be trafficked (Raney, 2017). However, this is false as males reside in similar dysfunctional situations to those experienced by girls and women. "Boys and men who have been trafficked present with issues that are similar to many victims of complex trauma: poverty, sexual abuse, violence or living in a home where substance abuse takes place," (p. 22). Male survivors of sexual trafficking often present with additional trauma and shame as they believe they should have been "man enough" to stop the trafficking and abuse, even if they were a child at the time. Another difficulty for male survivors is the lack of available services as the majority of assistance is focused on female survivors.

Child Brides:

UNICEF estimates that in 2016, 5.6 million girls under the age of 18 became a child bride and more than 650 million women alive today were married before the age of 18 (Reid, 2018). During the past decade, the proportion of young women who were married as children decreased by 15 per cent, from 1 in 4 (25%) to approximately 1 in 5 (21%), and efforts are being made throughout the world to end child marriages by 2030. There are many factors that contribute to child brides including poverty, lower dowry costs, paying off debts, food insecurities, political unions, cultural and social norms, protection during unstable times, and to ensure young females remain virgins as to not dishonor their families.



Child Bride in Iran

Regardless of the reason, child marriages are associated with a range of poor health and social outcomes (United Nations Human Rights Council, 2014). These negative consequences include early and frequent pregnancies that are linked to high maternal and infant morbidity and mortality. Pregnancy-related complications are the main cause of death for young women, with girls being twice as likely to die from childbirth as women in their twenties. Girls who are subjected to childbirth early, and forced marriage

are often unable to make decisions about their sexual and reproductive health. This compromises their ability to decide on the number and spacing of their children and places them at heightened risk of contracting sexually transmitted infections and HIV. Child marriage and early childbearing are also significant obstacles for participating in education, employment and other economic opportunities.

Although the majority of child brides are located in South Asia and sub-Saharan Africa (UNICEF, 2018), between 2000 and 2015, at least 207,459 minors were married in the United States (Tsui et al., 2017). The exact number is not known as not all states keep data on the age of those seeking marriage licenses as it is left to individual counties. Almost 90 percent of minors who married between 2000 and 2015 were girls. Although most of them were 16 or 17 years old, some were as young as 12 years old. While some minors married other minors, 86% married adults. Marriages involving minors occurred most often in Idaho, Kentucky, and West Virginia, which have large rural populations and higher levels of poverty. Girls from middle class and wealthy families, as well as those who live in cities, typically do not get married young.

An individual in the United States can marry without parental consent at the age of 18 in all states and at 19 in Nebraska. Underage marriages can occur when there is consent of the parents, consent of a court clerk or judge, if one of the parties is pregnant or has given birth, or if the minor is emancipated (World Population Review, 2020). Most states have a minimum marriage age for minors with parental consent, ranging from 12-17 years old. However, neither California nor Mississippi have minimum ages, and Massachusetts has the lowest minimum marriage age with parental consent of 14 years old for boys and 12 years old for girls. Statewide efforts are underway to raise the age of marriage for all individuals to 18, regardless of pregnancy or parental permission. Advocates of stricter state laws argue that current laws are failing to protect minors from being forced or coerced into marriages where they may face violence and sexual assault (Tsui et al., 2017).

Children who are wed before the legal age of adulthood may face additional legal challenges if they wish to leave the relationship as not all states automatically grant emancipation when a child marries (Tahirih Justice Center, 2017). Should they try to leave a marital relationship even for domestic violence they may find,

depending on the state, that they are turned away from shelters as they are below the legal age of adulthood. Tahirih also found that child brides can be listed as a runaway, and if found may be returned to their family and potentially their abuser. In addition, the lack of emancipation may mean that the while the child can be married, they may not be able to file for a divorce, and must rely on the help of an adult to be their advocate.

Gender and Crime Statistics

Statistics from the Federal Bureau of Investigation (FBI; 2018) demonstrate that males commit the vast majority of the crimes in the United States. The following table depicts the most recent data from 2018 identifying the crime and the percent for males and females. Only two of the offenses listed indicate a higher percentage for females than males: embezzlement and prostitution.

	Numb	Percent	Percent		
Offense charged	Total	Male	Female	male	female
TOTAL	5,660,751	4,103,093	1,557,658	72.5	27.5
Murder and nonnegligent manslaughter	6,719	5,912	807	88.0	12.0
Rape ²	13,740	13,310	430	96.9	3.1
Robbery	56,841 48,236 8,605		8,605	84.9	15.1
Aggravated assault	228,348	228,348 173,207 55,141		75.9	24.1
Burglary	101,535	81,251	20,284	80.0	20.0
Larceny-theft	564,524	325,338	239,186	57.6	42.4
Motor vehicle theft	52,376	40,538	11,838	77.4	22.6
Arson	5,042	3,897	3,897 1,145		22.7
Violent crime ³	305,648	240,665	64,983	78.7	21.3
Property crime ³	723,477	451,024	272,453	62.3	37.7
Other assaults	616,990	437,260	179,730	70.9	29.1
Forgery and counterfeiting	28,226	18,750	9,476	66.4	33.6
Fraud	66,364	42,581	23,783	64.2	35.8
Embezzlement	9,067	4,488	4,579	49.5	50.5

Stolen property; buying, receiving, possessing	53,149	41,352	11,797	77.8	22.2
Vandalism	107,028	81,939	25,089	76.6	23.4
Weapons; carrying, possessing, etc.	97,680	88,859	8,821	91.0	9.0
Prostitution and commercialized vice	20,966	7,012	13,954	33.4	66.6
Sex offenses (except rape and prostitution)	25,439	23,636	1,803	92.9	7.1
Drug abuse violations	888,318	674,130	214,188	75.9	24.1
Gambling	1,909	1,623	286	85.0	15.0
Offenses against the family and children	33,590	21,405	12,185	63.7	36.3
Driving under the influence	429,437	317,280	112,157	73.9	26.1
Liquor laws	103,908	72,588	31,320	69.9	30.1
Drunkenness	217,976	173,210	44,766	79.5	20.5
Disorderly conduct	206,822	145,391	61,431	70.3	29.7
Vagrancy	16,254	12,337	3,917	75.9	24.1
All other offenses (except traffic)	1,692,876	1,236,563	456,313	73.0	27.0
Suspicion	165	129	36	78.2	21.8
Curfew and loitering law violations	15,462	10,871	4,591	70.3	29.7

Percent of violent incidents, by victim and offender sex, 2018

Victim sex	_	Offender sex					
	Number of violent incidents	Total	Male	Female	Both male and female		
Total	5,479,590	100%	77.0%	18.3%	4.7%		
Male*	2,527,920	100%	81.3	15.6	3.2		
Female	2,951,670	100%	73.4 †	20.6 ‡	6.0 †		

Note: Details may not sum to totals due to rounding. An incident is a specific criminal act involving one or more victims. Offender sex is based on victims' perceptions of offenders. Includes incidents in which the perceived sex of the offender was reported. The sex of the offender was unknown in 8% of incidents. See appendix table 18 for standard errors. *Comparison group.

†Significant difference from comparison group at the 95% confidence level. ‡Significant difference from comparison group at the 90% confidence level. Source: Bureau of Justice Statistics, National Crime Victimization Survey, 2018. Data measuring violent incidents in 2018, indicated that males were offenders in a greater percentage committed against males (81%) and against females (73%) (Bureau of Justice Statistics, 2019). Males also experienced higher victimization rates than females for all types of violent crime except rape/sexual assault. Females were more likely to commit a violent act against other females (21%) than against males (16%). Violence in other cultures and countries reflect what is seen in America. Overall, in every society, males are more violent and commit more crimes than females (Kanazawa, 2008a).

What accounts for the significant gender differences in the level of crimes committed?

According to the University of Minnesota (2015), biological differences are seen by some researchers as reasons, especially the role that testosterone plays in aggression. Gender role socialization is another theory as boys are raised to be assertive and aggressive, while girls are reared to be nurturing and kind. A further reason relates to opportunity, as parents watch their daughters more closely than they watch their sons,

thus providing males more opportunities to engage in illegal behaviors, especially within a peer group. Additionally, women face lower incentives to engage in crime as criminal earnings are higher for men, and women with very young children receive more adverse effects, such as going to jail (Campaniello, 2019). The lower rates for women are also due to females being less likely to be arrested, sentenced, and incarcerated for the same crimes compared to males.

Theorists associated with the evolutionary perspective, indicate that the large number of homicides between men, compared to the number of homicides between women, or between the genders, is a direct consequence of males competing for mates (Kanazawa, 2008a). For example, most homicides between men are due to "trivial altercations." A fight might begin because of trivial matters of honor, status and reputation. One male might insult another or show an interest in the other's partner, resulting in violence because neither male would back down. Evolutionary psychologists believe that these mostly young men are fighting for status in their peer group because high-status individuals are more sexually attractive to women (Barber, 2015). Nonviolent crimes, such as stealing, are also explained through the evolutionary perspective as a way for males to accumulate resources that attract mates when they lack legitimate means to acquire these resources (Kanazawa, 2008b).

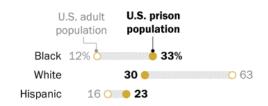
For females, the evolutionary perspective explains that they too may need to compete for resources and mates, especially when these are scarce (Kanazawa, 2008c). They may occasionally resort to violence, but more often spread negative gossip or rumors about a romantic rival than become violent with them. To obtain resources, they are more likely to engage in lower risk acts, such as embezzlement, rather than robbery. When women do steal, they tend to steal what they need to survive for themselves and their children, and they tend not to use crime for other purposes, like showing off and gaining status, as men do.

Despite the current gender gap, the number of women committing crimes is increasing. According to Campaniello (2019), women have more freedom than in the past, which provides more opportunities for crime. Additionally, the relative wage inequality between higher and lower earning women's wages has resulted in more women at the low end of the wage distribution committing crimes.

Intersectionality and Incarceration

Blacks, Hispanics make up larger shares of prisoners than of U.S. population

U.S. adult population and U.S. prison population by race and Hispanic origin, 2018



Notes: Blacks and whites include those who report being only one race and are non-Hispanic. Hispanics are of any race. Prison population is defined as inmates sentenced to more than a year in state or federal prison.

Source: U.S. Census Bureau, Bureau of Justice Statistics.

PEW RESEARCH CENTER

The racial and ethnic makeup of prisons in the United States continues to look substantially different from the country's demographics. While their rate of imprisonment has decreased the most in recent years, black Americans are much more likely than their Hispanic and white counterparts to be in prison (Gramlich, 2020). In 2018, black Americans represented 33% of those in prison, almost triple their 12% share of the U.S. adult population. Whites accounted for 30% of prisoners, about half their 63% share of the adult population. Hispanics accounted for 23% of inmates, compared with 16% of the adult population.

Black men especially are likely to be imprisoned. There were 2,272 inmates per 100,000 black men in 2018, compared with 1,018 inmates per 100,000

Hispanic men, and 392 inmates per 100,000 white men. The rate was even higher among black men in certain age groups: Among those ages 35 to 39, about one-in-twenty black men were in state or federal prison (Gramlich, 2020).

Currently, women comprise only 7% of the federal prison population, and they also are a smaller percentage of inmates in state and local facilities. Even though there are significantly fewer female inmates than male, during the past 30 years there has been a 700% increase in female imprisonment in federal, state, and local correctional facilities (Cowan, 2019). While federal prisons have seen an uptick in numbers of incarcerated women during this period, the most dramatic increases are in state prisons and local jails. Although there has been an increase in women convicted of violent crimes, most incarcerated females are serving sentences for property and drug offenses.

Similar to men, women of color are overrepresented in prisons (Cowan, 2019). Black women are twice as likely to be incarcerated as white women: 96 per 100,000 versus 49 per 100,000. Additionally, rates of Hispanic women in correctional settings are 1.4 times higher than those for whites: 67 per 100,000 versus 49 per 100,000. Native American women are also overrepresented in prison in particular geographical locations. Even at the juvenile justice system level, black and Hispanic girls are more likely to be committed to juvenile residential facilities than white girls. What is consistent, is that females in prisons are overwhelmingly poor, with most living well below the poverty line. Because of their overall limited incomes, more women stay in prison without having been convicted of a crime because they cannot afford the cash bond to be released (Sawyer, 2018).

Compared to male inmates, female inmates are more likely to have experienced a lifetime of exposure to cumulative trauma, physical and sexual victimization, untreated mental illness, and substance use to manage distress (Ney et al., 2012). According to Sawyer (2018), women's responses to gender-based abuse and discrimination are increasingly criminalized, such as fighting back against domestic violence, or running away from abuse for girls. Upon release from prison, rates of relapse are high for women, especially if they have not received the mental health or substance abuse treatment needed during incarceration. Stigma facing

female parolees is greater than that facing males. There are fewer halfway programs and shelter beds for women. Female parolees have greater difficulty obtaining employment and housing than males, and are at greater risk for losing their homes (Bandele, 2017).



While incarcerated, women receive more disciplinary actions, and more severe sanctions than men (Sawyer, 2018). Even though female inmates are less likely to act out violently than males, they receive more physical restraints and disciplinary tickets for minor offenses, such as making a derogatory comment, disrespect, or refusing to obey an order (Pupovac & Lydersen, 2018). Critics of female prisons have stated that officers write emotionally driven tickets because they become frustrated and angry with female inmates for talking back or behaving disrespectfully. Women are more likely to have their phone privileges revoked or have visitation privileges with their children cancelled, and they spend more time in solitary confinement. Not surprisingly, these disciplinary actions hinder a woman's ability to get time off her sentence or be paroled. Critics believe that women are expected to follow strict social controls in prison that would never be accepted by male prisoners.

Approximately 6%-10% of incarcerated women are pregnant (Stringer, 2019). In more than half of U.S. states, women are shackled to the bed during delivery and their baby is taken away and placed with a family member or into foster care. Over 60% of imprisoned women are mothers, and the time away from their children can negatively impact the mother-child bond. Incarcerated mothers may not be able to visit with their children or maintain custody of their children, even if the reason they are in prison has nothing to do with child abuse or neglect. When mothers are in prison, and especially if children are placed in foster care, children are more likely to experience homelessness and later involvement in the criminal justice system themselves (Cowan, 2019).

Gender Timeline

Important Societal, Legislative and Judicial Gender-related Events in the U.S.

- 1920 19th Amendment (women's Suffrage Ratified)
- 1941-1945 World War II forces millions of women to enter the workforce
- 1948 Universal Declaration of Human Rights
- 1963 Congress passes Equal Pay Act
- 1964 Congress passes Civil Rights Act, which outlaws sex discrimination
- 1969 Stonewall riots in NYC, forcing gay rights into the American spotlight
- 1972 Congress passes Equal Rights Amendment; Title IX prohibits sex discrimination is schools and sports
- 1973 American Psychiatric Association removes homosexuality from the DSM
- 1981 First woman appointed to the US Supreme Court
- 1987 Average woman earned \$0.68 for every \$1.00 earned by a man
- 1992 World Health Organization no longer considers homosexuality an illness
- 1993 Supreme Court rules that sexual harassment in the workplace is illegal
- 2011 Don't Ask Don't Tell is repealed, allowing people who identify as gay serve openly in the US military
- 2012 President Barak Obama becomes the first American president to openly support LGBT rights and marriage equality
- 2015 Supreme Court in the *Obergefell v. Hodges* case struck down all state bans on same-sex marriage, legalizing it in all fifty states, and requiring states to honor out-of-state same-sex marriage licenses
- 2022 Supreme Court in the *Dobbs v. Jackson* case struck down *Row v. Wade* allowing individual States to determine abortion access

Adapted from (Kang et al. 2017).

Glossary

Achievement motivation: Refers to an individual's needs to meet goals and accomplish things.

Additive model of identity: Simply adds together privileged and disadvantaged identities for a slightly more complex picture.

Adverse childhood experiences (ACEs): All types of abuse, neglect, and other potentially traumatic experiences that occur before the age of 18.

Affiliative speech: Refers to language used to establish or maintain connections with others.

Agency: Are the traits that facilitate leadership and success, such as assertiveness.

Agender: Without gender, and can describe people who do not have a gender identity, who identify as non-binary or gender neutral, have an undefinable identity, or feel indifferent about gender.

Aggression: Refers to any behavior that is intended to harm another individual.

Amygdala: The brain region that responds to emotional arousal.

Alleles: A the possible versions of a gene that can be inherited.

Ambivalent sexism: A concept of gender attitudes that encompasses both positive and negative qualities.

Androgen Insensitivity Syndrome (AIS): Occurs when a person has one X and one Y chromosome, but is resistant to the male hormones or androgens, and appears female at birth.

Androgyny: Possessing both stereotypical masculine and feminine traits.

Andropause or **late-onset hypogonadism:** Refers to testosterone levels declining significantly in older males.

Anthropocentricism: A view that views humans as being the most important entity in the universe.

Asexual: The sexual orientation that pertains to little desire or sexual associations.

Benevolent sexism: The "positive" element of ambivalent sexism, which recognizes that women are perceived as needing to be protected, supported, and adored by men.

Between-group variance: Refers to the difference between the average score of each group.

Biocentricism: A view that endorses inherent value to all living things.

Bisexual: The term traditionally *used* to signify being attracted to both men and women, but it has recently been used in nonbinary models of sex and gender to refer to attraction to any sex or gender.

Booty calls: Relationships that are non-committal nor are they expected to be monogamous, but involve repeated sexual encounters.

Brody's Transactional Model: Explains how children learn gender roles by focusing on the bidirectional influences between parents and children.

Broken rung: Not being able to take the first step up into a management position.

Bromance: A close heterosexual friendship between males.

Bullying: Unwanted, aggressive behavior that involves a real or perceived power imbalance.

Catastrophizing: Refers to assuming the worst case scenario when faced with a challenge.

Chosen family: A circle of friends who understand the challenges of being LGBTQ+ and who can support them.

Congenital Adrenal Hyperplasia (CAH): A group of genetic disorders which cause increased production of androgens due to an enzymatic deficiency (21-hydroxylase) resulting in an inability to produce cortisol and the overproduction of androgens.

Carriers: Those who have inherited only one recessive-gene.

Case studies: Descriptive records of one or a small group of individuals' experiences and behavior.

Catharsis: A now debunked idea that observing or engaging in less harmful aggressive actions will reduce the tendency to aggress later in a more harmful way.

Cesarean section (c-section): A surgery used to deliver the baby through the mothers' lower abdomen.

Child abuse and neglect: Any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation; or an act or failure to act, which presents an imminent risk of serious harm.

Chromosomes: Are strands of DNA.

Chronosystem: A concept in ecological systems theory that refers to the historical context in which experiences occur.

Cingulate gyrus: A region of the brain that is important in processing emotions and regulating behaviors.

Cisgender (cis): Refers to individuals who identify with the gender assigned to them at birth.

Climacteric: Is the midlife transition when fertility declines.

Cognitive behavioral therapy (CBT): A treatment that assists sufferers by identifying distorted thinking patterns and changing inaccurate beliefs.

Cognitive social learning theory: This theory emphasizes reinforcement, punishment, and imitation, but adds cognitive processes to explain how humans learn.

Collectivistic cultures: Value the needs of the group over individuals.

Communion: Are the traits that facilitate connection with and concern for others, such as kindness.

Constructionism: Argues that society creates what we believe to be true.

Contingency boost: Confirmation of masculinity elevates a man's self-worth.

Contingency threat: The extent to which a lack of masculinity threatens a man's self-worth.

Control group: Does not receive the treatment the experimenter is studying as a comparison.

Correlational research: Research designed to discover relationships among variables and to allow the prediction of future events from present knowledge.

Coverture laws: Stated that upon marriage a woman could no longer own property or enter into contract in her own name.

Cross over theory: Suggests that the changes in our social roles as we move through middle and late adulthood would likely lead to greater similarity between the genders in terms of how they see themselves.

Cult of true womanhood: Piety, purity, submission and domesticity were the tenants, and held that women were rightfully and naturally located in the private sphere of the household and not fit for public, political participation, or labor in the waged economy.

Cultivation theory: States that repeated exposure to media encourages beliefs depicted in that reality.

Cyberbullying: Involves bullying using electronic technology, including sending mean text messages or emails, creating fake profiles, and posting embarrassing pictures, videos or rumors on social networking sites.

Dead reckoning: Refers to estimating distances using space and orientation cues.

Debriefing: A procedure designed to fully explain the purposes and procedures of the research after participation, and to remove any harmful aftereffects of participation.

Deception: Whenever research participants are not completely and fully informed about the nature of the research project before participating in it.

Degendering theory: Proposes that as people age, gender and the social expectations of gender becomes less central to people's self-concept.

Dependent variable: A measured variable that is expected to be influenced by the experimental manipulation.

Descriptive research: Research that describes what is occurring at a particular point in time.

Developmental intergroup theory: A theory that postulates that adults' focus on gender leads children to pay attention to gender as a key source of information about themselves and others, to seek out possible gender differences, and to form rigid stereotypes based on gender.

Discrepancy strain: Happens when a person fails to live up to the social standards for the gender role.

Disharmonious emotions: Emotions that convey a highly competitive motivation to achieve and dominate others, such as anger or gloating when defeating an opponent.

Displaced aggression: Aggression that is directed at an object or person other than the person who caused the frustration.

Dispositional attributions: The internal reasons people give for why someone behaves the way that they do.

Dominant gene: Expresses itself in the phenotype even when paired with a different version of the gene.

Double standard of aging: Refers to the idea that men's social value increases with age, while women's declines.

d statistic: Quantifies the difference between group means in standardized units.

Dyadic power: Refers to the power to initiate intimate relationships and control the decisions in those relationships.

Dysfunction strain: Suggests that some of the gender role norms are inherently psychologically and physically harmful.

Effect size: A way of quantifying the difference between two groups.

Ego identity: The self-image that we form in adolescence and young adulthood that is the integration of our ideas about who we are and who we want to be.

Ecological systems theory: Provides a framework for understanding and studying the many influences on human development.

Empathy: Refers to our ability to feel what others feel.

Endogamy: Cultural rules regarding the groups we should marry within and those we should not marry in.

Erectile dysfunction: Refers to the inability to achieve an erection or an inconsistent ability to achieve an erection.

Essentialism: The belief that characteristics that are a part of a category are assumed to be universal, inherent, and unambiguous.

Executive functions: Refer to higher order cognitive skills, including planning, cognitive flexibility, working memory, inhibitory behavior, goal-setting and problem solving.

Exosystem: A concept in ecological systems theory that includes the larger contexts of community.

Experimental group: Receives the treatment under investigation.

Experimental research: Research in which a researcher manipulates one or more variables to see their effects.

Ex post facto research: Research in which groups of people are compared on a participant variable, such as men and women.

Extraneous variables: Variables that are not part of the experiment that could inadvertently effect either the experimental or control group, thus distorting the results.

Fear of success: The anxiety that women and men might feel when achieving success in an atypical gender situation.

Femininity: The attributes a culture most commonly associates with women.

Feminism: Encompasses many social movements that emphasize improving women's lives and rectifying gender inequality in society.

Fraternal birth order effect: Suggests that the probability of a male identifying as gay increases for each older brother born to the same mother.

Friends with benefits: Relationships that involve friends having casual sex without commitment.

Frontal cortex: Is the region of the brain that is responsible for higher-level cognitive skills.

Gay: Sexual orientation that refer to men who are attracted to other men.

Gender: The cultural, social, and psychological meanings that are associated with masculinity and femininity.

Gender-affirming hormone treatment: Are hormones used to align one's physical body with their gender identification.

Gender aschematic: A term used to describe individuals who do not use gender as a dimension for interpreting the world.

Gender-based violence: Violence against an individual based on their gender or gender identity.

Gender binary: The belief that there are two discrete gender categories, which are biologically based, apparent at birth, and stable over time, in which all individuals can be sorted.

Gender-critical feminism: Feminists who advocate reserving women's spaces for ciswomen and do not view transgender women as women.

Gender discrimination: Differential treatment on the basis of gender.

Gender dysphoria: Refers to the distress accompanying a mismatch between one's gender identity and biological sex.

Gender equality: Refers to not discriminating on the basis of a person's gender when it comes to access to services, the allocation of resources, or opportunities.

Gender equity: Refers to there being fairness and justice in the distribution of resources and responsibilities on the basic of gender.

Genderfluid: Highlights that people can experience shifts between gender identities.

Gender identity: A person's psychological sense of being male, female, both, or neither.

Gender role identity paradigm (GRIP): Makes the assumption that successful personality development hinges upon the formation of a gender role that is consistent with the person's biological sex.

Gender role intensification: At about the same time that puberty accentuates gender identity, gender role differences also accentuate for at least some teenagers.

Gender roles: The behaviors, attitudes, and personality traits that are designated as either masculine or feminine in a given culture.

Gender role strain: The pressure to live up to gender role ideals, and often results in psychological distress.

Gender schemas: Refers to conceptual networks of information about gender.

Gender schematic: A term used to describe individuals who are especially attuned to gender, and use it as a way of organizing and understanding the world.

Gender segregation effect: States that children seek out and play with other children of the same gender.

Gender similarities hypothesis: States that females and males are similar on most, but not all, psychological variables.

Gender socialization: Refers to what young children learn about gender from society, including parents, peers, media, religious institutions, schools, and public policies.

Gender stereotypes: The beliefs and expectations people hold about the typical characteristics, preferences, and behaviors of men and women.

Gendered languages: Languages that mark nouns and pronouns for gender.

Genderfluid: People that can experience shifts between gender identities.

Genderless languages: Languages that do not mark either nouns or pronouns for gender.

Gender/sex: A term that is used to recognize that the biological (sex) and sociocultural (gender) are too intertwined to separate.

Genes: The segments of DNA that are recipes for making proteins.

Genotype: Refers to the sum total of all the genes a person inherits.

Glass ceiling: Refers to the invisible barrier that prevents women from advancing into top positions.

Glass cliff: Women hired for leadership potions are sometimes placed in precarious positions after a crisis and are set-up to fail.

Glass escalator: Many men experience their token status in female occupations as an advantage in hiring and promotion

Gray matter: Refer to neuronal cell bodies in the brain.

Greater male variability hypothesis: States that more men than women have very high, as well as very low, intelligence.

Healthy Life Expectancy: Takes into account current age-specific mortality, morbidity, and disability risks and refers to the number of years of life that is disability free.

Hegemonic masculinity: A dominant set of expectations that serve as the foundation of cultural beliefs about what it means to be a man.

Heteronormative: society supports heterosexuality as the norm.

Heterosexual: Sexual orientation that indicates that the individual is attracted to the other sex; also referred to as straight.

Heterozygous: When we receive a different version of the gene from each parent.

Hippocampus: The brain region that is responsible for memory processing and storage.

Homogamy: Marriage between individuals who are similar on various indicators (e.g., education, wealth).

Homophily: The idea that people affiliate more with those like themselves.

Homophobia: A range of negative attitudes and feelings toward homosexuality or people who are identified or perceived as being lesbian, gay, bisexual, or transgender.

Homozygous: When we receive the same version of a gene from our mother and father.

Hookups: Refers to uncommitted sexual encounters.

Hormone Replacement Therapy (HRT): Medication that contains female hormones, taken to replace the estrogen that the female body stops making during menopause.

Hostile sexism: The negative element of ambivalent sexism, which includes the attitudes that women are inferior and incompetent relative to men.

Hot flash: Is a surge of adrenaline, and is one of the common symptoms of the climacteric in women.

Human Immunodeficiency Virus (HIV): A virus that weakens a person's immune system by destroying important cells that fight disease and infection.

Hypergamy: Refers to women "marrying up" in educational attainment and wealth.

Hypogamy: Refers to women "marrying down".

Hypotheses: Specific statements about the relationship between variables.

Identities: The categories we use to define both ourselves and other people.

Implicit bias: Unconscious attitudes and stereotypes.

Incomplete dominance: When a dominant gene does not completely suppress the recessive gene.

Independent variable: The causing variable that is created or manipulated by the experimenter.

Individualistic cultures: Emphasize the individual rather than the group.

Informed consent: Explaining as much as possible about the true nature of the study, particularly everything that might be expected, prior to participants agreeing to participate.

Institutionalized homophobia: Refers to religious and state-sponsored homophobia.

Intelligence: Refers to the ability to think, learn from experience, solve problems, and adapt to new situations.

Internalized Homophobia: People with same-sex attractions internalize, or believe, society's negative views and/or hatred of themselves.

Intersectional theory: The study of how overlapping or intersecting social identities relate to oppression, domination or discrimination.

Intersectionality: Views race, class, gender, sexuality, age, ability, and other aspects of identity as mutually constitutive; that is, people experience these multiple aspects of identity simultaneously and the meanings of different aspects of identity are shaped by one another.

Intersex: Refers to individuals whose external genitals and/or internal reproductive structures, hormones, or sex chromosomes do not match or are indeterminate.

Interviewed: Participants are directly questioned by a researcher.

Intimate terrorism: Refers to one partner consistently using fear and violence to dominate the other.

Jacob's syndrome (XYY): Results when an extra Y chromosome is present in the cells of a male.

Kinkeeper: Refers to the person, or persons, who keep the family connected and who promote solidarity and continuity in the family.

Klinefelter syndrome (XXY): Refers to an extra X chromosome in the cells of a male and results in infertility.

Laboratory observation: Research conducted in a setting created by the researcher.

Latinx paradox: A tendency of Latinx Americans to have as good, if not better, health than non-Latinx White Americans despite having less education and a lower socioeconomic status.

Lesbian: Sexual orientation that refers to women who are attracted to other women.

Life expectancy: The average number of years that members of a population (or species) live.

Limbic cortex: The region of the brain that is involved in emotional processing.

Macrosystem: A concept in ecological systems theory that includes the cultural elements.

Magnetic resonance imaging (MRI): Uses magnetic fields and radio waves to create images of the body.

Male reference group identity dependence: The extent to which a male is dependent on a male reference group for his gender role self-concept.

Masculinity: Refers to the attributes most commonly associated with men in a culture.

Masculinity Contingency: The extent to which a man's sense of self-worth is related to his sense of masculinity.

Masculine ideology: A man's endorsement and internalization of cultural belief systems about masculinity and the male gender.

Matriarchy: Is the term used to describe societies that place structural power and resources in the hands of females.

Matrilineal: Societies where the lineage and wealth is passed down from mothers.

Matrilocal: Cultures where men move to live with or near their wife's family.

Maudsley Approach: Treatment that has the parents of adolescents with anorexia nervosa be actively involved in their child's treatment.

Maximalist approach: Emphasizes differences and often assumes no real overlap in the performance of different genders.

Medicalization: The process where more normal functions of the body come under medical influence, and treatments emerge for what were previously viewed as non-medical problems./

Meiosis: The process by which the gamete's chromosomes duplicate, and then divide twice resulting in four cells containing only half the genetic material of the original gamete.

Menarche: The first menstrual period.

Menopause: Is defined as 12 months without menstruation.

Mental rotation: Refers to the ability to rotate an object in one's mind.

Mesosystem: A concept in ecological systems theory that includes the larger organizational structures, such as school, the family, or religion.

Meta-analysis: A technique for analyzing and integrating the results from several studies.

Microsystem: A concept in ecological systems theory that includes the individual's setting and those who have direct, significant contact with the person, such as parents or siblings.

Minimalist approach: Assumes that although the difference is statistically significant there is likely considerable overlap between the genders.

Minority stress model: States that an unaccepting social environment results in both external and internal stress which contributes to poorer mental health.

Mitosis: The process by which all cells, but the gametes, duplicate and create an exact copy of all the chromosomes and split into two new cells.

Morbidity-mortality paradox: How women have higher rates of chronic, nonfatal, but debilitating health problems, yet tend to live longer than men.

Motherhood mandate: The social expectation that females will have children.

Mullerian ducts: Are the primitive female internal sex organs.

Muscle dysmorphia: An extreme desire to increase one's muscularity.

Natural gender languages: Languages that mark gender with third-person singular pronouns (e.g., he, she, his, her).

Naturalistic observation: Research method that involves the observation and recording of behavior that occurs in everyday settings.

Nature: Refers to the contribution of genetics to one's development.

Negative correlations: High values for one variable is associated with low values for another variable.

Non-binary/genderqueer: Refers to gender identities beyond binary identifications of man or woman.

Nurture: Refers to all the environmental influences that affect an individual.

Objectification Theory: Focuses on how the female body has become an object of the male gaze.

Occupational sexism: Involves discriminatory practices, statements, or actions, based on a person's sex, that occur in the workplace.

Ovaries: The gonads that produce ova and ovarian hormones.

Pansexual: Sexual orientation that refers to being attracted to all sexes and gender identities.

Parental investment: A concept in evolutionary theory that refers to the amount of investment a parent makes that will increase the survival of the offspring.

Parietal cortex: Is the region of the brain that is involved in spatial perception, among other skills.

Partial Androgen Insensitivity syndrome (PAIS): A mild form of androgen insensitivity syndrome that occurs when the body's tissues are partially sensitive to the effects of androgens and may appear female, male or indeterminate at birth.

Participant variables: These are naturally occurring characteristic of the research participant, (e.g., age, gender, race), and they are measured rather than manipulated.

Patriarchy: Is the term used to describe societies that place power and resources in the hands of males.

Patrilineal: Societies where lineage and wealth in a family is passed down from fathers.

Patrilocal: Cultures where women leave their families to live with or near their husband's family.

Pearson correlation coefficient: Symbolized by the letter r, is the most common statistical measure of the strength of linear relationships among variables.

Perimenopause: Refers to a period of transition in which a woman's ovaries stop releasing eggs and the level of estrogen and progesterone production decreases.

Phenotype: Refers to the features that are actually expressed.

Polygenic: When more than one gene influences that characteristic.

Polysexual: Sexual orientation that refers to being attracted to people of many sexes and gender identity.

Population: The people that the researcher wishes to know about.

Positive correlation: High values for one variable is associated with high values for another variable.

Precarious manhood hypothesis: Proposes that men have a tenuous social status that is difficult to attain, but easy to lose.

Primary sexual characteristics: The changes in puberty that allow for sexual reproduction.,

Process model of romantic relationships: Proposes that interpersonal processes, such as closeness, trust, commitment, and interdependence are the mechanisms that can guide relationships in different directions.

Psychophysiological Assessment: A record of psychophysiological data, such as measures of heart rate, hormone levels, or brain activity to help explain behavior.

Pubertal blockers: Are medications that suppress puberty by halting the production of estrogen or testosterone and should be taken before puberty starts and stopped by age 14.

Puberty: The period of rapid growth and sexual maturation.

Quasi-experimental research: Research that includes both participant variables and experimental (manipulated) variables.

Queer: Signifies a range of different sexual orientations and gender behaviors, identities, or ideologies.

Random assignment: Using chance to determine which condition of the experiment research participants receive.

Rape: The penetration, no matter how slight, of the vagina or anus with any body part of object, or oral penetration by a sex organ of another person, without the consent of the victim.

Recessive gene: Expresses itself in the phenotype only when paired with a similar version gene.

Reference group: The group we use for self comparison.

Relational aggression: Verbal aggression that is intended to harm relationships.

Representative sample: A sample that includes the same percentages of genders, age groups, ethnic groups, and socio-economic groups as the larger population.

Research design: The specific method a researcher uses to collect, analyze, and interpret data.

Role congruity theory: One's characteristics should align with typical social roles.

Sample: The people chosen to participate in the research.

Sandwich generation: Refers to adults who have at least one parent age 65 or older and are either raising their own children or providing support for their grown children.

Schemas: The categories into which people actively organize their own and others' behavior, activities, and attributes.

Scientific method: The set of assumptions, rules, and procedures scientists use to conduct research.

Secondary/Content Analysis: Analyzing information that has already been collected or examining documents or media to uncover attitudes, practices or preferences.

Secondary sexual characteristics: The visible physical changes of puberty not directly linked to reproduction, but signal sexual maturity.

Self-assertive speech: Refers to language used to influence others.

Self-confidence: The belief that one can be successful in a specific area.

Self-efficacy: One's belief about being able to accomplish some task or produce a particular outcome.

Self-esteem: Refers to the positive regard one has for oneself.

Sex: Biological category of male or female as defined by physical differences in genetic composition and in reproductive anatomy and function.

Sex typing: Is the process by which individuals acquire patterns of gendered behavior.

Sexism or gender discrimination: Is a form of prejudice and/or discrimination based on a person's sex or gender.

Sexual abuse: A type of maltreatment that refers to the involvement of the child in sexual activity to provide sexual gratification or financial benefit to the perpetrator, including contacts for sexual purposes, molestation, statutory rape, prostitution, pornography, expo-sure, incest, or other sexually exploitative activities.

Sexual harassment: A form of gender discrimination based on unwanted treatment related to sexual behaviors or appearance when this conduct explicitly or implicitly affects an individual's employment, unreasonably interferes with an individual's work performance, or creates an intimidating, hostile, or offensive work environment.

Sexual orientation: Refers to the direction of emotional and erotic attraction toward members of the opposite sex, the same sex, both sexes, or neither sex.

Sexual selection: Refers to members of one gender (usually males) competing among themselves for mating access to the other gender (usually females), and those being competed for (usually females) having preferences for and actively choosing to mate with members of the opposite gender (usually males).

Sexual strategies theory: Suggest that gender differences in mate preferences reflect the evolutionary roles of men and women.

Sexuality: Refers to the capacity for sexual responses and experiences.

Single determinant model of identity: Presumes that one aspect of identity, say, gender, dictates one's access to or disenfranchisement from power.

Situational attributions: The external reasons people give for why someone behaves the way that they do.

Situational couple violence: Violence that results when heated conflict escalates between a couple.

Social desirability: A problem in self-report measures where respondents may lie because they want to present themselves in the most favorable light.

Social learning theory: Argues that behavior is learned through observation, modeling, reinforcement, and punishment.

Spatial location memory: Is the ability to remember the location of objects in physical space.

Spatial perception: Refers to the ability to perceive and understand space relations between objects.

Spatial visualization: Refers to complex, sequential manipulations of spatial information.

Spermarche: The first ejaculation of semen.

Stage theory of romantic relationships: Proposes that there is a linear sequence of stages that are associated with increasing commitment.

Statistical significance: A measure of how unlikely the difference between groups was due to chance.

Stereotype: Refers to a shared belief about a social group.

Stereotype threat: Refers to the anxiety that people feel when they risk confirming the cultural stereotype for their group.

Sticky floors: Keep low-wage workers, who are more likely to be women and minorities, from being promoted contribute to lower wages.

Structural power: Refers to power that determines who makes the decisions and laws that govern the society, and who holds, and metes out, resources.

Submissive emotions: Emotions that communicate vulnerability, such as anxiety or sadness.

Suffrage: The right to vote.

Survey: A measure administered through either a verbal or written questionnaire to get a picture of the beliefs or behaviors of a sample of people of interest.

Telomeres: Disposable DNA on the end of chromosomes that protect the genes.

Temporal lobe: The brain region that is associated with language comprehension and processing.

Testes: The gonads inside the scrotum that produce sperm and testosterone.

Thalamus: The region of the brain that acts as a relay station for sensory information.

Third variable: A variable that is not part of the research hypothesis but produces the observed correlation between two variables.

Toxic masculinity: The socially regressive male traits that serve to foster domination, the devaluation of women, homophobia, and violence.

Trans: Is an abbreviated term and individuals appear to use it self-referentially is an all-inclusive umbrella term which encompasses all nonnormative gender identities.

Transgender: Generally refers to individuals who identify as a gender not assigned to them at birth.

Transgender children: Refers to children who identify with a gender that is different than the one assigned at birth.

Trauma strain: The notion that the socialization of males to achieve the traditional masculine gender-role is traumatic.

Triple jeopardy: A concept that refers to the ageism, racism and sexism faced by older, minority women.

Triple X syndrome (XXX): Refers to the presence of an additional X chromosome in the cells of a female.

Turner syndrome (XO): Is the absence of, or an imperfect, second X chromosome.

Variable: Anything that changes in value.

Verbal fluency: Is the ability to generate words.

White matter: Refers to the myelinated axons of neurons in the brain.

Within-group variance: Refers to variation in the scores within a group.

Wolffian ducts: Are the primitive male internal sex organs.

Work-family conflict theory: Theory that states that work and family roles are incompatible, given conflicting expectations for time, energy, and behaviors.

Resources

Below is a list of professional societies and journals that are important to the study of gender and related topics. Some information comes from McRaney et al. (2021).

Societies

APA Division 35 – Society for the Psychology of Women

Website - https://www.apa.org/about/division/div35

Mission Statement – "Division 35: Society for the Psychology of Women provides an organizational base for all feminists, women and men of all national origins, who are interested in teaching, research, or practice in the psychology of women. The division recognizes a diversity of women's experiences which result from a variety of factors, including ethnicity, culture, language, socioeconomic status, age and sexual orientation. The division promotes feminist research, theories, education, and practice toward understanding and improving the lives of girls and women in all their diversities; encourages scholarship on the social construction of gender relations across multicultural contexts; applies its scholarship to transforming the knowledge base of psychology; advocates action toward public policies that advance equality and social justice; and seeks to empower women in community, national and global leadership."

Publication - Psychology of Women Quarterly (journal) and Feminist Psychologist (quarterly newsletter)

Other Information – The division has 5 special sections for the psychology of black women; concerns of Hispanic women/Latinas; lesbian, bisexual, and transgender concerns; psychology of Asian Pacific American women; and Alaska Native/American Indian/Indigenous women.

APA Division 44 - Society for the Psychology of Sexual Orientation and Gender Diversity

Website - https://www.apadivisions.org/division-44

Mission Statement – "Div. 44 (SPSOGD) is committed to advancing social justice in all its activities. The Society celebrates the diversity of lesbian, gay, bisexual, transgender and gender nonconforming and queer

people and recognizes the importance of multiple, intersectional dimensions of diversity including but not limited to: race, ethnicity, ability, age, citizenship, health status, language, nationality, religion and social class."

Publication - Psychology of Sexual Orientation and Gender Diversity (journal) and Division 44 Newsletter

APA Division 51 – Society for the Psychological Study of Men and Masculinities

Website - https://www.apa.org/about/division/div51

Mission Statement – "Division 51: Society for the Psychological Study of Men and Masculinities (SPSMM) advances knowledge in the new psychology of men through research, education, training, public policy and improved clinical services for men. SPSMM provides a forum for members to discuss the critical issues facing men of all races, classes, ethnicities, sexual orientations and nationalities."

Publication – Psychology of Men and Masculinities (journal)

Other Information – The division has five special interest groups focused on applied and professional practice, racial ethnic minorities, sexual and gender minorities, students, and violence and trauma.

Journals

Psychology of Women Quarterly

Website: https://www.apadivisions.org/division-35/publications/journal/index

Published by: APA Division 35

Description: "The Psychology of Women Quarterly (PWQ) is a feminist, scientific, peer-reviewed journal that publishes empirical research, critical reviews and theoretical articles that advance a field of inquiry, teaching briefs and invited book reviews related to the psychology of women and gender." Topics include violence against women, sexism, lifespan development and change, therapeutic interventions, sexuality, and social activism."

Psychology of Sexual Orientation and Gender Diversity

Website: https://www.apadivisions.org/division-44/publications/journal

Published by: Division 44 of APA

Description: "A quarterly scholarly journal dedicated to the dissemination of information in the field of sexual orientation and gender diversity, PSOGD is envisioned as the primary outlet for research particularly as it impacts practice, education, public policy, and social action."

Psychology of Men & Masculinities

Website: https://www.apa.org/pubs/journals/men

Published by: Division 51 of APA

Description: "Psychology of Men & Masculinities is devoted to the dissemination of research, theory, and clinical scholarship that advances the psychology of men and masculinity. This discipline is defined broadly as the study of how boys' and men's psychology is influenced and shaped by both gender and sex, and encompasses the study of the social construction of gender, sex differences and similarities, and biological processes."

Journal of Gender Studies

Website: https://tandfonline.com/toc/cjgs20/current

Published by: Taylor and Francis

Description: "The Journal of Gender Studies is an interdisciplinary journal which publishes articles relating to gender and sex from a feminist perspective covering a wide range of subject areas including the Social, Natural and Health Sciences, the Arts, Humanities, Literature and Popular Culture. We seek articles from around the world that examine gender and the social construction of relationships among genders."

International Journal of Gender and Women's Studies

Website: http://ijgws.com/

Description: "International Journal of Gender and Women's Studies is an interdisciplinary international journal which publishes articles relating to gender and sex from a feminist perspective covering a wide range of subject areas including the social and natural sciences, the arts, the humanities and popular culture. The journal seeks articles from around the world that examine gender and the social construction of relationships among genders."

Journal of Research in Gender Studies

Website: https://addletonacademicpublishers.com/journal-of-research-in-gender-studies

Published by: Addleton Academic Publishers

Description: "The Journal of Research in Gender Studies publishes mainly original empirical research and review articles focusing on hot emerging topics, e.g. same-sex parenting, civil partnership, LGBTQ+ rights, mobile dating applications, digital feminist activism, sexting behavior, robot sex, commercial sex online, etc."

Journal of Gay and Lesbian Mental Health

Website: https://www.tandfonline.com/action/

journalInformation?show=aimsScope&journalCode=wglm20

Published by: Taylor and Francis

Description: "Journal of Gay & Lesbian Mental Health seeks out and publishes the most current clinical and research scholarship on LGBT mental health with a focus on clinical issues."

Sexualities

Webpage: https://journals.sagepub.com/home/sex

Published by: Sage

Description: "Sexualities is an established international journal and an invaluable resource, publishing articles, reviews and scholarly comment on the shifting nature of human sexualities. The journal adopts a broad, interdisciplinary perspective covering the whole of the social sciences, cultural history, cultural anthropology and social geography, as well as feminism, gender studies, cultural studies and lesbian and gay studies."

Biology of Sex Differences

Webpage: https://bsd.biomedcentral.com/

Published by: Springer Nature

Description: "Biology of Sex Differences focuses on sex differences in all aspects of an individual or organism: from molecules to behavior and from studies of cellular function to clinical research studies. This journal aims to improve understanding of basic biological principles mediating sex differences and foster development of therapeutic and diagnostic tools that are sex-specific." This journal is open access.

Feminist Theory

Webpage: https://journals.sagepub.com/home/fty

Published by: Sage

Description: "Feminist Theory is an international interdisciplinary journal that provides a forum for critical analysis and constructive debate within feminism."

Gender & Society

Webpage: https://journals.sagepub.com/home/gas

Published by: Sage

Description: "Gender & Society promotes feminist scholarship and the social scientific study of gender. Gender & Society publishes theoretically engaged and methodologically rigorous articles that make original contributions to gender theory. The journal takes a multidisciplinary, intersectional, and global approach to gender analyses."

Journal of Sex Research

Webpage: https://www.tandfonline.com/journals/hjsr20?gclid=CjwKCAjwx7GYBhB7EiwAod8oe-AoRFlQH1rVhjI7KwUNWG96QRb_1U-mjb2hh_a8O7ofJKqaui64kxoC1BoQAvD_BwE

Published by: Taylor & Francis

Description: "The Journal of Sex Research publishes research into the scientific study of sexuality, spanning the disciplines of psychology, education and allied health."

Sex Roles: A Journal of Research

Webpage: https://www.springer.com/journal/11199

Published by: Springer

Description: "Sex Roles: A Journal of Research is a global, multidisciplinary, scholarly, social and behavioral science journal with a feminist perspective. It publishes original research reports as well as original theoretical papers and conceptual review articles that explore how gender organizes people's lives and their surrounding worlds, including gender identities, belief systems, representations, interactions, relations, organizations, institutions, and statuses."

Web Resources for Children, Adolescents and Families

Gender Spectrum

Webpage: https://genderspectrum.org

Description: Gender spectrum is a national organization committed to the health and well-being of gender-diverse children and teens through education and support for families, and training and guidance for educators, medical and mental health providers, and other professionals.

References

Module 1: Introduction

Blau, F. D., Currie, J. M., Croson, R. T. A., & Ginther, D. K. (2010). Can mentoring help female assistant professors? Interim results from a randomized trial. *American Economic Review*, 100(2),348-52. doi: 10.1257/aer.100.2.348

Bosson, J. K., Vandello, J. A. & Buckner, C. E. (2019). The psychology of gender. Sage Publishing.

Brooks, K. (June 3, 2014). Profound portraits of young agender individuals challenge the male/female identity. *The Huffington Post.* http://www.huffingtonpost.com/2014/06/03/chloe-aftel-agender_n_5433867.html.

Ceci, S. J. & Williams, W. M. (2011). Understanding current causes of women's underrepresentation in science. *Proceedings of the National Academy of Sciences*, 108(8), 3157-3162. https://doi.org/10.1073/pnas.1014871108

Crenshaw, K. W. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. Stanford Law Review, 43(6), 1241–1299.

Edley, N. (2017). Men and masculinity: The basics. Routledge.

Else-Quest, N. M. & Hyde, J. S. (2018). The psychology of women and gender. Sage Publishing.

Equal Rights Amendment (2018). Ratification Info State by State. Alice Paul Institute. https://www.equalrightsamendment.org/era-ratification-map.

Evans, M. (2014). Introduction. In M. Evans, C. Hemmings, M. Henry, H. Johnstone, S. Madhok, A. Plomien, & S. Wearing (Eds.), *The SAGE handbook of feminist theory*, pp. xviii-xxvi. SAGE publications.

Few, A. L. (2007). Black feminist thought. In G. Ritzer (Ed.), The blackwell encyclopedia of sociology. Blackwell Publishing.

Funk. C. & Parker, K. (2018). Women in STEM see more gender disparities at work, especially those in computer jobs, majority-male worplaces. *Pew Research Center*. https://www.pewsocialtrends.org/2018/01/09/women-in-stem-see-more-gender-disparities-at-work-especially-those-in-computer-jobs-majority-male-workplaces/

Glick, P., & Fiske, S. T. (1997). Hostile and benevolent sexism: Measuring ambivalent sexist attitudes toward women. *Psychology of Women Quarterly*, 21(1), 119-135. https://doi.org/10.1111/j.1471-6402.1997.tb00104.x

Goldberg, H. (1976). The hazards of being male: Surviving the myth of male privilege. Nash Publishing.

Hines, M. (2011). Gender development and the human brain. Annual Review of Neuroscience, 34, 69-88.

Hinze, S. W., Lin, J., & Andersson, T. E. (2012). Can we capture the intersections? Older black women, education, and health. *Women's Health Issues*, 22, e91-e98.

Houghton, J., Bean, L., Matlack, T., & Good Men Foundation. (2009). The Good Men Project: Real stories from the front lines of modern manhood. Good Men Foundation.

hooks, b. (1984). Feminist theory: From margin to center (2nd ed.). South End Press.

Isacco, A., & Wade, J. (2017). A review of theoretical perspectives and research in the psychology of men and masculinities. In R. Levant & J. Wong (Eds.) *The psychology of men and masculinities*. American Psychological Association.

Kang, M., Lessard, D., Heston, L., & Nordmarken, S. (2017). *Introduction to women, gender, sexuality studies*. https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1000&context=wost_ed_

Katz, J. N. (2003). The invention of heterosexuality. In T. E. Ore (Ed.), The social construction of difference and inequality: Race, class, gender, and sexuality. McGraw-Hill.

King, E. B. (2015). What mothers face at work: Why the "opt out" explanation is insufficient. *American Psychological Association*. https://www.apa.org/science/about/psa/2015/09/mothers-work.

Levant, R. F., & Powell, W. A. (2017). The gender role strain paradigm. In R. F. Levant & Y. J. Wong (Eds.) *The psychology of men and masculinities*. American Psychological Association.

Li, Z. & Dalaker, J. (2019). Poverty among Americans aged 65 and older. *Congressional Research Services*. https://crsreports.congress.gov

McRaney, K., Bridley, A., & Duffin, L.W. Jr. (2021). *The psychology of gender (2nd. ed.)*. Washington State University. https://opentext.wsu.edu/psychology-of-gender/wp-content/uploads/sites/119/2019/06/The-Psychology-of-Gender-2nd-edition.pdf

Morgan, R. (1996). Introduction – planetary feminism: The politics of the 21st century. In *Sisterhood is Global: The International Women's Movement Anthology*. R. Morgan (ed.). The Feminist Press at CUNY.

Morris, B. J. (2016). *History of lesbian, gay, bisexual and transgender social movements*. American Psychological Association. https://www.apa.org/pi/lgbt/resources/history.

National Organization for Men Against Sexism. (2017). Principles. http://nomas.org/principles/

National Sleep Foundation. (2016). Menopause and Insomnia. *National Sleep Foundation*. https://sleepfoundation.org/ask-the-expert/menopause-and-insomnia

National Women's History Museum. (2021). Feminism: The fourth wave. https://www.womenshistory.org/exhibits/feminism-fourth-wave

Newman, D. M. (2017). *Identities and inequalities: Exploring the intersections of race, class, gender, and sexuality* (3 ed.). McGraw Hill Education.

Pleck, J. H. (1981). The Myth of Masculinity. The MIT Press.

Pleck, J. H. (1995). The gender role strain paradigm. An update. In R. F. Levant & W. S. Pollack (Eds.), *A new psychology of men* (pp. 11–32). Basic Books.

Pleck, J. H. (2017). Foreward: A brief history of the psychology of men and masculinities. In R. F. Levant & Y. J. Wong (Eds.) *The psychology of men and masculinities*. American Psychological Association.

Quinn, J. F., & Cahill, K. E. (2016). The new world of retirement income security in America. *American Psychologist*, 71(4), 321-333.

Ramptom, M. (2015, October 25). Four waves of feminism. *Pacific Magazine*. https://www.pacificu.edu/magazine/four-waves-feminism

Renzetti, C. M., Curran, S. J., & Maier, S. L. (2012). Women, men, and society (6th ed.). Pearson.

Rowbottom, S., Brown, D., & Cachia, P. (2012). The male gender role and men's psychological distress: A review. *Social Psychology Review*, 14(1), 16-27.

Roxie, M. (2011). Genderqueer and nonbinary identities. *Genderqueer and Non-binary Identities*. http://genderqueerid.com/gqhistory.

Schultz, D. P., & Schultz, S. E. (1994). Theories of personality (5th ed.). Thomson Brooks/Cole Publishing Co.

Scott, S. M., Wallender, J. L., Depaoli, S., Elliott, M. N., Grunbaum, J. A., Tortolero, S. R., . . . Schuster, M. A. (2015). Gender role orientation is associated with health-related quality of life differently among African-American, Hispanic, and White youth. Quality of Life Research: An International Journal of Quality of Life Aspects and Treatment, Care & Rehabilitation, 24(9), 2139-2149.

Sherman, M. (2020, June 16). Landmark ruling protects LGBT workers. The Chicago Tribune, Section 1.

Terman, L., & Miles, C. C. (1936). Sex and personality: Studies in masculinity and femininity. McGraw-Hill.

The Good Men Project. (n.d.). *About us.* https://goodmenproject.com/about/

Thompson, B. (2002). Multiracial feminism: Recasting the chronology of second wave feminism. *Feminist Studies*, 28(2), 337-360.

Tompkins, A. (2014). Asterisk. Transgender Studies Quarterly 1(1-2), 26-27.

Vandello, J. A., & Bosson, J. K. (2013). Hard won and easily lost: A review and synthesis of theory and research on precarious manhood. *Psychology of Men and Masculinity*, 14, 101-113.

Villalobos, B. (2017). Intersectional ecofeminism: Environmentalism for everybody. Environmental Protection Information Center. https://www.wildcalifornia.org/blog/intersectional-ecofeminism-environmentalism-for-everybody.

Wade, J. C. (1998). Male reference group identity dependence: A theory of male identity. *Counseling Psychologist*, 26(3), 349-383.

Wingood, G. M. & DiClemente, R. J. (2000). Application of the theory of gender and power to examine HIV-related exposures, risk factors, and effective interventions for women. *Health and Education Behavior*, 27(5), 539-565.

Youdin, R. (2016). Psychology of Aging 101. Springer Publishing.

Young, S. (1997). Changing the wor(l)d: Discourse, politics, and the feminist movement. Routledge.

Zanghellini, A. (2020). Philosophical problems with the gender-critical feminist argument against trans inclusion. *Sage Open*, 1-14. https://journals.sagepub.com/doi/10.1177/2158244020927029

Module 2: Research Methods

American Psychological Association. (2016). Revision of ethical standards of 3.04 of the "Ethical Principles of Psychologists and Code of Conduct" (2002, as amended 2010). *American Psychologist*, 71, 900.

Andoh,E. (2021). Psychology's urgent need to dismantle racism. *Monitor on Psychology*, 52(3), 38-45. https://www.apa.org/monitor/2021/04/cover-dismantle-racism

Beery, A. K. & Zucker, I. (2011). Sex bias in neuroscience and biomedical research. *Neuroscience & Biobehavioral Reviews*, 35(3), 565-572.

Bosson, J. K., Vandello, J. A. & Buckner, C. E. (2019). The psychology of gender. Sage Publishing.

Centers for Disease Control. (2020). FastStats: Body measurements. https://www.cdc.gov/nchs/fastats/body-measurements.htm

Condry, J. C. & Ross, D. F. (1985). Sex and aggression: The influence of gender label on perceptions of aggression in children. Society for Research in Child Development, 56(1), 225-233.

Heinrich, J., Heine, S. J., & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*, 33(2-3), 1-75. https://www.cambridge.org/core/journals/behavioral-and-brain-sciences/article/abs/weirdest-people-in-the-world/BF84F7517D56AFF7B7EB58411A554C17

Hyde, J. S. (2005). The gender similarities hypothesis. *American Psychologist*, 60, 581-592.

Lally, M. J. & Valentine-French, S. J. (2019). Lifespan development: A psychological perspective. College of Lake County.

McGregor, A. J., Hasnain, M., Sandberg, K., Morrison, M. F., Berlin, M., & Trott, J. (2016). How to study the impact of sex and gender in medical research: A review of resources. *Biology of Sex Differences*, 7(1), 61-72.

National Institutes of Health. (2015). *Consideration of sex as a biological variable in NIH-funded research*. https://grants.nih.gov/grants/guide/notice-files/NOT-OD-15-102.html.

Regitz-Zagrosek V. (2012). Sex and gender differences in health. Science & Society Series on Sex and Science. EMBO Reports, 13(7), 596–603. https://doi.org/10.1038/embor.2012.87

Swartout, (2013). K. M. (2013). The company they keep: How peer networks influence male sexual aggression. *Psychology of Violence*, *3*, 157-171.

Unger, R. K., & Crawford, M. E. (1996). Women and gender: A feminist psychology (2nd ed.). McGraw-Hill.

Module 3: Biological Effects

Avis, N. E., Stellato, R., & Crawford, S. (2001). Is there a menopausal syndrome? Menopausal status and symptoms across racial/ethnic groups. *Social Science and Medicine*, 52(3), 345-356.

Berk, L. (2004). *Development through the life span* (3rd ed.). Allyn and Bacon.

Berkeley Wellness. (2011). *The lowdown on low testosterone*. http://www.berkeleywellness.com/self-care/sexual-health/article/lowdown-low-testosterone

Blackless, M., Charuvastra, A., Derryck, A., Fausto-Sterling, A., Lauzanne, K., & Lee, E. (2000). How sexually dimorphic are we? Review and synthesis. *American Journal of Human Biology*, 12, 151-166.

Carlson, N. R. (1986). *Physiology of behavior*. Allyn and Bacon.

Carroll, J. L. (2016). Sexuality now: Embracing diversity (5th ed.). Cengage Learning.

Clarke, L. H., & Griffin, M. (2008). Visible and invisible aging: Beauty and work as a response to ageism. *Ageing & Society*, 28, 653-674.

Crooks, K. L., & Baur, K. (2007). Our sexuality (10th ed.). Wadsworth.

Dreger, A. (1998). Ambiguous sex—or ambivalent medicine? Ethical issues in the treatment of intersexuality. *Hastings Center Report*, 28, 24-35.

Grumbach, M. M., & Conte, F. A. (1998). Disorders of sex differentiation. In: Wilson, J. D., Foster, D. W., Kronenborg, H. M., & Larsen, P. R. (Eds.) Williams Textbook of Endocrinology, Ed: 9th. (pps. 1303-1425). WB Saunders.

Herdt, G. (1996). Third sex, third gender–Beyond sexual dimorphism in culture and history. MIT Press.

Hines, M. (2011). Gender development and the human brain. Annual Review of Neuroscience, 34, 69-88.

Hines, M. (2015). Gendered development. In R. M. Lerner & M. E. Lamb (Eds.), *Handbook of child psychology and developmental sciences, socioemotional processes* (pp. 842-887). John Wiley & Sons.

Huang, J. (2007). Hormones and female sexuality. In M. Tepper & A. F. Owens (Eds.), Sexual Health, Vol 2: Physical Foundations (pp. 43-78). Praeger.

Jarne, P., & Auld, J. R. (2006). Animals mix it up too: The distribution of self-fertilization among hermaphroditic animals. *Evolution*, 60, 1816–1824.

Kagawa-Singer, M., Wu, K., & Kawanishi, Y. (2002). Comparison of the menopause and midlife transition between Japanese American and European American women. *Medical Anthropology Quarterly*, 16(1), 64-91.

Kaur, S., Walia, I., & Singh, A. (2004). How menopause affects the lives of women in suburban Chandigarh, India. *Climacteric*, 7(2), 175-180.

Kite, M. E., Stockdale, G. D., Whitley, B. J., & Johnson, B. T. (2005). Attitudes toward younger and older adults: An updated meta-analytic review. *Journal of Social Issues*, 61, 241-266.

Lachman, M. E. (2004). Development in midlife. *Annual Review of Psychology*, *55*(1), 305-331. doi: 10.1146/annurev.psych.55.090902.141521

Lally, M. J. & Valentine-French, S. J. (2019). Lifespan development: A psychological perspective. College of Lake County.

Lucas, D. & Fox, J. (2018). The psychology of human sexuality. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. DEF publishers.

Lucas, D. & Fox, J. (2018). Human sexual anatomy and physiology. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. DEF publishers.

Madden, S., St Pierre-Hansen, N., & Kelly L. (2010). First Nations women's knowledge of menopause: Experiences and perspectives. *Canadian Family Physician*, *56*(9), e331-e337.

Matura, L. A., Ho, V. B., Rosing, D. R., Bondy, C. A. (2007). Aortic dilatation and dissection in Turner syndrome. *Circulation*, 116, 1663-70.

Mayo Clinic. (2022). *Pubertal blockers for transgender and gender-diverse youth.* https://www.mayoclinic.org/diseases-conditions/gender-dysphoria/in-depth/pubertal-blockers/art-20459075

Morita, Y., Iwamoto, I., Mizuma, W., Kuwahata, T., Matsuo, T., Yoshinaga, M., &Douchi, T. (2006). Precedence of the shift of body-fat distribution over the change in body composition after menopause. *Journal of Obstetrics and Gynecology*, 32, 513-516.

National Institutes of Health. (2007). *Menopause: MedlinePlus Medical Encyclopedia*. http://www.nlm.nih.gov/medlineplus/ency/article/000894.htm

National Institutes of Health. (2014). *What is atherosclerosis*? http://www.nhlbi.nih.gov/health/health-topics/topics/atherosclerosis

National Institutes of Health. (2019). Klinefelter syndrome. https://ghr.nlm.nih.gov/condition/klinefelter-syndrome

National Institutes of Health. (2020). 47,XYY syndrome. https://ghr.nlm.nih.gov/condition/47xyy-syndrome#statistics

National Institutes of Health. (2020). Androgen insensitivity syndrome. https://ghr.nlm.nih.gov/condition/androgen-insensitivity-syndrome

National Institutes of Health. (2020). *Triple X syndrome*. https://ghr.nlm.nih.gov/condition/triple-x-syndrome#definition

National Institutes of Health. (2020). What is a gene? https://ghr.nlm.nih.gov/primer/basics/gene#:~:text=However%2C%20many%20genes%20do%20not,one%20inherited%20from%20each%20parent.

Nolan, J., & Scott, J. (2009). Experiences of age and gender: Narratives or progress and decline. *International Journal of Aging & Human Development*, 69(2), 133-158.

North American Menopause Society. (2016). Menopause FAQs: Understanding the symptoms. http://www.menopause.org/for-women/expert-answers-to-frequently-asked-questions-about-menopause/menopause-faqs-understanding-the-symptoms

Palacios, S., Henderson V. W., & Siseles, N. (2010). Age of menopause and impact of climacteric symptoms by geographical region. *Climacteric*, 13(5), 419-428.

Roberts, C. (2022). Persistence of transgender gender identity among children and adolescents. *Pediatrics*, 150 (2), e2022057693. https://doi.org/10.1542/peds.2022-057693

Rossi, A. S. (2004). The menopausal transition and aging process. In How healthy are we: A national study of health in midlife. (pp. 550-575). University of Chicago Press.

Schoenberg, N. (2018, November 4). It's medically sanctioned violence and torture. *The Chicago Tribune*, pp. 1A, 12A, 13A.

Swaab, D. F. (2004). Sexual differentiation of the human brain: Relevance for gender identity, transsexualism and sexual orientation. *Gynecological Endocrinology*, 19, 301-312.

Swierzewski, S. J. (2015). *Erectile Dysfunction*. http://www.healthcommunities.com/erectile-dysfunction/overview-of-impotence.shtml

Thurston, W. E, & Vissandjée, B. (2005). An ecological model for understanding culture as a determinant of women's health. *Critical Public Health*, 15(3), 229-242.

WebMD. (2016). *Erectile Dysfunction: Testosterone Replacement Therapy*. http://www.webmd.com/erectile-dysfunction/guide/testosterone-replacement-therapy?page=2#3

Wilson, L. (2021, May 11). What are puberty blockers? *New York Times*. https://www.nytimes.com/2021/05/11/well/family/what-are-puberty-blockers.html

Wingood, G. M., & DiClemente, R. J. (2000). Application of the theory of gender and power to examine HIV related exposures. Risk factors, and effective intervention for women. *Health and Education Behavior*, 27(5), 539-565.

Wisniewski, A. B., Migeon, C J., Meyer-Bahlburg, H. F., Gearhart, J. P., Berkovitz, G. D., Brown, T. R., & Money, J. (2000). Complete androgen insensitivity syndrome: Long-term medical, surgical, and psychosexual outcome. *Journal of Clinical Endocrinology and Metabolism*, 85, 2664–2669.

Wizemann, T. M., & Pardue, M. L. (2001). Sex begins in the womb. In T. M. Wizemann & M. L. Pardue (Eds.), Exploring the Biological Contributions to Human Health: Does Sex Matter? National Academies Press (US).

Yick-Flanagan, A. (2013). Meanings of menopause: Cultural considerations. http://www.netce.com/coursecontent.php?courseid=976

Module 4: Gender Identity Theories

American Academy of Pediatrics. (2015). Gender identity development in children. https://www.healthychildren.org/English/ages-stages/ gradeschool/Pages/Gender-Identity-and-Gender-Confusion-In-Children.aspx

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). https://doi.org/10.1176/appi.books.9780890425596

 $American \ Psychological \ Association. \ (2020). \ Publication \ manual of the \ American \ Psychological \ Association \ (7th \ ed.). \ https://doi.org/10.1037/0000165-000$

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.

Basow, S. (2008). Gender socialization, or how long a way has baby come? In J.C. Chrisler, C. Golden, & P. D. Rozee (Eds.), *Lectures on the psychology of women* (4th ed., pp. 81-95). McGraw-Hill.

Bem, S. L. (1981). Gender schema theory: A cognitive account of sex typing. Psychological Review, 88, 354-364.

Bem, S. L. (1983). Gender schema theory and its implications for child development: Raising gender aschematic children in a gender schematic society. *Signs*, *8*, 598-616.

Bigler, R. S., & Leaper, C. (2015). Gendered language: Psychological principles, evolving practices, and inclusive policies. *Policy Insights from the Behavioral and Brain Sciences*, 2(1), 187-194. https://doi:10.1177/23727322I5600452

Bigler, R. S., & Liben, L. S. (2007). Developmental intergroup theory: Exploring and reducing children's social stereotyping and prejudice. *Current Directions in Psychological Science*, 16, 162-166.

Boe, J. L., & Woods, R. J. (2018). Parents' influence on infants' gender-typed toy preferences. *Sex Roles*, 79(5–6), 358–373.

Bosson, J. K., Vandello, J. A. & Buckner, C. E. (2019). The psychology of gender. Sage Publishing.

Brody, L. R. (1999). Gender, emotion, and the family. Harvard University Press.

Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. Cambridge, MA: Harvard University Press.

Brown, C. S., Jewell, J. A., & Tam, M. J. (2020). Gender. In R. Biswas-Diener & E. Diener (Eds), *Noba textbook series: Psychology*. DEF publishers. http://noba.to/ge5fdhba

Bussey, K., & Bandura, A. (1999). Social cognitive theory of gender development and differentiation. *Psychological Review*, 106(4), 676-713.

Centers for Disease Control and Prevention. (2020). *About adult BMI*. https://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html

Chang, A., Sandhofer, C. M., Adelchanow, L., & Rottman, B. (2010). Language, culture, and number: Differences in numerical language input in Mandarin Chinese and English. *Journal of Child Language*, 38, 341-355.

Common Sense. (2017). Watching gender: How stereotypes in movies and on TV impact kids' development. https://wnywomensfoundation.org/app/uploads/2017/08/16.-Watching-Gender-How-Stereotypes-in-Movies-and-on-TV-Impact-Kids-Development.pdf

Coyne, S. M., Linder, J. R., Rasmussen, E. E., Nelson, D. A., & Birkbeck, V. (2016). Pretty as a princess: Longitudinal effects of engagement with Disney princesses on gender stereotypes, body esteem, and prosocial behavior in children. *Child Development*, 87(6), 1909-1925. https://doi.org/10.1111/cdev.12569

Dixon, W. E. (2003). Twenty studies that revolutionized child psychology. Prentice Hall.

Else-Quest, N. M. & Hyde, J. S. (2018). The psychology of women and gender. Sage Publishing.

Freeman, N. (2007). Preschoolers' perceptions of gender appropriate toys and their parents' beliefs about genderized behaviors: Miscommunication, mixed messages, or hidden truths? *Early Childhood Education Journal*, 34, 357–366.

Garcia, E. B., Sulik, M. J. & Obradovic, J. (2019). Teachers' perceptions of students' executive functions: Disparities by gender, ethnicity, and ELL status. *Journal of Educational Psychology*, 111(5), 918-931. https://doi.org/10.1037/edu0000308

Guttman, D. (1987). Reclaimed powers: Towards a new psychology of men and women in later life. Basic Books.

Haggard, M. C., Kaelen, R., Saroglou, V., Klein, O., & Rowatt, W. C. (2019). Religion's role in the illusion of gender equality: Supraliminal and subliminal religious priming increases benevolent sexism. *Psychology of Religion and Spirituality*, 11(4), 392–398. https://doi-org.10.1037/rel0000196

Hines, M. (2015). Gendered development. In R. M. Lerner & M. E. Lamb (Eds.), *Handbook of child psychology and developmental sciences, socioemotional processes* (pp. 842-887). John Wiley & Sons.

Hines, M., Johnston, K., Golombok, S., Rust, J., Stevens, M., Golding, J., & The Alspac Study Team. (2002). Prenatal stress and gender role behavior in girls and boys: A longitudinal, population study. *Hormones and Behavior*, 42, 126–134.

Kirsch, A. C., & Murnen, S. K. (2015). "Hot" girls and "cool dudes": Examining the prevalence of the heterosexual script in American children's television media. *Psychology of Popular Media Culture*, 4(1), 18-30. doi: 10.1037/ppm0000017

Knorr, C. (2017). *Gender stereotypes are messing with your kid.* https://www.commonsensemedia.org/blog/gender-stereotypes-are-messing-with-your-kid

LaFrance, M., Hecht, M. A., & Paluck, E. L. (2003). The contingent smile: A meta-analysis of sex differences in smiling. *Psychological Bulletin*, 129, 305–334.http://dx.doi.org/10.1037/0033-2909.129.2.305

LaFrance, M., & Vial, A. C. (2016). Gender and nonverbal behavior. In. D. Matsumoto, H. C. Hwang, & M. G. Frank, (Eds.), APA Handbook of Nonverbal Communication (pp. 139-161). American Psychological Association.

Leaper, C. & Smith, T. E. (2004). A meta-analytic review of gender variations in children's language use: Talkativeness, affiliative speech, and assertive speech. *Developmental Psychology*, 40(6), 993-1027.

Lee, E. E., & Troop-Gordon, W. (2011). Peer socialization of masculinity and femininity: Differential effects of overt and relational forms of peer victimization. *British Journal of Developmental Psychology*, 29(2), 197-213. https://doi.org/10.1111/j.2044-835x.2010.02022.x

Lemaster, P., Delaney, R. K., & Strough, J. (2015). Cross-over, degendering or...? A multidimensional approach to life-span gender development. *Sex Roles* 76(11), 669-681.

Lytton, H., & Romney, D. M. (1991). Parents' differential socialization of boys and girls: A meta-analysis. *Psychological Bulletin*, 109, 267-296.

Maccoby, E., & Jacklin, C. (1987). Gender segregation in childhood. Advances in Child Development and Behavior, 20, 239-287.

MacPhee, D. & Prendergast, S. (2019). Room for improvement: Girls' and boys' home environments are still gendered. Sex Roles, 80, 332-346.

Marks, J., Bun, L. C., & McHale, S. M. (2009). Family patterns of gender role attitudes. *Sex Roles*, 61(3-4), 221–234. https://doi.org/10.1007/s11199-009-9619-3

Matthes, J., Prieler, M. & Adam, K. (2016). Gender-role portrayals in television advertising across the globe. *Sex Roles*, 75, 314–327. https://doi.org/10.1007/s11199-016-0617-y

McCormick, M. P., & O'Connor, E. E. (2015). Teacher-child relationship quality and academic achievement in elementary school: Does gender matter? *Journal of Educational Psychology*, 107(2), 502-516.

McHale, S. M., Updegraff, K. A., Helms-Erikson, H., & Crouter, A. C. (2001). Sibling influences on gender development in middle childhood and early adolescence: A longitudinal study. *Developmental Psychology*, 37(1), 115-125.

Mills, J. S., Shannon, A., & Hogue, J. (2017). Beauty, body image, and the media. In M. P. Levine (Ed.), *Perception of beauty* (pp. 145-157). https://www.intechopen.com/books/perception-of-beauty/beauty-body-image-and-the-media

Mischel, W. (1966). A social learning view of sex differences in behavior. In E. E. Maccoby (Ed.), *The development of sex differences* (pp. 57-81). Stanford University Press.

National Center on Parent, Family and Community Engagement. (2020). *Healthy gender development and young children*. https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/healthy-gender-development.pdf

Olson, K. R., & Gülgöz, S. (2018). Early findings from the TransYouth Project: Gender development in transgender children. *Child Development Perspectives*, 12(2), 93-97.

Retelsdorf, J., Schwartz, K., & Asbrock, F. (2015). "Michael can't read!" Teachers' gender stereotypes and boys' reading self-concept. *Journal of Educational Psychology*, 107(1), 186–194. https://doi.org/10.1037/a0037107

Robinson-Cimpian, J. P., Lubienski, S. T., Ganley, C. M., & Copur-Gencturk, Y. (2014). Teachers' perceptions of students' mathematics proficiency may exacerbate early gender gaps in achievement. *Developmental Psychology*, 50(4), 1262–1281. https://doi.org/10.1037/a0035073

Ruble, D. N., Martin, C., & Berenbaum, S. (2006). Gender development. In W. Damon & R. M. Lerner (Series Eds.) & N. Eisenberg (Vol. Ed.), Handbook of child psychology: Vol. 3. Social, emotional, and personality development (6th ed., pp. 858–932). New York, NY: Wiley.

Russo, F. (2016). Debate growing about how to meet the urgent needs of transgender kids. *Scientific American Mind*, 27(1), 27-35.

Silver, C. B. (2003). Gendered identities in old age: Toward (de) gendering? *Journal of Aging Studies*, 17, 379–397. doi:10.1016/S0890-4065(03)00059-8.

Stermer, S. P., & Burkley, M. (2015). SeX-box: Exposure to sexist video games predicts benevolent sexism. *Psychology of Popular Media*, 4(1), 47-55. doi: 10.1037/a0028397

Sutfin, E. L., Fulcher, M., Bowles, R. P., & Patterson, C. J. (2008). How lesbian and heterosexual parents convey attitudes about gender to their children: The role of gendered environments. *Sex Roles*, 58, 501-513.

Tsai, J. L., Ang, J. Y. Z., Blevins, E. Goernandt, J., Fung, H. H., Jiang, D., ... Haddouk, L. (2016). Leaders' smiles reflect cultural differences in ideal affect. *Emotion*, 16(2), 183-195.

Watt, H. M. G., & Eccles, J. S. (Eds.). (2008). Gender and occupational outcomes: Longitudinal assessments of individual, social, and cultural influences. American Psychological Association. doi:10.1037/11706-000

Module 5: Gender Differences

American Psychological Association. (2007). Report of the APA task force on the sexualization of girls. https://www.apa.org/pi/women/programs/girls/report-full.pdf

André, N., & Metzler, J. N. (2011). Gender differences in fear of success: A preliminary validation of the Performance Success Threat Appraisal Inventory. *Psychology of Sports and Exercise*, 12(4), 415-422. https://doi.org/10./j.psychsport.2011.02.006

Baldiga, K. (2013). Gender differences in willingness to guess. Management Science, 60, 434-448.

Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (2001). Self-efficacy beliefs as shapers of children's aspirations and career trajectories. *Child Development*, 72, 187-206.

Baron-Cohen, s., & Wheelwright, S. (2004). The empathy quotient: An investigation of adults with Asperger syndrome or high functioning autism, and normal sex differences. *Journal of Autism and Developmental Disorders*, 34(2). 163-175.

Bartley, E. J., & Fillingim, R. B. (2013). Sex differences in pain: A brief review of clinical and experimental findings. *British Journal of Anaesthesia*, 111(1), 52-58.

Bartley, E. J., & Rhudy, J. L. (2013). Comparing pain sensitivity and the nociceptive flexion reflex threshold across the mid-follicular and lateluteal menstrual phases in healthy women. *Clinical Journal of Pain*, 29, 154–161.

Barrett, L. F. & Bliss-Moreau, E. (2009). She's emotional. He's having a bad day: Attributional explanations for emotion stereotypes. *Emotion*, *9*, 649-658.

Bosson, J. K., Vandello, J. A. & Buckner, C. E. (2019). The psychology of gender. Sage Publishing.

Brody, L. R., & Hall, A. J. (2008). Gender and emotion. In M. Lewis, J. M. Haviland, & L. Feldman Barrett (Eds.), *Handbook of Emotions* (3rd ed., pp. 395–408). Guilford Press.

Brody, L. R., & Hall, A. J. (2010). Gender, emotion, and socialization. In J. C. Chrisler & D. R. McCreary (Eds.), *Handbook of Gender Research in Psychology*, (Vol 1, pp. 429-454). Springer.

Cahill, L. (2012). His brain, her brain. *Scientific American Special Editions*, 21, 4-11. https://doi.org/10.1038/scientificamericanbrain0512-4

Cairns, B. E., & Gazerani, P. (2009). Sex-related differences in pain. Maturitas, 63, 292–296.

Chaplin, T. M., Cole, P. M., & Zahn-Waxler, C. (2005). Parental socialization of emotion expression: Gender differences and relations to child adjustment. *Emotions*, 5(1), 80-88. https://doi.org/10.10007/s11199-010-9873-4

Cherry, F., & Deaux, K. (1978). Fear of success versus fear of gender inappropriate behavior. Sex Roles, 4(1), 97-101.

Costa, P. T., Jr., Terracciano, A., & McRae, R. R. (2001). Gender differences in personality traits across cultures: Robust and surprising findings. *Journal of Personality and Social Psychology*, 81, 322-331.

Courtright, S. H., McCormick, B. W., Postlethwaite, B. E., Reeves, C. J., & Mount, M. K. (2013). A meta-analysis of sex differences in physical ability: Revised estimates and strategies for reducing differences in selection contexts. *Journal of Applied Psychology*, 98(4), 623-641.

Cuddy, A. J. C., Fiske, S.T., Kwan, V. Y., Glick, P., Demouline, S., Leyens, J., ... Ziegler, R. (2009). Stereotype content model across cultures: Toward universal similarities and some differences. *British Journal of Social Psychology*, 48, 1-33.

Cuddy, A. J. C., Wolf. E. B., Glick, P., Crotty, S., Chong, J., & Norton, N. I. (2015). Men as cultural ideals: Cultural values moderate gender stereotype content. *Journal of Personality and Social Psychology*, 109, 622-635.

Eagly, A. H., Nater, C., Miller, D. I., Kaufmann, M., & Sczesny, S. (2020). Gender stereotypes have changed: A cross-temporal meta-analysis of US public opinion polls from 1946 to 2018. *American Psychologist*, 75(3), 301-315.

Else-Quest, N. M. & Hyde, J. S. (2018). The psychology of women and gender. Sage Publishing.

Fiske, S. T., Cuddy, A. J. C., Glick, P. & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow perceived status and competition. *Journal of Personality and Social Psychology*, 82, 878-902.

Forsythe L. P., Thorn, B., Day, M., & Shelby, G. (2011). Race and sex differences in primary appraisals, catastrophizing, and experimental pain outcomes. *Journal of Pain*, 12, 563-572.

Geer, E. A., Quinn, J. M., & Ganley, C. M. (2019). Relations between spatial skills and math performance in elementary school children: A longitudinal investigation. *Developmental psychology*, 55(3), 637–652.

Goldin, G., Goldin, R., & Foulkes, A. (2005, February 21). How Summers offended: Harvard president's comments underscored the gender bias we've experienced. The Washington Post, p. A27. http://www.washingtonpost.com/wp-dyn/articles/A40693-2005Feb20.html

Gray, H., Lyth, A., McKenna, C., Stothard, S., Tymms, P., and Copping, L. (2019). Sex differences in variability across

nations in reading, mathematics and science: a metaanalytic extension of baye and monseur. *Large-scale Assessments in Education*, 7, 2. https://doi.org/10.1186/s40536-019-0070-9

Gromeier, M., & Koefer, D., & Schack, T. (2017). Gender differences in motor skills of the overarm throw. *Frontiers in Psychology*, 8, 1-12. https://doi.org/10.3389/fpsyg.2017.00212

Grossman, M., & Wood, W. (1993). Sex differences in intensity of emotional experience: A social role interpretation. *Journal of Personality and Social Psychology*, 65, 1010-1022.

Haier, R. J. (2009). What does a smart brain look like? Scientific American Mind, 20(6), 26-33.

Haines, E' L., Deaux, K., & Lofaro, N. (2016). The times they are a-changing...or are they not? A comparison of gender stereotypes, 1983-2014. *Psychology of Women Quarterly*, 40(3), 353-363.

Halpern, D. F., Benbow, C. P., Geary, D. C., Gur, R. C., Hyde, J. S., & Gernsbache, M. A. (2007). The science of sex differences in science and mathematics. *Psychological Science in the Public Interest*, 8(1), 1–51.

Hines, M. (2011). Gender development and the human brain. Annual Review of Neuroscience, 34, 69-88.

Hines, M. (2015). Gendered development. In R. M. Lerner & M. E. Lamb (Eds.), Handbook of child psychology and developmental sciences, socioemotional processes (pp. 842-887). John Wiley & Sons.

Horner, M. S. (1969). Fail: Bright women. Psychology Today, 3(6), 36-38.

Hubble, C., & Zhou, J. (2016). Gender differences in marathon pacing and performance prediction. Journal of Sports Analytics, 2, 19-36. doi: 10.3233/JSA-150008

Hyde, J. S. (2005). The gender similarities hypothesis. *American Psychologist*, 60, 581-592.

Hyde, J. S. (2014). Gender similarities and differences. In S. Fiske, D. Schacter, & S. Taylor (Eds.), *Annual review of psychology* (pp.373-398). Annual Reviews.

Keefe F. J., Brown, G. K., Wallston, K. A., & Caldwell, D. S. (1989). Coping with rheumatoid arthritis pain: catastrophizing as a maladaptive strategy. *Pain*, 37, 51–56.

Keller, J. (2002). Blatant stereotype threat and women's math performance: Self-handicapping as a strategic means to cope with obtrusive negative performance expectations. *Sex Roles* 47, 193–198 (2002). https://doi.org/10.1023/A:1021003307511

Knechtle, B., Rosemann, T., & Rüst, C. A. (2015). Women cross the 'Catalina Channel' faster than men. Springerplus, 4, 332.

Lally, M. J. & Valentine-French, S. J. (2018). *Introduction to Psychology*. College of Lake County.

Lamm, C., Decety, J., & Singer, T. (2011). Meta-analytic evidence for common and distant neural networks associated with directly experienced pain and empathy for pain. *Neuroimage*, 54, 2492-2502. doi: 10.1016/j.neuroimage.2010.10.014

Lauer, J.E., Yhang, E., & Lourenco, S. F. (2019). The development of gender differences in spatial reasoning: A meta analytic review. *Psychological Bulletin*, 145(6), 537-565.

MacArthur, H. J. & Shields, S. A. (2015). There's no crying in baseball, or is there? Male athletes, tears, and masculinity in North America. *Emotions Review*, 7, 39-46.

Marathon Swimmers Federation. (2020). Longest open water swims. https://longswims.com/longest-swims/#ow

McClure, E. B. (2000). A meta-analytic review of sex differences in facial expression processing and their development in infants, children, and adolescents. *Psychological Bulletin*, 126(3), 424–453.

Mesquita, B., Boiger, M., & DeLeersnyder, J. (2016). The cultural construction of emotions. *Current Opinion in Psychology*, 8, 31-36.

Morris, A., Williams, J., Atwater, A., & Wilmore, J. (1982). Age and sex differences in motor performance of 3 through 6 year old children. Research Quarterly for Exercise and Sport, 53, 214–221. https://doi.org/10.1080/02701367.1982.10609342

Nisbett, R. E., Aronson, J., Blair, C., Dickens, W., Flynn, J., Halpern, D. F., & Turkheimer, E. (2012). Intelligence: New findings and theoretical developments. *American Psychologist*, 67(2), 130-159.

Okahana, H., & Zhou, E. (2018). Graduate enrollments and degrees 2017. Council of Graduate Schools.

Parmley, M., & Cunningham, J. G. (2014). She looks sad, but he looks mad: The effects of age, gender, and ambiguity on emotion perception. *Journal of Social Psychology*, 154(4), 323-338.

Petersen, J. L., & Hyde, J. S. (2011). Gender differences in sexual attitudes and behaviors: A review of metaanalytic results and large datasets. *Journal of Sex Research*, 48(2), 149-165.

Picho, K., Rodriguez, A., & Finnie, L. (2013). Exploring the moderating role of context on the mathematics performance of females under stereotype threat: a meta-analysis. *The Journal of Social Psychology*, 153(3), 299–333. https://doi.org/10.1080/00224545.2012.737380

Rahim-Williams, B., Riley, J. L. III, Williams, A. K., & Fillingim, R. B. (2012). A quantitative review of ethnic group differences in experimental pain response: do biology, psychology, and culture matter? *Pain Medicine*, 13, 522–540.

Reilly, D. (2012). Gender, culture, and sex-typed cognitive abilities. *PLOS One*, 7, e39904. https://doi.org/10.1371/journal.pone.0039904

Reilly, D., Neumann, D. L. & Andrews, G. (2018). Gender differences in reading and writing achievement: Evidence from the National Assessment of Educational Progress (NAEP). American Psychologist. Advance online publication. http://dx.doi.org/10.1037/amp00003566

Riley III, J. L., Robinson, M. E., Wise, E. A., & Price, D. D. (1999). A meta-analytic review of pain perception across the menstrual cycle. Pain, 81, 225-235.

Roberton, M. A., & Konczak, J. (2001). Predicting children's overarm throw ball velocities from their developmental levels in throwing. *Research Quarterly for Exercise and Sport*, 72, 91–103. https://doi.org/10.1080/02701367.2001.10608939

Smeding A., Dumas F., Loose, F., & Régner, I. (2013). Order of administration of math and verbal tests: An ecological intervention to reduce stereotype threat on girls' math performance. *Journal of Educational Psychology*, 105(3), 850-860.

Smith, Y. R., Stohler, C. S., Nichols, T. E., Bueller, J. A., Koeppe, R. A., & Zubieta, J. K. (2006). Pronociceptive and antinociceptive effects of estradiol through endogenous opioid neurotransmission in women. *Journal of Neuroscience*, 26, 5777–5785.

Somers, T. J., Kurakula, P.C., Criscione-Schreiber, L., Keefe, F. J., & Clowse, M. E. B. (2012). Self-efficacy and pain catastrophizing in systemic lupus erythematosus: relationship to pain, stiffness, fatigue, and psychological distress. *Arthritis Care & Research*, 64, 1334–13340.

Spinath, B., Eckert, C., & Steinmaytr, R. (2014). Gender differences in school success: What are the roles of student's intelligence, personality and motivation? *Education Research*, 56, 230-243.

Thomas, J. R., & French, E. (1985). Gender differences across age in motor performance: A meta-analysis. *Psychological Bulletin*, 98, 269–282. https://doi.org/10.1037/0033-2909.98.2.260

U.S. Bureau of Labor Statistics (2018). TED: The economics daily: Labor force participation rates by age and sex, seasonally adjusted. https://www.bls.gov

van den Tillaar, R., & Ettema, G. (2004). A force-velocity relationship and coordination patterns in overarm throwing. *Journal of Sports Science & Medicine*, 3, 211–219.

Voyer, D., Postma, A., Brake, B., & Imperato-McGinley, J. (2007). Gender differences in object location memory: A meta-analysis. *Psychological Bulletin & Review*, 14, 23-28.

Voyer, D., Voyer, S., & Bryden, M. P. (1995). Magnitude of sex differences in spatial abilities: A meta-analysis and consideration of critical variables. *Psychological Bulletin*, 117, 250–270.

Weisberg, Y. J., DeYoung, C. G. & Hirsh, J. B. (2011). Gender differences in personality across the ten aspects of the big five. *Frontiers in Psychology*, 2(178), 1-11. https://dx.doi.org/10.3389/fpsyg.2011.00178

Weiss, E. M., Kemmler, G., Deisenhammer, E. A., Fleischhaker, W. W., & Delazer, M. (2003). Sex differences in cognitive functions. *Personality and Individual Differences*, 35, 863-875.

Wells, L. J., Gillespie, S. M., & Rotshtein, P. (2016). Identification of emotional facial expressions: Effects of expression, intensity, and sex on eye gaze. *PLOS One*, 11(2), 1-20. https://doi.org/10.1371/journal.pone.0168307.

Module 6: Sexual Behavior

American Psychological Association. (2016). *Sexual orientation and homosexuality*. Retrieved from http://www.apa.org/topics/lgbt/orientation.aspx

Aristegui, I., Castro Solano, A., & Buunk, A. P. (2018). Mate preferences in Argentinean transgender people: An evolutionary perspective. *Personal Relationships*, 25, 330-350.

Bailey, J. M., Kim, P. Y., Hills, A., & Linsenmeier, J. A. W. (1997). Butch, femme, or straight acting? Partner preferences of gay men and lesbians. *Journal of Personality and Social Psychology*, 73, 960-973.

Bailey, J. M., & Pillard, R. C. (1991). A genetic study of male sexual orientation. *Archives of General Psychiatry*, 48, 1089-1096.

Bailey, J. M., Pillard, R. C., Neale, M. C. & Agyei, Y. (1993). Heritable factors influence sexual orientation in women. *Archives of General Psychology*, 50, 217-223.

Balthazart, J. (2018). Fraternal birth order effect on sexual orientation explained. *Proceedings of the National Academy of Sciences of the United States of America*, 115(2), 234-236.

Barrios, R. J., & Lundquist, J. H. (2012). Boys just want to have fun? Masculinity, sexual behaviors, and romantic intentions of gay and straight males in college. *Journal of LGBT Youth*, 9(4), 271–296. doi.org/10.1080/19361653.2012.716749

Bauermeister, J. A., Johns, M. M., Sandfort, T. G., Eisenberg, A., Grossman, A. H., & D'Augelli, A. R. (2010). Relationship trajectories and psychological well-being among sexual minority youth. *Journal of Youth and Adolescence*, 39(10), 1148-1163.

Bech-Sorenson, J., & Pollet, T. V. (2016). Sex differences in mate preferences: A replication study, 20 years later. *Evolutionary Psychological Science*, 2, 171–176.

Bisson, M. A., & Levine, T. R. (2009). Negotiating a friends with benefits relationship. *Archives of Sexual Behavior*, 38, 66–73. doi:10.1007/s10508-007-9211-2

Blanchard, R. (2001). Fraternal birth order and the maternal immune hypothesis of male homosexuality. *Hormones and Behavior*, 40, 105-114.

Bogle, K. A. (2007). The shift from dating to hooking up in college: What scholars have missed. *Sociology Compass*, 1/2, 775–788.

Bogle, K. A. (2008). Hooking up: Sex, dating, and relationships on campus. New York University Press.

Bosson, J. K., Vandello, J. A. & Buckner, C. E. (2019). The psychology of gender. Sage Publishing.

Buss, D. M., & Bames, M. (1986). Preferences in human mate selection. *Journal of Personality and Social Psychology*, 50(3), 559–570.

Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. Psychological Review, 100, 204–232. doi:10.1037/0033-295X.100.2.204

Carlson, N. R. (2011). Foundations of behavioral neuroscience (8th ed.). Pearson Education.

Carroll, J. L. (2016). Sexuality now: Embracing diversity (5th ed.). Cengage Learning.

Cohen-Bendehan, C. C., van de Beek, C. & Berenbaum, S. A. (2005). Prenatal sex hormone effects on child and adult sex-typed behavior: Methods and findings. *Neuroscience and Biobehavioral Reviews*, 47, 230-237.

Farber, B. A., & Nitzburg, G. C. (2016). Young adult self-disclosures in psychotherapy and on Facebook. *Counselling Psychology Quarterly*, 29, 76-89.

Farvid P. (2015) Heterosexuality. In C. Richards & M. J. Barker (Eds.). The Palgrave handbook of the psychology of sexuality and gender (pp. 92-108). Macmillan.

Gallant, S., Williams, L., Fisher, M., Cox, A. (2011). Mating strategies and self-presentation in online personal advertisement photographs. *Journal of Social, Evolutionary, and Cultural Psychology*, *5*(1), 106-121.

Garcia, J. R., & Reiber, C. (2008). Hook-up behavior: A biopsychosocial perspective. *The Journal of Social, Evolutionary, and Cultural Psychology, 2,* 192–208.

Garcia, J. R., Reiber, C., Massey, S. G., & Merriwether, A. M. (2012). Sexual hookup culture: A review. *Review of General Psychology*, 16(2), 161-176. doi:10.1037/a0027911

Hyde, J. S. (2014). Gender similarities and differences. In S. Fiske, D. Schacter, & S. Taylor (Eds.), *Annual review of psychology* (pp.373-398). Annual Reviews.

Jenkins Hall, W., & Tanner, A. E. (2016). US Black college women's sexual health in hookup culture: Intersections of race and gender. *Culture, Health & Sexuality*, 18(11), 1265-1278.

Kinsey, A., Pomeroy, W.B., & Martin, C. E. (1948). Sexual behavior in the human male. PA: Saunders.

LaBrie, J.W., Hummer, J. F., Ghaidarov, T. M., Lac, A., & Kenney, S. R. (2014). Hooking up in the college context: The event-level effects of alcohol use and partner familiarity on hookup behaviors and contentment. *Journal of Sex Research*, 51(1), 62–73.

Lippa, R. A. (2007). The preferred traits of mates in a cross-national study of heterosexual and homosexual men and women: An examination of biological and cultural influences. *Archives of Sexual Behavior*, 36, 193–208.

Machia, L. V.., Proulx, M. L., Ioerger, M., & Lehmiller, J. J. (2020). A longitudinal study of friends with benefits. *Personal Relationships*, 27, 47-60.

March, E., Van Doorn, G., Grieve, R. (2018). Netflix and chill? What sex differences can tell us about mate preferences in (hypothetical) booty-call relationships. Evolutionary Psychology, 16(4), 1-10. doi: 10.1177/1474704918812138

Monto, M. A., & Carey, A. G. (2014). A new standard of sexual behavior? Are claims associated with the "hookup culture" supported by general social survey data? *Journal of Sex Research*, 51, 605–615. doi.org/10.1080/00224499.2014.906031

Oliver, M. B., & Hyde, J. S. (1993). Gender differences in sexuality: A meta-analysis. *Psychological Bulletin*, 114, 29–51. doi:10.1037/0033-2909.114.1.29

Owen, J., & Fincham, F. D. (2011). Young adults' emotional reactions after hooking up encounters. *Archives of Sexual Behavior*, 40, 321–330. doi:10.1007/s10508-010-9652-x

Poushter, J., & Kent, N. O. (2020). The global divide on homosexuality persists: But increasing acceptance in many countries over past two decades. Pew Research. https://www.pewresearch.org/global/2020/06/25/global-divide-on-homosexuality-persists/

Ryle, R. (2011). Questioning gender. Sage Publishing.

Schmitt, D. P., Alcalay, L., Allik, J., Ault, L., Austers, I., Bennett, K. L., . . . Zupane`ie`, A. (2003). Universal sex differences in the desire for sexual variety: Tests from 52 nations, 6 continents, and 13 islands. *Journal of Personality and Social Psychology*, 85, 85–104. doi:10.1037/0022-3514.85.1.85

Schwartz, G., Kim, R., Kolundzija, A., Rieger, G., & Sanders, A. (2010). Biodemographic and physical correlates of sexual orientation in men. *Archives of Sexual Behavior*, 39, 93-109

Snyder, T. D., & Dillow, S. A. (2015). Digest of Education Statistics 2013. National Center for Education Statistics.

Sutton, T. E., & Simons, L. G. (2014). Sexual assault among college students: Family of origin hostility, attachment, and the hook-up culture as risk factors. *Journal of Child and Family Studies*, 24(10), 2827–2840.

Uecker, J. E., & Martinez, B. C. (2017). When and why women regret sex in hookups more than men do: An analysis of the online College Social Life Survey. *Sociology Quarterly*, *58*(3), 470-494.

Tye, M. H. (2006). Social inequality and well-being: Race-related stress, self-esteem, and life satisfaction among African American gay and bisexual men. *Dissertation Abstracts International: Section B*, 67(4-B), 0419-4217.

Ueda, P., Mercer, C. H., Ghaznavi, C., & Herbenik, D. (2020). Trends in frequency of sexual activity and number of sexual partners among adults aged 18 to 44 years in the US, 2000-2018. *JAMA Network Open,* 3(6):e203833. doi:10.1001/jamanetworkopen.2020.3833

Wade, L. (2017). American hookup: The new culture of sex on campus. WW Norton & Company.

Watson, R. J., Snapp, S., & Wang, S. (2017). What we know and where do we go from here: A review of lesbian, gay, and bisexual youth hook-up literature. Sex Roles, 77, 801-811. doi 10.1007/s11199-017-0831-2

Welsh, D. P., Grello, C. M., & Harper, M. S. (2006). No strings attached: The nature of casual sex in college students. *Journal of Sex Research*, 43, 255–267. doi:10.1080/00224490609552324

Williams, J. C., & Jovanovic, J. (2015). Third wave feminism and emerging adult sexuality: Friends with benefits relationships. *Sexuality & Culture*, 19, 157-171. doi: 10.1007/s12119-014-9252-3

Zentner, M., & Eagly, A. H. (2015). A sociocultural framework for understanding partner preferences of women and men: Integration of concepts and evidence *European Review of Social Psychology*, 26(1), 328–373, http://dx.doi.org/10.1080/10463283.2015.1111599

Zhang, J., Zheng, L., & Zheng, Y. (2019). Self-rated attractiveness and sociosexual behavior predict gay men's preferences for masculine cues in male voices in China. *Evolutionary Psychology*, 17(2), 1-8.

Module 7: Adult Interpersonal Relationships

Aassve, A., Fuochi, G., & Mencarini, L. (2014). Desperate housework: Relative resources, time availablity, economic dependency, and gender ideology across Europe. *Journal of Family Issues*, 35, 1000-1022.

Alterovitz, S. S., & Mendelsohn, G. A. (2013). Relationship goals of middle-aged, young-old, and old-old Internet daters: An analysis of online personal ads. *Journal of Aging Studies*, 27, 159–165. doi.10.1016/j.jaging.2012.12.006

American Civil Liberties Union (2016). Overview of lesbian and gay parenting, adoption and foster care. Retrieved from https://www.aclu.org/fact-sheet/overview-lesbian-and-gay-parenting-adoption-and-foster-care?redirect=overview-lesbian-and-gay-parenting-adoption-and-foster-care

Anderson, M., Vogels, E. A., & Turner, E. (2020). The virtues and downsides of online dating. *Pew Research Center*. https://www.pewresearch.org/internet/2020/02/06/the-virtues-and-downsides-of-online-dating/

AARP. (2009). The divorce experience: A study of divorce at midlife and beyond. Washington, DC: AARP

AARP. (2012). AARP online dating survey. Retrieved October 9, 2016, from http://www.aarp.org/content/dam/aarp/research/surveys_statistics/general/2012/AARP-Online-DatingSurvey-AARP.pdf

Ashburn-Nardo, L. (2017). Parenthood as a moral imperative? Moral outrage and the stigmatization of voluntarily childfree women and men. Sex Roles, 76, 393–401. https://doi.org/10.1007/s11199-016-0606-1

Ausubel, J. (2020). Globally women are younger than their male partners, more likely to age alone. *Pew Research Center*. https://www.pewresearch.org/fact-tank/2020/01/03/globally-women-are-younger-than-their-male-partners-more-likely-to-age-alone/

Baxter, L.A., & Bullis, C. (1986). Turning points in developing romantic relationships. *Human Communication Research*, 12(4), 469–493. doi:10.1111/j.1468-2958.1986.tb00088.x

Benokraitis, N. V. (2005). Marriage and families: Changes, choices, and Constraints (5th ed). Pearson.

Bisson, M. A., & Levine, T. R. (2009). Negotiating a friends with benefits relationship. *Archives of Sexual Behavior*, 38, 66–73. doi:10.1007/s10508-007-9211-2

Bittman, M., England, P., Sayer, L. Folbre, N., & Matheson, G. (2003). When does gender trump money? Bargaining and time in household work. American Journal of Sociology, 109, 186-214.

Bleske-Recheck, A., Somers, E., Micke, C., Erickson, L., Matteson, L., Stocco, C., & Schumacher, B. (2012). Benefit or burden? Attraction in cross-gender friendship. *Journal of Social and Personal Relationships*, 29(5), 569-596. doi: 10.1177/0265407512443611

Bookwala, J., Marshall, K. I., & Manning, S. W. (2014). Who needs a friend? Marital status transitions and physical health outcomes in later life. *Health Psychology*, 33(6), 505-515.

Bosson, J. K., Vandello, J. A. & Buckner, C. E. (2019). The psychology of gender. Sage Publishing.

Brines, J. (1994). Economic dependency, gender and the division of labor at home. American Journal of Sociology, 100, 652-688.

Brown, A. (2020a). A profile of single Americans. *Pew Research Center*. https://www.pewresearch.org/social-trends/2020/08/20/a-profile-of-single-americans/

Brown, A. (2020b). Lesbian, gay, and bisexual online daters report positive experiences – but also report harassment. *Pew Research Center*. https://www.pewresearch.org/fact-tank/2020/04/09/lesbian-gay-and-bisexual-online-daters-report-positive-experiences-but-also-harassment/

Brown, L. H., & DeRycke, S. B. (2010). The kinkeeping connection: Continuity, crisis and consensus. *Journal of Intergenerational Relationships*, 8(4), 338-353, DOI: 10.1080/15350770.2010.520616

Brown, S. L., & Lin, I. (2013). The gray divorce revolution: Rising divorce among middle aged and older adults 1990-2010. National Center for Family & Marriage Research Working Paper Series. Bowling Green State University. https://www.bgsu.edu/content/dam/BGSU/college-of-arts-and-sciences/NCFMR/ documents/Lin/The-Gray-Divorce.pdf

Bryant, K. & Sheldon, P. (2017). Cyber dating in the age of mobile apps: Understanding motives, attitudes, and characteristics of users. *American Communication Journal*, 19(2), 1-15.

Cohen, P. (2013). *Marriage is declining globally. Can you say that?* https://familyinequality.wordpress.com/2013/06/12/marriage-is-declining/

Drury, S. (2016). Cultural conceptions of motherhood and its relation to childcare policy in Canada. Journal of Historical Studies, 5(1), 1-10. https://jps.library.utoronto.ca/index.php/prandium/article/view/28080/20562

Else-Quest, N. M. & Hyde, J. S. (2018). The psychology of women and gender. Sage Publishing.

Frost, D. M. (2011). Stigma and intimacy in same-sex relationships: A narrative approach. *Journal of Family Psychology*, 25(1), 1–10. doi:10.1037/a0022374

Frost, D. M., Meyer, I. H., & Schwartz, S. (2016). Social support networks among diverse sexual minority populations. *American Journal of Orthopsychiatry*, 86, 91-102.

Gatrell, C., Cooper, C. L., & Kossek, E. E. (2017). Maternal bodies as taboo at work: New perspectives on the marginalizing of senior-level women in organizations. *Academy of Management Perspectives*, 31(3), 239–252. https://doi.org/10.5465/amp.2014.0034

Geiger, A. W., & Livingston, G. (2019). 8 facts about love and marriage. Pew Research Center. https://www.pewresearch.org/fact-tank/2019/02/13/8-facts-about-love-and-marriage/

Gewirtz-Meydan, A., & Ayalon, L. (2018). Forever young: Visual representations of gender and age in online dating sites for older adults. *Journal of Women and Aging*, 30(6), 484-502.

Gibbons, C., Creese, J., Tran, M., Brazil, K., Chambers, L., Weaver, B., & Bedard, M. (2014). The psychological and health consequences of caring for a spouse with dementia: A critical comparison of husbands and wives. *Journal of Women & Aging*, 26, 3-21.

Gillespie, B. J., Frederick, D., Harari, L., Grov, C. (2015). Homophily, close friendship, and life satisfaction among gay, lesbian, heterosexual, and bisexual men and women. *PLOS One*, 10(6), e0128900. doi:10.1371/journal.pone.0128900

Graf, N. (2019). Key findings on marriage and cohabitation in the U.S. Pew Research Center. https://www.pewresearch.org/fact-tank/2019/11/06/key-findings-on-marriage-and-cohabitation-in-the-u-s/

Gurrentz, B. (2018). Living with an unmarried partner now common for adults. *U.S. Census Bureau*. https://www.census.gov/library/stories/2018/11/cohabitaiton-is-up-marriage-is-down-for-young-adults.html

Halatsis, P., & Christakis, N. (2009). The challenge of sexual attraction within heterosexuals' cross-sex friendship. *Journal of Social and Personal Relationships*, 26(6–7), 919–937.

Hayman, B., & Wilkes, L. (2017). De novo families: Lesbian motherhood. Journal of Homosexuality, 64, 577-591.

Hennekam S, Syed J, Ali F, & Dumazert J-P. (2019). A multilevel perspective of the identity transition to motherhood. *Gender Work Organization*, 26, 915–933. https://doi.org/10.1111/gwao.12334

Horowitz, J. M., Graff, N., & Livingston, G. (2019). Views on marriage and cohabitation in the U.S. *Pew Research Center*. https://www.pewsocialtrends.org/2019/11/06/marriage-and-cohabitation-in-the-u-s/

Hyde, J. S. (2014). Gender similarities and differences. In S. Fiske, D. Schacter, & S. Taylor (Eds.), *Annual review of psychology* (pp.373-398). Annual Reviews.

Jenkins Hall, W., & Tanner, A. E. (2016). US Black college women's sexual health in hookup culture: Intersections of race and gender. *Culture, Health & Sexuality, 18*(11), 1265-1278.

Joshi, A., Neely, B., Emrich, C., Griffiths, D., & George, G. (2015). Gender research in AMJ: An overview of five decades of empirical research and calls to action. *Academy of Management Journal*, 58(5), 1459–1475. https://doi.org/10.5465/amj.2015.4011

Kinsey, A., Pomeroy, W.B., & Martin, C. E. (1948). Sexual behavior in the human male. PA: Saunders.

Leach, M. S., & Braithwaite, D. O. (1996). A binding tie: Supportive communication of family kinkeepers. *Journal of Applied Communication Research*, 24, 200–216.

Lenton, A. P., & Webber, L. (2006). Cross-sex friendships: Who has more? Sex Roles, 54(11–12), 809–820.

Levinger G. (1980). Toward the analysis of close relationships. *Journal of Experimental Social Psychology*, 16(6), 510–544. doi:10.1016/0022-1031(80)90056-6

Lippa, R. A. (2007). The preferred traits of mates in a cross-national study of heterosexual and homosexual men and women: An examination of biological and cultural influences. *Archives of Sexual Behavior*, 36, 193–208.

Livingston, G. (2014). Four in ten couples are saying I do again. In Chapter 3. The differing demographic profiles of first-time marries, remarried and divorced adults. Pew Research Center. Retrieved from http://www.pewsocialtrends.org/2014/11/14/chapter-3-the-differing-demographic-profiles-of-first-time-married-remarried-and-divorced-adults/

Livingston, G. (2018a). Stay-at-home moms and dads account for about one-in-five parents. https://www.pewresearch.org/fact-tank/2018/09/24/stay-at-home-moms-and-dads-account-for-about-one-in-five-u-s-parents/

Livingston, G. (2018b). The changing profile of unmarried parents. *Pew Research Center*. https://www.pewsocialtrends.org/2018/04/25/the-changing-profile-of-unmarried-parents/

Livingston, G., & Parker, K. (2019). 8 facts about American dads. *Pew Research Center*. https://www.pewresearch.org/fact-tank/2019/06/12/fathers-day-facts/

Machia, L. V.., Proulx, M. L., Ioerger, M., & Lehmiller, J. J. (2020). A longitudinal study of friends with benefits. *Personal Relationships*, 27, 47-60.

Macapagal, K., Greene, G. J., Rivera, Z. A., & Mustanski, B. (2015). "The best is always yet to come": Relationship stages and processes among young LGBT couples. *Journal of Family Psychology*, 29(3), 309-320. doi: 10.1037/famooooo94

March, E., Van Doorn, G., Grieve, R. (2018). Netflix and chill? What sex differences can tell us about mate preferences in (hypothetical) booty-call relationships. Evolutionary Psychology, 16(4), 1-10. doi: 10.1177/1474704918812138

Martin-Storey, A., Cheadle, J. E., Skalamera, J., & Crosnoe, R. (2015). Exploring the social integration of sexual minority youth across high school contexts. *Child Development*, 86, 965-975.

Matilla, H. (2020). The social construction of stay-at-home fathering across everyday spaces. *Qualitative Psychology*, 7(2), 185-205. http://dx.doi.org/10.1037/qup0000175

McWilliams, S., & Barrett, A. E. (2014). Online dating in middle and later life: Gendered expectations and experiences. Journal of Family Issues, 35(3), 411–436. doi:10.1177/0192513X12468437

Menkin, J. A., Robles, T. F., Wiley, J. F., & Gonzaga, G. C. (2015). Online dating across the life span: Users' relationship goals. *Psychology and Aging*, 30(4), 987–993. https://doi.org/10.1037/a0039722

Metlife. (2011). Metlife study of caregiving costs to working caregivers: Double jeopardy for baby boomers caring for their parents. Retrieved from http://www.caregiving.org/wp-content/uploads/2011/06/mmi-caregiving-costs-working-caregivers.pdf

Monte, L. (2019). Fathering across households. SEHSD Working Paper #2019-07. https://www.census.gov/content/dam/Census/library/working-papers/2019/demo/sehsd-wp2019-07.pdf

National Alliance for Caregiving. (2015). *Caregiving in the U.S. 2015*. Retrieved from http://www.caregiving.org/caregiving2015

NORC. (2020). Trends: Gender & marriage. *General Social Survey*. https://gssdataexplorer.norc.org/trends/Gender%20&%20Marriage?measure=posslq

Parker, K. & Patten, E. (2013). The sandwich generation: Rising financial burdens for middle-aged Americans. *Pew Research Center*. Retrieved from http://www.pewsocialtrends.org/2013/01/30/the-sandwich-generation/

Patterson, C. J. (2013). Children of lesbian and gay parents: Psychology, law, and Policy. Psychology of Sexual Orientation and Gender Diversity, 1, 27-34.

Pew Research Center. (2015). Parenting in America: Outlook, worries, aspirations are strongly linked to financial situation. https://www.pewsocialtrends.org/2015/12/17/2-satisfaction-time-and-support/#parenting-matters-to-overall-identity

Pew Research Center. (2019). Same-sex marriage around the world. https://www.pewforum.org/fact-sheet/gay-marriage-around-the-world/

Reeder, H. (2017). "He's like a brother": The social construction of satisfying cross-sex friendship roles. *Sexuality & Culture*, 21, 142-162.

Robinson, S., White, A., & Anderson, E. (2017). Privileging the bromance: A critical appraisal of romantic and bromantic relationships. *Men and Masculinities*, 22(5), 850-871.

Rogalin, C. L. & Brooks, J. E. (2018). Lesbians achieving pregnancy: The intersections of social location and the heteronormative medicalization of infertility. *Sociology Compass*, 12:e12637. https://doi.org/10.1111/soc4.12637

Ruitenberg, J. (2014). A typology of Dutch mothers' employment narratives: Drifters, privilegeds, balancers, ambitious. *Gender Issues*, 31(1), 58–82. https://doi.org/10.1007/s12147-014-9118-x

Schulz, R. & Eden, J. (2016). Families caring for an aging America. National Academies Press.

Smith, A., & Anderson, M. (2016). 5 facts about online dating. Pew Research Center. https://internet.psych.wisc.edu/wp-content/uploads/532-Master/532-UnitPages/Unit-06/Smith_Pew_OnlineDating_2016a.pdf

Sohn, H. (2015). Health insurance and risk of divorce: Does having your own insurance matter? *Journal of Marriage and Family*, 77(4), 982–995. https://doi.org/10.1111/jomf.12195v

Toadvine, J. (2015). Our story too: Giving voice to lesbian couples' experience with infertility. Ph.D., Wiedener University.

U.S. Census Bureau. (2019). Table 3. Children ever born per 1,000 women and percent childless by age and marital status: June 2018. https://www.census.gov/data/tables/2018/demo/fertility/womenfertility.html#par_list_59

Vogels, E. A. (2020). 10 facts about Americans and online dating. Pew Research Center. https://www.pewresearch.org/fact-tank/2020/02/06/10-facts-about-americans-and-online-dating/

Wang, W. (2018). The state of our unions: Marriage up among older Americans, down among the younger. *Institute for Family Studies*. https://ifstudies.org/blog/the-state-of-our-unions-marriage-up-among-older-americans-down-among-the-

younger#:~:text=Marriage%20is%20Rising%20Among%20Americans%20Ages%2065%2B&text=During%20th e%20same%20period%2C%20the,adults%20ages%2065%20and%20older.

Wang, W., & Parker, K. (2014). Record share of Americans have never married. *Pew Research Center*. https://www.pewsocialtrends.org/2014/09/24/record-share-of-americans-have-never-married/

Wang, W., & Taylor, P. (2011). For Millennials, parenthood trumps marriage. Pew Research Center.

Ward, A. F. (2012). Men and women can't be "just friends". *Scientific American*. https://www.scientificamerican.com/article/men-and-women-cant-be-just-friends/

Watson, R. J., Snapp, S., & Wang, S. (2017). What we know and where do we go from here: A review of lesbian, gay, and bisexual youth hook-up literature. Sex Roles, 77, 801-811. doi 10.1007/s11199-017-0831-2

Welsh, D. P., Grello, C. M., & Harper, M. S. (2006). No strings attached: The nature of casual sex in college students. *Journal of Sex Research*, 43, 255–267. doi:10.1080/00224490609552324

Westrick-Payne, K. K., Manning, W. D. (2022). Marriage, divorce, and the COVID-19 Pandemic in the U.S. Family Profiles, FP-22-12. Bowling Green State University National Center for Family & Marriage Research. https://doi.org/10.25035/ncfmr/fp-22-12

Williams, J. C., & Jovanovic, J. (2015). Third wave feminism and emerging adult sexuality: Friends with benefits relationships. *Sexuality & Culture*, 19, 157-171. doi: 10.1007/s12119-014-9252-3

Witt, J. (2009). SOC. McGraw Hill.

Wrzus, C., Zimmermann, J., Mund, M., & Neyer, F. J. (2017). Friendships in young and middle adulthood: Normative patterns and personality differences. In M. Hojjat & A. Moyer (Eds.), *Psychology of friendship* (pp. 21-38). Oxford University Press.

Zentner, M., & Eagly, A. H. (2015). A sociocultural framework for understanding partner preferences of women and men: Integration of concepts and evidence *European Review of Social Psychology*, 26(1), 328–373, http://dx.doi.org/10.1080/10463283.2015.1111599

Zhang, J., Zheng, L., & Zheng, Y. (2019). Self-rated attractiveness and sociosexual behavior predict gay men's preferences for masculine cues in male voices in China. *Evolutionary Psychology*, 17(2), 1-8.

Module 8: College and Work

American Association of University Women. (2019). *The simple truth about the gender pay gap, Fall 2019 update.* https://www.aauw.org/resources/research/simple-truth/

Babcock, L., Gelfand, M., Small, D., & Stayn, H. (2006). Gender differences in the propensity to initiate negotiations. In D. De Cremer, M. Zelenberg, & J.K. Muringham (Eds.), *Social psychology and economics* (pp. 239-262). Mahwah, NJ: Lawrence Erlbaum.

Baldridge, D.C., Eddleston, K.A., & Vega, J.F. (2006). Saying no to being uprooted: The impact of family and gender on willingness to relocate. *Journal of Occupational and Organizational Psychology*, 79, 131-149.

Bessen, J., Denk, E., & Meng, C. (2020). Perpetuating inequality: What salary history bans reveal about wages. Boston University School of Law, Public Law & Legal Theory Paper No. 20-19. https://ssrn.com/abstract=3628729

Boniol, M., McIsaac, M., Xu, L., Wuliji, T., Diallo, K., & Campbell, J. (2019). Gender equity in the healthcare workforce: Analysis of 104 countries. World Health Organization. https://apps.who.int/iris/bitstream/handle/10665/311314/WHO-HIS-HWF-Gender-WP1-2019.1-eng.pdf?sequence=1&isAllowed=y

Bosson, J. K., Vandello, J. A. & Buckner, C. E. (2019). The psychology of gender. Sage Publishing.

Bruckmuller, S., Ryan, M.K., Floor, R., & Haslam, S.A. (2014). The glass cliff: Examining why women occupy leadership positions in precarious circumstances. In S. Kumra, R. Simpson, & R.J. Burke (Eds.), Oxford handbook of gender in organizations (pp. 314-331). New York: Oxford University Press.

Bureau of Labor Statistics. (2019). National census of fatal occupational injuries in 2018. https://www.bls.gov/news.release/pdf/cfoi.pdf

Bureau of Labor Statistics. (2020). *Employment situation summary*. https://www.bls.gov/news.release/empsit.to2.htm

Carnevale, A. P., Smith, N., & Gulish, A. (2018). Women can't win. Georgetown University Center on Education and the Workforce. https://cew.georgetown.edu/cew-reports/genderwagegap/

Catalyst. (2020). Women in male-dominated industries and occupations: Quick take. https://www.catalyst.org/research/women-in-male-dominated-industries-and-occupations/

Ceci, S. J. & Williams, W. M. (2011). Understanding current causes of women's underrepresentation in science. *Proceedings of the National Academy of Sciences*, 108(8), 3157-3162. https://doi.org/10.1073/pnas.1014871108

Center for American Progress (2018). Women disproportionately report sexual harassment in male-dominated industries. https://www.americanprogress.org/issues/women/news/2018/08/06/454376/gender-matters/

Channick, R. (2019, July 9). Putting gender pay gap onto a broader stage. The Chicago Tribune, pp. 1-2.

Colorado State University. (2020, June 29). Even when women outnumber men, gender bias persists among science undergrads: Is representation enough to improve gender diversity in science? A new study says there's more to the story. *Science Daily*. www.sciencedaily.com/releases/2020/06/200629164147.htm

Council of Economic Advisors. (2015). *Gender pay gap: Recent trends and explanations*. Retrieved from https://www.whitehouse.gov/sites/default/files/docs/equal_pay_issue_brief_final.pdf

Das, A. (2022, May 18). U.S. Soccer and Top Players Agree to Guarantee Equal Pay. https://www.nytimes.com/2022/05/18/sports/soccer/us-soccer-equal-pay-deal.html?searchResultPosition=1

Dill, J. S., Price-Gylnns, K., & Rakovski, C. (2016). Does the "glass escalator" compensate for the devaluation of care occupations? The careers of men in low- and middle-skill health care jobs. *Gender and Society*, 30(2), 334-360.

Eaton, A. A., Saunders, J. F., Jacobson, R. K., & West, K. (2019). How gender and race stereotypes impact the advancement of scholars in STEM: Professor's biased evaluations of physics and biology post-doctoral candidates. Sex Roles, 82, 127-141. https://doi.org/10.1007/s11199-019-01052-w

Gupta, A. H. (2020, March 12). Why women may face a greater risk of catching coronavirus. *The New York Times*. https://www.nytimes.com/2020/03/12/us/women-coronavirus-greater-risk.html

Hedreen, S. (2019). Gendered' jobs are on the decline, but stereotypes remain. https://www.businessnewsdaily.com/10085-male-female-dominated-jobs.html

Hegewisch, A., & Ellis, E. (2015). *The gender wage gap by occupation 2014 and by race and ethnicity*. Washington DC: Institute for Women's Policy Research. Retrieved from http://www.iwpr.org/publications/pubs/the-gender-wage-gap-by-occupation-2014-and-by-race-and-ethnicity.

Hess, A. (2019). Today is the Women's World Cup final between the US and Netherlands—here's how much money is on the line. Retrieved from https://www.cnbc.com/2019/07/04/womens-world-cup-final-how-much-money-is-on-the-line.html

Hyde, J. S. (2005). The gender similarities hypothesis. American Psychologist, 60, 581-592.

Hyde, J. S. (2014). Gender similarities and differences. In S. Fiske, D. Schacter, & S. Taylor (Eds.), *Annual review of psychology* (pp.373-398). Annual Reviews.

Kaiser, R. B., & Wallace, W. T. (2016). Gender bias and substantive differences in ratings of leadership behavior: Toward a new narrative. *Consulting Psychology Journal: Practice and Research*, 68(1), 72-98. https://doi.org/10.1037/cpb0000059

Keplinger, K., Johnson, S. K., Kirk, J. F., & Barnes, L. Y. (2019). Women at work: Changes in sexual harassment between September 2016 and September 2018. *PLOS ONE*, 14(7): e0218313. doi.10.1371/journal.pone.0218313

King, E. B. (2015). What mothers face at work: Why the "opt out" explanation is insufficient. *American Psychological Association*. https://www.apa.org/science/about/psa/2015/09/mothers-work

Kossek, E. E., Su, R., & Wu, L. (2017). "Opting out" or "pushed out"? Integrating perspectives on women's career equality for gender inclusion and interventions. *Journal of Management*, 43(1), 228-254. https://doi.org/10.1177/0149206316671582

Livingston, G., & Parker, K. (2019). 8 facts about American dads. *Pew Research Center*. https://www.pewresearch.org/fact-tank/2019/06/12/fathers-day-facts/

Mandel, H. (2013). Up the down staircase: Women's upward mobility and the wage penalty for occupational feminization, 1970-2007. *Social Forces*, 91, 1183-1207.

Master, A., Cheryan, S., & Meltzoff, A. N. (2016). Computing whether she belongs: Stereotypes undermine girls' interest and sense of belonging in computer science. *Journal of Educational Psychology*, 108(3), 424–437. 437. https://doi.org/10.1037/edu0000061

McKinsey & Co. (2019). Women in the workplace 2019. https://womenintheworkplace.com/

Mensik, H. (2018, August 9). For many women, college debt means dreams delayed. *Chicago Tribune*. https://www.chicagotribune.com/business/ct-biz-women-in-debt-20180801-story.html

Morgan, M. (2015). Glass ceilings and sticky floors: Drawing new ontologies. *London School of Economics and Political Science*, No. 228. https://pdfs.semanticscholar.org/2b34/e2b25422bdc70098e1d9be2b977eae1a7e70.pdf

Noland, M., Moran, T., & Kotschwar, B. (2016). *Is gender diversity profitable? Evidence from a global survey*. Washington, DC: Peterson Institute for International Economics. Retrieved from https://www.piie.com/publications/working-papers/gender-diversity-profitable-evidence-global-survey.

Novotney, A. (2019). Renewing the push for equality. Monitor on Psychology, 50(4), 37-44.

Oliveira, D. F., Ma, Y., Woodruff, T. K., & Uzzi, B. (2019). Comparison of National Institutes of Health grant amounts to first-time male and female principal investigators. *JAMA*, 321(9), 898-900. doi:10.1001/jama.2018.21944

Organisation for Economic Co-operation and Development. (2008). Annual Report 2008. https://www.oecd.org/newsroom/40556222.pdf

Parks-Stamm, E. J., & Grey, C. (2016). Evaluating engagement online. *Social Psychology*, 47(5), 281-287. doi:10:1027/1864-9335/a000277

Peterson, A. (2019, July 9). Women's World Cup. Changes could go global. The Chicago Tribune, p. 5.

Pew Research Center. (2013). On pay gap, millennial women near parity-for now. https://www.pewsocialtrends.org/2013/12/11/on-pay-gap-millennial-women-near-parity-for-now/

Ryan, M. K., & Haslan, S. A. (2007). The glass cliff: Exploring the dynamics surrounding the appointment of women to precarious leadership positions. *Academy of Management Review*, 32(2), 549-572.

Sandberg, S. (2013). Lean in: Women, work and the will to lead. Knopf.

Stolzenberg, E. B., Eagan, M. K., Zimmerman, H. B., Berdan Lozano, J., Cesar-Davis, N. M., Aragon, M. C., & Rios-Aguilar, C. (2019). *Undergraduate teaching faculty: The HERI Faculty Survey* 2016–2017. Los Angeles: Higher Education Research Institute, UCLA.

U.S. Census Bureau. (2019). *Educational attainment in the United States:* 2018. Retrieved from https://www.census.gov/data/tables/2018/demo/education-attainment/cps-detailed-tables.html

United States Equal Employment Opportunity Commission. (2020). *Facts about sexual harassment*. https://www.eeoc.gov/publications/facts-about-sexual-harassment

Vandello, J. A., & Bosson, J. K. (2012). Hard won and easily lost: A review and synthesis of theory and research on precarious manhood. *Psychology of Men & Masculinity*, 14(2), 1-19. doi:10.1037/a0029826

Vedantam, S. (2018). Why more men don't get into the field of nursing. *National Public Radio*. https://www.npr.org/2018/10/02/653570048/why-more-men-dont-get-into-the-field-of-nursing

Witherspoon, E. B., Vincent-Ruiz, P., & Schunn, C. (2019). When making the grade isn't enough: The gendered nature of premed science course attrition. *Educational Researcher*, 48(4), 193-204. doi:10.3102/0013189X19840331

Woodhams, C., Lupton, B, Cowling, M. (2015). The presence of ethnic minority and disabled men in feminized work: Intersectionality, vertical segregation, and the glass escalator. *Sex Roles*, 72, 277-293.

World Economic Forum. (2017). *Global Gender Gap Report 2017*. Retrieved from: http://reports.weforum.org/global-gender-gap-report-2017/key-findings/

Module 9: Physical Health

Abramson, J. (2004). Overdosed America: The broken promise of American medicine. Harper Perennial.

Allison, R. A. (2012). Ten things transgender persons should discuss with their health care provider. *Gay and Lesbian Medical Association*. http://www.glma.org/index.cfm?fuseaction=Page.ViewPage&PageID=692

American Cancer Society. (2020a). Cancer facts for gay and bisexual men. https://www.cancer.org/healthy/find-cancer-early/mens-health/cancer-facts-for-gay-and-bisexual-men.html

American Cancer Society (2020b). Cancer facts for lesbian and bisexual women. https://www.cancer.org/healthy/find-cancer-early/womens-health/cancer-facts-for-lesbians-and-bisexual-women.html

American Civil Liberties Union. (2010). ACLU history: The Roe v. Wade era. https://www.aclu.org/other/aclu-history-roe-v-wade-era

American Lung Association. (2020). *Current asthma demographics*. https://www.lung.org/research/trends-in-lung-disease/asthma-trends-brief/current-demographics

American Psychological Association. (2018a). APA Guidelines for psychological practice with boys and men. American Psychological Association.

American Psychological Association. (2018b). APA Guidelines for psychological practice with girls and women. American Psychological Association.

Associated Press. (2022, August 21). Kansas recount confirms results in favor of abortion rights. *Politico*. https://www.politico.com/news/2022/08/21/kansas-recount-favor-abortion-rights-00053046

Barefoot, K. N., Warren, J. C., & Smalley, K. B. (2017). Women's health care: the experiences and behaviors of rural and urban lesbians in the USA. *Rural and remote health*, 17(1), 3875. https://doiorg.lrcezproxy.clcillinois.edu:2443/10.22605/rrh3875

Barnack-Tavlaris, J. (2015). The medicalization of the menstrual cycle: Menstruation as a disorder. In M. C. McHugh and J. C. Chrisler (eds.) The wrong prescription for women: How medicine and media create a "need" for treatments, drugs, and surgery. (pp. 61-75). Praeger/ABC-CLIO.

Barrett, E. L., & Richardson, D. S. (2011). Sex differences in telomeres and lifespan. *Aging cell*, 10(6), 913–921. https://doi.org/10.1111/j.1474-9726.2011.00741.x

Bellware, K. (2022, September 8). Michigan abortion ballot measure will be put to voters in November. *Washington Post*. https://www.washingtonpost.com/nation/2022/09/08/michigan-supreme-court-abortion/

Boehmer, U., Bowen, D. J., & Bauer, G. R. (2007). Overweight and obesity in sexual-minority women: Evidence from population-based data. *American Journal of Public Health*, 97, 1134-1140. https://doi.org/10.2105/AJPH.2006.088419

Boerma, T., Hosseinpoor, A. R., Verdes, E., & Chatterji, S. (2016). A global assessment of the gender gap in self-reported health from survey data from 59 countries. *BMC Public Health*, 16, 675-683. https://doi.org/10.1186/s12889-016-3352-y

Bogart, L. M., Dale, S. K., Daffin, G. K., Patel, K. N., Klein, D. J., Mayer, K. H., & Pantalone, D. W. (2018). Pilot intervention for discrimination-related coping among HIV-positive Black sexual minority men. *Cultural diversity & ethnic minority psychology*, 24(4), 541–551. https://doi.org/10.1037/cdp0000205

Bosson, J. K., Vandello, J., & Buckner, C. (2019). The psychology of sex and gender. Thousand Oaks, CA: Sage.

Brennan Center for Justice. (2022). Roe v. Wade and Supreme Court abortion cases: Reproductive rights in the United States explained. https://www.brennancenter.org/our-work/research-reports/roe-v-wade-and-supreme-court-abortion-cases

Brody, D. J., Pratt, L. A., & Hughes, J. P. (2018). Prevalence of depression among adults aged 20 and over: United States, 2013–2016. NCHS Data Brief, 303. https://www.cdc.gov/nchs/products/databriefs/db303.htm

Bronstein, J. M. (2020). The cultural construction of preterm birth in the United States. *Anthropology & Medicine*, 27(2), 234-241. https://doi.org/10.1080/13648470.2019.1688610

Bustillo, X. (2022, June 24). Following Roe's reversal, Biden calls it "a sad day" for court and for the U.S. *National Public Radio*. https://www.kcur.org/politics-elections-and-government/2022-06-24/following-roes-reversal-biden-calls-it-a-sad-day-for-the-court-and-the-u-s

Centers for Disease Control and Prevention. (2013). State-specific healthy life expectancy at age 65: United States 2007-2009. https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6228a1.htm

Centers for Disease Control and Prevention. (2014). About LGBT health. https://www.cdc.gov/lgbthealth/about.htm

Centers for Disease Control and Prevention. (2017). National diabetes statistics report, 2017. Retrieved from: https://www.cdc.gov/diabetes/pdfs/data/statistics/national-diabetes-statistics-report.pdf

Centers for Disease Control and Prevention. (2019). Racial and ethnic disparities in heart disease. *Health United States Spotlight*. https://www.cdc.gov/nchs/hus/spotlight/HeartDiseaseSpotlight_2019_0404.pdf

Centers for Disease Control and Prevention. (2020). COVID-19 racial and ethnic health disparities. https://www.cdc.gov/coronavirus/2019-ncov/community/health-equity/racial-ethnic-disparities/index.html

Central Intelligence Agency. (2019). World fact book. https://www.cia.gov/library/publications/the-world-factbook/fields/355rank.html

Ceres, M., Quinn, G. P., Loscalzo, M., & Rice, D. (2018). Cancer screening considerations and cancer screening uptake for lesbian, gay, bisexual, and transgender persons. Seminars in Oncology Nursing, 34(1), 37-51.

Dembosky, A. (2020, November 11). All you want is to be believed: The impacts of unconscious bias in health care. *The Chicago Tribune*. https://www.chicagotribune.com/lifestyles/health/health-fitness/sns-unconscious-bias-health-care-20201029-2atimwa4p5eunlh3fxtrrrrbte-story.html

Dilley, J. A., Wynkoop Simmons, K., Boysun, M. J., Pizacani, B. A., & Stark, M. A. (2010). Demonstrating the importance and feasibility of including sexual orientation in public health surveys: Health disparities in the Pacific Northwest. *American Journal of Public Health*, 100(3), 460-467. https://doi.org/10.2105/AJPH.2007.130336

Douthit, N., Kiv, S., Dwotatzky, T., Biswas, S. (2015). Exposing some important barriers to healthcare access in rural USA. *Public Health*, 129, 611-620.

Else-Quest, N. M. & Hyde, J. S. (2018). The psychology of women and gender. Sage Publishing.

Furman, D., Hejblum, B. P., Simon, N., Jojic, V., Dekker, C. L. Thiebaut, R., ... Davis, M. M. (2014). Systems analysis of sex differences reveals an immunosuppressive role for testosterone in the response to influenza vaccination. *Proceedings of the National Academy of Science*, 111, 869-874.

Gamble V. N. (1997). Under the shadow of Tuskegee: African Americans and health care. *American journal of public health*, 87(11), 1773–1778. https://doi.org/10.2105/ajph.87.11.1773

Gibson, C., Grande, K., Schumann, C., & Gasiorowicz, M. (2018). Census tract poverty and racial disparities in HIV rates in Milwaukee county, Wisconsin, 2009–2014. *AIDS and Behavior*, 22, 2994–3002. https://doi.org/10.1007/s10461-018-2064-y

Gilbert, K. L., Ray, R., Siddiqi, A., Shetty, S., Baker, E. A., Elder, K., & Griffith, D. M. (2016). Visible and invisible trends in Black men's health: Pitfalls and promises for addressing racial, ethnic, and gender inequities in health. *Annual Review of Public Health*, 37, 295–311. https://doi.org/10.1146/annurev-publhealth-032315-021556

Gold, R. B. (2003). Lessons learned before Roe: Will past be prologue? *Guttmaker Policy Review*, 6(1). https://www.guttmaker.org/gpr/2003/03/lessons-roe-will-past-be-prologue.

Gonzalez, J. (2015, May 29). Hispanic paradox: Why immigrants have a higher life expectancy. BBC. http://www.bbc.com/news/world-us-canada-32910129

Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: Attitudes, self-esteem, and stereotypes. *Psychological Review*, 102(1), 4–27. https://doi.org/10.1037/0033-295X.102.1.4

Griffith, D. M., Sharma, G., Holliday, C.S., Enyia, O.K., Valliere. M., & Semlow, A.R. (2020). Men and COVID-19: A biopsychosocial approach to understanding sex differences in mortality and recommendations for practice and policy interventions. *Preventing Chronic Disease*, 17(E63), 1-9. https://doi.org/10.5888/pcd17.200247

Gupta, G. (2015). Menstruation and the religious taboos for women. *DNA*. https://www.dnaindia.com/lifestyle/report-menstruation-and-the-religious-taboos-for-women-2152434

Hall, W. J., Chapman, M. V., Lee, K. M., Merino, Y. M., Thomas, T. W., Payne, B. K., Eng, E., Day, S. H., & Coyne-Beasley, T. (2015). Implicit racial/ethnic bias among health care professionals and its influence on health care outcomes: A systematic review. *American Journal of Public Health*, 105(12), e60–e76. https://doi.org/10.2105/AJPH.2015.302903

Henry, T. A. (2016). Rising teen obesity rate sparks push for healthier schools. *American Medical Association*. https://www.ama-assn.org/delivering-care/public-health/rising-teen-obesity-rate-sparks-push-healthier-schools

Heron, M. (2019). Deaths: Leading causes for 2017. *National Vital Statistics Reports*, 68(6), 1-77. https://www.cdc.gov/nchs/data/nvsr/nvsr68/nvsr68_09-508.pdf

Himmelstein, M. S., & Sanchez, D. T. (2016). Masculinity in the doctor's office: Masculinity, gendered doctor preference and doctor-patient communication. *Preventive Medicine*, 84, 34-40, https://doi.org/10.1016/j.ypmed.2015.12.008.

Kawahara, M., & Kono, T. (2010). Longevity in mice without a father. *Human Reproduction*, 25(2), 457-461. doi:10.1093/humrep/dep400

Le, C. H. H. (2016). The prevalence of anemia and moderate-severe anemia in the US population (NHANES 2003-2012). PLOS ONE, 11(11): e0166635. https://doi.org/10.1371/journal.pone.0166635

Leddy, A.M., Weiss, E., Yam, E., & Pulerwitz, J. (2019). Gender-based violence and engagement in biomedical HIV prevention, care and treatment: a scoping review. *BMC Public Health*, 19, 897. https://doi.org/10.1186/s12889-019-7192-4

Legal Information Institute. (2022). Planned Parenthood of central Missouri et al. appellants. v. John C. Danforth, Attorney General of the State of Missouri, et al. Appellant. Cornell Law School. https://www.law.cornell.edu/supremecourt/text/428/52.

Long, M. (2022). 2022 state ballot initiatives on abortion rights. *Women's Health Policy*. https://www.kff.org/policy-watch/2022-state-ballot-initiatives-abortion-rights/

Mamary, A. J., Stewart, J. I., Kinney, G. L., Hokanson, J. E., Shenoy, K., Dransfield, M. T., Foreman, M. G., Vance, G. B., Criner, G. J., & COPDGene® Investigators (2018). Race and gender disparities are evident in COPD underdiagnoses across all severities of measured airflow obstruction. *Chronic Obstructive Pulmonary Diseases*, 5(3), 177–184. https://doi.org/10.15326/jcopdf.5.3.2017.0145

MacDorman, M. F., & Declercq, E. (2019). Trends and state variations in out-of-hospital births in the United States, 2004-2017. *Birth (Berkeley, Calif.)*, 46(2), 279–288. https://doi.org/10.1111/birt.12411

Mayo Clinic. (2020). Menopause hormone therapy and your heart. https://www.mayoclinic.org/diseases-conditions/menopause/in-depth/hormone-replacement-therapy/art-20047550

McHugh, M. C. & Chrisler, J. C. (2015). The medicalization of women's bodies and everyday experiences. In M. C. McHugh & J. C. Chrisler (Eds.), The wrong prescription for women: How medicine and the media create a "need" for treatments, drugs, and surgery. (pp. 1-15). Praeger/ABC-CLIO.

McLeod, D. S. A. Caturegli, P., Cooper, D. S. Matos, P. G., & Huftless, S. (2014). Variation in rates of autoimmune thyroid disease by race/ethnicity in US military personnel. *JAMA*, 311(15), 1563. DOI: 10.1001/jama.2013.285606

MedlinePlus. (2020). Cesarean section. https://medlineplus.gov/cesareansection.html#:~:text=A%20Cesarean%20section%20(C%2Dsection,a%20C%2Dsection%20may%20inc lude

Mereish, E. H. (2014). The weight of discrimination: The relationship between heterosexist discrimination and obesity among lesbian women. *Psychology of Sexual Orientation and Gender Diversity*, 1(4), 356–360. https://doiorg/10.1037/sgd0000056

Mikulic, M. (2020). Pfizer: Viagra revenue 2003-2019. Statistica. https://www.statista.com/statistics/264827/

pfizers-worldwide-viagra-revenue-

since-2003/#:~:text=Pfizer's%20worldwide%20known%20erectile%20dysfunction,dollars%20in%20revenue% 20in%202019

Mode N. A., Evans, M. K., & Zonderman, A. B. (2016). Race, neighborhood economic status, income inequality and mortality. *PLoS ONE* 11(5): e0154535. https://doi.org/10.1371/journal.pone.0154535

Mohamed, Y., Durrant, K., Huggett, C., Davis, J., Macintyre, A., Menu, S., Wilson, J. N., Ramosaea, M., Sami, M., Barrington, D. J., McSkimming, D., & Natoli, L. (2018). A qualitative exploration of menstruation-related restrictive practices in Fiji, Solomon Islands and Papua New Guinea. *PloS one*, 13(12), e0208224. https://doi.org/10.1371/journal.pone.0208224

Murphy, S. L., Kochanek, K. D., Xu, J. Q., & Arias, E. (2021). Mortality in the United States, 2020. NCHS Data Brief, 427. National Center for Health Statistics. https://dx.doi.org/10.15620/cdc:112079

National Cancer Institute. (2018). *Oral contraceptives and cancer risk*. https://www.cancer.gov/about-cancer/causes-prevention/risk/hormones/oral-contraceptives-fact-sheet

National Kidney Foundation. (2020). *Race, ethnicity and kidney disease.* https://www.kidney.org/atoz/content/minorities-

KD#:~:text=Black%20or%20African%20Americans%20are,the%20risk%20for%20kidney%20disease.

Nguyen, V. K., Greenwald, Z. R., Trottier, H., Cadieux, M., Goyette, A., Beauchemin, M., Charest, L., Longpré, D., Lavoie, S., Tossa, H. G., & Thomas, R. (2018). Incidence of sexually transmitted infections before and after preexposure prophylaxis for HIV. AIDS (London, England), 32(4), 523–530. https://doi.org/10.1097/QAD.000000000001718

Oyez. (2022). *Roe v. Wade.* Cornell's Legal Information Institute, Justia, Chicago-Kent College of Law. https://www.oyez.org/cases/1971/70-18.

Pappas, S. (2019). APA issues first-ever guidelines for practice with men and boys. *Monitor on Psychology*, *50*(1), 35-39.

Parker, A., Abutaleb, Y., & Pager, T. (2022, July 9). Two long weeks: Inside Biden's struggle to respond to abortion ruling. Washington Post. https://www.washingtonpost.com/politics/2022/07/09/biden-democrats-abortion-dobbs/

Regitz_Zagrosak, V. (2012). Sex and gender differences in health. European Molecular Biology Organization Reports, 13(7), 596-603.

Reny, T. T. (2020). Masculine norms and infectious disease: The case of COVID-19. *Politics & Gender*, 1-8. doi:10.1017/S1743923X20000380

Schenker, L. (2020, August 13). Nine times out of 10, I was completely brushed off: Black Chicagoans confront bias in health care, hope for change. *The Chicago Tribune*. https://www.chicagotribune.com/news/breaking/ct-chicago-health-care-racism-george-floyd-implicit-bias-20200813-nxrujltiyvg37pks2hyf6iwb7m-story.html

Spencer Scott, P. (2020, November 22). Battle of the brain? Do men or women have the healthier brain? *Parade*. https://parade.com/1121927/paulaspencer/how-mens-womens-brains-different/

Srinivas, N., Rachakonda, S., & Kumar, R. (2020). Telomeres and yelomere length: A general overview. *Cancers*, 12(3), 558. https://doi.org/10.3390/cancers12030558

Stewart, K. A., Ristvedt, S., Brown, K. M., Waters, E. A., Trinkaus, K., McCray, N., & James, A. S. (2019). Giving voice to Black men: Guidance for increasing the likelihood of having a usual source of care. *American Journal of Men's Health*, 13(3), 1-11. https://doi.org/10.1177/1557988319856738

Stojan, G., & Petri, M. (2018). Epidemiology of systemic lupus erythematosus: an update. *Current opinion in rheumatology*, 30(2), 144–150. https://doi.org/10.1097/BOR.00000000000480

Thompson, A. E., Anisimowicz, Y., Miedema, B., Hogg, W., Wodchis, W. P., & Aubrey-Bassler, K. (2016). The influence of gender and other patient characteristics on health care-seeking behaviour: a QUALICOPC study. *BMC family practice*, 17, 38. https://doi.org/10.1186/s12875-016-0440-0

Vanberg, P., & Atar, D. (2010). Androgenic anabolic steroid abuse and the cardiovascular system. *Handbook of experimental pharmacology*, (195), 411–457. https://doi.org/10.1007/978-3-540-79088-4_18

Waggoner, M. R. & Stults, C. D. (2010). Gender and medicalization. *Sociologist for Women in Society Fact Sheet.* https://socwomen.org/wp-content/uploads/2018/03/fact_4-2010-medicalization.pdf

Warburton, M. (2022, December 8). U.S. Congress passes landmark bill protecting same-sex marriage. *Reuters*. https://www.reuters.com/world/us/us-congress-expected-pass-bill-protecting-same-sex-marriage-2022-12-08/

Woolf, S. H., Masters, R. K., & Aron, L. Y. (2021). Effect of the covid-19 pandemic in 2020 on life expectancy across populations in the USA and other high income countries: Simulations of provisional mortality data. *The BMJ*, 373, n1343. https://www.bmj.com/content/373/bmj.n1343

World Health Organization. (2019). World health statistics 2019. https://www.who.int/gho/publications/world_health_statistics/2019/EN_WHS_2019_Main.pdf

Xue, B., Johnson, A. K., & Hay, M. (2013). Sex differences in angiotensin II- and aldosterone-induced hypertension: the central protective effects of estrogen. *American Journal of Physiology: Regulatory, Integrative and Comparative Physiology*, 305(5), R459–R463. https://doi.org/10.1152/ajpregu.00222.2013

Module 10: Mental Health

Abrams, Z. (2022). The facts about abortion and mental health. Monitor on Psychology, 53(6), 40-43.

American Psychiatric Association. (2022). Diagnostic and statistical manual of mental disorders, fifth edition, text revision (DSM-5-TR). https://doi.org/10.1176/appi.books.9780890425787

American Psychological Association. (2015). Guidelines for psychological practice with transgender and nonconforming people. *American Psychologist*, 70(9), 832-864.

American Psychological Association. (2018a). APA Guidelines for psychological practice with boys and men. American Psychological Association.

American Psychological Association. (2018b). APA Guidelines for psychological practice with girls and women. American Psychological Association.

Arcelus, J., Mitchell, A. J., Wales, J., & Nielsen, S. (2011). Mortality rates in patients with anorexia nervosa and other eating disorders. *Archives of General Psychiatry*, 68(7), 724-731.

Borgogna, N. C., McDermott, R. C., Aita, S. L., & Kridel, M. M. (2019). Anxiety and depression across gender and sexual minorities: Implications for transgender, gender nonconforming, pansexual, demisexual, asexual, queer and questioning individuals. *Psychology of Sexual Orientation and Gender Diversity*, 6(1), 54-63.

Bosson, J. K., Vandello, J., & Buckner, C. (2019). The psychology of sex and gender. Thousand Oaks, CA: Sage.

Brody, D. J., Pratt, L. A., & Hughes, J. P. (2018). Prevalence of depression among adults aged 20 and over: United States, 2013–2016. NCHS Data Brief, 303. https://www.cdc.gov/nchs/products/databriefs/db303.htm

Diemer, E. W., White Hughto, J. M., Gordon, A. R., Guss, C., Austin, S. B., & Reisner, S. L. (2018). Beyond the binary: Differences in eating disorder prevalence by gender identity in a transgender sample. *Transgender health*, 3(1), 17–23. https://doi.org/10.1089/trgh.2017.0043

Else-Quest, N. M. & Hyde, J. S. (2018). The psychology of women and gender. Sage Publishing.

Ferguson, C. J. (2013). In the eye of the beholder: Thin-ideal media affects some, but not most, viewers in a meta-analytic review of body dissatisfaction in women and men. *Psychology of Popular Media Culture*, 2(1), 20–37. https://doi.org.lrcezproxy.clcillinois.edu:2443/10.1037/a0030766.supp (Supplemental)

Ferguson, C. J. (2018). The devil wears stata: Thin-ideal media's minimal contribution to our understanding of body dissatisfaction and eating disorders. *Archives of Scientific Psychology*, 6(1), 70–79. https://doi.org/10.1037/arc0000044

Hedegaard, H., Curtin, S. C., & Warner, M. (2020). Increase in suicide mortality in the United States, 1999–2018. NCHS Data Brief, 32. https://www.cdc.gov/nchs/data/databriefs/db362-h.pdf

Hudson, J. I., Hiripi, E., Pope, H. G., & Kessler, R. C. (2007). The prevalence and correlates of eating disorders in the National Comorbidity Survey Replication. *Biological Psychiatry*, 61(3), 348-358.

Kaltiala-Heino, R., Bergman, H., Työläjärvi, M.,. & Frisén, L. (2018). Gender dysphoria in adolescence: Current perspectives. *Adolescent Health, Medicine and Therapeutics*, *9*, 31–41.

King's College London. (2019). *Genetic study reveals metabolic origins of anorexia.* www.sciencedaily.com/releases/2019/07/190715164655.htm

National Center for Transgender Equality. (2015). *National transgender discrimination survey*. http://www.transequality.org/issues/national-transgender-discrimination-survey

National Eating Disorders Association. (2016). *Health consequences of eating disorders*. https://www.nationaleatingdisorders.org/health-consequences-eating-disorders

National Institutes of Mental Health. (2016). *Eating disorders*. https://www.nimh.nih.gov/health/topics/eating-disorders/index.shtml

Olson, K. R., Durwood, L., Horton, R., Gallagher, N. M., & Devor, A. (2022). Gender identity 5 years after social transition. *Pediatrics*, 150(2), e2021056082. https://doi.org/10.1542/peds.2021-056082

Pappas, S. (2019). APA issues first-ever guidelines for practice with men and boys. *Monitor on Psychology*, *50*(1), 35-39.

SAMHSA. (2018). 2018 National Survey on Drug Use and Health. https://www.niaaa.nih.gov

Santoro, H. (2022). Advocating for transgender and nonbinary youths. Monitor on Psychology, 53(5), 47-55.

Sax, L. (2010). Her college experience is not his. In P. S. Rothenberg (Ed.), Race, class, and gender in the United States (8th ed., pp.441-446). Worth Publishers.

Steensma, T. D., Biemond, R., de Boer, F., & Cohen-Kettenis, P.T. (2011). Desisting and persisting gender dysphoria after childhood: A qualitative follow-up study. *Clinical Child Psychology and Psychiatry*, 16(4), 499-516. doi:10.1177/1359104510378303

Steensma, T. D., McGuire, J. K., Kreukels, B.P., Beekman, A. J., & Cohen-Kettenis, P. T. (2013). Factors associated with desistence and persistence of childhood gender dysphoria: A quantitative follow-up study. *Journal of the American Academy of Child and Adolescent Psychiatry*, 52(6), 582-590. doi:10.1016/j.jaac.2013.03.016

Turban, J. L., King, D., Li, J. J., & Keuroghlian, A. S. (2021). Timing of social transition for transgender and gender diverse youth, K-12 harassment, and adult mental health outcomes. *Journal of Adolescent Health*, 69(6), 991-998. https://doi.org/10.1016/j.jadohealth.2021.06.001

Wade, T. D., Keski-Rahkonen, A., & Hudson, J. I. (2011). Epidemiology of eating disorders. *Textbook of Psychiatric Epidemiology, Third Edition*, 343-360.

Zahn-Waxler, C., Shirtcliff, E. A., & Marceau, K. (2008). Disorders of childhood and adolescence: Gender and psychopathology. *Annual Review of Clinical Psychology*, 4, 275-303.

Zaliznyak, M., Bresee, C., & Garcia, M. M. (2020). Age at first experience of gender dysphoria among transgender adults seeking gender-affirming surgery. *JAMA Network Open*, 3(3): e201236. doi:10.1001/jamanetworkopen.2020.1236

Module 11: Aggression and Crime

American Association of Psychologists. (2014). APA Report of the Task Force on Trafficking on Women and Girls, Unseen Victims of Sex Trafficking. https://www.apa.org/pi/women/programs/trafficking

American Psychological Association. (2019). APA guidelines on boys and men launch important and fiery national conversation. *Monitor on Psychology*, 50(2). https://www.apa.org/monitor/2019/02/male-guidelines

American Psychological Association, Boys and Men Guidelines Group. (2018). APA guidelines for psychological practice with boys and men. http://www.apa.org/about/policy/psychological-practice-boys-men-guidelines.pdf

Bandele, M. (2017, Oct. 23). Here's how prisons and jail systems brutalize women. *ACLU*. https://www.aclu.org/blog/womens-rights/women-and-criminal-justice/heres-how-prison-and-jail-systems-brutalize-women.

Barber, N. (2015). *Violent crime linked to male sexuality*. https://www.psychologytoday.com/blog/the-human-beast/201505/violent-crime-linked-male-sexuality?eml

BBC News (2018). *Elliot Rodger: How misogynist killer became "incel hero."* https://www.bbc.com/news/world-us-canada-43892189

Berkowitz, L. (1993a). Aggression: Its causes, consequences and control. McGraw-Hill.

Berkowitz, L. (1993b). Pain and aggression: Some findings and implications. *Motivation and Emotion*, 17(3), 277–293.

Bosson, J. K., Vandello, J. A. & Buckner, C. E. (2019). The psychology of gender. Sage Publishing.

Budd, K. M., Rocque, M., & Bierie, D. M. (2017). Deconstructing incidents of campus sexual assault: Comparing male and female victimizations. *Sexual Abuse: A Journal of Research and Treatment*, 1–22. doi: 10.1177/1079063217706708

Bureau of Justice Statistics. (2019). Criminal victimization, 2018. https://www.bjs.gov/content/pub/pdf/cv18.pdf

Bureau of Justice Statistics. (2020). *Criminal victimization*, 2019. https://www.bjs.gov/content/pub/pdf/cv19_sum.pdf

Bushman, B. J., & Cooper, H. M. (1990). Effects of alcohol on human aggression: An integrative research review. *Psychological Bulletin*, 107(3), 341–354

Bushman, B. J., Wang, M. C., & Anderson, C. A. (2005). Is the curve relating temperature to aggression linear or curvilinear? Assaults and temperature in Minneapolis reexamined. *Journal of Personality and Social Psychology*, 89(1), 62–66.

Buss, D. M., & Duntley, J. D. (Eds.). (2006). The Evolution of Aggression. Psychosocial Press.

Campaniello, N. (2019). Women in crime. IZA World of Labor, 105. https://doi.org/10.15185/izawol.105.v2

Centers for Disease Control and Prevention. (2019). *About adverse childhood experiences.* https://www.cdc.gov/violenceprevention/childabuseandneglect/acestudy/aboutace.html

Centers for Disease Control and Prevention. (2020). *Preventing child sexual abuse*. https://www.cdc.gov/violenceprevention/pdf/can/CSA-factsheet508.pdf

Chavez, N., & McLaughlin, E. C. (2018). Tallahassee gunman reported for harassing women, police say; records show groping case dropped. CNN News. https://www.cnn.com/2018/11/04/us/tallahassee-shooting-yoga-studio/index.html?no-st=1542134910

Cowan, B. A. (2019). Incarcerated women: Poverty, trauma and unmet need. *American Psychological Association*. https://www.apa.org/pi/ses/resources/indicator/2019/04/incarcerated-women

Dabbs, J. M. Jr., Hargrove, M. F., & Heusel, C. (1996). Testosterone differences among college fraternities: Wellbehaved vs. rambunctious. *Personality and Individual Differences*, 20(2), 157–161.

Davidson, R. J., Putnam, K. M., & Larson, C. L. (2000). Dysfunction in the neural circuitry of emotion regulation—A possible prelude to violence. *Science*, 289(5479), 591–594.

Federal Bureau of Investigation. (2018). *Crime in the United States.* https://ucr.fbi.gov/crime-in-the-u.s/2018/crime-in-the-u.s/2018/tables/tables/table-48

Fedina, L., Holmes, J. L., & Backes, B. (2016). How prevalent is campus sexual assault in the United States? *National Institute of Justice Journal*, 277, 26-30. http://nij.gov/journals/277/pages/campus-sexual-assault.aspx

Felitti, V. J., Anda, R.F., Nordenberg, D., Williamson, D. F., Spitz, A., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14(4), 245-258. doi:10.1016/S0749-3797(98)00017-8

Finkelhorn, D., Hotaling, G., Lewis, I. A., & Smith, C. (1990). Sexual abuse in a national survey of adult men and women: Prevalence, characteristics, and risk factors. *Child Abuse and Neglect*, 14(1), 19-28.

Graham, K., Osgood, D. W., Wells, S., & Stockwell, T. (2006). To what extent is intoxication associated with aggression in bars? A multilevel analysis. *Journal of Studies on Alcohol*, 67(3), 382–390.

Gramlich, J. (2020). Black imprisonment rate in the U.S. has fallen by a third since 2006. *Pew Research Center*. https://www.pewresearch.org/fact-tank/2020/05/06/share-of-black-white-hispanic-americans-in-prison-2018-vs-2006/

Harvard University. (2019). Center on the developing child: Toxic stress. https://developingchild.harvard.edu/science/key-concepts/toxic-stress/

Hines, A. (2019, May 28). How many bones would you break to get laid? *The Cut*. https://www.thecut.com/2019/05/incel-plastic-surgery.html

Hyde, J. S. (2014). Gender similarities and differences. In S. Fiske, D. Schacter, & S. Taylor (Eds.), *Annual review of psychology* (pp.373-398). Annual Reviews.

International Labour Organization. (2020). Forced labour, modern slavery, and human trafficking. https://www.ilo.org/global/topics/forced-labour/lang-en/index.htm

Kanazawa, S. (2008a). Why are almost all criminals men? Part I. https://www.psychologytoday.com/blog/the-scientific-fundamentalist/200807/why-are-almost-all-criminals-men-part-i?eml

Kanazawa, S. (2008b). Why are almost all criminals men? Part II. https://www.psychologytoday.com/blog/the-scientific-fundamentalist/200807/why-are-almost-all-criminals-men-part-ii?eml

Kanazawa, S. (2008c). Why are almost all criminals men? Part III. https://www.psychologytoday.com/us/blog/the-scientific-fundamentalist/200807/why-are-almost-all-criminals-men-part-iii

Kupers, T. A. (2005). Toxic masculinity as a barrier to mental health treatment in prison. *Journal of Clinical Psychology*, 61, 713–724. http://dx.doi.org/10.1002/jclp.20105

Marcus-Maxwell, A., Pedersen, W. Carlson, M., & Miller, N. (2000). Displaced aggression is alive and well: A meta- analytic review. *Journal of Personality and Social Psychology*, 78, 678-689.

Mellins, C.A., Walsh, K., Sarvet, A.L., Wall, M., Gilbert, L., & Santelli, J.S. (2017) Sexual assault incidents among college undergraduates: Prevalence and factors associated with risk. *PLoS ONE*, 12(11): e0186471 https://doi.org/10.1371/journal.pone.0186471

Merrick, M. T., Ford, D. C., Ports, K. A., & Guinn, A. S. (2018). Prevalence of adverse childhood experiences from the 2011- 2014 Behavioral Risk Factor Surveillance System in 23 States. *Early JAMA Pediatrics*, 172(11), 1038-1044.

Mikorski, R., & Szymanski, D. M. (2017). Masculine norms, peer group, pornography, facebook, and men's sexual objectification of women. *Psychology of Men and Masculinity*, 18(4), 257-267. http://dx.org/10.1037/men0000058

Ney, B., Ramirez, R., & Van Dieten, M. (2012). Ten truths that matter when working with justice involved women. *National Resource Center on Justice Involved Women*. https://cjinvolvedwomen.org/wp-content/uploads/2015/09/Ten_Truths.pdf (PDF, 561KB).

Pappas, S. (2019). APA issues first-ever guidelines for practice with men and boys. *Monitor on Psychology*, *50*(1), 35-39.

Paquette, J. A., & Underwood, M. K. (1999). Gender differences in young adolescents' experiences of peer victimization: Social and physical aggression. *Merrill-Palmer Quarterly*, 45(2), 242–266.

Parent, M. C., Gobble, T. D., & Rochlen, A. (2019). Social media behavior, toxic masculinity, and depression. *Psychology of Men & Masculinities*, 20(3), 277-287. https://doi.org/10.1037/men0000156

Polaris. (2020). 2019 U.S. national human trafficking hotline statistics. https://polarisproject.org/2019-us-national-human-trafficking-hotline-statistics/

Pupovac, J.& Lydersen, K. (2018). Women in prison punished more harshly than men around the country. *Chicago Reporter*. https://www.chicagoreporter.com/women-in-prison-punished-more-harshly-than-men-around-the-country/

Raney, R. F. (2017). Unseen victims of sex trafficking. Monitor on Psychology, 48(4), 22-23.

Rape, Abuse and Incest National Network. (2020). *Victims of sexual violence: Statistics*. https://www.rainn.org/statistics/victims-sexual-violence

Reid, K. (2018). *Child marriage: Facts, FAQS, and how to help end it.* https://www.worldvision.org/child-protectionnews-stories/child-marriage-facts#where

Rocca, C. H., Samari, G., Foster, D. G., Gould, H., & Kimport, K. (2020). Emotions and decision rightness over five years following an abortion: An examination of decision difficulty and abortion stigma. *Social science & medicine* (1982), 248, 112704. https://doi.org/10.1016/j.socscimed.2019.112704

Russo, A. (2019). *Gillette takes on toxic masculinity in viral me too ad.* https://m.huffpost.com/us/entry/us_5c3daf15e4boeobaf54odf45/amp

Sawyer, W. (2018, Jan. 9). The gender divide: Tracking women's state prison growth. *Prison Policy Initiative*. https://www.prisonpolicy.org/reports/women_overtime.html.

Scaptura, M. N., & Boyle, K. M. (2020). Masculinity threat, "incel" traits, and violent fantasies among heterosexual men in the United States. *Feminist Criminology*, 15(3), 278-298.

Smith, S., Zhang, X., Basile, K., Merrick, M., Wang, J., Kresnow, M., & Chen, J. (2018). *National Intimate Partner and Sexual Violence Survey, United States*, 2015. https://www.cdc.gov/violenceprevention/pdf/2015data-brief508.pdf

Steele, C. M., & Southwick, L. (1985). Alcohol and social behavior: I. The psychology of drunken excess. *Journal of Personality and Social Psychology*, 48(1), 18–34.

Stopbullying.gov. (2018). Preventing weight-based bullying. https://www.stopbullying.gov/blog/2018/11/05/preventing-weight-based-bullying.html

Streng, T. K. & Kamimura, A. (2015). Sexual assault prevention and reporting on college campuses in the US: A review of policies and recommendations. *Journal of Education and Practice*, 6(3),1-8.

Stringer, H. (2019). Improving life for pregnant inmates. Monitor on Psychology, 50(3), 53.

Tahirih Justice Center. (2017). Falling through the cracks: How laws allow child marriage to happen in today's America. https://www.tahirih.org/wp-content/uploads/2017/08/TahirihChildMarriageReport-1.pdf

Tsui, A., Nolan, D., & Amico, C. (2017). Child marriage in America by the numbers. http://apps.frontline.org/child-marriage-by-the

numbers/?utm_source=facebook&utm_medium=pbsofficial&utm_campaign=frontline_2017#

UNICEF. (2018). Child Marriage: Latest trends and future prospects. https://data.unicef.org/resources/child-marriage-latest-trends-and-future-prospects/#

United Nations. (2020). What is human trafficking? http://www.unodc.org/unodc/en/human-trafficking/whatis-human-trafficking.html#What_is_Human_Trafficking

United Nations Human Rights Council. (2014). Preventing and eliminating child, early and forced marriage. http://www.unodc.org/res/e4j/data/_university_uni_/preventing_and_ eliminating_child_early_and_forced_marriage_html/english.pdf

United States Department of Health and Human Services. (2019). *Child maltreatment* 2017. https://www.acf.hhs.gov/cb/resource/child-maltreatment-2017

United States Department of Health & Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2020). *Child Maltreatment* 2018. https://www.acf.hhs.gov/cb/research-data-technology/statistics-research/child-maltreatment

United States Department of Justice. (2012). An updated definition of rape. https://www.justice.gov/archives/opa/blog/updated-definition-rape

United States Immigration and Customs Enforcement. (2020). Human trafficking. https://www.ice.gov/features/human-trafficking

University of Minnesota. (2015). *Social problems*. https://open.lib.umn.edu/socialproblems/chapter/8-3-who-commits-crime/

Valente, S. M. (2005). Sexual abuse of boys. Journal of Child and Adolescent Psychiatric Nursing, 18, 10-16. doi:10.1111/j.1744-6171.2005.00005.x

Violence Policy Center. (2018). *More than 1,800 women murdered by men in one year, new study finds.* http://vpc.org/press/more-than-1800-women-murdered-by-men-in-one-year-new-study-finds/

Wendling, M. (2018). Toronto van attack: What is an 'incel'? BBC News. https://www.bbc. com/news/blogs-trending-43881931

World Population Review. (2020). *Marriage age by state* 2020. https://worldpopulationreview.com/state-rankings/marriage-age-by-state

Gender Timeline

Kang, M., Lessard, D., Heston, L., & Nordmarken, S. (2017). *Introduction to women, gender, sexuality studies*. https://scholarworks.umass.edu/cgi/viewcontent.cgi?article=1000&context=wost_ed_

Resources

McRaney, K., Bridley, A., & Duffin, L.W. Jr. (2021). *The psychology of gender (2nd. ed.)*. Washington State University. https://opentext.wsu.edu/psychology-of-gender/wp-content/uploads/sites/119/2019/06/The-Psychology-of-Gender-2nd-edition.pdf