

High School Lesson

Women's Inequity in Pay: Could It Be Sexism, Implicit Bias or Both?

Rationale

This lesson provides an opportunity for students to reflect on their own opinions about sexism, understand the gender pay gap and its various manifestations and consider ways that it can be addressed.

Objectives

- Students will explore their opinions of and experiences with sexism and gender stereotypes.
- Students will deepen their understanding of the “gender wage gap,” how it manifests in different states and the way it specifically impacts women of color.
- Students will reflect on ways to close the gender pay gap and explore one idea in depth.

Age Range

Grades 9–12

Time

90 minutes or 2 class periods (plus time to implement project)

Requirements

Handouts and Resources:

- [The Big Number: 80 Percent](#) graph (one for each student and to be projected)
- [Wage Gap Data Interpretation](#) (one for each group)
- [Gender Differences: Jobs, Wages and Education](#) (one for each student)
- [“How to Bridge That Stubborn Pay Gap”](#) article (one for each student)

Other Material:

- Chart paper, markers, pens or pencils
- Computer, LCD projector or board/smart board

Advanced Preparation

- Reproduce handouts as directed above.
- Prepare definitions in Part I #5 to be posted for review.
- Select a large open space and indicate the position of an imaginary line with the farthest left point representing a STRONGLY AGREE response and the farthest right point a STRONGLY DISAGREE response. In between, place AGREE, IN BETWEEN/NOT SURE and DISAGREE along the continuum. Hang up signs with these words on the wall to mark each position (see Part I #1).
- Prepare [The Big Number: 80 Percent](#) graph to be projected for viewing by the entire class and/or distribute a copy to each student (see Part II #3).

Techniques and Skills

analyzing charts, analyzing data, analyzing visual media, brainstorming, cooperative group work, critical thinking, forming opinions, large and small group discussion, social action

Key Words

Bias
 Compensation
 Discrimination
 Disparity
 Flexibility
 Gender wage gap
 Implicit bias
 Institutional
 Median
 Negotiate
 Parental leave
 Personal
 Penalized
 Policy
 Salaries
 Sexism
 Stereotype
 Unconscious bias
 Wage

Procedures

Part I: Introduction to Bias and Sexism (20 minutes)

1. Explain to students that they will listen to some statements about gender and equity and decide to what extent they agree or disagree with each statement. Explain that some are statements of opinion and some are statements that have factual information. Instruct them to indicate their opinion about each statement by positioning themselves along the continuum posted on the wall, depending upon how strongly they agree or disagree with a statement.
2. Read each statement below, one at a time, requesting that students take a few minutes to decide where they stand in the continuum and to walk silently to that place and observe where others choose to stand. Following each statement, after everyone has chosen their spot, have students spend 2–3 minutes talking amongst themselves (in the groups that formed after choosing where to stand) about why they are standing where they are.
 - Girls and boys in this school are treated equally.
 - Gender stereotypes mostly hurt girls and women.
 - Women and men who have the same level of education generally make the same amount of money.
 - Sexism is a thing of the past.
 - Women who have children make less money than women who don't have children.
 - There are not major differences in salary between women of different races/ethnic backgrounds.
3. After all of the statements have been read, reconvene the whole class and lead a group discussion using the following questions:
 - a. Were some statements easier for you to decide where to stand and some more difficult? How so?
 - b. How did it feel when you might have been the only person or one of a few in a particular place on the continuum?
 - c. What did you base your decision about where to place yourself?
 - d. Did you ever decide to change your position when you saw you did not agree with a majority of the group, or after hearing others' points of view?
4. Ask students if they know what the terms "bias," "stereotype," "sexism" and "implicit bias" mean. Elicit responses for each term. Then, post the following definitions and review them, ensuring students understand the meanings:

Bias: an inclination or preference either for or against an individual or group that interferes with impartial judgment.

Stereotype: an oversimplified idea about a person or an entire group of people without regard for individual differences.
Example: All boys are good at sports.

Sexism: prejudice and/or discrimination based on a person's sex. Sexism is based on a belief (conscious or unconscious) that there is a natural order based on sex. *Example: Someone tells a joke or puts a person down because the person is male or female.*

Implicit bias: the unconscious attitudes, stereotypes and unintentional actions (positive or negative) towards members of a group merely because of their membership in that group. These associations develop over the course of a lifetime beginning at a very early age through exposure to direct and indirect messages. When people are acting out of their implicit bias, they are not even aware that their actions are biased. In fact, those biases may be in direct conflict with a person's explicit beliefs and values.

5. Share the following example of implicit bias:

Researchers asked students to rate teachers of an online course. The students were divided into four groups—two groups instructed by a female teacher and the other two by a male teacher. The students never saw or heard the teachers' voices. To one of the group of students, a male teacher claimed to be female and to another group of students, a female teacher claimed to be male. Despite who taught the course, when students believed the teacher to be male, they rated the male more highly. When believed to be female, the teacher was rated significantly lower (Source: Lillian MacNell and Matt Shipman, "[Online Students Give Instructors Higher Marks If They Think Instructors Are Men](#)," NC State News, December 9, 2014).

6. Lead a class discussion by asking the following questions:
 - In what way does this example illustrate implicit bias?
 - Do you think this example illustrates sexism? Why or why not?

NOTE: If it is not mentioned, share with students that in this example, students may have rated the male teacher more favorably because of his gender (i.e. sexism). And, students may have rated the male teacher higher because of biases they have subconsciously learned or were unaware of (i.e. implicit bias).

- Can you think of other examples of implicit bias?
- What are the challenges and possible consequences of making assumptions about someone based only on the person's gender?

Part II: Analyzing the Gender Pay Gap (60 minutes)

1. Ask students if they know what is meant by the term "gender pay gap." If students do not know, have them look at the three words separately to determine its meaning. Elicit/explain the definition of **gender pay gap** as the average difference between men's and women's median earnings, reported as either the earnings ratio between men and women or as an actual pay gap. For this lesson, the earnings ratio will be used to reflect the pay gap, calculated as follows:

$$\text{Pay gap} = \text{Women's median earnings} \div \text{Men's median earnings}$$

Also explain that this is also known as "gender wage gap" and the terms are often used interchangeably.

2. Ask students if they believe the gender pay gap is a result of conscious or unconscious bias, or neither? Allow a few minutes for them to share their thoughts.
3. Explain to students that they are going to talk about some data regarding the gender pay gap. Project the graph entitled "[The Big Number: 80 Percent](#)." Give students five minutes to carefully look at the data and then ask them to share some facts about the graph.

4. Provide a more detailed explanation of the graph by reading the following blurb:

Did you know that in 2016, women working full time in the United States typically were paid just 80 percent of what men were paid, a gap of 20 percent? The gap has narrowed since the 1970s, due largely to women's progress in education and workforce participation and to men's wages rising at a slower rate. Still, the pay gap does not appear likely to go away on its own. At the rate of change between 1960 and 2016, women are expected to reach pay equity with men in 2059. But even that slow progress has stalled in recent years. If change continues at the slower rate seen since 2001, women will not reach pay equity with men until 2119.

Ask students if they have any questions and provide responses that facilitate their understanding of the data.

5. Tell students they are going to analyze data regarding the gender pay gap and explore the different ways it manifests. Divide students into small groups of 4–5 students each.
6. Distribute to each group one copy of the [Wage Gap Data Interpretation](#) and to each student the [Gender Differences: Jobs, Wages and Education](#) handout. Instruct students to look at only the information in the "Occupations" section and to take note of the jobs classified as "Women's Work" and as "Men's Work." Explain to students that throughout the years, society has continuously classified positions like these according to perceptions of gender roles and whether a woman can perform executive/management level jobs or jobs viewed as labor intensive. This handout represents a sampling of occupations reflecting high and low concentrations of women.
7. Give students ten minutes in their small groups to study and discuss the data for each position. Ask for volunteers to indicate what they think the data reveals. Come to an understanding of the following:
 - Occupations classified as "Women's Work" generally involve nurturing, teaching or desk work while occupations classified as "Men's Work" generally involve leadership, decision making or labor/construction work.
 - Men make more money than women in both "Women's Work" and "Men's Work."
 - Women make more money doing "Men's Work" than doing "Women's Work."

8. Ask each group to select a recorder who will complete the [Wage Gap Data Interpretation](#) handout based on their small group discussion. Instruct groups to read the rest of the [Gender Differences: Jobs, Wages and Education](#) handout, studying and discussing the information and data while they answer the questions on the handout as a group. Allow 15 minutes for this part of the activity.
9. Reconvene the whole class and ask for someone from each group to report their groups' responses to questions 1–3 from the *Wage Gap Data Interpretation* handout. Allow 20 minutes for reporting.
10. Lead a class discussion by asking the following questions:
 - a. Taking into consideration all the data you have reviewed and discussions you've had, what did you learn that made you either change your point of view or made you feel more strongly about the position you took during the exercise at the beginning of this lesson when asked the following questions? Read each statement one at a time allowing a few responses for each statement
 - Women and men who have the same level of education generally make the same amount of money.
 - Sexism is a thing of the past.
 - There are not major differences in salary between women of different races/ethnic backgrounds.
 - b. Taking into consideration your discussions about question four on the *Wage Gap Data Interpretation* handout, what do you think are some of the reasons that women earn less (record responses on board/smart board)?

Following up on the last discussion question, explain that the gender wage gap is due to a variety of causes including: discrimination in hiring, differences in education choices, differences in preferred job and industry, salary negotiation differences, the types of positions held by men and women, difference in length of work week and breaks in employment due to parenting.

11. Distribute a copy of the article "[How to Bridge That Stubborn Pay Gap](#)" to each student. Give students ten minutes to read the article silently.

NOTE: The wage gap-related statistics in the article are somewhat different than what is in the article because the lesson has been updated since this article was written. However, the article still provides key and relevant information on how to close the wage gap.

12. Engage students in a class discussion by asking the following questions:
 - According to the article, what are some of the reasons for the gender wage gap and what factors make it difficult to determine the exact reasons for the gap?
 - What are some of the suggested ideas to address the gender wage gap? What are your thoughts about those suggestions?
 - Which of these examples reflect conscious bias and which reflect unconscious bias and why?

NOTE: If students ask questions about what the federal government has done to address this problem, share the following:

In 2009, the first piece of legislation that President Obama signed was the Lilly Ledbetter Fair Pay Act, a bill that makes it easier for women to sue companies who pay women less than men for the same work. In June 2012, another bill would have banned companies from retaliating against women for seeking equal pay but it failed in the Senate. Then it failed twice more in the Senate in 2014. It is important to note that according to estimates from the National Organization of Women (NOW), over her lifetime, the wage gap will cost the average high school graduate \$700,000, the average college graduate \$1.2 million and the average advanced degree graduate \$2 million.

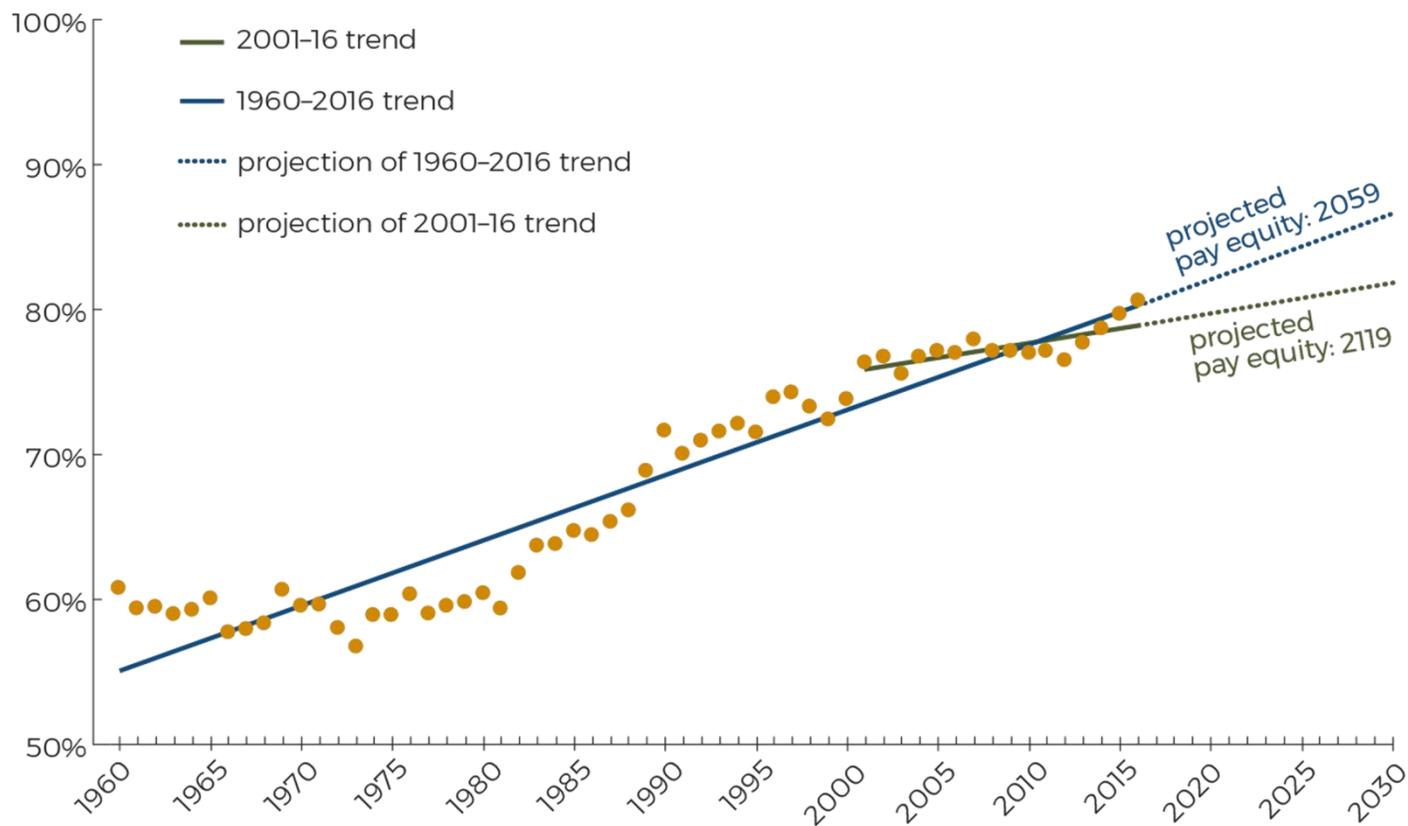
Additionally, you may recommend students read an interactive article, "See What Your State Is Doing to Close the Gender Wage Gap," at <https://www.nbcnews.com/news/us-news/see-what-your-state-doing-close-wage-gap-n741351> for additional information on what the government is doing.

Part III: Social Action Essay Writing (10 minutes)

1. Explain that bias can be personal and institutional and, similarly, the solutions can be personal or institutional. Ask students how they think the two are different and provide the following definitions of personal and institutional bias:
 - **Personal** manifestations of prejudice or discrimination include individual acts of bias, meanness or exclusion.
 - **Institutional** manifestations of prejudice or discrimination include policies and practices that are supported and sanctioned by power and authority, and that benefit some and disadvantage others.
2. Explain to students that they are going to brainstorm ways to address the gender wage gap. Ask them to reflect on everything they have discussed, read and learned—on both a personal and institutional level—and call out ways they think the gender wage gap can be addressed. Record their responses on the board/smart board.
3. Instruct students to select one of the ideas generated from the brainstorming session to expand upon. Explain that for homework they are to write an essay (or a research paper) to be completed over the course of the next day or several weeks, depending on the writing assignment, but they are to write the opening paragraph now, in class. In addition, and if time allows, students can also make a video, PowerPoint presentation or use social media to get their message across to a larger audience.
4. Close by having all the students share the opening paragraph from their essays (or research paper). Then indicate when their paper is due.

The Big Number: 80 Percent

Women’s Median Annual Earnings as a Percentage of Men’s for Full-time, Year-round Workers, 1960–2016 and Projections



Source: AAUW analysis of Semega et al., 2017 and previous publications.

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Wage Gap Data Interpretation

Directions: Based on all the data from the *Gender Differences: Job, Wages and Education* handout that your group has reviewed and analyzed, discuss and answer the following questions within your group.

1. Do men and women who have the same level of education generally make the same amount of money?
2. Does education have an impact on how much you can earn in the workplace? Explain.
3. Are there major differences in salary between women of different races? How about women of color (African-American, Latino, Asian) compared to white men? What are the differences among women of color (African-American, Latina, Asian)? Explain.
4. Do you think the gender wage gap is a result of conscious or unconscious bias, or neither? Please explain.

Gender Differences: Jobs, Wages and Education

Occupations

The gender wage gap is the average difference between men's and women's median earnings, reported as either the earnings ratio between men and women or as an actual pay gap. The wage (pay) gap, as earnings ratio, is calculated as follows:

$$\text{Wage gap} = \text{Women's median earnings} \div \text{Men's median earnings}$$

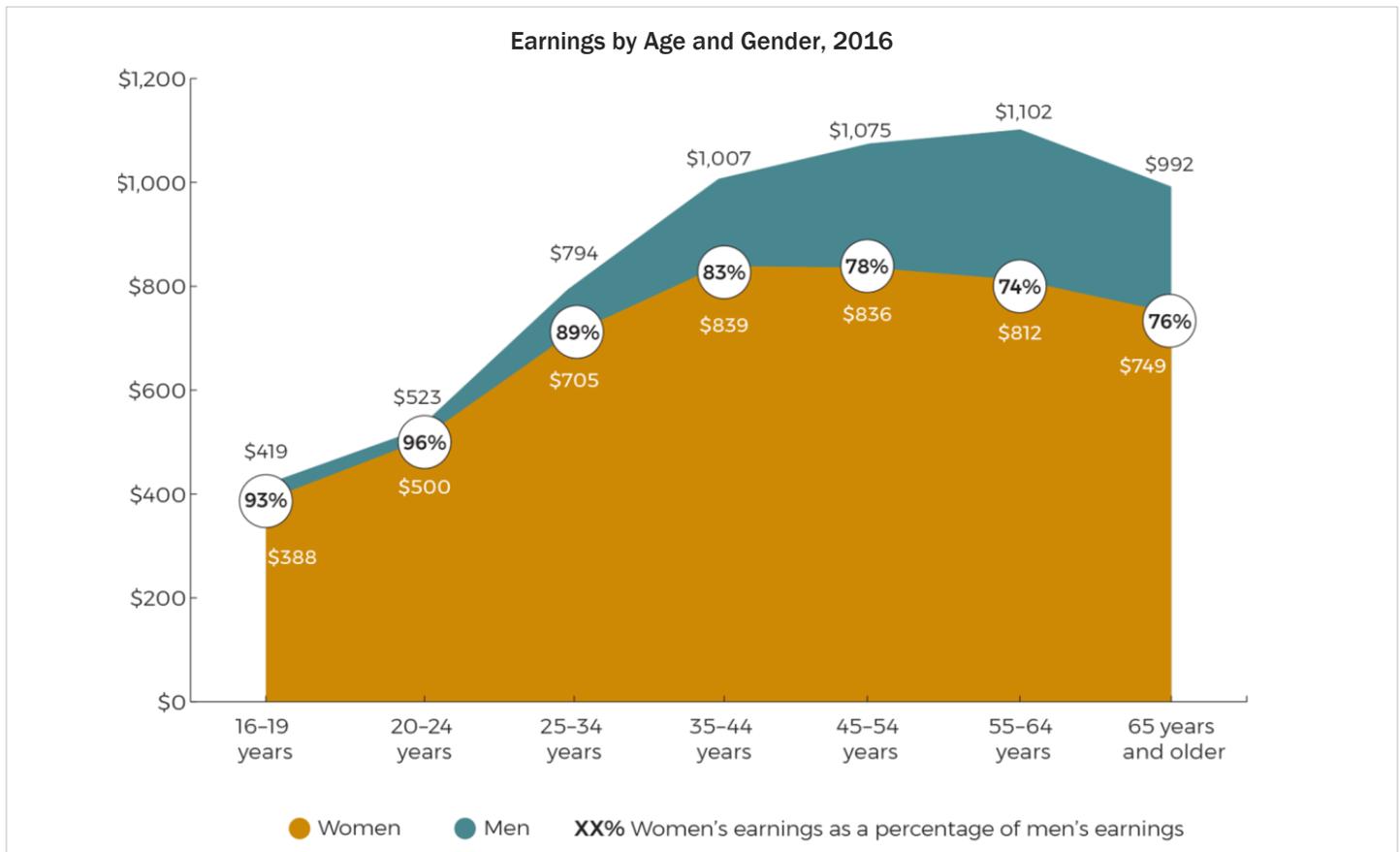
"Women's Work" (Occupations with a High Concentration of Women in 2016)	% Women	Median* Weekly Salary	% Men	Median* Weekly Salary	Wage Gap**
Preschool and kindergarten teachers	97.7	\$621	2.5	–	
Childcare workers	94.1	\$451	5.9	–	
Secretaries and administrative assistants	94.0	\$708	6.0	\$831	85.2%
Registered Nurses	88.6	\$1,143	11.4	\$1,261	90.6%
Nursing, psychiatric and home health aids	86.0	\$498	14.0	\$534	93.3%
Bookkeeping, accounting and auditing clerks	84.8	\$716	15.2	\$790	90.6%
Maids and housekeeping cleaners	84.6	\$427	15.4	\$497	85.9%
Social workers	81.4	\$884	18.6	\$1,039	85.1%
Elementary and middle school teachers	78.7	\$981	21.3	\$1,126	87.1%
Medical and health services managers	75.0	\$1,254	25.0	\$1,610	77.9%
"Men's Work" (Occupations with a Low Concentration of Women in 2016)	% Women	Median* Weekly Salary	% Men	Median* Weekly Salary	
Chief executives	27.7	\$1,876	72.3	\$2,419	77.6%
Computer and Mathematical	25.2	\$1,325	74.8	\$1,518	87.3%
Software developers, applications and systems software	18.0	\$1,415	81.9	1,751	80.8%
Clergy (priests, rabbis, ministers, etc.)	14.4	\$893	85.6	\$1,070	83.5%
Architecture and Engineering	14.0	\$1,207	86.0	\$1,529	78.9%
Driver/sales workers and truck drivers	4.3	\$630	95.7	\$787	80.1%
Installation, maintenance and repair occupations	3.4	\$781	96.6	\$863	90.5%
Firefighters	3.2	–	96.8	\$1,056	
Electricians	2.7	–	97.3	\$951	

*Median means the middle number when a series of numbers are arranged in order. A dash indicates no data or data that meet publication criteria (values were less than \$50,000 annually).

**A gap of 70% means, for example, that women earn 70¢ for every \$1.00 that men earn.

Earnings

Women are integral to today's workforce. Almost half of U.S. workers are women yet they only earn 80% of what men earn. Earnings for both female and male full-time workers tend to increase with age, though earnings increase more slowly after age 45 and even decrease after age 55 (see graph below). Women's median weekly earnings in 2016 were highest among ages 35–54. The gender pay gap was the smallest between ages 16–24 and grew with age. Older female workers earned considerably less than their male counterparts and experienced a wage gap considerably larger than the male/female differences in wages among younger workers.

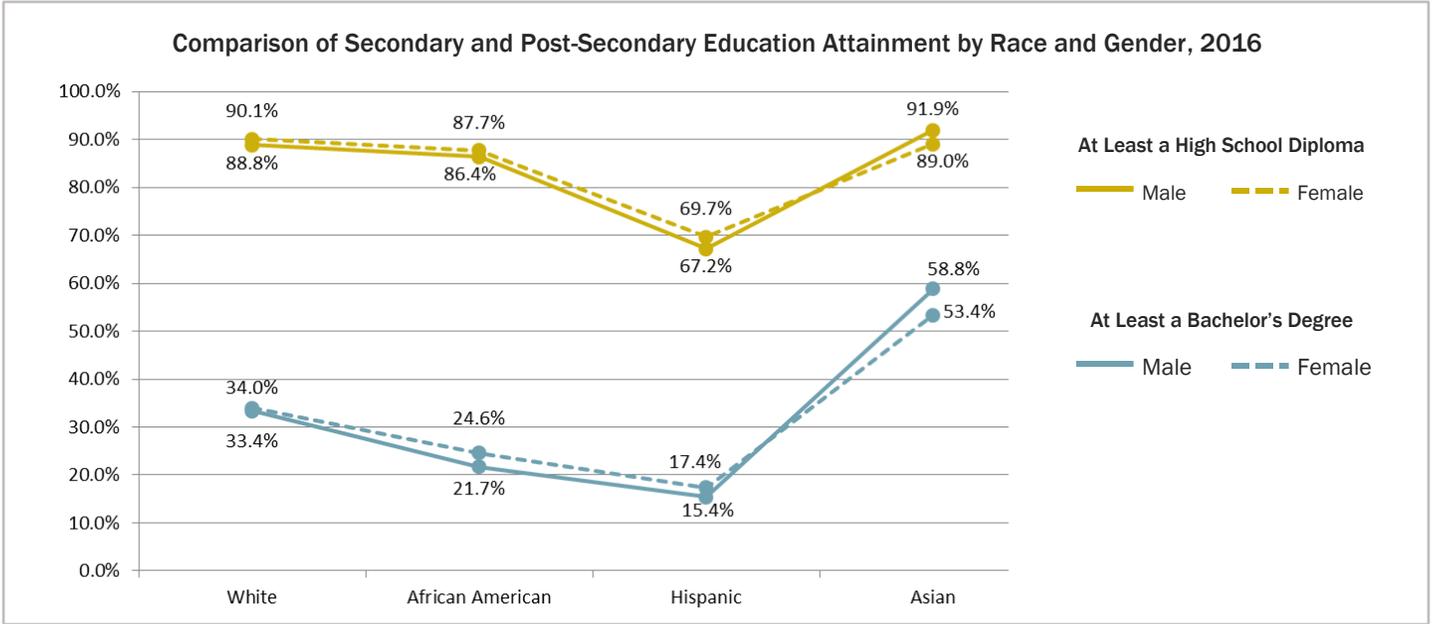


Note: Based on median usual weekly earnings of full-time wage and salary workers, 2016 annual averages

Source: U.S. Bureau of Labor Statistics (2017c). Illustration reprinted with permission from *The Simple Truth about the Gender Wage Page*. © 2017 The American Association of University Women, www.aauw.org.

Education

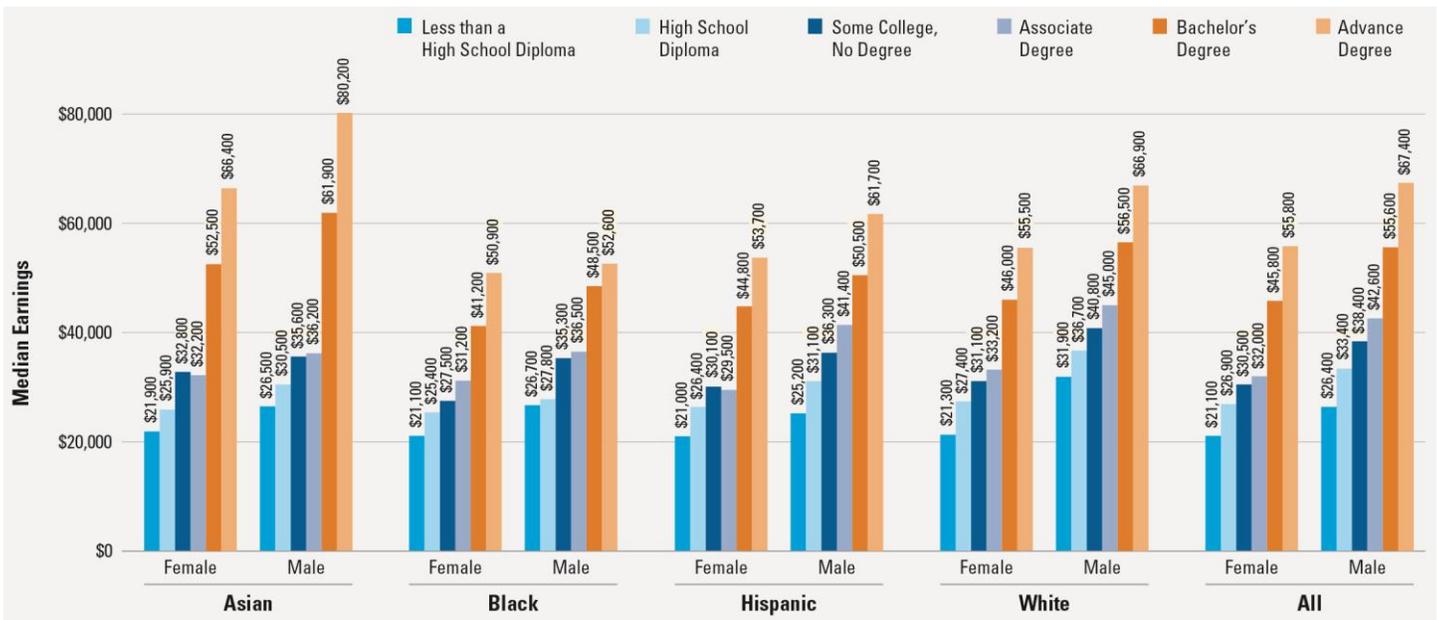
As educational attainment increases, the percentages of men and women who participate in the U.S. labor force also increases. The gap between men's and women's labor force participation rates also narrows as educational attainment increases. Between 1980 and 2015, the median weekly earnings for men have been substantially more than women at each level of educational attainment with 2014 being the first year, among ages 25 and older, where the percentage of women's college attainment (30.2%) was statistically higher than that of men (29.9%). In 2016, men had higher labor force participation rates than women at nearly every level of educational attainment. A higher percentage of females among Whites, African Americans and Hispanics were higher than their male counterparts who obtained a high school diploma or bachelor's degree. But, the percentage for Asian males was statistically higher than their female counterparts (see the graph below).



Source: U.S. Census Bureau, Educational Attainment in the United States: 2016

A report by the College Board shows that median earnings of females with a bachelor's degree exceeded the median earnings of female high school graduates by 66% in 2015. For males with a bachelor's degree, their median earnings exceeded the median earnings of male high school graduates by 72%. The graph below reflects the median earnings of full-time workers age 25 to 34 by race/ethnicity, gender and education level.

Median Earnings of Full-Time Workers Age 25 to 34 by Race/Ethnicity, Gender and Education Level



Notes: Based on combined data from the 2014, 2015 and 2016 Annual Social and Economic Supplement of the Current Population Survey. Earnings in 2013 and 2014 are adjusted to 2015 dollars using the Consumer Price Index for all urban consumers. Median earnings are the medians of combined data. The "Asian," "Black" and "White" categories include individuals who reported one race only and who reported non-Hispanic.

Sources: U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2014, 2015 and 2016; calculations by the authors. Reprinted from Jennifer Ma, Matea Pender and Meredith Welch, *Education Pays 2016: The Benefits of Higher Education for Individuals and Society* (New York: The College Board, 2016),

Race/Ethnicity

Among full-time workers in 2016, Hispanic or Latina, American Indian or Alaska Native, Black or African American and Native Hawaiian or other Pacific Islander women had lower median annual earnings compared with non-Hispanic white and Asian women. Compared with salary information for white male workers, Asian women's salaries show the smallest gender pay gap, at 87% of white men's earnings. The gap was largest for Hispanic women, who were paid only 54% of what White men were paid in 2016.

Women's Earnings as a Percentage of White Men's Earnings, by Race/Ethnicity, 2016

Women	Current Population Survey (CPS)	American Community Survey (ACS)
Hispanic or Latina	54%	54%
Black or African American	63%	63%
White (non-Hispanic)	79%	77%
Asian	87%	90%
Native Hawaiian or Other Pacific Islander	–	59%
American Indian or Alaska Native	–	57%

Note: Based on median annual earnings of full-time, year-round workers. CPS includes workers 15 and older; ACS includes workers 16 and older. The CPS is the preferred data source for income estimates but lacks sufficient sample size for reporting on smaller demographic groups. See page 6 for a more detailed description of the CPS and ACS.

Source: U.S. Census Bureau (2017a, 2017b)

According to the percentages listed above, for women of color, the wage gap translates into an annual loss of \$26,403 for Latinas, \$24,007 for Native women, \$21,698 for Black women and \$7,310 for Asian women. Closing the wage gap is, therefore, particularly important for Black, Latina and Native women who have lower incomes, and are more likely to be in poverty than white, non-Hispanic women and Asian women. (Source: "[The Wage Gap: The Who, How, Why and What to Do](#)," Workplace Fact Sheet (Washington, DC: National Women's Law Center))