Public Perceptions of the Pay Gap

American Association of University Women Educational Foundation
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This report was written by Catherine Hill and Elena Silva of the AAUW Educational Foundation. The telephone survey was conducted by Lake, Snell, Perry, Mermin and Associates. Sue Dyer edited the report, and Lisa Maatz, Meghan Kissell, and Jean-Marie Navetta provided valuable comments. Special thanks to Vicky Lovell, Institute for Women’s Policy Research, for technical assistance.

The American Association of University Women promotes equity for all women and girls, lifelong education, and positive societal change. The AAUW Educational Foundation provides funds to advance education, research, and self-development for women and to foster equity and positive societal change.
Introduction

Women have made gains toward closing the gender pay gap during the past two decades.\(^1\) Much of the progress occurred during the 1980s, with smaller gains in the 1990s (Institute for Women’s Policy Research 2004). Women’s achievements in higher education are partly responsible for narrowing the pay gap in the 1980s and 1990s.\(^2\) As more women earned college and professional degrees, women’s overall earnings increased, even while individuals continued to face a pay gap at every educational level.\(^3\)

Most recently, progress has slowed, and the pay gap now stands at about 25 cents; that is, women working full time earn about 75 percent of what men working full time earn. Do Americans know about this disparity? Why do they think there is a pay gap?

The following report examines Americans’ perceptions of the pay gap based on an AAUW-commissioned poll conducted by Lake, Snell, Perry, Mermin & Associates between March 23 and March 29, 2005, and compares these perceptions to recent research on the pay gap. For the methodology, see Appendix B.

What Do Americans Say?

Is There a Gap?

Americans are well aware that there is a pay gap between male and female full-time workers. Three-quarters (75 percent) say they agree, including 60 percent who say they strongly agree. Women, older Americans, and Democrats are more likely to agree there is a pay gap. Younger adults, Republicans, and higher income groups are more likely to say that a pay gap does not exist.

Figure 1: Do you agree or disagree that there is a difference between the wages for women who work full time and for men who work full time?

<table>
<thead>
<tr>
<th>Disagree (strongly or not strongly)</th>
<th>Agree or strongly agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>17%</td>
<td>75%</td>
<td>60%</td>
</tr>
</tbody>
</table>

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\(^1\) See Appendix A.

\(^2\) See, for example, Blau and Khan (2001, 23-24).

\(^3\) Unfortunately, the narrowing of the gap between men and women’s earnings is also partly caused by a decline in the real value of the wages of men without college degrees.
Of those who agree that there is a pay gap, more than half believe a woman makes about 65 or 75 cents for every dollar men make and another 29 percent think women make 75 cents for every dollar men make. An additional 20 percent say that women make about 80 cents for every dollar men make.

**Why Is There A Gap?**

More than half (56 percent) of Americans include employers’ unwillingness to promote young women because they may leave when they have children as either the first (29 percent) or second (27 percent) most important reason for the pay gap. About 41 percent say it is because women prioritize family over career: 23 percent felt it was the most important factor, and 18 percent thought it was the second most important factor. An identical number (41 percent) say it is because employers discriminate against women in their hiring and promotion practices: 21 percent chose this as the most important factor, and 20 percent chose it as the second most important factor. About one-fifth of Americans (28 percent) chose gender differences in negotiation and assertiveness as a leading factor: 11 percent chose this as the most important factor, and 17 percent chose it as the second most important factor. Only 12 percent of adults believe there is a pay gap because men are more likely to have the education and skills needed for higher paying jobs: 4 percent chose this as the most important factor, and 8 percent chose it as the second most important factor.

<table>
<thead>
<tr>
<th>Most Important</th>
<th>Next Most Important</th>
<th>Combined</th>
</tr>
</thead>
<tbody>
<tr>
<td>Women prioritize family over career.</td>
<td>23</td>
<td>18</td>
</tr>
<tr>
<td>Men are more assertive at negotiating with employers.</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Men are more likely to have the education and skills needed for higher paying jobs.</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Employers don’t promote young women because employers believe that women will leave if they have children.</td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td>Employers discriminate against women in their hiring and promotion practices.</td>
<td>21</td>
<td>20</td>
</tr>
</tbody>
</table>

Notes: A small percentage of those surveyed responded that they did not know (5 percent), all of the above (4 percent) were true, or none of the above (3 percent) were true. These options were not given to respondents as choices, but if respondents volunteered these answers, the answers were recorded. Options are listed in the order in which they were presented to respondents.

Americans over the age of 45, both men and women, are more likely to agree that there is a gender pay gap. Women over 45 agree there is a pay gap and estimate a greater gap. Younger women believe that the pay gap is the result of women putting family first and being less committed to a career; nearly one-third of younger women cited this as the main reason for the pay gap, compared to only one-fifth of older women.4

American’s perceptions of the pay gap by party affiliation reveal some interesting differences and similarities. The majority of both parties perceive there is a gender pay gap, although Democrats are notably more likely than Republicans to agree that there is a gap. Both parties

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4 Due to the limited sample size, analysis of other demographic characteristics is not possible.
equally believe that the top reason for the pay gap is employer’s unwillingness to promote young women based on assumptions that women will leave when they have children. Democratic and Republican women agree that there is a gender pay gap and share the belief that a key reason for the gap is employer’s unwillingness to promote young women based on assumptions that women will leave when they have children.

**What Do Economists Say?**

Economists agree that there is a gender pay gap among full-time workers but disagree on the size of the gap and the factors driving the disparities. Among full-time, year-round workers ages 18 and older, the median earnings for men in 2003 was $40,683 and the median earnings for women was $30,733 for an earnings ratio of 75.5 percent (U.S. Census Bureau 2004).\(^5\)

Economists note that the pay gap is wider between white men and women and narrower between men and women of African American or Hispanic descent, in large part because the wages of African American and Hispanic men are considerably lower than those of white men (U.S. Bureau of Labor Statistics 2004, 1).

**Putting Family First**

Many economists agree that women’s decision to put their family first, manifested as taking time out of the labor force or reducing hours at various times to care for children or other family members, accounts for part of the gender pay gap. A recent study by the U.S. General Accounting Office (2003, 2) found the following:

> Of the many factors that account for the differences in earnings between men and women, our model indicates that work patterns are key. Specifically, women have fewer years of work experience, work fewer hours per year, are less likely to work a full-time schedule, and leave the labor force for longer periods of time than [do] men.

Other economists concur that work patterns account for a portion of the pay gap.\(^6\) For example, Blau and Kahn (2001, 12) found a sizeable difference in work force experience among male and female full-time workers and that this disparity accounted for part, but not all, of the pay gap.

While parenthood appears to affect men’s and women’s careers differently, a majority of mothers do continue working, even while they have young children. Lovell (2003) reports that

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\(^5\) Annual earnings of full-time wage and salary workers is a standard measure of pay differentials. Economists also calculate the pay gap using median usual weekly earnings of full-time wage and salary workers. The ratio for usual weekly earnings in 2003 was 79.4; this gap is narrower in part because weekly figures do not include bonuses and overtime pay. Because men are more likely than women to receive bonuses and work overtime, the gender pay gap in annual earnings is slightly wider when measured using usual weekly earnings Differences can also be measured on an hourly basis. Among workers paid on an hourly basis, women age 16 and older typically earn, on average, about 85 percent of men’s earnings. Because only part of the work force is paid on an hourly basis, it is not usually consider a good representation of the full work force.

\(^6\) GAO included both full-time and part-time workers as well as the self employed. Differences in work patterns accounted for differences among full-time workers as well as among the broader work force.
three-fourths (76 percent) of mothers work for pay and more than one-third (39 percent) work 40 hours per week, year-round.

| Table 2: Labor Force Participation of Mothers, by Age of Children, 2001 |
|-------------------|----------------|----------------|----------------|----------------|
|                   | No work for pay | Part time, part year | Part time, full year | Full time, part year | Full time, year round |
| All mothers       | 25%            | 11%             | 16%             | 10%             | 39%             |
| Mothers with infants | 32%           | 18%             | 8%              | 18%             | 24%             |
| Mothers with preschoolers | 31%        | 12%             | 15%             | 10%             | 33%             |
| Mothers with school-age children | 20%       | 10%             | 17%             | 8%              | 45%             |

Notes:
(1) Rows may not equal 100 due to rounding.
(2) Full-time is defined as 40 hours or more usual hours of work per week (the standard definition of full-time work is 35 hours per week).
(3) Definitions: “Mothers with infants” means the youngest child is less than 1, “mothers with preschoolers” means the youngest child is at least 1 and not more than 5, and “mothers with school-age children” means the youngest child at least 6 and not more than 18, as of March 2002.
Source: Lovell 2003, Table 1.

Boushey (2005) reports that women who received pay during their maternity leave are more likely to return to the workplace than are those who have to finance the leave themselves. She also found that workplace flexibility— including scheduling flexibility and maternity leave—has either a positive or no effect on mothers’ wages.

**Occupational Segregation**

Occupational segregation is often cited as a reason for pay disparities between men and women. Economists Boraas and Rodgers (2003, 9) found that the share of women in an occupation is the largest contributor to the gender pay gap. Despite women’s progress in many nontraditional jobs, occupational segregation remains widespread. An analysis by the National Women’s Law Center (2000) found that more than half of women (or men) would have to change jobs to completely eradicate occupational segregation. Certainly many of the occupations most heavily dominated by women include the lowest paid workers (see Table 3).

| Table 3: Usual Weekly Wages in Low-wage Occupations With a High Percentage of Women Workers, 2003 Annual Averages |
|---------------------------------------------------------------|----------------|----------------|
| Occupation                                                   | Percentage Female | Usual Weekly Earnings |
| Total workers, 16 years and older                            | 43.9            | $552            |
| Preschool and kindergarten teachers                          | 97.5            | $493            |
| Secretaries and administrative assistants                     | 96.3            | $531            |
| Receptionists and information clerks                         | 93.2            | $446            |
| Teacher assistants                                            | 90.9            | $344            |
| Nursing, psychiatric and home health aides                   | 89.0            | $372            |

Source: Data provided by the Institute for Women’s Policy Research based on the Current Population Survey.

7 The AAUW poll did not ask directly about occupational segregation as a reason for the pay gap. However, this variable could be associated with individual choice (e.g., women choosing careers that allow them to care for children), employer discrimination (e.g., employers not hiring and promoting women in traditionally male fields), or education and skills (e.g., women not pursuing or advancing in traditionally male fields).
Differences in Skills and Education

With the remarkable educational gains by women during the past 40 years, there should be no dispute that women have the credentials for higher paying jobs. Today women make up a majority of college students.\(^8\) Overall, men are only slightly more likely to have a college degree, and among young adults, these differences disappear altogether.\(^9\)

Women have made considerable advancements in the fields traditionally considered male. The most dramatic changes occurred in professional programs such as medicine, law, and business, where the proportion of women shot up from 9 percent in 1970 to 47 percent in 2000. Some economists, however, argue that women have the “wrong” educational credentials and skills and say that women are not sufficiently well educated in mathematics and science.

During the past three decades, women have made significant gains in nontraditional fields including biology, physical sciences, business, and mathematics. For example, women now earn more than 60 percent of undergraduate degrees in biology and nearly half (47 percent) of undergraduate degrees in mathematics.

Figure 2. Percentage of Bachelor’s Degrees Earned by Women, Selected Fields, 1970-71 to 2001-02

![Figure 2](image)


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\(^8\) Among undergraduates, women comprised 56 percent of the student body in 2000, up from 42 percent in 1970. The proportion of women graduate students grew from 39 percent to 58 percent during this period.

\(^9\) About one-third (31 percent) of the women and one-fourth (26 percent) of men ages 25 to 29 have a college education.
Women’s progress in professional programs such as medicine, business, and law has been remarkable. In 1970, only 9 percent of students in professional degree programs were women; by 2001, women made up 48 percent of this student body.¹⁰

A comparison of recent college graduates who work full time offers one indication that differences in skills and education are not a key factor in the gender pay gap. It is notable that the gap is greatest in engineering, math, and science and lowest among traditionally female occupations.

| Table 4: Average Annual Salary of Recent Bachelor’s Degree Recipients Employed Full Time One Year After Graduation, by Gender And Undergraduate Field of Study, 2001 |
|---------------------------------|-----------------|----------------|
| **Men**                        | **Women**       | **Earnings Ratio** |
| All graduates                  | $39,400         | $32,600         | 83%           |
| Business                       | $42,300         | $39,000         | 92%           |
| Education                      | $29,600         | $28,100         | 95%           |
| Engineering, math, and science | $45,200         | $34,200         | 76%           |
| Health vocation, technical, and Professional | $38,100         | $34,300         | 90%           |
| Humanities and social science  | $34,600         | $29,400         | 85%           |

Source: Peter & Horn 2006.

Working in a nontraditional field has long been suggested as a way for women to increase their pay. A significant gender pay gap is found among doctors, lawyers, and businessmen (Baker 2002). For example, a study of University of Michigan Law School graduates found that even after controlling for child care, work history, school performance, and other variables, about one-fourth of the male-female pay gap remained unexplained (Wood, Corcoran, & Courant 1993).

**Differences in Negotiation Skills**

Economists agree that individual differences in negotiating skills can lead to pay variation among workers with similar skill sets, although they differ on the relative importance of this factor. Employers have a fair amount of discretion in setting wages as long as they pay at least the minimum wage and do not discriminate based on gender, race, ethnicity, age, or other protected group.¹¹ One study by Babcock and Laschever (2003) found that starting salaries for male students graduating from Carnegie Mellon University with master’s degrees were about 7 percent higher (almost $4,000) than those of women. Babcock and Laschever argue that this gap in part reflects differences in men’s and women’s willingness to negotiate. Only 7 percent of the women negotiated their salaries compared to 57 percent of the men, according to Babcock and Laschever. Because raises, bonuses, and retirement benefits are often calculated as a percentage of pay, small differences in initial pay can result in larger disparities over time. Of course, differences in willingness to negotiate may also reflect differences in cultural norms. What is viewed as assertive in a man may be perceived as aggressive in a woman. Whether women’s attempts to negotiate higher pay would be well received remains an open question.


¹¹ Federal and state laws determine minimum wages, and employees are entitled to the higher of the two. Various groups of workers are not covered under federal minimum wage law, such as agricultural workers and tipped employees (who have a separate, lower minimum pay). Only employers who do at least $500,000 in business per year are covered under minimum wage rules (see www.bls.gov for more information).
**Discrimination**

Most economists agree that some part of the pay gap is accounted for and thus could result from employer discrimination, although there is disagreement on the extent to which pay differences are not explained by other factors (Blau & Kahn 2001; U.S. General Accounting Office 2003). GAO (2003, 2) found that about 20 percent of the pay gap is explained and hence could be attributed to discrimination (or other factors not included in their analysis):

> When we account for differences between male and female work patterns as well as other key factors, women earned, on average, 80 percent of what men earned in 2000. Even after accounting for key factors that affect earnings, our model could not explain all of the differences in earnings between men and women.

Because someone’s gender is usually easily identified by name, voice, or appearance, studying sex discrimination directly is difficult. One study of the impact of blind auditions by symphony orchestras is illustrative. Goldin and Rouse (2000) found that the adoption of blind auditions in which a screen was used to conceal the identity of the candidate explained 25 percent of the increase in the number of women in top U.S. symphony orchestras, from less than 5 percent of musicians in 1970 to 25 percent by 2000.

Other evidence of the persistence of sex discrimination comes from the U.S. Equal Employment Opportunity Commission (2005), which reports that in fiscal year 2004, it found 112 cases in which there was reasonable cause to believe that sex discrimination in pay had occurred—a number that has risen during the past decade.12

**Conclusion**

Americans know about the pay gap and some of the main reasons for these inequities. Research supports Americans’ perceptions that work/family balance, both real and perceived, partially explain the pay gap.

Notably, Americans do not believe that women’s skills and education are an important factor, nor do they think the gap is principally a question of negotiation skills. Americans are more likely to attribute the pay gap to employer discrimination.

Economists leave a portion of the pay gap unexplained, even when controlling for factors generally associated with earnings. AAUW’s findings suggest that economists should take a closer look at employer practices and attitudes as an explanation for the pay gap.

Women’s progress throughout the past 30 years attests to the possibility of change, as economist Claudia Goldin (2004) eloquently reminds us:

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12 Equal Pay Act charges include cases in which concurrent charges were filed under Title VII of the Civil Rights Act of 1964, the American With Disabilities Act (ADA), or the Age Discrimination in Employment Act (ADEA). Charges of discrimination under the Equal Pay Act do not have to be filed with the EEOC, thus the number of cases involving claims of pay discrimination is most likely higher.
Meaningful discussions about Ågwomen at the topÅh can take place today only because a quiet revolution occurred about thirty years ago. The transformation was startlingly rapid and was accomplished by unwitting foot soldiers of an upheaval that transformed the workforceÅc. Previously, women who reach the peaks often made solo climbs and symbolized that women, contrary to conventional wisdom, could achieve greatness. But real change demanded a march by the masses from the Åevalley to the summitÅf.

Before Title IX of the Education Amendments of 1972 and Title VII of the Civil Rights Act of 1964, employers could’and did’ refuse to hire women for occupations deemed Ågunsuitable,Åh fire women when they became pregnant, or limit their work schedule because they were female. Schools could’and did’ set quotas for the number of women admitted or refuse women admission altogether. In the decades since these civil rights laws were enacted, women have made remarkable progress in fields such as law, medicine, and business as well as in nontraditional Ågblue-collarÅh jobs like airplane pilots, fire fighters, and auto mechanics.

Collectively, women have demonstrated that they have the skills and the intelligence to do any job. Women have made enormous gains in education and labor force participation. Now it is time for our paychecks to catch up.

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**Definitions**

*Annual Earnings* is the sum of wage and salary income before deductions for taxes. Annual earnings include wages and salary, overtime pay, bonuses, and other monetary compensation from employer. Only full-time, year-round wage and salary workers are included in this calculation. Earnings are usually reported based on the median or typical earnings of men and women who work full time, year-round. Thus, half of the female workers earn less than the median and half earn more (likewise, half of male workers earn less and half earn more than the reported male median earnings). The self employed, even if they are incorporated, are not included.

*Full time* is defined as 35 hours a week or more. Elementary or secondary school teachers who worked 37 weeks or more are considered full time.

*Pay gap* is the difference between the earnings of typical male and female full-time workers. The earnings ratio equals the amount earned by women divided by the amount earned by men. The pay gap equals the amount earned by men minus the amount earned by women.

*Year-round* means an individual worked 50 or more weeks (paid vacations count as weeks worked).

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13 The U.S. Bureau of Labor Statistics Women’s Bureau (2005) reports that the percent increase in the share of women employed as airplane pilots and navigators (167 percent), fire fighters (174 percent), and automobile mechanics (177 percent) rose between 1993 and 2002.
Appendix A. Trends in Median Usual Weekly Earnings of Full-Time Wage and Salary Workers

Median Usual Weekly Earnings of Full-time Wage and Salary Workers, 25 Years and Older, Annual Averages (2004 Dollars)
Appendix B. Methodology

Lake, Snell, Perry, Mermin and Associates conducted this survey of 800 women and 400 men ages 18 and older nationwide between March 23 and March 29, 2005. Data was weighted slightly by age and race to reflect the attributes of the actual population. The data was also weighted to 48 percent male and 52 percent female to reflect the general population.

The questions discussed in this report were part of a larger survey on economic and social issues. Below are the four questions presented to respondents.

1. Do you agree or disagree that there is a difference between the wages for women who work full time and for men who work full time? [Is that strongly or not so strongly agree/disagree?]
   a. Strongly agree
   b. Not so strongly agree
   c. Not so strongly disagree
   d. Strongly disagree
   e. Do not know [not read to respondents]

If the respondents agreed with above question, the following questions were asked

2. Of the following wage differences for women and men working full time, which one do you think is the MOST accurate?
   Women make about 65 cents for every dollar a man makes.
   Women make about 75 cents for every dollar a man makes.
   Women make about 80 cents for every dollar a man makes.
   Women make about 90 cents for every dollar a man makes.

   [Other options not read include different amounts, do not know and refused to answer]

3. Now let me read you some reasons other people have given as to why there is a wage gap between women and men who work full-time. Please tell which ONE you think is the most important reason as an explanation for the wage gap.
   a. Women prioritize family and are less committed to their careers.
   b. Men are more assertive at negotiating with employers.
   c. Men are more likely to have the education and skills needed for higher paying jobs.
   d. Employers don’t promote young women because they believe that they will leave if they have children.
   e. Employers discriminate against women in their hiring and promotion practices.

   [Other options not read include all of the above, none of the above, and do not know]

4. And what would be the NEXT most important reason [?] as to why there is a wage gap?
   Options for question 3 were repeated.
Demographic data was collected on gender, age, race, household income, education, political party registration, and political ideology (liberal versus conservative).

Sampling errors are reported at the 95 level. The margin of error for the entire survey is +/- 3.4 percent. The margin of error varies for each question depending on the number of respondents answering the question.

All of the assertions in the report are statistically significant to the 95 percent confidence level. Table 1A illustrates the methodology.

| Table 1A. Do you agree or disagree that there is a difference between the wages for women who work full time and for men who work full time? |
|-------------------------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Percent of Men                                  | Strongly Agree | Agree (including strongly agree) | Disagree strongly or not strongly | Difference between all agree and all disagree |
| Percent of Men                                  | 52%             | 69%                             | 24%                             | 69-24=45                                       |
| Unweighted Number of Men                        | 400             | 400                             | 400                             | NA                                             |
| Sampling Error                                  | +/- 4.9         | +/- 4.9                         | +/- 4.9                         | Significant                                    |
| Percent of Women                                | 68%             | 81%                             | 12%                             | 81-12=69                                       |
| Unweighted Number of Women                      | 800             | 800                             | 800                             | NA                                             |
| Sampling Error                                  | +/- 3.2         | +/- 2.7                         | +/- 2.0                         | Significant                                    |

Figures 1 through 8 below illustrate the polling results for selected comparisons. Error bars represent the confidence interval at the 95 percent confidence level.
Figure 1A. Do you agree or disagree that there is a difference between the wages for women who work full time and for men who work full time? (All adults and just women)

Figure 2A. Do you agree or disagree that there is a difference between the wages for women who work full time and for men who work full time? (All adults and just women)
Figure 3A. Do you agree or disagree that there is a difference between the wages for women who work full time and for men who work full time?

Figure 4A. Do you agree or disagree that there is a difference between the wages for women who work full time and for men who work full time?
Figure 5A. Of the following wage differences for women and men working full time, which one do you think is the MOST accurate?

- Women make 75 cents or less for every dollar a man makes: 58% (Men), 64% (Women)
- Women make 80 cents or more for every dollar a man makes: 33% (Men), 24% (Women)

Figure 6A. Tell me which ONE you think is the most important reason as an explanation for the wage gap. (Results are for women and men combined.)

- Young women not promoted: 29%
- Prioritize family over career: 23%
- Employer discrimination: 21%
- Men more assertive: 11%
- Education and skills: 4%
Figure 7A. Tell me which ONE you think is the most important reason as an explanation for the wage gap.

Figure 8A. Tell me which ONE you think is the most important reason as an explanation for the wage gap. And what would be the next most important reason as to why there is a wage gap? (First or second choice for women and men combined)
Bibliography


