Occupational Segregation and the Gender Pay Gap

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Some 6 million women entered the workforce for the first time in the 1940s to support the war industry. Beginning in the 1960s, women constituted about one-third of the workforce, aided by passage of employment antidiscrimination laws such as Title VII of the Civil Rights Act of 1964.[1] Also during this time, the U.S. labor market was marked by significant gender stratification among occupational lines, a concept known as occupational sex segregation. Starting in the 1970s, however, and until about 2000, women became increasing integrated in jobs they historically had been excluded from, such as lawyers and physicians.[2] Unfortunately, the speed of women's occupational integration has slowed since 2000 and appears to have stalled.

Where is Occupational Sex Segregation Most Prevalent?

In the United States, three out of four workers in education and health services are women, nine out of 10 workers in the construction industry are men, and seven out of 10 in the field of computer programming are men.[3] Among occupations, women make up 80 percent of all secretaries, teachers, and home health aides.[4]

In California, health services occupations are composed of 80 percent women. Conversely, construction occupations are composed of 98 percent men. Legal occupations have the most gender parity. The chart on the next page illustrates the 10 occupational sectors in California with the highest level of gender segregation and is followed by a chart representing the five occupational sectors with the most gender parity based on U.S. Census data from the American Community Survey. These occupational sectors may be found in both the private and public sector. Each sector is composed of anywhere between a half-dozen to more than 60 occupations, and taken together, represent more than 500 occupations.

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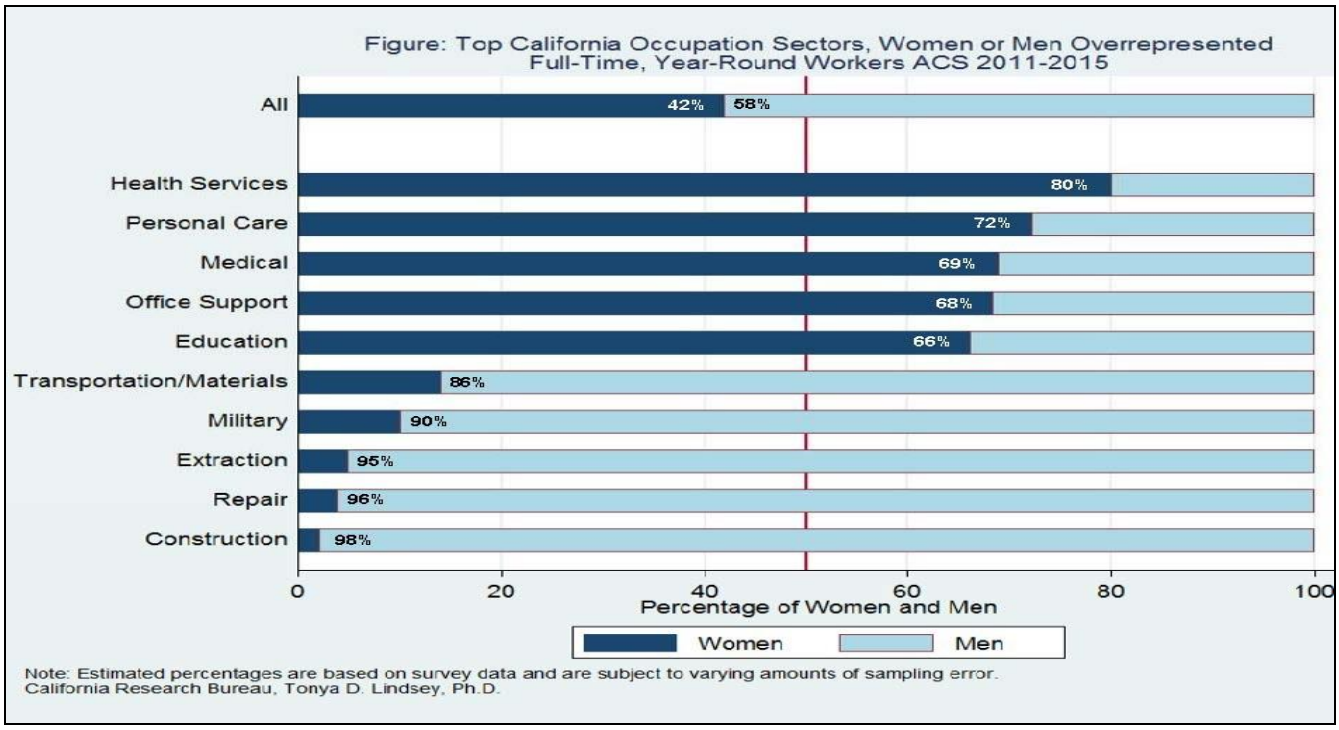
1 Ariane Hegewisch and H. Hartmann, "Occupational Segregation and the Gender Pay Gap: A Job Half Done," Institute for Women's Policy Research, scholars' paper, January 2014, p. 2.

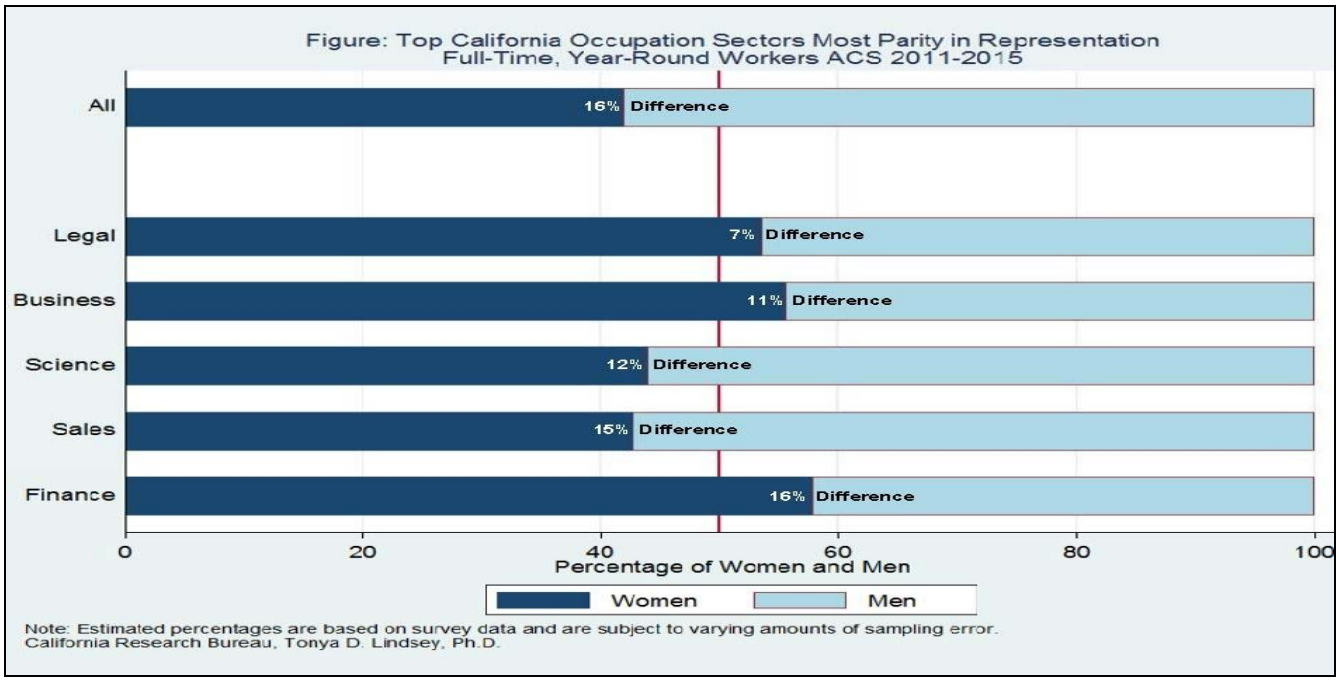
2 Ariane Hegewisch et al., "Separate and Not Equal? Gender Segregation in the Labor Market and the Gender Wage Gap," Institute for Women's Policy Research, briefing paper, September 2010, p. 4.

3 Institute for Women's Policy Research, "Occupational Segregation and the Gender Pay Gap: A Job Half Done," paper series celebrating the 50th Anniversary of American Women: Report of the President's Commission on the Status of Women, January 2014, p. 92, 96.

4 Ibid.



A few examples of the occupations within each of these sectors are: health services—nursing aides and phlebotomists; personal care—funeral directors and hairdressers; medical—physicians and medical record technicians; office support—secretaries and proofreaders; education—preschool/kindergarten teachers and librarians; transportation/materials—aircraft pilots and subway workers; military—tactical operations leaders and air/weapons specialists; extraction—earth drillers and explosives workers; repair—locksmiths and automotive glass installers; and construction—construction trades helpers and carpenters.



A few examples of the occupations within each of these sectors are: sales—cashiers and real estate brokers; finance— accountants and tax collectors; legal—paralegals and lawyers; science—astronomers and psychologists; and business—event planners and compliance officers.

What Explains Occupational Sex Segregation?

The literature identifies a number of factors that contribute to occupational segregation based on sex. This paper addresses one such factor- implicit bias- that has drawn increasing attention. Implicit bias involves "attitudes or stereotypes that affect our understanding, actions, and decisions in an unconscious manner."[5] According to a body of scholarly research, the unconscious attitudes we hold about other people often are based on categories such as race, gender, age, or ethnicity. Studies suggest implicit bias is pervasive, not necessarily in line with our declared beliefs, developed early in life, and not fixed.[6] Further, implicit bias is expressed at both an individual and institutional level.

Unconscious attitudes based on gender operate in different facets of our society.[7] In the employment context, some argue that gender bias influences occupational choices and patterns, ultimately limiting women's economic opportunities. Since the 1980s, a growing body of research has sought to explain how implicit gender attitudes impact career choice and progression. Specifically, a number of studies conclude gender bias is a significant contributor to the overrepresentation of men or women in certain occupations.[8] The impact of segregation has long been studied in a number of contexts and has been found to create social inequality by sorting groups into a dominant or subordinate status.[9]

A few theories seek to explain the link between implicit gender bias and occupational segregation. First, a theory grounded in sociology contends the allocation of men and women in different jobs is a result of long-term exposure to and compliance with cultural beliefs regarding gender appropriate attributes, skills, and occupations. According to this perspective, men are encouraged to pursue occupations that involve masculine stereotypes, skills and authority, while women are encouraged to pursue occupations associated with feminine

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5 Kirwan Institute for the Study of Race and Ethnicity, "Understanding Implicit Bias," Ohio State University, 2015, http://kirwaninstitute.osu.edu/research/understanding-implicit-bias/.

6 Ibid.

7 For this paper, I use the term gender and sex interchangeably with the understanding these labels often are not binary and may be fluid.

8 Margaret S. Stockdale and J. T. Nadler, "Paradigmatic Assumptions of Disciplinary Research and Gender Disparities: The Case of Occupational Sex Segregation," *Sex Roles: A Journal of Research*, vol. 68, 2013, p. 207–15; Catherine R. Dunham, "Third Generation Discrimination: Ripple Effects of Gender Bias in the Workplace," Elon University School of Law, August 15, 2017; Vicki Shultz, "Telling Stories About Women and Work: Judicial Interpretations of Sex Segregation in the Workplace in Title VII Cases Raising the Lack of Interest Argument," *Harvard Law Review*, vol. 103, June 1990, p. 1,749; and Laurie A. Morgan, "Major Matters: A Comparison of the Within-Major Gender Pay Gap Across College Majors for Early-Career Graduates," *Industrial Relations: A Journal of Economy and Society*, vol. 47, no. 4, 2008, p. 626–650.

9 Barbara Reskin, "Sex Segregation in the Workplace," *Annual Review of Sociology*, vol. 19, 1993, p. 241.

stereotypes, skills and traits.[10] In addition, while men and women may choose to enter male- or female-associated occupations, their choice can be seen as the result of a complex interaction between cultural bias, social pressures, and even discrimination.[11] These biases and pressures may operate over a long period and result from interactions with teachers, peers, family, mentors or role models, coworkers, and employers. As a complex process, occupational choice also may be influenced by personal interest, skills and abilities, educational opportunities and attainment, and concerns for work-family balance. These factors also can be shaped by our cultural and social experiences.

Drilling this concept down further, sociological research also looks at the impact of women's college major choice on career choice and explores the societal pressures influencing college major choice. This research reveals women overwhelming major and graduate in education, psychology, and social work, while men favor engineering, a field with much higher earning potential.[12] In particular, researchers have studied how gendered expectations about women's aptitudes for science and math careers influence their educational, and ultimately, professional choices.[13] The Organisation for Economic Cooperation and Development (OECD), a multinational economic justice think-tank of which the United States is a participating member, surveyed 15-year-olds from 60 countries in 2006 and found only 5 percent of girls contemplated a career in computing or engineering.[14] In addition, in 2012, OECD surveyed parents of 15-year-olds in 10 countries and found parents were more likely to expect their sons, rather than their daughters, to work in a science, technology, engineering, and math (STEM) field even when their daughters perform at the same level in mathematics.[15] The study concluded that parental expectations for gender-normative careers can be a factor in their children's occupational outcomes.

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10 Margaret S. Stockdale and J. T. Nadler, "Paradigmatic Assumptions of Disciplinary Research and Gender Disparities: The Case of Occupational Sex Segregation," *Sex Roles: A Journal of Research*, vol. 68, 2013, p. 207–15.

11 Ibid.

12 Anthony P. Carnevale and N. Smith, "Women, Jobs and Opportunity in the 21st Century," paper series celebrating the 50th Anniversary of American Women: Report of the President's Commission on the Status of Women, 2014, p. 40–41.

13 Jessica Schieder and E. Gould, "Women's Work and the Gender Pay Gap," Economic Policy Institute, July 20, 2016, p. 4–5; Catherine Hill and E. Prangley, "Policy, Education, and Social Change: 50 Years of Progress," paper series celebrating the 50th Anniversary of American Women: Report of the President's Commission on the Status of Women, 2014, p. 231–32.

14 Organisation for Economic Cooperation and Development, *The ABC of Gender Equality in Education: Aptitude, Behavior, Confidence* (Paris: OECD Publishing, 2015), p. 114, http://www.oecd-ilibrary.org/education/the-abc-of-gender-equality-in-education/what-some-countries-are-doing-to-promote-gender-equality-in-education_9789264229945-10-en.

15 Ibid, p. 139.

Another major theory linking gender bias to occupational segregation focuses on employers' implicit attitudes about appropriate workplace roles for men and women. This theory posits that employers contribute to job segregation by exercising their own gender biases in hiring, performance reviews, and promotional practices.[16] Hiring practices are influenced by an employer's perception of the appropriateness of an individual for a particular job or occupation, and gender bias in some cases may guide that perception. According to this theory, engrained assumptions that men are more status-worthy and competent may lead employers to hire women disproportionately into lower-wage and less prestigious positions.[17] In 2014, women held two-thirds of lower-wage jobs despite representing just under half of the workforce overall.[18]

Occupational Segregation and the Gender Pay Gap

A number of studies conclude that sex-based occupational segregation is a major contributor to the pay gap.[19] The gender pay gap measures what women are paid relative to men. In the United States, as of 2015, women's median earnings were approximately $40,700, compared with $51,200 for men.[20] This translates to women making 80 cents for every dollar earned by men. In California, the gap is somewhat less, with women making 84 cents on the dollar.[21] The gap persists regardless of a woman's education level and is the largest overall for women with advanced degrees.[22] In terms of tangible income, women are losing a little more than

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16 Margaret S. Stockdale and J. T. Nadler, "Paradigmatic Assumptions of Disciplinary Research and Gender Disparities: The Case of Occupational Sex Segregation," *Sex Roles: A Journal of Research*, vol. 68, 2013, p. 213.

17 Cecelia L. Ridgeway and P. England, *Sociological Approaches to Sex Discrimination in Employment, Sex Discrimination in the Workplace* (MA: Blackwell Publishing, 2007), p. 189–212.

18 Anne Morrison and K. Robbins, "Chartbook: Women in the Low-Wage Workforce May Not Be Who You Think," National Women's Law Center, September 2015, https://nwlc.org/resources/chart-book-women-low-wage-workforce-may-not-be-who-you-think/. (For purposes of this report, low-wage jobs are defined as those that generally pay $10.50 or less per hour).

19 Francine Blau and L. M. Kahn, "Gender Wage Gap: Extent, Trends, and Explanations," National Bureau of Economic Research, working paper, January 2016; Barbara Reskin, "Sex Segregation in the Workplace," *Annual Review of Sociology*, vol. 19, 1993, p. 241; Ariane Hegewisch et al., "Separate and Not Equal? Gender Segregation in the Labor Market and the Gender Wage Gap," Institute for Women's Policy Research, briefing paper, September 2010; and Philip N. Cohen, "Persistence of Gender Segregation at Work," *Sociology Compass*, 2013, p. 889–99. For information about other factors contributing to the pay gap, see my April 2017 paper, "What is the Gender Pay Gap?" http://sor.senate.ca.gov/sites/sor.senate.ca.gov/files/Backgrounder%20Gender%20Pay%20Gap%20for%20website.pdf.

20 American Association of University Women, "Simple Truth About the Gender Pay Gap," Spring 2017, p. 4.

21 National Partnership for Women and Families, "California Women and the Wage Gap," fact sheet, April 2016, p. 1, http://www.nationalpartnership.org/research-library/workplace-fairness/fair-pay/4-2016-ca-wage-gap.pdf.

22 Economic Policy Institute, "What is the Gender Pay Gap and is it Real? The Complete Guide to How Women are Paid Less Than Men, and Why it Can't be Explained Away," October 20, 2016, p.18, http://www.epi.org/files/pdf/112962.pdf.

$8,000 annually to the pay gap. An analysis of census pay data for 2014 reveals California's gender pay gap amounts to $39 billion annually in lost wages for women.[23]

Gender-based occupational segregation contributes to the pay gap because female-dominated work pays less overall than male-dominated work both historically and presently.[24] Studies estimate that sex segregation accounts for one-third to 40 percent of the gender pay gap.[25] In fact, female-dominated jobs at every skill level—low, medium, and high—are associated with lower median earnings than comparable male-dominated jobs.[26] According to 2010 Bureau of Labor Statistics data, examples of low-skilled female-dominated occupations are home health aides and housekeeping cleaners; examples of medium-skilled female-dominated occupations are secretaries and administrative assistants; and examples of high-skilled female-dominated occupations are elementary school teachers and registered nurses.[27] The share of women working in an occupation appears directly correlated to pay. A compelling study of 50 years of U.S. workforce data found when there is an influx of women into a previously male-dominated profession, average wages for the occupation decrease.[28]

—Prepared by Megan Lane

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23 National Partnership for Women and Families, "California Women and the Wage Gap," fact sheet, April 2016, p. 1 (Census data analyzed is from the American Community Survey One-Year Estimates 2014: Geographies: All States Within United States and Puerto Rico, 2015).

24 Economic Policy Institute, "What is the Gender Pay Gap and is it Real? The Complete Guide to How Women are Paid Less Than Men, and Why it Can't be Explained Away," October 20, 2016; Asaf Levanon, P. England, and P. Allison, "Occupational Feminization and Pay: Assessing Causal Dynamics Using 1950–2000 U.S. Census Data," *Journal of Social Forces*, vol. 88, no. 2, December 2009, p. 865–892.

25 Francine Blau and L. M. Kahn, "Gender Wage Gap: Extent, Trends, and Explanations," National Bureau of Economic Research, working paper, January 2016 (concluding sex segregation accounts for one-third of the pay gap); and Hilary M. Lips, "Gender Pay Gap: Challenging the Rationalizations: Perceived Equity, Discrimination, and the Limits of Human Capital Models," *Sex Roles: A Journal of Research*, vol. 68, no. 3–4, February 2013, p. 169–185 (concluding the segregation factor accounts for approximately 40 percent of the gender pay gap).

26 Ariane Hegewisch et al., "Separate and Not Equal? Gender Segregation in the Labor Market and the Gender Wage Gap," Institute for Women's Policy Research, briefing paper, September 2010, p. 13.

27 Ibid., p. 8–10.

28 Asaf Levanon, P. England, and P. Allison, "Occupational Feminization and Pay: Assessing Causal Dynamics Using 1950–2000 U.S. Census Data," *Journal of Social Forces*, vol. 88, no. 2, December 2009, p. 865–892.

Additional Resources

Jessica Pan, "Gender Segregation in Occupations: The Role of Tipping and Social Interactions," *Journal of Labor Economics*, vol. 33, no. 2, April 2015, p. 365–408.

Trond Petersen and L.A. Morgan, "Separate and Unequal: Occupation-Establishment Sex Segregation and the Gender Wage Gap," *American Journal of Sociology*, vol. 101, no. 2, September 1995, p. 329–365.

Barbara F. Reskin and H.I. Hartmann, *Women's Work, Men's Work: Sex Segregation on the Job*, 1st ed. (Washington D.C.: National Academy Press, 1986).

Susan Sturm, "Second Generation Employment Discrimination: A Structural Approach," *Columbia Law Review*, vol. 101, April 2001, p. 458–568.