College Major Selection, Social Class, and the Gender Pay Gap in the United States

Lawrence M. Eppard, Connors Institute at Shippensburg University, USA¹ **Annie Linker**, Connors Institute at Shippensburg University, USA² **Madison Laughman**, Connors Institute at Shippensburg University, USA³ **Katie Bonomo**, Connors Institute at Shippensburg University, USA⁴

Abstract

Although researchers have made plausible arguments about the contributions of several factors, occupational segregation and the "motherhood penalty" are widely considered to be two of the most important causes of the gender pay gap in the United States today. In this article we discuss some of the most important findings in the gender pay gap research in the U.S. We then summarize an exploratory study we conducted in spring 2024 into one particular stage in the process of occupational segregation: the choice of college major. We hypothesized that (a) female students would be overrepresented in lower-paying majors and (b) working-class females, while still overrepresented in these majors, would be more likely to choose higher-paying majors, given their backgrounds and the greater salience of economic security for them compared with their nonworking-class female peers. Using enrollment data from a university in the Mid-Atlantic region of the U.S., our first hypothesis was supported: females were overrepresented, to a significant degree, in majors with the lowest starting salaries. Our second hypothesis was not supported: the distribution of working-class females in lower-paying majors was virtually identical to that of nonworking-class females. We discuss these results as well as survey responses from a convenience sample of 38 students at that university, responses which further illuminate our quantitative findings. We plan to develop this study into a full empirical investigation in fall 2024.

Keywords

Americans, Blau, child penalty, Child Penalty Atlas, children, college major, discrimination, economic insecurity, fathers, female, first-generation students, gender, gender inequality, gender pay gap, gender pay ratio, gender roles, glass ceiling, Goldin, inequality, Klevin, low wage work, male, motherhood penalty, mothers, occupational segregation, sex, sex differences, social class, United States, university, work/family balance, working-class

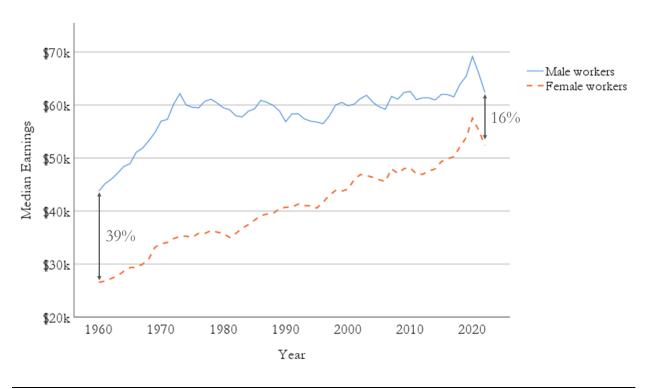
¹ Director of the Connors Institute for Nonpartisan Research & Civic Engagement and associate professor of sociology at Shippensburg University. Connors's website: <u>ConnorsInstitute.org</u>. Connors's email: <u>ConnorsInstitute@ship.edu</u>.

² Connors Institute research fellow and Shippensburg University undergraduate student.

³ Connors Institute research fellow and Shippensburg University graduate student.

⁴ Connors Institute research fellow and Shippensburg University undergraduate student.

FIGURE 1. Decline in the Gender Pay Gap Over Time in the United States.



Source: U.S. Census Bureau (2024).

Introduction

The <u>most recent data</u> published by the U.S. Census Bureau (Guzman & Kollar, 2023, p. 8) show that the median earnings of American men who worked full-time, year-round was \$62,350 in 2022, while it was \$52,360 for their female counterparts. This translates into a gender pay ratio of 84% and gender pay gap of 16%.

In Figure 1 (above) and Table 1 (below) you can see how this gap has <u>changed over time</u>. In the first year that the Census Bureau provides data (1960), for instance, the gender pay ratio was 61% and the gender pay gap was 39%. These numbers have improved significantly over time as American women entered the paid labor force in <u>much larger numbers</u> (see Figure 2 below).

It is important to note that <u>traditional measures</u> of the gender pay gap reflect the ratio of female to male earnings for a specific group of people: full-time workers across all U.S. industries without regard for myriad differences between these workers. Thus, these measures "do not reflect a direct comparison of women and men doing identical work" (Bleiweis, 2020).

This may be confusing for many Americans, as the public and political discourse around this issue can often obscure⁵ what is actually being measured.

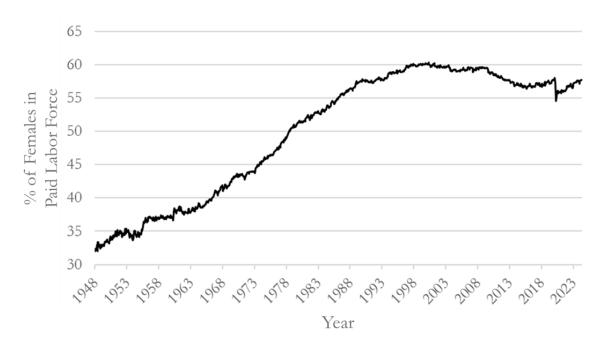
⁵ As it does with so many important and complicated societal issues.

TABLE 1. Gender Pay Ratio Over Time in the United States.

Year	Median male earnings	Median female earnings	Gender pay ratio	Gender pay gap
2022	\$62,350	\$52,360	84%	16%
2010	\$62,570	\$48,140	77%	23%
2000	\$59,860	\$44,130	74%	26%
1990	\$56,850	\$40,710	72%	28%
1980	\$59,460	\$35,770	60%	40%
1970	\$56,960	\$33,820	59%	41%
1960	\$43,770	\$26,560	61%	39%

Source: U.S. Census Bureau (2024).

FIGURE 2. Female Labor Force Participation in the United States, 1948-2024.



Source: Federal Reserve Bank of St. Louis (2024).

During former President Barack Obama's re-election campaign in 2012, for instance, his team made this claim <u>in an advertisement</u>: "The son of a single mom, proud father of two daughters, President Obama knows that women being paid 77 cents on the dollar for doing the same work as men isn't just unfair, it hurts families" (Jacobson, 2012). As PolitiFact's Louis Jacobson <u>explained</u> at the time:

"The Obama campaign took a legitimate statistic and described it in a way that makes it sound much more dramatic than it actually is. The 77-cent figure is real, but it does not factor in occupations held, hours worked or length of tenure. Describing that statistic as referring to the pay for women 'doing the same work as men' earns it a rating of Mostly False" (2012).

As one example of how these groups of workers may differ, women made up slightly less than half (47%) of the *overall* labor force in <u>one 2018 analysis</u>—but were a strong majority (78%) of workers in *low-paying* occupations (AAUW, 2024). This can be starkly illustrated by the percentage of females in low-paying jobs like childcare (93% female), housekeeping (88%), and cashiering (73%) in this analysis, versus the proportion in high-paying work like certain jobs in engineering (11-12% female) and computer-related work (19-26%) (AAUW, 2024).

As economist Astrid Kunze notes in her review of the gender pay gap literature in developed countries, "Women are systematically working in relatively low-paid occupations and men in more highly-paid occupations; this may reflect genuine job barriers or differences in preferences by gender for different kinds of jobs" (2017, p. 24).

Explaining the Gap

Some of the most influential work that attempts to help us better understand the complexities of the gender pay gap in the U.S. and the reasons behind it comes from the field of economics, particularly scholars like Harvard University's <u>Claudia Goldin</u>, Princeton University's <u>Henrik Klevin</u>, and Cornell University's <u>Francine Blau and Lawrence Kahn</u>.

Their analyses and those of other leading scholars point to two factors in particular as the most important drivers of the gender pay gap in the U.S. today: sex differences in childcare responsibilities (often referred to as the "motherhood penalty" or "child penalty") as well as sex differences in occupation⁶ (often referred to as "occupational segregation").

The Motherhood/Child Penalty

Economist Claudia Goldin, who won the Nobel Prize in 2023⁷ for her work on the gender pay gap, argues that sex differences in childcare responsibilities are the primary driver of the gap:

"Historically, much of the gender gap in earnings could be explained by differences in education and occupational choices. However, Goldin has shown that the bulk of this earnings difference is now between men and women in the same occupation, and that it largely arises with the birth of the first child" (Nobel, 2023).

⁶ "So-called women's jobs, which are jobs that have historically had majority-female workforces, such as home health aides and child care workers, tend to offer lower pay and fewer benefits than so-called men's jobs, which are jobs that have had predominantly male workforces, including jobs in trades such as building and construction" (Bleiweis, 2020).

⁷ More precisely she won the "2023 Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel."

In <u>one notable study</u> that Goldin and her colleagues conducted, they compared male and female MBA students who had graduated from the same elite program. Despite nearly identical earnings when they first graduated and entered the labor force, a pay gap emerged over time after the birth of children:

"Differential changes by sex in labor market activity in the period surrounding a first birth play a key role in this process. The presence of children is associated with less accumulated job experience, more career interruptions, shorter work hours, and substantial earnings declines for female but not for male MBAs" (Bertrand et. al., 2010, p. 252).

As Goldin recently explained: "It is really the child, the family responsibilities, that lead to these large differences [in wages]" (LaBlanc, 2023).

Henrik Klevin and his colleagues <u>have documented</u> the motherhood penalty across countries (see Figure 3 below) (Klevin et. al., 2023). Their work is incredibly valuable—it not only shows how children impact female wages virtually anywhere you look around the world, but that this impact varies significantly from country to country. There is much we can learn from these differences when attempting to achieve greater pay parity. Klevin and his colleagues have even made these data available to the public online—you can check it out yourself via their <u>Child Penalty Atlas</u>.

A <u>recent analysis</u> from Payscale (2024), a compensation software and data company based in Seattle, WA, comes to similar conclusions to those of Goldin and Klevin:

"Most interestingly, when we control gender pay gap analysis for job characteristics, we observe pay parity. Earnings of women without children keep pace with earnings of men without children. This supports research that suggests that having a child or being able to have a child is the primary or true cause of gender pay disparities. . . Research shows women's income decreases because they reduce their working hours to balance childcaring responsibilities more than men" (Payscale, 2024).

The Payscale study's authors claim to explain even more of the pay gap than many previous studies. In their 2024 report they asserted that, when they controlled for a variety of variables to ensure a comparison of similar workers (people with equivalent jobs and qualifications), the gender pay ratio all but disappeared—from 83% when uncontrolled to 99% when controlled. This would leave only 1% of the gap unexplained by measurable factors. For comparison, one of the most well-cited analyses of the gender pay gap (Blau & Kahn, 2017) left 38% unexplained.

The Payscale report does not lay out their research methods in a <u>traditional manner</u>, making it very difficult to discern the full list of controls that they used. Based on our reading of their report it seems that, at minimum, the following variables were likely included as controls: occupation, industry, job tenure, hours worked, experience, education, age, race, parent status, remote work status, and location (Payscale, 2024).

United States Norway Sweden Child Penalty: 25% Child Penalty: 3% Child Penalty: 9% 50% 25% 25% -50% -50% -50% -75% -75% -5 -4 -3 -2 -1 0 Canada France **United Kingdom** Child Penalty: 23% Child Penalty: 25% Child Penalty: 34% 25% -50% -50% -75% -75% -75% -100% -5 -4 -3 -2 -1 0 Germany Czech Republic Finland Child Penalty: 41% Child Penalty: 43% Child Penalty: 50% First Child First Child First Child 25% 25% -50% 50% -75% -75% -75% -100% -100% -100% Women

FIGURE 3. Motherhood/Child Penalties Around the World.

Source: CPA (2024).

According to the authors of the Payscale report, the most powerful factor in their analysis was sex differences in childcare: "The 'motherhood penalty' explains the gender pay gap" (Payscale, 2024).

Given the difficulty in assessing Payscale's methodology based on the limited information they provide online, their findings cannot be given nearly the same weight as those from leading peer-reviewed studies.

Occupational Segregation

The presence of a child is clearly impactful on women's wages in the U.S. Another crucial factor to consider is occupational segregation.

In their <u>well-cited 2017 analysis</u>, economists Francine Blau and Lawrence Kahn found three variables that stood out as particularly influential, explaining most of the pay gap in their study:

occupational segregation, sex differences in industry, and sex differences in labor force experience, with occupational segregation playing the largest role (Blau & Kahn, 2017, p. 799).⁸ Blau <u>explains</u> their findings:

"[W]e have considerable occupational segregation by gender. . . Men and women also tend to work in different industries. . . [T]ogether, occupation and industry explain about half of the gender wage gap. Among professional workers, women are more likely to be in relatively lower-paying jobs, such as elementary school teachers, whereas men would be more likely to be in higher-paying jobs, like lawyers or doctors. Women also tend to be more concentrated in lower-paying service occupations, like childcare workers. Gender differences in college major are really important and are related to the occupational differences. We've had equalization in terms of gender opportunities in education to the point that women are now exceeding men. But despite some convergence there are still sizable differences in college major and these are very closely tied to labor market outcomes. In STEM [science, technology, engineering, and mathematics] fields, for instance, women are particularly underrepresented" (Eppard & Blau, 2020, p. 32).

Andrew Chamberlain and Jyotsna Jayaraman (2017) <u>came to a similar conclusion</u> in their research, focusing specifically on the different types of majors that male and female college students end up choosing:

"[T]he biggest cause of today's gender pay gap is that men and women sort into different jobs—men into higher-paying positions and women into traditionally lower-paying jobs. . . During college, men and women gravitate toward different majors. . . This puts men and women on different career tracks—with different pay—after college. . . Many college majors that lead to high-paying roles in tech and engineering are male dominated, while majors that lead to lower-paying roles in social sciences and liberal arts tend to be female-dominated, placing men in higher-paying career pathways, on average. . . Nine of the 10 highest paying majors we examined are male-dominated. . . Choice of college major can have a dramatic impact on jobs and pay later on. Our results suggest that gender imbalances among college majors are an important and often overlooked driver of the gender pay gap" (p. 2).

Why Such Inequalities?

Taken together, the weight of the evidence suggests that the two biggest reasons for unequal pay between male and female workers in the U.S. are the motherhood penalty⁹ and occupational

⁸ "[G]ender differences in occupations and industries are quantitatively the most important measurable factors explaining the gender wage gap (in an accounting sense). . . [G]ender differences in location in the labor market, a factor long highlighted in research on the gender wage gap, remain exceedingly relevant" (Blau & Kahn, 2017, p. 854).

⁹ Astrid Kunze explains that, "Traditionally, most men work full time and continuously throughout their lives. For women, the employment picture is much more varied" (2017, p. 13). And the authors of the Payscale report find

segregation. So why do these sex differences in childcare responsibilities and occupations exist? There have been a variety of reasons put forth.

Some of the reasons for occupational segregation may stem from differences in the characteristics of men and women themselves. On average, for instance, men and women tend to prefer <u>different professions</u>—this shows up quite starkly <u>in college</u>, where there are large differences in the types of majors that women and men tend to choose (Chamberlain & Jayaraman, 2017). These preferences could be the result of <u>innate differences</u> between men and women, differential <u>societal pressures</u> and expectations by sex, or some combination.

There are <u>observed</u> group differences in psychological traits between the sexes which may play a role here, such as differences in competitiveness, risk aversion, importance placed on family, agreeableness, and importance placed on work/money, among others (Blau & Kahn, 2017, p. 838). These differences may influence the types of occupations that women and men end up choosing, the promotions they seek, the number of hours they end up working, the work/family balance they desire, their perceived job performance, etc. ¹⁰

We cannot rule out the presence of discrimination. A <u>recent meta-analysis</u> (Schaerer et. al., 2023) of 85 experimental employment <u>audit studies</u> conducted from 1976 to 2020 involving over 360,000 job applications found that, over the last decade at least, women do not seem to be discriminated against when it comes to job callbacks:

"The present meta-analysis finds that discrimination against female applicants for jobs historically held by men has declined significantly and is no longer observable in the last decade. In contrast, bias against male applicants for female-typed jobs has remained robust and stable over the years. These results thus demonstrate both welcome declines in and the stubborn persistence of different forms of gender discrimination. Contrary to the beliefs of laypeople and academics revealed in our forecasting survey, after years of widespread gender bias in so many aspects of professional life, at least some societies have clearly moved closer to equal treatment when it comes to applying for many jobs" (Schaerer et. al., 2023).

This is of course a sign of great progress toward gender equality. But these results are for callbacks alone and do not mean that there might not be unequal treatment *after* the callback—such as in the actual decision to hire, as well as later decisions about pay, workplace treatment, promotions, firing, etc.

Take the <u>Payscale study</u> discussed earlier as an example. Even though the controlled gender pay gap in their analysis was only 1%, there were specific occupations where it was much more pronounced, including drivers (17%) and some jobs in religious organizations (13%). And while

that, "The most likely explanation for the widening gender pay gap by age is some women becoming mothers and leaving the workforce, incurring the aforementioned motherhood penalty" (2024).

¹⁰ It should be noted that all the independent variables we discuss—from occupational segregation to industry differences to psychological traits and beyond—may impact the gender pay gap directly and/or each other as well. Competitiveness may impact occupational segregation in several ways, for instance—which industries you consider pursuing/avoiding, which promotions you seek/earn, your job tenure, your work/family balance, etc.

the overall controlled gender pay gap was 1% for the lowest job levels, it grew to 6% at the highest job levels for women of all races and 11% for Hispanic women (Payscale, 2024). So while it is plausible that discrimination is not the primary factor driving the overall gender pay gap in the U.S. today, gender norms still may be strong enough in some industries and workplaces so that they continue to contribute to gender inequality.

Why do we have such differences in childcare by sex? As we have discussed, mothers are <u>more likely</u> to either drop out of the labor force for a period of time when they have a child, scale back their hours, and/or deprioritize their careers in some other manner much more than working fathers:

"Parenthood leads some women to put their careers on hold, whether by choice or necessity. . . Fathers, however, are more likely to hold a job or be looking for one than men who don't have children at home. . . Among those who do have a job, fathers also work a bit more each week, on average, than men who do not have children at home" (Kochhar, 2023).

Astrid Kunze similarly notes that, unlike many fathers, when mothers have a child, "they decide whether and when to return to work, and, if they return to work, whether to work full-time or part-time" (2017, p. 13).

This has a substantial impact on the money women are able to earn as well as their career advancement. It also may impact not only how much a mother works but the types of jobs she is willing/able to take on.

As is likely the case for occupational segregation, it is plausible that some combination of both individual preferences on the part of women themselves as well as societal pressures and expectations contribute to sex differences in childcare responsibilities.

Our Exploratory Study

In the spring of 2024, we undertook an exploratory study into the gender pay gap in the U.S., hoping to learn more about the processes responsible for occupational segregation. We were particularly interested in sex differences in college major selection and whether they are moderated by social class.

Our two hypotheses were that (a) female students would be overrepresented in lower-paying majors and (b) working-class females, while still overrepresented in these majors, would be more likely to choose higher-paying majors compared with non-working-class females, given their backgrounds and the greater salience of economic security for them.

The first hypothesis follows from <u>previous research</u> which suggests the presence of such differential decision-making by sex.

The second hypothesis assumes that, while working-class women will be influenced in their college major choice by their sex, they will also be influenced by their social class in ways that

non-working-class women are not. We posit that economic security will be a more salient concern for them when compared with non-working-class women, thus moderating the impact of sex and leading to less unequal representation in higher-paying majors.

In order to explore these hypotheses, we first secured detailed enrollment data from a regional university in the <u>Mid-Atlantic region</u> of the United States (henceforth referred to by the pseudonym "Mid-Atlantic University" or "MAU"). These data allowed us not only to calculate the percentage of women and men in each major at this university, but to examine whether these percentages were different for first-generation (our proxy for working-class) female students compared with non-first-generation ones.

After completing this analysis, we then distributed a <u>Qualtrics</u> survey to a convenience sample of students at the university, receiving 38 responses. This survey asked a number of open-ended questions about how these students arrived at their college major decision. We then analyzed their responses for any patterns that might help further illuminate our quantitative findings.

The <u>scatterplot</u> in Figure 4 (below) displays the association between sex and college major selection in our analysis of enrollment data. The x-axis (horizontal axis) is the percentage of men in each major, while the y-axis (vertical axis) displays the median starting salaries in the first five years that these majors are in the labor force. As you can see, there is a strong <u>correlation</u> (r = 0.78, p < .001) between sex and starting salary. As you move left-to-right on the horizontal axis, the percentage of men in each major increases, corresponding with a significant increase in starting salaries on the vertical axis by the time you get to the most male-dominated majors.

Table 2 (below) displays our analysis of the possible moderation by social class of the relationship between sex and college major selection. We calculated a <u>cross-tabulation</u> of the average starting salaries for the highest-paying, middle-paying, and lowest-paying college major tiers. There was more than a \$20k difference between the highest-paying (\$67,709) and lowest-paying (\$47,242) tiers, with middle-paying majors yielding a \$51,664 average starting salary.

In this same table we analyzed the percentages of first-generation and non-first-generation women who chose majors in these three tiers. We found that there was little difference between the two groups. Nearly identical percentages of both first-generation (10.6%) and non-first-generation (10.2%) women choose the highest-paying majors, while similarly high percentages of first-generation (65.7%) and non-first-generation (63.4%) women chose the lowest-paying majors.

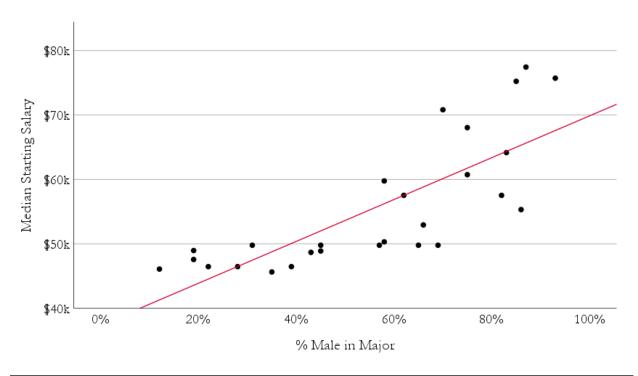
To deepen our analysis and further illuminate these quantitative findings, we surveyed a <u>convenience sample</u> of undergraduate students from MAU to better understand their choice of college major, receiving 38 responses.

There were three overwhelmingly dominant themes (see Table 3 below) in the female MAU undergraduates' survey responses explaining why they chose their college majors:

10

¹¹ No citation or bibliography entry included for MAU enrollment data in order to protect anonymity. This is an ethical consideration and IRB requirement.

FIGURE 4. Association Between College Major Sex Distribution and Starting Salary.



Note: r = 0.78, p < .001. Converted to 2024 U.S. dollars (using BLS 2024). *Source:* Authors' calculations using Glassdoor (Chamberlain & Jayaraman, 2017) and 2024 Mid-Atlantic University data.¹²

TABLE 2. Sex Segregation by College Major Starting Salary Tier, Mid-Atlantic University.

Starting	Avg.	% of all first-	% of all non-first-
salary	starting	generation	generation
tier	salary	women	women
Highest paying majors	\$67,709	10.6	10.2
Middle paying majors	\$51,664	23.7	26.4
Lowest paying majors	\$47,242	65.7	63.4

Source: Authors' calculations using Glassdoor (Chamberlain & Jayaraman, 2017) data (2024 adjusted) and 2024 Mid-Atlantic University data (see footnote #12 below).

¹² No citation or bibliography entry included for MAU enrollment data in order to protect anonymity. This is an ethical consideration and <u>IRB requirement</u>.

TABLE 3. Survey Themes and Responses.

Theme	Example survey response	
Personal interest/job I like	"I started out a chemistry major, but it was a lot of work and I was forcing myself to do it but I wasn't happy."	
	"I honestly just like kids."	
	"I was drawn to criminal justice because I'm pretty interested in how the law works."	
	"I went with a major I know I'm good at and I know I enjoy."	
Major matches abilities	"I honestly don't do well with numbers and math is just not interesting to me."	
	"I don't like math, don't care about computers/coding, and I like helping people."	
	"I would rather choose a major that I believe I can succeed in."	
	"I am not good with STEM."	
Improving society/helping people	"I want to bring a change to the world and help little kids in need."	
	"As a minority, I feel that there is a lot of corruption and injustice within law enforcement, so I want to be able to create a small yet significant change for all minorities."	
	"I enjoy working with people and helping people."	
	"I like working with kids and being able to watch them learn and grow."	

- Having a personal interest in a particular area of study.
- Desiring to pick a major that will lead to a job that she knows she will like.
- Desiring a major that matches her abilities and that she knows she will succeed in.

Another slightly less frequent but still popular theme was the desire to improve society and/or help people (see Table 3 above).

Summary

Although researchers have made plausible arguments about the contributions of several factors, the motherhood penalty and occupational segregation are widely cited as two of the most important causes of the gender pay gap in the U.S. today.

In this article we discussed an exploratory study we conducted in spring 2024 into one particular stage in the process of occupational segregation: the choice of college major.

We hypothesized that (a) female students would be overrepresented in lower-paying majors, and (b) working-class females, while still overrepresented in these majors, would be more likely to choose higher-paying majors, given their backgrounds and the greater salience of economic security for them compared with non-working-class females.

Using enrollment data from a university in the Mid-Atlantic region of the U.S., our first hypothesis was supported: females were overrepresented, to a significant degree, in majors with the lowest starting salaries. The strong correlation between sex and college major selection aligned with previous research in this area.

Our second hypothesis was not supported: the distribution of working-class females across salary tiers was virtually identical to that of non-working-class females.

In the fall of 2024 we plan to begin expanding our study into a full empirical investigation, surveying far more students, conducting <u>focus groups</u>, adding questions about students' future plans regarding work/family balance, adding statistical complexity to our analysis of enrollment data, possibly including more college campuses, and more.

Author Bios

Lawrence M. Eppard is a sociology faculty member and Director of the Connors Institute for Nonpartisan Research & Civic Engagement at Shippensburg University. He also hosts Connors's *Utterly Moderate Podcast* (ConnorsInstitute.org).

Annie Linker is an undergraduate research fellow at the Connors Institute.

Madison Laughman is a graduate research fellow at the Connors Institute.

Katie Bonomo is an undergraduate research fellow at the Connors Institute.

Bibliography

- American Association of University Women (AAUW). (2024). Fast Facts: Occupational Segregation. Retrieved May 17, 2024, from https://www.aauw.org/resources/article/occupational-segregation/.
- Bertrand, Marianne, Claudia Goldin, & Lawrence F. Katz. (2010). Dynamics of the Gender Gap for Young Professionals in the Financial and Corporate Sectors. *American Economic Journal: Applied Economics*, 2(July), 228-255.
- Blau, Francine D., & Lawrence M. Kahn. (2017). The Gender Wage Gap: Extent, Trends, and Explanations. *Journal of Economic Literature*, 55(3), 789-865.
- Bleiweis, Robin. (2020). Quick Facts About the Gender Wage Gap. Center for American Progress. Retrieved May 17, 2024, from https://www.americanprogress.org/article/quick-facts-gender-wage-gap/.
- Chamberlain, Andrew, & Jyotsna Jayaraman. (2017). The Pipeline Problem: How College Majors Contribute to the Gender Pay Gap. Glassdoor. Retrieved Feb. 27, 2024, from https://research.glassdoor.com/site-us/wp-content/uploads/sites/2/2017/04/FULL-STUDY-PDF-Gender-Pay-Gap2FCollege-Major.pdf.
- Child Penalty Atlas (CPA). (2024). Retrieved May 24, 2024, from https://childpenaltyatlas.org/.
- Eppard, Lawrence M., & Francine Blau. (2020). Minding the Gap: Explaining Gender Differences in Wages in the United States. *Sociation*, 19(1), 31-35.
- Federal Research Bank of St. Louis. (2024). Labor Force Participation Rate Women. Retrieved May 22, 2024, from https://fred.stlouisfed.org/series/LNS11300002.
- Guzman, Gloria, & Melissa Kollar. (2023). Income in the United States: 2022. United States Census Bureau. Retrieved May 24, 2024, from https://www.census.gov/content/dam/Census/library/publications/2023/demo/p60-279.pdf.
- Jacobson, Louis. (2012). Barack Obama Ad Says Women Are Paid "77 Cents on the Dollar for Doing the Same Work as Men." PolitiFact. Retrieved May 21, 2024, from https://www.politifact.com/factchecks/2012/jun/21/barack-obama/barack-obama-ad-says-women-are-paid-77-cents-dolla/.
- Klevin, Henrik, Camille Landais, & Gabriel Leite-Mariante. (2023). The Child Penalty Atlas. NBER. Retrieved May 24, 2024, from https://www.nber.org/papers/w31649.
- Kochhar, Rakesh. (2023). The Enduring Grip of the Gender Pay Gap. Pew Research Center. Retrieved May 17, 2024, from https://www.pewresearch.org/social-trends/2023/03/01/the-enduring-grip-of-the-gender-pay-gap/.

- Kunze, Astrid. (2017). The Gender Wage Gap in Developed Countries. IZA Institute of Labor Economics. Retrieved May 21, 2024, from https://docs.iza.org/dp10826.pdf.
- The Nobel Foundation (Nobel). 2023. Press Release. Retrieved May 21, 2024, from https://www.nobelprize.org/prizes/economic-sciences/2023/press-release.
- Payscale. (2024). Gender Pay Gap Report. Retrieved May 16, 2024, from https://www.payscale.com/research-and-insights/gender-pay-gap/#module-14.
- Schaerer, Michael, Christilene du Plessis, My Hoang Bao Nguyen, Robbie C.M. van Aert, Leo Tiokhin, Daniël Lakens, Elena Giulia Clemente, Thomas Pfeiffer, Anna Dreber, Magnus Johannesson, Cory J. Clark, Gender Audits Forecasting Collaboration, and Eric Luis Uhlmann. (2023). On the Trajectory of Discrimination: A Meta-Analysis and Forecasting Survey Capturing 44 Years of Field Experiments on Gender and Hiring Decisions. *Organizational Behavior and Human Decision Processes, 179*(November), 1-26.
- Unsiloed Podcast with Greg LaBlanc (LaBlanc). (2023). Understanding the Gender Wage Gap featuring Claudia Goldin. YouTube. Retrieved May 21, 2024, from https://www.youtube.com/watch?v=SQxUcijeUxo.
- U.S. Bureau of Labor Statistics. (2024). CPI Inflation Calculator. Retrieved May 24, 2024, from https://data.bls.gov/cgi-bin/cpicalc.pl.
- U.S. Census Bureau (2024). Equal Pay Day: March 12, 2024. Retrieved May 24, 2024, from https://www.census.gov/newsroom/stories/equal-pay-day.html.