College Experiences, the Gender Pay Gap, and Men and Women’s Attitudes about Gender Roles in the Workplace

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This research paper examines the structural, cultural, and personal explanations of the gender pay gap, paying particular attention to how college experiences contribute to continued disparities in pay between men and women. College can reflect, reinforce, or contest trends in broader society. College years are formative in terms of education, skill development, job choice, and attitudes toward work and the role that men and women play in the workforce. Understanding the gender pay gap and how it is shaped at the college level could help us better understand how the gap develops. I conduct a survey, modeled after Pew Research’s 2013 national survey on the pay gap in America, to test the relationship between men and women’s attitudes towards gender inequality in the workplace and the gender pay gap. I use a representative sample of Xavier University undergraduate students, ranging in age from 18 to 22-years-old. The goal of my survey is to assess how college-age men’s and women’s experiences in college shapes their attitudes about gender roles in the workplace and income inequality.

Women entered the workforce in significant numbers at the same time that a college education became the most dependable path to economic security and mobility for Americans. Women’s enrollment in college continues to rise, more so than men’s, along with the “public’s perception that women are now on equal footing with men (Rose, 2010).” Since 1963, women have increased their educational achievements, helping raise women’s earnings and narrowing the gender wage gap from 59 cents for every dollar earned by men in 1960 to 78 cents in 2013. Despite these achievements, a level playing field between men and women has not been achieved (Rose, 2010).

This study will focus on the impact of college experiences relating to the gender pay gap. College can reflect, reinforce, or contest trends in broader society. The college years are formative in terms of a person’s education, skill development, and job choice. A person’s educational and work experiences early in their life are likely to have a powerful impact on their attitudes about work and the role that men and women play in the workforce. Furthermore, college students are typically young, unmarried, childless, and inexperienced in the workplace. As Corbett and Hill (2012) explain, “The broad similarities in the lives of men and women at this time set the stage for a solid comparison. This focus on recent college graduates is also important because college graduates are an increasing proportion of the labor force, and this is especially true for women.” For these reasons, looking at college undergraduates and newly graduated college students will allow us to analyze the gender pay gap “when gender differences in work experience and family responsibilities are relatively small (Corbett and Hill, 2012).”
Statement of the Problem
My research will consider which factors are responsible for the continuing wage disparity in the United States, focusing specifically on whether gender discrimination, gendered career choice, or at the college level could help us better understand how the gap develops and how to fix it. In my study, I focus specifically on undergraduate men and women’s attitudes about gender roles in society and in the workplace. I hypothesize that, if we can change men and women’s perceptions about gender roles in society to reflect a norm of equal opportunities for men and women (as opposed to the findings among surveyed men and women of disparities between the roles of and opportunities for men and women in society), we can change the dynamics of the workplace and, ultimately, close the gender pay gap. In my study I will conduct a survey, modeled after Pew Research’s national survey on the pay gap in America effected in October of 2013, to test the relationship between men and women’s attitudes towards gender inequality in the workplace and the gender pay gap. I will use a representative sample of Xavier University undergraduate students, ranging in age from 18 to 22 years old. The goal of my survey will be college-age men’s and women’s experiences in college shapes their attitudes about gender roles in the workplace and income inequality.

The Pay Gap: What It Is, Where We See It, and Why It Matters
In 2014, women earn considerably less than men. Although the gap has narrowed since the Equal Pay Act fifty years ago, progress to close it has stalled. Equal pay is not just a women’s issue, but also one that affects families across the nation. Families today increasingly rely on the wages of women (Corbett and Hill, 2014). The American Association of University Women’s 2014 report on the gender pay gap found that, “between 1967 and 2010, the percentage of mothers who brought home at least a quarter of the family’s earnings rose from less than a third (28%) to nearly two-thirds (64%).” Today, about one-third of employed women are the sole breadwinners for their families. Over a lifetime, full time employed, college-educated women will earn $500,000 less than their male counterparts (Carnevale, Rose, and Cheah, 2011). The gender pay gap influences the educational opportunities available to women and their children, the neighborhoods they live in, and the food they eat (Corbett and Hill, 2014).

Since the 1970s, women have progressed in workforce participation and education. Though women’s earnings have increased relative to the earnings of men, a pay gap remains. Unequal earnings for men and women are measured in several ways. Gender differences in income are generally reported as “the difference in men’s and women’s median earnings, usually reported as either the earnings ratio between men and women or as an actual pay gap (AAUW, 2012).” The earnings ratio is women’s median earnings divided by men’s median earnings, which gives the percentage of women’s earnings to men’s earnings.

On average, in 2013, the median annual earnings for full-time working women was $39,157 while the median for men was $50,033, equating to a 78% gap in earnings between men and women. The pay gap, in numerical terms, is men’s median earnings minus women’s median earnings divided by men’s median earnings, which gives you the percentage pay gap between
men and women. In 2013, women earned, on average, 22% percent less than their male equivalents (AAUW, 2012).

The pay gap can be seen in all jobs across the country. As Dwoskin (2012) writes, “[E]ven when women and men are in practically identical situations, their earnings start to diverge just one year out of school.” For instance, in sales, women earn 77% of their male counterparts. Female teachers earn 89% of male teachers. Women who majored in business earn about $38,000 their first year after graduation compared to about $45,000 that men earn with the same major. The gap can be seen not only within an occupation but also within state borders. The AAUW (2012) looked at the pay gap at a state-by-state level and found that the gap varies by location. For example, women in Washington, D.C. earn 91% while women in Ohio earn 77% of what men earn.

Given current trends, studies estimate that it will take fifty years for the unequal pay gap to close. Pamela Coukos, Senior Advisor to the Director of Office of Federal Contract Compliance Programs under U.S. Department of Labor, wrote about her frustrations with the continued gender pay gap:

We live today in a world where women run Fortune 500 companies, sit on the Supreme Court, and push back the frontiers of knowledge. We live during a time when more young women than men hold bachelor’s degrees, and when women make up almost half of all new law school graduates. Given all our progress, there must be some explanation behind the fact that women still lag behind men when it comes to pay equity... Despite the evidence, myths that women’s choices or other legitimate factors are the ‘real’ cause of the pay gap persist (Coukos 2013).

Between 2001 and 2013 the gap shrunk by just 2% (National Committee on Pay Equity). For over a decade, progress to close the gap has seemed to stall, despite the fact that young women are starting their careers better educated than men. The Pew Research Center conducted a national survey in October 2013 with a nationally representative sample of over 2,000 adults age 18 and older, including 810 Millennials, to see what attitudes these men and women held concerning gender roles and gender discrimination in society and their workplaces. The survey found:

[I]n spite of the dramatic gains women have made in educational attainment and labor force participation in recent decades, young women view this as a man’s world—just as middle-aged and older women do. Roughly half of Millennial women (51%) and their older counterparts (55%) say society favors men over women; just 6% of both groups say it favors women over men (Pew Research, 2013).

Pew Research wrote in their report, “[Millennial women] believe that women are paid less than men for doing the same job. They believe it is easier for men to get top executive jobs than it is for women. And they assume that if and when they have children, it will be harder for them to advance in their careers” (Pew Research, 2013). Even though women today, especially young
women, have more advantages in educational attainment than men and greater opportunities for career advancement than their mothers and grandmothers, a consensus stands among women that there are barriers to success. In order to close the gender pay gap, we need to focus on changing men and women’s perceptions about gender roles to reflect a norm of equal opportunities for men and women. If we focus on changing the mindsets of Millennial men and women, we can change the dynamics of the workplace and, ultimately, close the gender pay gap for the benefit of future generations.

**Structural, Cultural, and Personal Explanations**

There are differing explanations for, and much scholarly research about the primary causes of the gender pay gap, including limits to law and legislation, career choices, education attainment, gender discrimination, life choices, and willingness to negotiate.

The Pew Research Center found from their 2013 survey that:

> Most, but not all of the wage gap can be explained by certain measurable factors such as education attainment, occupational segregation and differences in the number of hours worked (even among full-time workers). But there are other forces at work that are difficult to quantify: gender stereotypes, discrimination, professional networks that are more robust for men than for women, and hesitancy on the part of women to aggressively negotiate for raises and promotions. Experts suggest that these factors account for anywhere from 20% to 40% of the earnings gap (Pew Research, 2013).

The unmeasured factors that data on occupation, education, and earnings do not provide insight into lends further question as to why there remains a gap. Pew Research argues that “the attitudes and experiences of men and women…give insight into how they navigate the workplace in an era of narrowing, yet persistent, gender gap in pay (Pew Research, 2013).” Before 1960, women were limited by legal, political, religious, and educational socio-cultural norms and expectations. Women were only given a handful of traditionally female occupations to choose from in the workforce. However, since enactment of the Equal Pay Act of 1963, the Equal Opportunity Act of 1964, and the Higher Education Act of 1965, women have had greater and more important roles in the workplace (Hamid and Howell, 2012). Despite enactments in law, overall trends that are reflected in public attitudes about work and gender tell us far more about why there is a continuing gender pay gap in society today.

Legal enforcement of equal employment opportunities remains a daunting challenge in the United States, even though the right is acknowledged (Andrews, 1994). In 1963 President John F. Kennedy signed the Equal Pay Act (EPA), which guaranteed “equal pay for women and men performing equal work for the same employer.” The EPA did not, however, make provisions for
what was meant by “equal work.” The EPA became part of the Fair Labor Standard Act and states:

No employer having employees subject to any provisions of this section shall discriminate within any establishment in which such employees are employed, between employees on the basis of sex by paying wages to employees in such establishment at a rate less than the rate at which he pays wages to employees of the opposite sex in such establishment for equal work on jobs the performance of which requires equal skill, effort, and responsibility, and which are performed under similar working conditions, except where such payment is made pursuant to (i) a seniority system; (ii) a merit system; (iii) a system which measures earnings by quantity or quality of production; or (iv) a differential based on any other factor other than sex.

Despite the passing of this statute, interpretation and enforcement of the EPA has proven challenging (Laney, 2014). Laney writes, “The EPA’s equal work standard does not require that compared jobs be identical, only that they be ‘substantially equal,’ and job content, not titles, control the assessment.” In order for a woman to determine if she is being paid unfairly for comparable work based on sex, she must find one male co-worker that is being paid more. But the issue arises in the private sector, where employers create “context-specific functional titles, inexact job descriptions and no clear stepladder approach to advancement or compensation (Laney, 2014).” It is because of this, that cases must be assessed on a case-by-case basis, leaving plaintiffs with unknown outcomes because of differing circumstances. This, and the fact that employers often discourage their employees from discussing pay, prevents women from knowing if they are getting paid less than their male counterparts.

In recent years gender differences are decreasing in workforce participation, education, college majors, occupations, lifetime labor force experience, hours of work at home, and paid hours of work. Despite this, though, Goldin (2014) argues, “[T]he gender gap in pay would be considerably reduced and might even vanish if firms did not have an incentive to disproportionately reward individuals who worked long hours and who worked particular hours.” Goldin contends that it is the structure of the workplace that needs to be changed to accommodate the needs of women and men. Aside from the structure of the workplace, Hakim argues that “[T]here is solid evidence that men and women continue to differ, on average, in their work orientations and labor market behavior, and that these differences are linked to broader differences in life goals, the relative importance of competitiveness versus consensus-seeking values, and the relative importance of family life and careers” (Hakim, 2006). Correll (2004) echoes this by arguing that “understanding the gendered nature of the career choice process is important since, to the extent that men and women make different career-relevant choices throughout their lives, the labor force will continue to be segregated by gender.”

Today, women are leading men in educational achievement. Education plays a pivotal role in workplace success. It is argued that education is responsible for the reduction of the gender wage gap in the last few decades. Bobbit-Zeher (2007) argues that by “connecting women’s
educational accomplishments to the declining gender gap in income suggests an optimistic picture for young, college-educated women at the time of their entry into careers…given the increasing importance of a college education in the labor market.” More so today than ever, education is a reliable indicator of economic success and security.

Discrimination in the workplace is one of the most widely cited explanations for the gender pay gap. A number of studies find that after accounting for differences in occupation, work hours, educational preparation, years of work, and family responsibilities, women and men with similar characteristics are not paid the same; women are earning less than men. As Vicky Lovell of the Institute for Women’s Policy Research notes:

One reason that wage discrimination has proved to be so intractable is that it is very difficult to eradicate through legislation. Even though Congress has outlawed specific acts of discrimination and the Supreme Court has struck down acts that create inequitable outcomes, the burden of enforcement still falls on individuals who may never have an opportunity to discover their coworkers’ pay (Lovell 2009).

The issue becomes especially challenging in the private sector, where employers are secretive about wage information, being shielded by confidentiality laws. Employer secrecy creates another barrier for women: they could be paid unfairly for decades without even knowing they are being discriminated against.

Women’s continued status as the primary caregivers in American families contributes to the differing treatment they receive in the workplace. Most firms in the United States have done little to offer paid parental leave, flexible work hours, and affordable and accessible childcare to help support parents with children. Moreover, employers treat parents, and especially women, differently based on their perceived notions about time asked off, available time and commitment to assigned tasks, pay increases, learning opportunities, and promotions.

These structural, cultural, and personal explanations are the dominant reasons for the gender pay gap in America. Each author of these explanations offers their own proposals for how the gap can be narrowed. While each of these explanations is important to understand, a gender pay gap exists at the college-level before young people enter the workforce. It is important to also analyze why the gap continues widening as people get older in the workforce.

**The College Experience and the Pay Gap**

Because women are increasingly earning degrees in higher levels of education, the question of what causes the gender wage gap to persist has shifted from the issues of gender discrimination and career choices to looking at the effect of the college experience on wage disparity. Roksa and Level (2010) write:
Strong demand for more educated workers, coupled with a relative slowdown of their supply, has led to a sharp increase in the wage premium of college degrees in the United States since the 1980s. The increase in the returns to postsecondary education has not only produced greater wage inequality between college educated and other workers but also growing wage dispersion among highly educated workers. Thus, while the importance of college degrees has been rising, so has inequality among degree holders, drawing increasing attention to the qualitative differences among college graduates.

Previous research finds that college-level career choices contribute to wage disparity. College can reflect, reinforce, or contest trends in broader society. The college years are formative in terms of education, skill development, job choice, and attitudes about work and the role that men and women play in the workforce. Colleges play a role in socializing women, creating opportunities for them to pursue careers in high paying fields, teaching them negotiation skills, encouraging them to ‘lean in,’ and giving them formative work experiences that help them narrow the gap in various ways. In support of this, Bobbit-Zeher (2012) writes:

Understanding the degree of gender inequality in earnings in the early years of college is important because initial income disparities tend to grow over time… [I]t is during these early years of a career—when differences in employment histories, life experiences, and accumulated skills are minimized—that educational credentials and school experiences are likely to matter the most.

By understanding the gender pay gap and how it is shaped at the college level will help better figure out how the gender gap develops and how to eliminate it.

**Career Choices, Job Experience, Education, and Leaning In**

In studying the gender pay gap, college level decisions and experiences are important to focus on. Corbett and Hill (2012) argue that focusing on “college graduates at the beginning of their careers provides valuable insight [because] most are young (23 years old, on average), are relatively inexperienced in the workplace, have never been married, and are not raising children. The broad similarities in the lives of men and women at this time set the stage for a solid comparison (Corbett and Hill, 2012).” Because a gap exists one year after graduation (Dey and Hill, 2007; Corbett and Hill, 2012), focusing on career choices, job experience, education, and leaning in should give a better insight into why there is a wage disparity between men and women following graduation.

The choices women make in college will shape their incomes going forward. It has been found that college major choices are closely linked with the type of field one desires to work in. Even though men and women generally attend similar universities or colleges and earn similar grades, they tend to major in different areas. Corbett and Hill (2012) write that:
Because field of study is viewed as a free choice, many people do not consider the segregation of men and women into different college majors to be an issue of equal opportunity. Yet subtle and overt pressures can drive women and men away from college majors that are nontraditional for their gender. The segregation of men and women into different college majors is a long-standing phenomenon that persists today.

Siman (2014) argues that college experience is one of the most important factors in determining future income. She also claims that college major selection is an important component of the gender pay gap, arguing that “majoring in a field in Business, Economics, Computer Science, or Engineering is a statistically significant indicator of a higher future income, for both females and males… [and that] if more females were to choose majors in the STEMB disciplines…we could come closer to closing the gender pay gap” (Siman, 2014).

Women’s first job experiences help shape their attitudes about negotiation and women’s role in organizations. Pew Research (2013) reports that “women are less likely than men to say they have asked for a raise or promotion and less likely to say that they would like to be a boss or senior manager someday.” They find that among Millennials, 42% of women and 48% of men say they have asked for a promotion or pay raise. This was found to be statistically insignificant, compared to the greater percentage differences between those 33 years-old and older, which suggests that Millennials have changing attitudes about seeking higher pay and positions than the generations before them.

Young women today are outperforming young men in educational attainment. They are not only enrolling in college more than men, but they are also “outpacing men in graduating from high school, attending college, and attaining college degrees (Bobbit-Zeher 2007).” Pew Research (2013) reported, “Among older Millennials today (those ages 25 to 32), 38% have a bachelor’s degree, compared with 31% of men. And among younger Millennials (those ages 18 to 24), women are more likely than men to be enrolled in college (45% vs. 38% in 2012).” A report released this year by the American Association of University Women Educational Foundation (AAUW) found that one year after graduation, women are only earning 82% annually of their male counterparts.

The authors of the report accounted for college major, occupation, industry, sector, hours worked, workplace flexibility, experience, educational attainment, enrollment status, GPA, institution selectivity, age, race/ethnicity, region, marital status, and number of children. After considering all of these factors, they found there to be a 5% difference one year after graduation in the earnings of female and male college graduates. They also found there to be a 12% difference in earnings ten years after graduation for full-time workers (Corbett and Hill, 2014). Despite that men and women one year after graduation have a lot in common, men already earn more than women. An analysis of data from the US Department of Education indicates that women working full-time earned $35,396 on average compared to men working full-time earned $42,918. This represents an earnings ratio gap of 82% (Corbett and Hill, 2012).
Although a college degree considerably improves earnings, the evidence suggests that income gaps between men and women nonetheless persist. While additional years of education increase earnings for both men and women, it has not been effective in closing the gap (AAUW). The gap for those with college degrees varies somewhat depending on age. For those 65 years and older, women earn 78% of what men earn. For those 20-24 years old, women earn 89% of what men earn. Though women who graduated recently do better, comparatively, than past generations of women, the gap exists for all age groups.

Dey and Hill (2007) argue that the choices individuals are making ten years after graduating from college create a “career trajectory.” It is during this time, a decade after college graduation, where men and women are defining themselves as professionals, and are also starting to have families, which fosters parenthood stereotypes that weren’t affecting these individuals right out of graduation. Dey and Hill (2007) find, “Ten years after graduation, women working full time earn only 69% as much as men working full time earn, down from 80% one year after graduation.” This finding raises several questions: Why is there a difference in percentage earnings between men and women during this ten-year course? Were different choices made? Did similar choices result in different outcomes? Did new responsibilities affect one gender and not the other? Did attitudes change between one year out of college and ten years?

Pew Research (2013) finds that “looking at the most recent cohorts of young women, by the time they reached their mid-30s, their earnings relative to those of men began to fall further behind, even if they had started out ahead of the previous cohort of young women.” One explanation for this change is motherhood, likely leading to women’s level of participation in the workforce to decline (Pew Research, 2013). Another explanation is the changing attitudes of men and women over time spent in the workforce. There is, however, a growing “leaning in” culture that may very well close the gender pay gap once and for all.

Sheryl Sandberg’s 2013 best-selling book, Lean In: Women, Work, and the Will to Lead, brought the phrase “lean in” into the national conversation about work and gender. Pew Research wrote in their report on leaning in:

As Millennial women come of age in the ‘lean in’ era, they share many of the same views and values about work as their male counterparts. They want a job they enjoy that provides security and flexibility, and they place relatively little importance on high pay. At the same time, however, young working women are less likely that men to aspire to top management jobs: 34% say they are not interested in becoming a boss or top manager; only 24% of young men say the same (Pew Research, 2013).

In recent decades, women have extended their mark into the executive ranks of corporate America. Pew Research (2013) cited data from the U.S. Bureau of Labor Statistics, which found that in 1980, only 7% of women were in managerial occupations, compared with 17% of men. Compared with data from 2012, women only hold 15% of these positions compared to 17% of men. Women are still not on level ground with men in executive occupations. Pew Research also cited data from the nonprofit research group Catalyst, which found that “women currently
hold 4.2% of Fortune 500 CEO positions and 4.5% of Fortune 100 CEO positions (Pew Research, 2013).” Even more discouraging is Pew Research’s finding that Millennial men are still more likely to have asked for a promotion or raise and that they would like to be a senior manager or boss someday than women. Data does support, though, that Millennials as a whole are more willing to ask for a raise or promotion than their parents or grandparents, which suggests that attitudes are changing for the better (Pew Research, 2013). It is clear that the Millennial generation is leaning in to the gender and work conversation.

**Purpose of Study**
The purpose of this study is to assess how college-age men’s and women’s experiences in college shapes their attitudes about gender roles in the workplace and income inequality. I will study a representative sample of Xavier University undergraduate students, ranging in age from 18 to 22 years old. In my study I conduct a survey, modeled after The Pew Research Center’s national survey on the pay gap in America affected in October of 2013, to test the relationship between men and women’s attitudes towards gender roles in the workplace and the gender pay gap. The goal of my survey is to see if attitudes of inequality among Millennial, undergraduate students who have some experience working exists today. I want to see how Millennial’s experience, choices, specifically college major, and demographics impact their attitudes about gender roles and the gender gap.

**Research Question, Hypotheses and Definition of Key Terms**
For the purpose of this study, I will be asking Xavier undergraduate students questions about their demographics, college major, if they are or are not employed, if they have experienced discrimination in their place of work, have they ever negotiated in their place of work, and what their plans are for the future concerning their career and expected pay. My hypotheses are as follows:

- **H₁** More Xavier undergraduate females than Xavier undergraduate males will have experienced sex discrimination in the workplace.
- **H₂** More Xavier undergraduate males than Xavier undergraduate females will have negotiated their pay in the workplace.
- **H₃** More Xavier undergraduate females than Xavier undergraduate males will believe that having children in the future will affect their career and expected pay.

For the purposes of my analysis, **gender pay gap** is defined as “the difference between male and female earnings expressed as a percentage of male earnings (OECD).” **Gender or sex-based discrimination** “involves treating someone (an applicant or employee) unfavorably because of that person’s sex, and can also involve treating someone less favorably because of his or her
connection with an organization or group that is generally associated with people of a certain sex (EEOC).”

**Theoretical Framework**

Even though public perceptions have shifted to near parity concerning workplace equality between men and women compared to 30 years ago, most believe change is still needed. Pew Research (2013) finds, “Among Millennial women, 75% say this country needs to continue making changes to achieve gender equality in the workplace, compared with 57% of Millennial men.” Despite these overall trends, there is a public divide over the question of how society treats men and women. It was found that 45% say society favors men over women versus 9% that say society favors women over men. Pew Research also found that “there is a general perception, especially among women, that men have an unfair advantage when it comes to wages and hiring, relatively few working adults report these types of gender biases at their own workplace (Pew Research, 2013).” Of those surveyed, only one in ten said women are paid less than men. It appears that few see unfair conditions at their own workplace. While Pew Research focused their survey on adults ranging from age 18 to 67, I will be focusing my survey on a much smaller sample of undergraduate students at Xavier University, ranging in age from 18 to 22-years-old.

**Research Design**

I will be testing a representative sample of Millennial (ages 18 to 22 years old), undergraduate students at Xavier University and their attitudes about gender roles in the workplace and in society. My categorical variable is gender. My dependent variables are pay, hours worked, career choices, attitudes about gender inequality, stereotypes, discrimination, and respondents’ experiences and willingness to negotiate for higher pay. My confounding variables are race, economic class, class year, parental marital status, parental work history, and parental education.

To test the validity of significance between Xavier undergraduate men’s and women’s experiences and their attitudes about gender roles in the workplace and income inequality, a survey experiment was distributed to the entire Xavier University student body. Only current, Xavier undergraduate students, ranging in age from 18 to 22 years old, survey responses were used in this analysis. In total, there were 82 (n=82) respondents.

Table 1 illustrates the demographics, with a relatively even distribution among sex, age, and class year. The sample is self-selective, as the survey was distributed via the Xavier Student Portal by an announcement, so student respondents independently chose to take the survey. Of the 82 respondents, 50 females and 32 males completed the survey.

Questions were developed based on previous significant research methods and standard measures accepted in the field. The survey questions were broken up into five sections. The first section of questions pertained to the respondents’ demographics. The second section of questions concerned the respondents’ parents’ experiences in education and employment. The
third section of questions related to the respondents’ employment status, present and anticipated. The fourth section of questions had to do with the respondents’ work experiences. The final section of questions concerned the respondents’ attitudes about the gender pay gap and income inequality.

**Table 1. Demographics of Female and Male Xavier University Undergraduate Respondents**

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>18 years old</td>
<td>6</td>
</tr>
<tr>
<td>19 years old</td>
<td>10</td>
</tr>
<tr>
<td>20 years old</td>
<td>24</td>
</tr>
<tr>
<td>21 years old</td>
<td>24</td>
</tr>
<tr>
<td>22 years old</td>
<td>18</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sex</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>50</td>
</tr>
<tr>
<td>Male</td>
<td>32</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class Year</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st year</td>
<td>11</td>
</tr>
<tr>
<td>2nd year</td>
<td>20</td>
</tr>
<tr>
<td>3rd year</td>
<td>27</td>
</tr>
<tr>
<td>4th year</td>
<td>23</td>
</tr>
</tbody>
</table>

Questions were separated into 51 separate variables. I used SPSS to analyze the results. Any variable that included a “don’t know,” “prefer not to answer,” or “not applicable” entered as missing data in the variable view in SPSS. The purpose was to avoid cluttering the analysis, and to make the Chi Square Tests 2x2 or 3x2 tables greater than that. Two variables, NegotPay and AftKids, were recoded into different variables. NegotPay was changed to NominalNegot and AftKids was changed to KidsHarder. Some categories of each of the original survey questions were collapsed together. Apart from these changes, all other variables were given numerical values, each of which contained a written description of what the numerical value denoted.

**Analysis**

An analysis of survey results provides empirical support for all three hypotheses. The results of my analysis appear in Table 2. Pertaining to my first hypothesis concerning sex discrimination, I found there is a statistically significant difference between Xavier undergraduate females and males, and whether or not an individual experienced discrimination in the workplace. Specifically, more Xavier undergraduate females than Xavier undergraduate males experienced sex discrimination in the workplace. Further, a Chi-Square test indicates that there is a statistically significant difference between sex and discrimination. In the sample, 17 females out of the 50 female respondents, or 41.5%, reported that they had experienced sex discrimination in the workplace, compared with only 4 males out of the 32 male respondents, or 14.8%. Clearly,
based on these results, sex discrimination is a problem for college-aged females more so than college-aged males.

Table 2. Gender Differences in Work Experiences and Expected Work Experiences

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Chi Square</th>
<th>Sig.</th>
<th>Lambda</th>
<th>Cramer’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experienced gender discrimination in the workplace</td>
<td>41.5%</td>
<td>14.8%</td>
<td>5.416</td>
<td>.020**</td>
<td>.000</td>
<td>.282</td>
</tr>
<tr>
<td>Negotiated for higher pay in the workplace</td>
<td>19.6%</td>
<td>48.3%</td>
<td>6.896</td>
<td>.009***</td>
<td>.000</td>
<td>.303</td>
</tr>
<tr>
<td>Children will make advancement in career harder</td>
<td>61.9%</td>
<td>43.3%</td>
<td>7.817</td>
<td>.020**</td>
<td>.000</td>
<td>.330</td>
</tr>
<tr>
<td>Full time employment plans after having children</td>
<td>44.0%</td>
<td>75.0%</td>
<td>7.614</td>
<td>.006***</td>
<td>.167</td>
<td>----</td>
</tr>
<tr>
<td>Government should take action to ensure pay equity</td>
<td>85.4%</td>
<td>50.0%</td>
<td>9.795</td>
<td>.002***</td>
<td>.000</td>
<td>.382</td>
</tr>
<tr>
<td>Gender Pay Gap is due to socialization and discrimination that limits opportunities for women in the workplace</td>
<td>55.6%</td>
<td>21.4%</td>
<td>9.951</td>
<td>.007***</td>
<td>.195</td>
<td>----</td>
</tr>
<tr>
<td>The man generally earns more for comparable work</td>
<td>90.7%</td>
<td>66.7%</td>
<td>6.584</td>
<td>.010**</td>
<td>.000</td>
<td>.300</td>
</tr>
<tr>
<td>Easier for men to get top executive jobs in business and government</td>
<td>89.1%</td>
<td>69.0%</td>
<td>6.019</td>
<td>.049**</td>
<td>.000</td>
<td>.283</td>
</tr>
</tbody>
</table>

* p < .10; ** p < .05; *** p < .01

With regard to my second hypothesis on pay negotiation, I found a statistically significant difference between Xavier undergraduate females and males about negotiating pay. Likewise, the Chi-Square Test shows there is a statistically significant difference between sex and pay negotiation in the workplace (the p-value in this comparison is 0.009). In sum, just 9 females out of the 50 female respondents, or 19.6%, said that they had negotiated their pay in the workplace, while 14 males of the 32 male respondents, or 48.3%, said the same. This finding
suggests that by the time that men and women leave college, gender differences in pay negotiation have already emerged.

Pertaining to my third and final hypothesis concerning whether children will have a varied affect on male and female career advancement, I found that female students are statistically more likely than male students to believe that having children will negatively impact advancement in their career. Further, a Chi-Square Test shows that there is a statistically significant difference between sex and the expected impact on career after children (the p-value is 0.020).ii In the sample, 26 females out of the 50 female respondents, or 61.9%, said that having children in the future would make it harder for them to advance in their job or career, while 13 males out of the 32 male respondents, or 43.3%, said the same thing. This finding suggests that we need to make the workplace more balanced so that men and women feel as though they each have equal time for work life and family life. Another interesting finding with this comparison is that men were more likely than women to believe children would not make a difference in their ability to advance in their career. This may reflect the fact that the burden of childcare does not fall equally on men and women and, as a result, women are more likely than men to perceive children to be an obstacle that hinders their career advancement.

Beyond my hypotheses, I found six more variables that were statistically significant when compared with sex that deserve attention. There is a statistically significant difference between gender and plans for employment after children. While 16% of females plan on being a mostly stay-at-home parent, but employed part time, just 3.1% of males respond similarly. Similarly, 18% of women, but 0% of men, plan on working nearly, but not quite full time. Male respondents overwhelmingly planned on continuing to work full time or to equally divide their time between work and home compared to female respondents. Only 2 males out of the 32 male respondents (6.2%), planned to be a full-time or mostly-full time stay at home parent, compared to 9 females out of 32 (18.0%). In addition, 93.8% of male respondents planned on mostly working outside the home versus only 82% of female respondents. These findings indicate that females more than males plan to take on the role of childcare in the future. Likewise, women respondents were more likely than men to see themselves as taking the role of childcare provider, with just 44.0% of women reporting that they planned to be employed full-time after children.

A second significant finding indicates that significant differences exist between men and women with regard to their attitudes about whether the government should take action to ensure pay equity (p = .002). In the sample, 35 females out of the 50 female respondents, or 85.4%, said that the government should take action to ensure pay equity, compared with 13 males out of the 32 male respondents, or 50.0%, that said the same. This finding indicates that male and female students have significantly different perceptions concerning the government’s role in closing the gender pay gap. Female students, who are more likely to be directly affected by pay inequality, believe that government intervention is key to fixing the issue. Based on the earlier results that women are still being discriminated against in the workplace, government intervention seems critically important to ensure that discrimination, especially concerning pay, does not continue to negatively affect women, specifically college-aged women who are entering the workplace.
The third significant finding is that there is a statistically significant relationship between gender and student attitudes about the causes of the gender pay gap (p = .007). In total, 25 females out of the 50 respondents, or 55.6%, said that the gender pay gap is due to systemic factors like discrimination and socialization that limit opportunities for women, compared to 6 males out of the 32 male respondents, or 21.4%, whom said the same. This finding is significant because it shows that females-- more than males-- believe discrimination and socialization are key factors contributing to the gender pay gap compared to women’s individual choices. This shows that men and women have significantly different perceptions about the causes of the pay gap. This is an important finding because it emphasizes that females believe socialization and discrimination are real issues affecting them and their ability to be paid fairly for comparable work.

The fourth significant finding is that female students were more likely than male students to agree that men generally earn more than women for comparable work (p = .010). In the sample, 39 females out of the 50 female respondents, or 90.7%, said that the man generally earns more if a man and a woman are doing the same work, compared to 20 males out of the 32 male respondents, or 66.7%, who said the same. Just 4 female respondents, or 9.3%, said that men and women generally earn the same amount for comparable work, compared with 10 male respondents, or 33.3%. Interestingly, not a single female or male respondent said that a woman generally earns more than the man for comparable work. This finding highlights the importance of educating students – men in particular - about pay inequality in the United States.

The fifth and final finding is that female students were much more likely than men to agree that it is easier for men to get top executive jobs in business or government (p = 0.049). In sum, 89.1% of female respondents said it was easier for men to get top executive jobs in business or government today, compared to 69.0% of male respondents that said the same. This finding shows that college-age women still believe the business and government executive world is still very much male-dominated (and in fact, this is the case). However, the college-age female perception that the workforce is still male-dominated, shows that women see a difference, and possibly a hindrance, in the ability for women to take on top executive jobs. Also interesting is that none of the female respondents said it was easier for women to get top executive jobs, and only 10.9% said there was no difference between men’s and women’s ability to reach top positions in business and government. This is important because it again shows that college-age females feel there are gender limitations that continue to hinder women who seek to attain top executive positions.

**Discussion**

The purpose of this study was to assess how Xavier undergraduate men’s and women’s experiences in college shaped their attitudes about gender roles in the workplace and income inequality. Based on a sample of 82 male and female respondents, several statistically significant results were found that shed light on this important research question. In sum, undergraduate female respondents were significantly more likely than undergraduate male respondents to report that they had experienced gender discrimination in their workplace, and more likely to agree that advancement in their career would be harder after having children.
Female students in the sample were more likely than male students to support government intervention to ensure pay equity, more likely to agree that discrimination and socialization are the main causes that limit opportunities for women in closing the pay gap, and more likely to say that men generally make more than women for doing comparable work. Finally, female students were more likely to agree that it is easier for men than women to get top executive jobs in business and government today. In addition, male respondents in the sample were considerably more likely than women to expect to work full time after having children.

These findings strongly suggest that gender differences in the workplace and gendered attitudes about the roles that men and women play in the workplace, are firmly established by the time that men and women graduate from college. Moreover, the experiences that men and women have in the workplace, with regard to sex discrimination and pay negotiation, likely reinforce gendered roles in the workplace rather than challenging them. The responses of the college-age women surveyed here indicate that young women are keenly aware of the obstacles that prevent them from advancing in their careers. These obstacles range from feeling like they can negotiate their pay, from having pay equity, from attaining top executive positions, from escaping the negative effects of socialization and discrimination in the workplace, and from believing that women have a place in the top executive jobs today, as almost 90% of the female respondents felt it is still very much a male-dominated world. The results of this study emphasize the need for colleges to help female students feel encouraged to negotiate their pay, to create female leaders that are confident to take on top executive positions in business and government, and encourage young women to ‘lean in’ and demand equal treatment and equal pay in the workplace. It is startling to find that college-age women have already experienced sex discrimination in the workplace and feel there are immense limitations to their success in high-paying careers.

In order for there to be an America of true gender inequality, it is imperative that we do more to prepare college-age men and women, who are our next generation of workers entering the workforce, to embrace attitudes of gender equality and pay equity in today’s workplace. How we educate college-age men and women on fostering these attitudes will hopefully contest the trends of gender and pay inequality instead of continuing to reflect and reinforce them.

References


OECD Employment Outlook (2013); OECD Employment database (2013)


**Appendix: COLLEGE STUDENT EMPLOYMENT SURVEY**

**DEMOGRAPHIC**

1. What is your sex?
   - Female
   - Male

2. What is your age? ____ [Respondents <18 and 23 and older will be directed out of the survey. Thank you for participating!]
   - >18
   - 18
   - 19
   - 20
   - 21
   - 22
   - 23 and older

3. What is your ethnicity?
   - American Indian or Alaskan Native
   - Asian or Pacific Islander
   - Black or African American
   - Hispanic or Latino
   - White/Caucasian
   - Prefer not to answer

4. What is your college major?

5. What’s your class year?
   - First year undergraduate
   - Second year undergraduate
   - Third year undergraduate
   - Fourth year undergraduate
   - Fifth year or more undergraduate
   - Graduate student

**PARENTAL EXPERIENCE**
6. What is your mother’s highest level of education?
   ● High school or less
   ● Some college (did not graduate)
   ● College Degree
   ● Graduate degree (MA, PHD, etc…) or first-professional degree (MD, JD, etc…)
   ● Don’t Know
   ● Other/Not Applicable

7. Is your mother employed full time, part time, or not at all?
   ● Full time
   ● Part time
   ● Not at all
   ● Don’t Know
   ● Other/Not Applicable

8. How would you describe your mother’s job?
   ● White Collar (White collar positions include Professional occupations or Management positions)
   ● Blue Collar (Blue collar positions include: assistants and clerical workers, technicians and repair workers, artists and entertainers, service workers, laborers, salespersons, operators, skilled trade workers, assemblers, or former military. assistants and clerical workers, technicians and repair workers, artists and entertainers, service workers, laborers, salespersons, operators, skilled trade workers, assemblers, or former military).¹
   ● Don’t Know
   ● Other: (Describe)

9. What is your father’s highest level of education?
   ● High school or less
   ● Some college (did not graduate)
   ● College Degree
   ● Graduate degree (MA, PHD, etc…) or first-professional degree (MD, JD, etc…)
   ● Don’t Know
   ● Other/Not Applicable

10. Is your father employed full time, part time, or not at all?
    ● Full time
    ● Part time
    ● Not at all
    ● Don’t Know
    ● Other/Not Applicable

11. How would you describe your father’s job?
    ● White Collar (White collar positions include Professional occupations or Management positions)
    ● Blue Collar (Blue collar positions include: assistants and clerical workers, technicians and repair workers, artists and entertainers, service workers, laborers, salespersons, operators,

skilled trade workers, assemblers, or former military assistants and clerical workers, technicians and repair workers, artists and entertainers, service workers, laborers, salespersons, operators, skilled trade workers, assemblers, or former military).²

- Don’t Know
- Other: (Describe)

12. Which parent makes more? Who is the breadwinner?
   - Father
   - Mother
   - They make equal amounts
   - Don’t Know
   - Other/Not Applicable

**EMPLOYMENT STATUS, PRESENT AND ANTICIPATED**

13. Are you currently employed full time or part time?
   - Full time – One position
   - Full time – Multiple positions
   - Part time – One position
   - Part time – Multiple positions
   - Not Employed
   - Other/Not Applicable

15. If Employed, how many hours a week do you work during the school year, on average?
   - 1 to 5
   - 6 to 10
   - 11 to 20
   - 21 to 30
   - 31 to 40
   - More than 40
   - Not employed during the school year

16. How many hours a week do you work during the summer, on average?
   - 1 to 5
   - 6 to 10
   - 11 to 20
   - 21 to 30
   - 31 to 40
   - More than 40
   - Not employed during the summer

17. Once you have completed your schooling/education, do you expect to work part-time or full-time?
   - Part-time
   - Full-time
   - I do not expect to work

18. If, at some point in the future, you have children, do you expect that you would be employed or do you expect that you would be a stay at home parent?

19. In the future, do you expect to make more than your spouse or partner?
   ● Yes, I will make more
   ● No, I will make less
   ● I expect we will make about the same
   ● Not Sure
   ● Not Applicable

20. What salary do you expect to earn at age 40?
   ● None/Not Working
   ● Less than $30,000
   ● $30,000 to $49,999
   ● $50,000 to $74,999
   ● $75,000 to $99,999
   ● $100,000 to $199,999
   ● $200,000 or more

21. Thinking about your work life, would you like to someday be a boss or a top manager in your profession, or is this not something you would like to do?
   ● Yes, would like to be a boss or top manager
   ● No, would not like to do this
   ● Already the boss/top manager
   ● Depends
   ● Don’t know/Not Sure
   ● Not Applicable

22. There are many things people value in a job. Please rank the following job characteristics on a scale of 1 through 7, with 1 being “least important” and 7 being “most important.”
   ● Having a high paying job
   ● Having a job that provides me with job security
   ● Having a job that allows me to take time off for family or child care needs
   ● Having a job that I enjoy doing
   ● Having a job that offers good benefits
   ● Having a job that offers opportunities for promotion or advancement
   ● Having a job that helps society

23. Are you satisfied or dissatisfied, on the whole, with your personal financial situation?
   ● Very satisfied
   ● Somewhat satisfied
   ● Somewhat dissatisfied
   ● Very dissatisfied
   ● Does not apply
   ● Don’t know
24. Are you satisfied or dissatisfied, on the whole, with your current job?
   - Very satisfied
   - Somewhat satisfied
   - Somewhat dissatisfied
   - Very dissatisfied
   - Does not apply
   - Don’t know

25. Are you satisfied or dissatisfied, on the whole, with your career choice?
   - Very satisfied
   - Somewhat satisfied
   - Somewhat dissatisfied
   - Very dissatisfied
   - Does not apply
   - Don’t know

**WORK EXPERIENCES**

26. Thinking about all the jobs that you have had, have you ever negotiated with your boss or supervisor for higher pay?
   - Yes, but not successfully (did not receive higher pay)
   - Yes, somewhat successfully (received a higher pay, but not the pay that I wanted)
   - Yes, successfully (received the pay that I wanted or more)
   - No
   - Don’t Know/Not Sure
   - Not Applicable

27. Thinking about all the jobs that you have had, have you ever earned less than a member of the opposite sex who was doing the same job?
   - Yes
   - No
   - Don’t Know/Not Sure
   - Not Applicable

28. Thinking about all the jobs that you have had, have you ever been skipped over or denied a promotion because of your sex?
   - Yes
   - No
   - Don’t Know/Not Sure
   - Not Applicable

29. Have you ever been turned down for a job because of your sex?
   - Yes
   - No
   - Don’t Know/Not Sure
   - Not Applicable

30. Thinking about all the jobs that you have had, do you feel you were ever let go, fired or severed because of your sex?
   - Yes
31. Thinking about all the jobs that you have had, have you ever experienced sex discrimination in the workplace?
   - Yes
   - No
   - Not Sure
   - Not Applicable

32. Thinking about all the jobs that you have had, did you generally receive more hours or fewer hours than members of the opposite sex doing the same job?
   - More
   - Fewer
   - No Difference
   - Not Sure
   - Not Applicable

33. Thinking about all the jobs that you have had, did you generally receive higher or lower pay than members of the opposite sex doing the same job?
   - Higher
   - Lower
   - No Difference
   - Not Sure
   - Not Applicable

34. Thinking about all the jobs that you have had, were those in management positions generally men or women?
   - Men
   - Women
   - Roughly Equal Numbers of Men and Women
   - Not Sure
   - Not Applicable

35. Thinking about all the jobs that you have had, who had greater opportunities for promotion or advancement?
   - Women had/have greater opportunities than men
   - Women had/have fewer opportunities than men
   - Men and women had/have about the same opportunities
   - Not applicable
   - Don’t know

36. Thinking about the non-management workers at all the jobs that you have had, who was more focused on their career, men or women?
   - Men
   - Women
   - No difference
   - Not Sure
● Not Applicable

37. Of the people you know, who are around your age, who is more focused on their career?
   ● Women more than men
   ● Men more than women
   ● No difference

ATTITUDES ABOUT PAY EQUITY

38. Please choose the statement that best reflects your understanding of pay equity:
   ● Equal pay for men and women who are doing the same job
   ● Equal pay for men and women doing work of equal or comparable value whether the work is similar or not
   ● Equal pay for all men and women who work full time
   ● Equal pay for men and women who do work in the same industry
   ● Equal base pay for men and women doing work of equal or comparable value whether the work is similar or not
   ● Don’t Know/Not Sure

39. Do you think the government should take action to ensure pay equity, or should the government stay out of it?
   ● Government should take action
   ● Government should stay out of it
   ● Don’t Know/Not Sure

40. Government statistics indicate that there is a pay gap between men and women. Some people say that the pay gap is due to men and women’s individual choices, while others argue that it is due to systemic factors like discrimination and socialization that limit opportunities for women. Which comes closest to your view?
   ● Pay gap is due to men and women’s individual choices
   ● Pay gap is due to discrimination and socialization that limits opportunities for women
   ● Both contribute equally
   ● Neither Explanation is close to my view
   ● Don’t Know/Not Sure

41. Is it ok if men make more than women?
   ● Yes
   ● No
   ● Not Sure/Don’t Know

42. How hard do you think it is for men and women to get top executive jobs in business or government these days? Generally, is it easier for men, easier for women, or isn’t there much difference?
   ● Easier for men
   ● Easier for women
   ● No difference
   ● Don’t know/Not Sure

43. What about salaries? These days, if a man and a woman are doing the same work, do you think that the man generally earns more or the woman generally earns more?
   ● The man generally earns more
   ● The woman generally earns more
   ● Both generally earn the same amount
44. Looking ahead, do you think that having children will make it harder or easier for you to advance in your job or career, or won’t this make a difference?
   ● Will make it harder
   ● Will make it easier
   ● Won’t make a difference
   ● Depends
   ● Don’t plan to have children
   ● Don’t know

\[1\] The NegotPay variable was recoded to collapse the “Yes” responses and eliminate the “Don’t know” answers from the analysis. It was recoded into a new nominal variable, where 1=Yes and 2=No.

\[2\] The AftKids variable was recoded to collapse the “Will make it easier” and “Won’t make a difference” responses together and the “Don’t know” and “Don’t plan to have children” were eliminated answers from the analysis. It was recoded into a new nominal variable, where 1=Yes, 2=No, and 3=Depends.