Pay Inequity: A Comparative Analysis of Pay Inequality in the United States by Selected Correlates

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Cover Page Footnote
Many thanks to Dr. Jerry Woods, Associate Professor of Sociology, for his invaluable comments and editing.
Background

According to the National Committee on Pay Equity (2012), pay equity is a means of eliminating gender and race in the wage-setting system. It means that the criteria employers use to determine wages must be gender and race blind. In this paper, pay inequity, pay inequality, pay disparity, wage gap, and wage disparity, are used interchangeably.

During World War I, large numbers of American women were employed in manufacturing industries while men employees served in the military. These women were guaranteed pay equity by the equal pay policy of the War Labor Board of 1918 which required employers to pay those women equal pay as men (AAUW, 2011). Also, during World War II, large numbers of women were employed in war industries. The National War Labor Board in 1942 asked employers to voluntarily pay these women the same rates paid to males. But none of these appeals bore fruit. Moreover, after the war, most of these women were pushed out of jobs (AAUW, 2011). Consequently, the first bill prohibiting pay discrimination against women called “Women’s Equal Pay Act of 1945” was introduced, but was not passed. Every year, bills were introduced but not passed and it was not until 1963 that John F. Kennedy signed the Equal Pay Act (EPA) which became effective on June 11, 1964. With this bill it was illegal to pay women lower wages than men for the same job because of their sex (AAUW, 2011). Regardless of EPA and other subsequent Acts (2005 Fair Pay Act and 2009 Lilly Ledbetter Fair Pay Act), women still do not earn equal pay as men do for equal value of work (AAUW, 2011) and research has shown that the main factor accounting for this persistence of gender pay gap is the concentration of women in low-paying jobs (Koriara, 1985). Consequently, the principle of comparable worth emerged in the 1970s to remedy the inequities in pay, stemming from the long history of sex-segregated jobs and differential pay scales for “men” and “women” jobs (Lewis, 2013).
The comparable worth doctrine is fuelled by the belief that jobs held traditionally by men and women should be compensated equitably by comparing education, skills, tasks, and responsibilities required by those jobs rather than their traditional pay history. In effect, the job of a registered nurse (held mostly by women) might be compared to the job of an electrician (held mostly by men) and their pay scales adjusted accordingly (Lewis, 2013).

Gender pay gap is determined by many factors, but within the traditional human capital theory, pay inequality has been attributed to individual differential characteristics such as age, education, and experience (Plantenga and Remery, 2006). Recent facts about wage gap are relevant to this study and worth noting here. 1) Women in the U.S. still make only 77 cents on the dollar men make. That number drops to 68 cents for African-American women and 58 cents for Latinas (Fitzpatrick, 2012). 2) It has been reported that the worst pay disparities are not male-female, but rather they are experienced by minorities (Wilson, 2012).

The National Committee on Pay Equity (2012) documented the following reasons for the persistence of the wage gap in the United States: a) wage data are kept secret and, therefore, women and minorities who are underpaid do not know it; b) pursuing equal pay cases can ruin personal lives of plaintiffs as employers can retaliate against women who file such a claim; c) women take time off to raise children, which lowers their earnings; d) women and minorities are concentrated in low-paying jobs and regardless of the Equal Pay Act over 40 years ago, pay discrimination, which has not been eliminated by market forces, still exists; e) discrimination is intangible and it’s very hard to prove, but it exists (“old boys’ network” or “glass ceiling” at work); f) stereotypes still exist about what kind of work women can do, which prevents their progress in some fields presently dominated by men; g) not all jobs are open to women and companies do not address unfairness; and h) current laws prohibiting wage discrimination are not
strong enough and sometimes hard to enforce. Regarding this final reason for the persistence of gender wage gap, legal cases are difficult to prove and win and the Equal Pay Act does not allow women to file class-action lawsuits.

**Purpose**

Even though large scale quantitative research studies on gender wage inequality exist, their foci have mainly been on human capital and individual-level factors of wage inequality. They attribute pay inequity to variations in education, experiences, type of work, and time in the work force. The objective of this study is to revisit the main reasons given for pay inequality by previous studies, but within the context of separate occupations. Also, the influence of other factors such as race, citizenship status, and work experience on income gap is considered in this study. The purpose of this study is fourfold: 1) to compare pay disparities by occupations, 2) to examine wage disparities within selected occupations by gender and education, and 3) to determine the predictive power of selected factors that are associated with income disparity. The following research questions have been addressed: 1) What is the extent of wage disparities by gender? 2) What is the extent of wage disparities by race? 3) What is the variation in wage disparity by occupational categories? 4) Which variables best predict the likelihood that respondents would fall into a low or high income category?
**Empirical Literature**

Education has played a major role in the surge of married women into the workforce partly because of the increased number of jobs that demanded advanced education and partly because educated women sought work outside the home that matched their training and skills (Katz, Stern and Fader 2005). The more education a woman has, the more likely she is to be in the work force. However, women with better education are not immune from the gender wage gap. Women have not only caught up with men in college attendance but younger women are more likely than younger men to have a college or master’s degree (White House Council on Women and Girls 2011). According to Lips (2011) while higher education increases women’s earnings, there is no evidence that the gender wage gap closes at higher levels of education. When education level could no longer be used to justify the gender wage gap, studies started focusing on the field of degree earned.

Different researchers, at different times, have documented that the most persuasive educational explanation today of gender income inequality is that women are more likely to major in fields that lead to jobs that are not rewarded with higher income (Bradley 2000; Davies and Guppy 1997; Gerber and Schafer 2004). Some of these same researchers and others have observed that in spite of the trend toward integration of fields of study, college majors are still quite gender segregated (Bradley 2000; Charles and Bradley 2002; Jacobs 1995, 1996).

Disparities in wage and promotion have been an issue for women and minorities for many years. In explaining the disparities in wage and promotion, some individuals argue that job performance of women and minorities are not up to par with the performance of men and whites (Cohen and Huffman, 2003; Nelson and Bridges, 1999). Castilla (2008) did a study of the
dynamics of what he calls performance-reward bias in order to find out the association between performance evaluation and wage determination. He developed and tested a proposition that performance-reward bias (a form of income discrimination) occurs when employers undervalue the work of certain minority employees and consequently, women and minorities receive less compensation than white men with equal scores in job performance. Even assuming that women and minorities are sorted into jobs equally, receive same starting salaries within the same job, and female/minority dominated jobs with equal skill requirements are valued as that of white-dominated jobs, Castilla (2008) still found that female/minority job performance would be disvalued over the years. His study supports the argument that women and minorities are capable of demonstrating equal job performance as White men, but they are still being compensated less. He argued that women and minorities need to work harder and obtain high performance scores in order to receive similar compensation increase as that of White men (Castilla, 2008).

In their report to the Equality Unit of the European Commission, Plantenga and Remery (2006) note that gender pay gap is determined by many factors. Within the traditional human capital theory, pay inequality has been attributed to individual differential characteristics such as age, education, and experience. They also note that despite women’s improved educational situation and increased labor force participation, gender pay gap persists. In fact, evidence has shown that differences in age, education, and experience play only an insignificant role in the persistence of gender pay inequity. They suggested effective policy measures to address pay discrepancy.

In a recent article, Wilson (2012) notes that there is much workplace inequality that transcends men and women. Citing a report by the American Sociological Association, she notes
that White men are twice more likely to acquire managerial jobs than Black men who are equally qualified and three times more likely than Black women, notwithstanding the 1964 Civil Rights Act that forbids employment discrimination based on race, religion, sex, or national origin. Taking a cue from this report, the factors of race, sex, and national origin are important variables that are considered in this study. Wilson also notes that in 2010, women working full time in the U.S. made about 77 cents to the dollar earned by their men coworkers. Whereas women made up about 50% of the labor force, only 3% of them are Fortune 500 CEOs. Fewer than 20% of women are members of Congress. According to Wilson, in every field, at every level of education, women face a pay gap. If the incumbent governor of Wisconsin could repeal his state’s equal pay law (in April 2012), then something is amiss. There is something else going on aside from the tenets of human capital theory. To be sure, women and minorities earn less than White men, because of factors that have nothing to do with age, talent, education, character, work ethic, and experience.

Some people believe that women cluster in low-paying jobs and most educated women are concentrated in teaching and nursing fields, whereas men become business executives, scientists, doctors, and lawyers – jobs that pay very well. In an article in *TIME* magazine, Fitzpatrick (2010) replies that industry does not tell the whole story. In all 20 industries and 25 occupations analyzed by the Census Bureau in 2007, women make less than men, even in women dominated fields. Female secretaries, for example, make 83.4% as much as their male counterparts. Fitzpatrick suggests that gender is related to this discrepancy and cites a 2008 study by University of Chicago sociologist Kirsten Schilt and NYU economist Matthew Wiswall who found out those men who had sex change and became women, earned 32% less after the transition. Women who became men earned 1.5% more after the surgery; this was after human
capital factors were controlled for (Fitzpatrick (2010). This observation is an interesting one and needs further investigation in regards the factors accounting for income variation after sex change.

Wage gap differences are generally greater between racial and ethnic groups than between men and women (McCall, 2001). Research has shown that wage inequality varies by region, race, ethnicity and gender. In McCall’s study, wage inequality was examined between whites and other ethnic groups and also separately for men and women. Many factors such as minority status, demographics, industrialization, economics, and regional difference play a big role in wage inequality. In fact, minority status is found to be the main source of wage disparities between Whites and Asians or Latinos. Also, demographic and industrialization factors account for wage inequality between Blacks and Whites. McCall (2001) focuses on whether certain explanations matter more for some groups than others and whether conventional explanation matter in today’s economy. She also found that sources of racial wage inequality were more similar for men and women in the same ethnic group than women of different races and ethnic background, even though there were several important gender differences presented.

Theoretical Considerations

Human Capital Theory

One of the oldest of personal income distribution theories is ability theory, which stipulates that differences in workers’ performance and ability affect their earnings. But the development of modern theory of human capital has negated that assumption (Sahota, 1978). The recognition of human skill within the capital-theory framework is not new. For example, it
was Adam Smith who once said that wages varied with the cost of learning the business. The modern version of human capital theory was initiated by the Chicago school in the 1950s under Theodore W. Shultz. Human capital theory is about human investment and any spending on persons that enhances their future earnings capacity such as human migration, human health, schooling, on-the-job-training, job search, information evaluation, preschool investment in the nurture of children, family and population, and so on (Sahota 1978). There are many components of the human capital theory, but with the progression of research, education emerged as a key to other components of human investment. Educated parents are important precursors of the ability and education of their children. Therefore, the hard core of the human capital theory has turned out to be education even though other components mentioned above are also important. Sahota (1978) also notes that the human capital theory is capable in explaining income distributions within and between sexes and other categories of labor, across occupations, and regions. However, the theory is not without criticisms, but criticisms of the human capital theory are not within the purview of the current study.

In Sahota’s (1978) opinion, most classical and neo-classical theories are piecemeal and none could be considered a general framework. The downside of such piecemeal approach is that a theory would only clarify one segment of the whole phenomenon at a time. He also notes that income distribution theories out there are as diverse as the political ideologies and social philosophies. Nonetheless, certain common areas are notable. First, most theories recognized the value of preschool human investment. Analysis of such an investment involves evaluation of family background and the environment in which a child grows up. Second, most theories do not deny the validity of other theories based on logic and rationality. This is because each theory has empirical support. Third, there is a popular move to involve all or most of the income inequality
variables in a path analysis for which behavioral choices operate. These variables include components of abilities, education (preschool, school, post school, informal education), forms of human investment (health, fertility, marital selection, job search, migration), earnings, work, saving, accumulation, and so on. Sahota (1978) concludes that in future, the development of a more satisfactory theory of income inequality may come from a more complete theory, not piecemeal theories.

*Discrimination Theory*

Wage discrimination occurs when similar workers receive different wages because of certain ascribed characteristics such as race, sex, ethnicity, age, and other personal characteristics such as religion or national origin, which are not directly related to productivity. Persons subjected to wage discrimination may earn lower wages in a particular job, be assigned to low earning tasks, be channeled into and/or employed in a low-paying jobs. However, not all wage differential wages are discriminatory. For example, if individual A is willing to work in dangerous but highly paid job, he or she may earn more than individual B who is unwilling to work in that type of job. Also, if individual A is less skilled, he or she may be paid less than individual B who is more skilled than individual A. In this case, there is no wage discrimination (Crankshaft, 2013).

Human capital theorists will argue that wages differ among workers because some people are more productive than others, or because some have more education or job training than others, or yet still some are fortunate to work for expanding firms whereas some are not. Nonetheless, there still remains the problem of discrimination based on gender, race, color,
religion, and national origin. Due to the difficulty in determining or measuring workplace discrimination, the obvious problem of wage discrimination remains.

Methods

Data and Sample

This is a correlation-descriptive study and employs secondary analysis of pre-collected data. The data source is the 2010 General Social Survey (GSS). The GSS is the only survey that seeks opinions of Americans over the years. It is demographic, attitudinal, and behavioral data on Americans aged 18 and above. The GSS have been conducted by the National Opinion Research Center (NORC) yearly initially since 1972 and biennially starting in 1994. The 2010 data file contains 2,044 cases and 790 variables. The 2010 topics include aging, the internet, shared capitalism, gender roles, intergroup relations, immigration, meeting spouse, knowledge and attitude toward science, religion, genetics, veterans, crime and victimization, social network and group membership, and sexual behavior.

Variables and Analytic Techniques

From the literature, the following variables are of great importance and are included in the analysis: Dependent variable is wage and explanatory variables are gender, racial categories (White, Black, Other), U.S. citizenship status, education, occupation, age, and work experience. The study unit of analysis is individual respondents in the United States.

The data have been analyzed at three levels: First, the socio-demographic characteristics of sample units were described. Then contingency tables were created summarizing the bivariate
association between the dependent and explanatory variables. At the multivariate level, the predictive values of all the explanatory variables were evaluated using logistic regression analysis.

Findings

Sample Characteristics

The study sample (N = 2044) comprises 56.4% females and 43.6% males with a racial composition of 75.8% white, 15.2% Black, and 9% other racial categories. Only 43.3% of respondents were married at the time of survey. A majority of respondents (64%) have either completed high school or lower, 7% have completed junior college, 18.3% have bachelor degrees, and almost 11% have attained graduate degrees. In terms of occupation, respondents are represented in professional/managerial (30.7%), technical/sales/administrative support (28.6%), service (20.3%), precision/production/craft & repair (9.1%), and operators/fabricators/laborers (11.3%). A large proportion of respondents (62.5%) are low annual income earners ($39,999 or less), 32.2% are middle income earners ($40,000-109,000) and only 5.3% of respondents are in high income group ($110,000 and above).

Socio-demographic Factors and Income

The result of a cross-tabulation analysis has been summarized in Table 1. As depicted by chi squares ($\chi^2$) and p values, all the independent variables are statistically associated with income. For convenience sake, the dependent variable, income, was recoded into a dichotomy -- low ($39,999 and below) and high ($40,000 and above). In reference to gender, more females (70.6%) make lower income than males (53.3%), whereas more males (46.7%) make higher income than females (29.4%). Based on Cramer’s V measure (.178) the association between
gender and income appears to be a weak one. This observation also applies to race and income. Even though there is a statistical association between these two variables, the strength of association is low (Cramer’s V = .154). Among the three racial categories, Blacks (78.6) are overrepresented in low income. On the other hand 41.5% of Whites are found in the high income
Table 1: Percentage Distribution of Income by Associated Socio-demographic Factors (N = 2044)

<table>
<thead>
<tr>
<th>Dependent Variable</th>
<th>Low Income (%)</th>
<th>High Income (%)</th>
<th>$^2$</th>
<th>P-value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>($39.9K or less)</td>
<td>($40K or more)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Independent Variables**

<table>
<thead>
<tr>
<th>Gender</th>
<th>38.2</th>
<th>.000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>53.3</td>
<td>46.7</td>
</tr>
<tr>
<td>Female</td>
<td>70.6</td>
<td>29.4</td>
</tr>
</tbody>
</table>

*Cramer’s V = .178*

<table>
<thead>
<tr>
<th>Race</th>
<th>28.58</th>
<th>.000</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>58.5</td>
<td>41.5</td>
</tr>
<tr>
<td>Black</td>
<td>78.6</td>
<td>21.4</td>
</tr>
<tr>
<td>Other</td>
<td>70.6</td>
<td>29.4</td>
</tr>
</tbody>
</table>

*Cramer’s V = .154*

<table>
<thead>
<tr>
<th>Education</th>
<th>204.74</th>
<th>.000</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Sch. or lower</td>
<td>77.5</td>
<td>22.5</td>
</tr>
<tr>
<td>Junior College</td>
<td>65.6</td>
<td>34.4</td>
</tr>
<tr>
<td>Bachelor</td>
<td>41.4</td>
<td>58.6</td>
</tr>
<tr>
<td>Graduate</td>
<td>25.6</td>
<td>74.4</td>
</tr>
</tbody>
</table>

*Cramer’s V = .413*

<table>
<thead>
<tr>
<th>Occupation</th>
<th>178.24</th>
<th>.000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial/Professional</td>
<td>38.7</td>
<td>61.3</td>
</tr>
<tr>
<td>Tech/Sales/Admin</td>
<td>66.3</td>
<td>33.7</td>
</tr>
<tr>
<td>Admin Support</td>
<td>74.8</td>
<td>25.2</td>
</tr>
<tr>
<td>Service</td>
<td>85.2</td>
<td>14.8</td>
</tr>
<tr>
<td>Precision/Production/Craft/Repair</td>
<td>54.7</td>
<td>45.3</td>
</tr>
<tr>
<td>Operatives/Fabricators/Laborers</td>
<td>80.4</td>
<td>19.6</td>
</tr>
</tbody>
</table>

*Cramer’s V = .385*

<table>
<thead>
<tr>
<th>Immigration Status</th>
<th>7.543</th>
<th>.006</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. citizen</td>
<td>57.7</td>
<td>42.3</td>
</tr>
<tr>
<td>Non U.S. Citizen</td>
<td>79.1</td>
<td>20.9</td>
</tr>
</tbody>
</table>

*Cramer’s V = .228*
Education has a moderately strong relationship with income (Cramer’s V = .413). Graduate educated respondents (74%) are overrepresented in high income group compared with bachelor holders (58.6%), junior college (34.4%), and high school or lower graduates (22.5%). Similarly, type of occupation has a moderate association (Cramer’s V = .385) with income. People in Managerial and professional occupations (61.3%) have income advantage over those in other occupations. Respondents in Service occupations (85.2%) and operatives/fabricators/laborers (80%) are the most disadvantaged and appear to make the least income in the six occupational categories listed in the survey.

Finally, citizenship status has a weak association with income (Cramer’s V = .228). Nonetheless, it has been observed that 42.3% of American citizens reported higher income compared with 20.9% of non-American citizens. As well, a large proportion of non-American citizens (79.1%) reported low income vis-à-vis 57.7% of American citizens who reported likewise.

**Disparities in Income by Occupation, Gender, and Education**

An analysis of disparities in occupational income show that more low paid workers are found in service (85.2%) occupations as well as those working as operatives, fabricators, and laborers (80.4%). On the other hand as many as 61.3% of respondents in managerial and professional occupations make high income (see Table 1).

As depicted in Table 2, there are more females in managerial and professional (68%), technical, sales and administrative support (71.9%), and service occupations (69.2%) that make
low income compared with their male counterparts in the same occupational categories. On the other hand, in all occupational categories except for technical, sales and administrative support, males are concentrated in the high income group.

Table 2: Income of Males and Females by Occupational Categories (N = 2044)

<table>
<thead>
<tr>
<th>Income</th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Low Income ($39,999 or less)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial/Professional</td>
<td>31.4</td>
<td>68.6</td>
</tr>
<tr>
<td>Tech/Sales/Admin support</td>
<td>28.1</td>
<td>71.9</td>
</tr>
<tr>
<td>Service</td>
<td>30.8</td>
<td>69.2</td>
</tr>
<tr>
<td>Precision/Production /Craft/Repair</td>
<td>86.2</td>
<td>13.8</td>
</tr>
<tr>
<td>Operatives/Fabricators /Laborers</td>
<td>77.8</td>
<td>22.2</td>
</tr>
<tr>
<td><strong>High Income ($40,000 and above)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial/Professional</td>
<td>50.8</td>
<td>49.2</td>
</tr>
<tr>
<td>Tech/Sales/Admin support</td>
<td>49.5</td>
<td>50.5</td>
</tr>
<tr>
<td>Service</td>
<td>69.4</td>
<td>30.6</td>
</tr>
<tr>
<td>Precision/Production /Craft/Repair</td>
<td>95.8</td>
<td>4.2</td>
</tr>
<tr>
<td>Operatives/Fabricators /Laborers</td>
<td>81.8</td>
<td>18.2</td>
</tr>
</tbody>
</table>

Table 3 shows income disparities by similarities in education. In the low income group, there are more female than male respondents represented at each level of education, from high school or lower to graduate degree level. This means that females with the same graduate degree as men are overrepresented in low income group. By contrast, in the high income group, there
are fewer female than male respondents represented at each level of education, with the exception of those with graduate degrees.

Table 3: Income of Males and Females by Educational Level (N = 2044)

<table>
<thead>
<tr>
<th>Income</th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Income ($39,999 or less)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Sch. or lower</td>
<td>42.4</td>
<td>57.6</td>
</tr>
<tr>
<td>Junior College</td>
<td>25.4</td>
<td>74.6</td>
</tr>
<tr>
<td>Bachelor</td>
<td>32.7</td>
<td>67.3</td>
</tr>
<tr>
<td>Graduate</td>
<td>47.5</td>
<td>52.5</td>
</tr>
<tr>
<td>High Income ($40,000 and above)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Sch. or lower</td>
<td>70.4</td>
<td>29.6</td>
</tr>
<tr>
<td>Junior College</td>
<td>57.6</td>
<td>42.4</td>
</tr>
<tr>
<td>Bachelor</td>
<td>54.5</td>
<td>45.5</td>
</tr>
<tr>
<td>Graduate</td>
<td>46.6</td>
<td>53.4</td>
</tr>
</tbody>
</table>

In reference to the research questions: 1) Gender is a significant factor in pay inequity. 2) Race is not a significant factor in determining pay inequity. 3) In a bivariate context, service occupations have the largest wage gap, followed by operatives/fabricators/laborers, then administrative support, and technical/sales, and followed by managerial/professionals; the occupation with the smallest pay gap is precision/production/craft/repair. 4) Best predictors of pay inequity are gender, education, immigration status, age, and job experience.

**Multivariate Analysis**
Results of the logistic regression analysis are presented in Table 4 as the likelihood of respondents making low or high income within the context of seven predictive factors namely, gender, race, education, type of occupation, immigration status, age, and job experience. The “goodness of fit test” of the model shows an overall good performance as indicated by the chi square value of 73.596 with 12 degrees of freedom. Between 46% and 63% of the variability in the dependent variable has been explained by the set of predictor variables (Cox & Snell R square = .461, Nagelkerke R square = .634).

The variables that contribute significantly to the predictive ability of the model are gender (p = .003), education (p = .000), immigration status (p = .010), age (p = .013), and job experience (p = .036). Negative $B$ value for gender indicates that being a female decreases the chances of making a high income by a factor of .11 (odds ratio = .111). In terms of education, the odds of making high income increases significantly with each level of education starting from junior college through graduate school in contrast with high school or lower. The information on immigration status shows that being a non U.S. citizen decreases the odds of making a high income by a factor of .17 compared with being a U.S. citizen. Age is also a significant predictor. With increasing age, it is less likely for a respondent to make high income compared with the young. Also, for every additional year of work experience acquired, it is 1.2 times more likely to make high income than those who do not gain that experience. Race and type of occupation did not contribute significantly to the model and are not good predictors of income category and therefore, were not considered further in the analysis (p > .05).
Table 4. Income Categories Regressed on Sex, Race, Education, Occupation, Immigration status, Age, and Experience (N = 2044)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE B</th>
<th>e^B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>-2.196</td>
<td>.735</td>
<td>.111*</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>-1.531</td>
<td>.930</td>
<td>.216</td>
</tr>
<tr>
<td>Other</td>
<td>-0.442</td>
<td>.694</td>
<td>.643</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Sch. or lower</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td>3.207</td>
<td>1.267</td>
<td>24.710*</td>
</tr>
<tr>
<td>Bachelor</td>
<td>3.777</td>
<td>1.009</td>
<td>43.529*</td>
</tr>
<tr>
<td>Graduate</td>
<td>4.233</td>
<td>1.036</td>
<td>68.914*</td>
</tr>
<tr>
<td>Type of Occupation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Managerial/Professional</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tech./Sales/Admin.</td>
<td>.038</td>
<td>.801</td>
<td>1.039</td>
</tr>
<tr>
<td>Service</td>
<td>-2.048</td>
<td>.949</td>
<td>.129</td>
</tr>
<tr>
<td>Precision/production/ craft/repairs/operatives/ laborers</td>
<td>.737</td>
<td>.994</td>
<td>2.089</td>
</tr>
<tr>
<td>Immigration Status</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. citizen</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not a U.S. Citizen</td>
<td>-1.787</td>
<td>.693</td>
<td>.167*</td>
</tr>
<tr>
<td>Age</td>
<td>-.075</td>
<td>.030</td>
<td>.928*</td>
</tr>
<tr>
<td>Job Experience</td>
<td>.133</td>
<td>.063</td>
<td>1.143*</td>
</tr>
</tbody>
</table>

Constant 1.887

\( \chi^2 \) 73.596

\( df \) 12

Cox & Snell R Square = .461

Nagelkerke R Square = .634

*p < .05.

Study Limitations

One disadvantage in using the 2010 GSS data set was that information on racial categories is limited. That is, only three racial categories (White, Black, and Other) were
represented in the data set, which made information on other racial groups very limited. It would have been beneficial to know income disparities among other specific racial or minority groups in addition to the three categories represented. Secondly, even though we would like to determine the best and worst states in reference to pay equity, the available data were limited to management, business, financial, sales, and related occupations only. The data did not have wage information on technical, administration, service, precision/production/craft/repair, and operatives/fabrication occupations.

Discussion and Conclusion

This study intended to replicate and expand on previous studies in reference to wage disparity. This was done within the context of a set of socio-demographic factors, namely gender, race, education, occupation, citizenship status, age, and work experience. In a bivariate analysis, all these factors appeared to have association with level of income. But in a multivariate context, race and occupation are not good predictors of income.

Gender is a significant factor in explaining income, based on the study results. Some researchers (Bradley 2000; Davies and Guppy 1997; Gerber and Schafer 2004) have argued that women are more likely to work in jobs that pay lower wages. But this study has found that regardless of which type of occupation women work in, they are more likely to fall into the low income category than men in the same type of occupation. Take for example the information in Table 2. If you consider the service occupation, as many as 69.2% of women in that occupational sector make less pay than men in that the same occupation. Similarly, in managerial/professional occupations, still more women (68%) are overrepresented in low income than do men. That is, irrespective of type of occupation, whether low paying or not, women still make lower income than do men generally. Therefore, the argument of women usually work in low paying jobs is not
corroborated by the findings and the argument may not be a valid one. Rather, this findings support Fitzpatrick’s (2010) article (based on 2007 Census Bureau) that women make less than men, even in women dominated fields. Moreover, when the association between type of occupation and income was verified in a multivariate context, occupation turned out to be of less or no importance in explaining income. This reiterates the suspicion that pay inequality may be a function of just being a female or a male. In relation to this, some individuals (Cohen and Huffman, 2003; Nelson and Bridges, 1999) have argued that job performance of women is not at par with that of men, which explains the disparities in wage and promotion. Perhaps, as stated in the tenets of discrimination theory, discrimination can cause pay inequality. As women are paid less than men due to discrimination, they become less productive than men or it is just that female job performances have been undervalued over the years due to discrimination (Castilla 2008) and have been paid less.

Education is also a good predictor of income. The literature agrees on the importance of education in the surge of women into the labor force, but despite this achievement there is no evidence that the gender wage gap diminishes with higher levels of education. As depicted in Table 3, it does not matter what educational levels women have, higher proportion of them make lower incomes than men at the same educational levels. The current findings support the previous research finding by Wilson (2012) who observed that, in every field, at every level of education, women face a pay gap. To be sure, there is something else going on, aside from the tenets of the human capital theory. That is, women earn less than men because of factors other than education. In the multivariate analysis, the chances of respondents (both males and females) making higher income increase significantly at every level of education above the high school or lower level, but with more women trailing men in income at each level.
To recap a fact in the literature, McCall (2001) has observed that immigration is a main source of wage disparities between Whites and minorities. There is evidence in the data to support McCall’s claim. The analysis on citizenship status and income shows that immigration status is an explanatory factor in wage inequality. Generally, the chances of non-U.S. citizens compared with U.S. citizens of making higher income decreases by a factor of .17. In addition, age is also a good predictor of income disparity. The current finding points to the fact that with every increase in age, the chances of making higher income decreases by a factor of .9. But there should be a word of caution here. Age should not be equated to work experience, because there may be older individuals who may be employed and have less work experience. There may be younger employees who may have been on the job longer and with more work experience than some older employees. Related to this description is the phenomenon of age discrimination or ageism which may manifest into wage discrimination. Lastly, work experience is also an important explanatory factor of wage disparity and this study has shown that those with more work experience compared with those with less work experience are more likely to make higher income.

In view of the above discussion, conclusion can be drawn that wage gap is a function of a myriad of factors. First off, just as propounded by the traditional human capital theory, the current research is in agreement that wage inequality is attributable to individual differential characteristics such as age, education, and work experience. Nonetheless, there is ample evidence from numerous studies including the current one to say that these individual differential characteristics play only a part in determining pay inequity. In concurrence to Wilson’s (2012) observation, pay gap transcends men and women. In fact, as the data have shown, other factors such as citizenship status and age are equally important. Secondly, the issue of discrimination
should be given serious consideration in understanding pay inequality. It is understandable why people want to shy away from the issue of discrimination and would not incorporate it in research projects because of denial. But upon examining possible contextual (social, economic, and demographic) factors, there is an unexplained (missing) factor that begs to be uncovered. If women and minorities have comparable education and skills and demonstrate equal job performance as do dominant group(s) and yet receive less compensation, then pay inequity has little to do with just individual differential characteristics as suggested by the human capital theory. This is an issue for future research and therefore, it is suggested that as much as human capital theory has been tested extensively in previous research, discrimination theory must also be equally subjected to rigorous empiricism. Better still, a triangulation of the various frameworks may be useful in better understanding the phenomenon of pay (in)equity. Finally, the policy implication of this finding resides in putting in place effective policy measures to address pay discrepancy and this should be in complement with existing fair pay legislations.

Acknowledgement

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Bios

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References


Education in Russia: Trends, Gender Differences, and Labor Market Outcomes.”


(http://womensenews.org/story/equal-payfair-wage/120421/color-lines-create-widest-pay-gaps)