The Gender Gap in Educational Attainment: Variation by Age, Race, Ethnicity and Nativity in the United States

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INTRODUCTION

The gender gap in educational attainment has been changing in recent decades. According to the Current Population Survey, women surpassed men in the proportion with high school diplomas in 2002 and this trend has continued. Data from the 2005 American Community Survey (ACS) showed that 84.6 percent of women 25 years and over had a high school diploma or more compared with 83.9 percent of men. While the gender gap in attainment has closed at the high school level, women still fall behind men in the proportion with a bachelor's degree or higher. In 2005, 28.5 percent of men 25 years and over had a bachelor's degree or higher compared with 26.0 percent of women. However, this is likely also to close, as women now comprise a larger proportion of college graduates (Kannankutty, 2005; DiPrete and Buchmann, 2006).

Despite the overall trend, it is less known whether this pattern is consistent across the population. Prior research suggests that the gender gap between Black women and men is larger than that of Whites, as Black women are more likely than their male counterparts to complete high school and complete college. The gender gap for Hispanics is also slightly larger than for Whites (Freeman, 2004). However, these comparisons among race and Ethnic origin groups ignore the heterogeneity of the US population, particularly regarding nativity. Research has only begun to explore the variation in the educational resources of these groups, particularly regarding the gender differences within race and Hispanic origin groups between the native and the foreign-born populations (Gamoran, 2001).

RESEARCH QUESTIONS, DATA AND METHODS

This research explores three fundamental questions: Does the gender gap in educational attainment exist for varying segments of the U.S. population by race and ethnic origin and nativity? If so, where does this gap exist? Which group has the largest gap? To answer these questions, we compare educational attainment by sex at both the secondary and post-secondary levels for several demographic characteristics. These characteristics include: age, race and Hispanic origin (categorized as non-Hispanic White, non-Hispanic Black, non-Hispanic Asian, non-Hispanic Other, and Hispanic), nativity, and world region of birth and year of entry for the foreign-born population. Using the 2005 American Community Survey (ACS), we evaluate these differences by comparing the ratio of the percentage of women with each degree to the percentage of men with each degree for these characteristics.

The American Community Survey is a powerful new data source from the U.S. Census Bureau that provides detailed social, housing, economic, and demographic data on an annual basis. The 2005 ACS data is drawn from a sample of approximately 3 million addresses in 3,141 counties in the U.S. and provides data for all geographic areas with populations of 65,000 or more. The ACS is the most current source of demographic data available on this scale.[1]

HYPOTHESES

Previous research documents the considerable differences in the level of educational attainment by age, race and Hispanic origin, nativity, place of birth, and year of entry, and we expect that these differences will be apparent in our findings as well.

[1] Information about the source and accuracy of the 2005 American Community Survey can be found at: http://acsweb2.acs.census.gov/acs/www/UseData/Accuracy/Accuracy1.htm

Our research, however, specifically addresses variation in the gender gap for these subgroups. Consistent with prior research, we expect that women born in the United States from all race and Hispanic origin groups are more likely than their male counterparts to have completed either high school or college, and that this is particularly true for Black and for Hispanic women.

For the foreign-born population, we expect that the pattern will be less consistent due to the heterogeneity of this population. This population includes highly skilled and highly educated workers, particularly those from Asia, who tend to be more likely to have the highest levels of educational attainment (Suarez-Orozco, 2001). However, the foreign-born population also includes a large segment of people who have very little education, such as those from developing countries. We, therefore, expect to find differences in overall educational attainment for the foreign-born population, with higher levels for Asian immigrants and lower levels for the Hispanic population.

We also expect that the gender gap within these groups will be different. For instance, gender gaps in educational attainment may be influenced by the educational pattern in the country of origin (Licuanan, 2004). It is also possible that characteristics of U.S. society are likely to influence the gender gap. For example, if science and technology industries attract highly educated Asian immigrants and are more likely to employ men, it would not be surprising to see higher attainment among foreign-born Asian men compared to their female counterparts. Overall, we expect less gender parity in educational attainment among the foreign born, particularly for groups with higher education.

With the increase of immigration to the United States, researchers and policy makers continue to need information about the characteristics of the foreign-born population. By addressing the intersection of gender, race and Ethnic origin, and nativity, this research helps illuminate the diverse educational experiences of multiple segments of the population.

FINDINGS

Differences by Age, Race and Ethnicity

The first set of analyses address age variation in the gender gap in educational attainment. For the population 25 years and over, the gender gap in high school attainment was smaller than the gap in bachelor's degree attainment. Women's high school attainment was slightly higher than men's, while a lower proportion of women had completed a bachelor's degree compared to men (Figure 1). Apart from the overall difference in the population, the gap in bachelor's degree (B.A.) attainment varied by age. The gap between men and women was largest for the oldest age category (55 years and over), with a smaller proportion of women earning a B.A. relative to their male counterparts. For the youngest adults (25 to 29 years), a higher proportion of women had a bachelor's degree compared to men.

The next set of analyses address variation by race and Hispanic origin. For both attainment levels, there was variation in the gender gap across race and Hispanic origin. The largest gap at each level existed for non-Hispanic Asians, as women had lower attainment relative to their male counterparts (Figure 2). Other than non-Hispanic Asians, a significantly higher proportion of women from all other race groups completed high school relative to their male counterparts. In both the non-Hispanic Black and the

Hispanic group, a larger proportion of women had a bachelor's degree relative to their male counterparts. A smaller proportion of non-Hispanic White and non-Hispanic Asian women completed a bachelor's degree relative to men, while there was no significant difference for non-Hispanic others. These findings are consistent with our first hypothesis about race differences in the gender gap, with higher relative attainment for non-Hispanic Black and Hispanic women compared to men.

The previous results suggest variation by age and by race and Hispanic origin, and the next analyses consider the interaction of these characteristics by examining the age patterns in the gender gap by race and Hispanic origin. Comparing the gender gap across race and Hispanic origin for young adults (25 to 29 years), the gender gap is more pronounced at the bachelor's degree level (Figure 3). Across each race and Hispanic origin group, a higher proportion of women versus men had a bachelor's degree, but the magnitude of this gap varied. Hispanics had the largest gap, while the non-Hispanic Asians had the smallest.

Additional analyses of the age pattern of the gender gap within each race and Hispanic origin category reveal further differences. For non-Hispanic Blacks, there was little variation in high school attainment, but a higher proportion of women versus men had bachelor's degrees at each age group, except for those aged 55 years and over (Figure 4). By contrast, only women in the youngest non-Hispanic Asian age category (25 to 29 years) had higher bachelor's degree attainment compared to their male counterparts. Also, the proportion of women with a high school diploma was significantly lower than men in all age groups except for the population 25 to 29 years.

Differences by Nativity

We then divide the sample by nativity to address the differences in the gender gap between the native and foreign-born populations. For the population 25 years and over, the gender gap at the bachelor's degree level was nearly identical by nativity. In both nativity groups, a lower proportion of women 25 years and over had a bachelor's degree compared to men (Figure 5). Furthermore, looking at the age group patterns, the following trend held up for both nativity groups in the younger age groups where women had higher attainment relative to men; while in older age groups, men had higher attainment than women.

Next we explored the differences observed by race and Hispanic origin, and found they varied across nativity categories, particularly at the bachelor's degree level. Among the foreign born, the largest gender gap existed for bachelor's degree attainment for non-Hispanic Whites (Figure 6).[2] Furthermore, Hispanic women were the only group that had higher educational attainment relative to their male counterparts. For the native population, the pattern across race and Hispanic origin categories was similar, particularly for high school attainment. However, non-Hispanic Blacks had the largest gap in bachelor's degree attainment with a higher proportion of women reporting a BA versus men, while the opposite occurred for non-Hispanic White women.

We also address this race and Hispanic origin and nativity interaction separately for young adults aged 25 to 29 years. Figure 7 shows the ratio of the proportion of foreign-born women to the proportion of foreign-born men with a B.A. ranged from 0.98 for non-Hispanic Asians to 1.55 for Hispanics, while there was no significant difference

[2] The gender-gap ratio of non-Hispanic white men and women (0.76) was not statistically different from the gender-gap ratio of non-Hispanic other men and women (0.82).

by race for natives (ranging from 1.21 for non-Hispanic Blacks to 1.30 for Hispanics). For high school attainment, there were small differences across race and Hispanic origin categories for the native population, while the gaps were somewhat larger for the foreign born with the largest gap for Hispanics.

These findings support our second hypothesis about the gender gap among the foreign born population, particularly the lower educational attainment of Asian women and the higher educational attainment for Hispanic women relative to their male counterparts. These findings also reveal the degree to which the race differences in the gender gap are influenced by the heterogeneity of the population. Among the young, native population, the gender gap in educational attainment was remarkably similar for all race and Hispanic origin groups with women having higher attainment than men.

Differences by Place of Birth and Year of Entry for the Foreign Born

Finally, we look at characteristics of the foreign born and address whether the gender gap in educational attainment varies by place of birth and year of entry. The findings for place of birth overlap considerably with the race and Hispanic origin results. A larger proportion of women from Latin America have a high school diploma compared to men (Figure 8). Women from Latin America were also the only group to have a larger proportion of bachelor's degree attainment compared to men. The gender gap in educational attainment also varies by year of entry, although primarily in bachelor's degree completion (Figure 9). Except for the most recent year of arrival category (2000 or later), a smaller proportion of women had a bachelor's degree relative to men. However, when looking at only the young adult population (25 to 29 years), women's attainment was higher than men at each level and across all year of entry categories

(Figure 10). The gap was smallest at the high school level for the foreign born who arrived prior to 1990.

CONCLUSIONS

Overall, the results from this study suggest several important issues about educational attainment in the U.S. First, not only did the absolute levels of educational attainment vary by age, race and Hispanic origin, and nativity, but the gender gap in educational attainment varied by these characteristics as well. A single statistic reflecting the gender gap in education does not fully capture the variation in gender differences in high school and bachelor's degree attainment. Second, gender parity in high school completion was more uniform than bachelor's degree attainment. Although a slightly higher proportion of women completed high school relative to men, attainment at higher levels differs more.

Finally, these findings point to a continual change in the gender gap in education, as young women have higher educational attainment than their male peers. For the native population, these findings are consistent across race and Hispanic origin groups. If younger generations of women continue their patterns of college enrollment and completion, then the overall gender gap in bachelor's degree attainment is likely to close. However, these findings also highlight how variation in the characteristics of immigrant streams continues to alter the educational profile of the U.S. Apart from immigration, the patterns in educational attainment in the United States are shaped by a number of factors, including cohort changes, and educational experiences. Together these likely contribute to these findings of differences in the gender gap in educational attainment.

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