

Education Inequality in the United States

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ABSTRACT

This paper investigates trends in educational inequality in the United States. We analyze changes in educational attainment and quality among different races and genders. Through our thorough research we found that although there has been a general increase in the level of education attained by both men and women of all races, the Hispanic population continues to fall behind. The data indicates that education quality, represented by the types of institutions, has improved minimally in the past years. While majority races disproportionately attend private non-profit institutions, a more significant percentage of students at private for-profit schools are of minority races. The aim of this paper is to enlarge the exposure of educational inequality for students of different genders and races in the United States to the public.

Keywords: *Education Inequality, Race, Gender*

1. INTRODUCTION

In the U.S., high-quality education provides citizens with the best opportunity to improve their socioeconomic status. However, throughout history, the education system established in the United States has provided the best schools for certain elite groups of people who need help the least and low-quality schools for children who need help the most. This education system amplifies inequality rather than equal opportunity. Nevertheless, following several reforms, inequality has decreased. Although true education equality has yet to be achieved, the U.S. has made significant efforts to reduce disparities through increased investments in educational programs and reform policies. Thus, we have seen reductions in education disparities.

Educational inequality in the United States can be shown through differences in access to education and disparities in education quality. Specifically, education resources significantly differ between white and other minority races and between genders. Such inequalities lead to differences among the immediate generation, but they also affect future generations by decreasing social mobility. Ultimately, the pressing question is whether the recent trends of disparity have shown improvement or deterioration.

Our paper focuses on the education attainment and quality of different races in the U.S. We graph the percentage of different populations with high school or above and college or above education. We also analyze the types of institutions attended by different populations.

This paper also introduces certain related education policies in the U.S. to further convey the efforts to ease inequalities in education. We discuss policies such as compensatory education in the 1960s, the Head Start Program, the Enrichment Program, the Academically Oriented preschool program, and the No Child Left Behind Act.

To examine trends in the level of educational attainment, we use the Current Population Survey, which provides information on the number of people who attained at least a high school degree and those who attained at least a college degree. To determine the quality of education attained, we use data from The Integrated Postsecondary Education Data System (IPEDS), which has comprehensive data on enrollment in different types of institutions.

Several papers examine education inequality in the U.S. and implemented policies. In the paper written by Long [1], the writer evaluates the potential of X% program alternatives to traditional affirmative action policies to estimate if this policy could reduce the

educational attainment inequality caused by races. Another article written by Campbell [2] examines the current state of post-secondary education in the United States, delving into the achievement gap across geographic and racial lines. This paper suggests that people living in rural areas tend to get lower quality education, and urban areas tend to have the most prominent racial attainment gaps.

In these two articles, the authors focus on the educational attainment of different races in the United States. Our paper differs from these papers because we do not focus on the policies' effects on inequality or income gaps. Rather, we compare the proportions of different races and genders that attain different levels of education in different types of post-secondary institutions.

Further, the paper "Race, Gender, and the Role of Education in Earnings Inequality: An Introduction" uncovers the role of education in explaining economic inequality between different ethnic/racial and gender groups in the national labor market [3]. It claims that the higher the schooling supply for educationally disadvantaged groups, the higher the likelihood that the income gap between these groups and the advantaged groups will be reduced. We differ from this study because we focus specifically on the status quo of education supply, not the advantages of education.

Another paper by Claudia Buchmann[4] examines women's educational achievement. It concludes that females have better education performance; under a similar education environment, women always tend to reach a higher grade than men. In contrast, our paper does not discuss gaps in educational achievement but differences in educational attainment and quality.

2. BACKGROUND

Since the end of World War II, the overall economic situation in the United States has improved, with average household incomes doubling from previous levels, and the increase in economic income has enabled working people to finance better education. However, in the 1970s, technological advances allowed more educated Americans to acquire skills such as computer technology, and low-skilled jobs were outsourced to other countries at a lower cost. This economic pattern continued into the 21st century, leading to significant wage increases for college graduates but stagnant wages for high school dropouts. In other words, the standard of living of high-income earners increased and vice versa.

Some expected that technological and scientific advances would spur economic development, which would raise education levels. However, because high school graduation rates have not improved significantly since the 1970s, the educational achievement gap between children in low- and high-income groups in the

United States has widened [5].

The truth about why the American educational dream has stalled is that throughout its history, the United States has relied on public schools to correct inequalities in the educational treatment of children from families of different birth backgrounds and income levels. However, with the rise of private schools, the effectiveness of public schools has declined. As a result, public schools have struggled to help those at the bottom of the ladder develop the skills they need to compete for jobs. The high quality of education in private schools has exacerbated the lack of resources faced by poor schools, leading to increasingly unequal educational outcomes.

In the United States, several policies have been implemented to reduce inequalities in education.

Compensatory education was promoted in the United States in the 1960s to compensate for the difficulties of culturally disadvantaged children, reduce their learning difficulties, and improve their learning abilities [6]. During this period, several programs were implemented simultaneously.

First, the Head Start Program, which provided early childhood education for children from low-income families, provided comprehensive services and worked closely with parents. This was followed by the Enrichment Program that focused on remedial work in language, math, and science. In addition, the Academically Oriented Preschool Program focused on language development [7].

These programs have similar goals and emphasize the importance of early learning so that compensatory education can have a more significant impact if implemented at an early age. All of the programs target children from disadvantaged or culturally backward areas. All of these programs focused on the holistic development of the child [7].

In addition, the U.S. federal government created the Rural Education Program to address the severe underfunding of rural education, the overrepresentation of poor and minority students, the shortage of teachers, and to provide more legal and financial support for the balanced development of rural education [7].

Then came President Bush's No Child Left Behind Act of 2001, which established an accountability system for elementary and secondary education, expanded the autonomy of local governments and schools, gave parents the right to choose, ensured that all children could read, improved the quality of teachers, monitored student performance in each state, and improved English language proficiency for non-native English speaking children [7].

Thus, the No Child Left Behind Act is designed to improve children's basic academic skills through the use of tools and instruments to close achievement gaps,

ensure that all children meet state academic standards, and give children equitable access to quality education.

However, the law has placed considerable pressure on school teachers and students. Both elementary and secondary schools have responded differently to the pressures of annual assessments, grading, and increased sanctions.

First, schools have been under pressure from state examinations that have intensified school instruction regarding time, resources, and teachers. At the same time, non-exam subjects have been significantly weakened or eliminated. Second, many primary and secondary schools have reduced students' leisure time by lengthening the curriculum and increasing extracurricular activities to meet standards.

What is known is that the implementation of this law has been uneven across U.S. states over the past decade. Some states have lowered their achievement standards as a result. The data shows that after the passage of the No Child Left Behind Act, U.S. students' language skills improved, but their performance in reading and math declined.

As a result, Every Student Succeeds Act of 2015 was passed. Every Student Succeeds Act eliminates the previously mandated federal reporting system based on test scores and replaces it with a national reporting system that returns control of education to the states and local school districts. This act would improve the troubled 5 percent of public schools and schools with high dropout rates in higher education [8]. It ensured that states focus on the unique needs of English learners, including students from low-income families, students of color, students with disabilities, English learners, students with immigration status, homeless children, children in foster care, and children with parents in the military service. The Secretary of Education is also authorized to allocate additional education funds for low-income and English learners. This bill also repeals the mandatory federal teacher evaluation, which dramatically reduces the pressure on teachers.

3. DATA

Our primary data source to examine the trends in educational attainment is the Current Population Survey (CPS). The CPS, sponsored by the U.S. Census Bureau and the U.S. Bureau of Labor Statistics (BLS), is a monthly national survey covering about 60 thousand household observations in the U.S. from 1940 to 2020. From this data, we are interested in the number of people who attained at least a high school degree and those who attained at least a college degree. Specifically, we want to know if the percentage of people who attained such degrees among people of each race and gender differs

across different races and genders.

To examine the trends in the quality of education attained, we use the data from IPEDS. The IPEDS is a post-secondary education data collection program, collecting institution-level data from more than 7000 post-secondary education institutions in the U.S. It has comprehensive data on the composition of enrollment in different types of institutions, public, private non-profit, or private for-profit, of students of different races. Although there are some notable exceptions, public and private for-profit schools often lack education quality because of limited financial support. Private non-profit schools, on the other hand, are often institutions that make the top of the list, such as Stanford, Harvard, and MIT.

4. EMPIRICAL FRAMEWORK

To determine racial and gender disparities in education, we analyze trends in the level of education and the quality of education attained in the U.S. Specifically, we examine high school or above and college or above completion by the U.S. population who are 25 years or older from 1940 to 2020. Further, we explore the types of post-secondary institutions enrolled and Ivy Plus institutions' gender and race compositions. Overall, though we are interested in the broader perspective of education disparities, we are particularly interested in the trends of such disparities since Obama's presidency, as the former president paid emphasized attention to reducing gaps in education.

5. MAIN RESULTS

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5.1. Education Attainment

5.1.1. High School or Above Completion

First, we examine trends in the proportion of each race population that completed at least high school from 1940 to 2020.

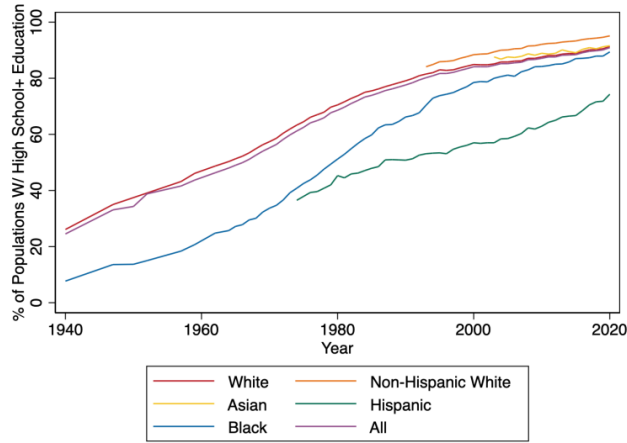


Figure 1: High School or Above Completion of Different Races (1940 - 2020)

Notes: The graph plots high school or above attainment proportions of each of the race populations. The Asian, Non-Hispanic White, and Hispanic population are missing data for several years because of a change in survey grouping methods. For example, only prior to 2003, Asians were grouped with Pacific Islanders. The data represents only those who indicated one racial identity.

As shown in Figure 1, we see a significant increase in overall high school completion rates among each race. However, we also witness a gap between high school attainment among Hispanics and Blacks, and Blacks and Whites or Asians. Further, the diminishing gap between the proportions of the White and Black population that completed high school evince that the efforts to decrease education disparities have mainly been targeted towards the Black population. The Black population lagged

behind the White population by more than 15% in the 1940s, and in 2020, by only 2% to 3%. Although the Black and Hispanic populations have similar high school attainment proportions in the 1970s, the Hispanic population has continued to lag, deferring by about 20% by 2020. Even though more Hispanics are getting a high school education, they are still struggling in the competitive job market because, on a national level, overall levels of education have increased even more.

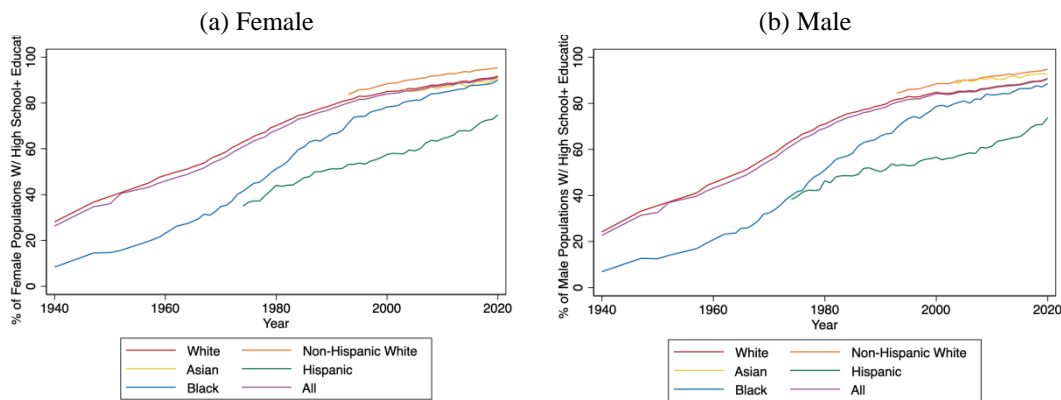


Figure 2: High School or Above Completion of Different Genders (1940 - 2020)

Notes: The graphs plot high school or above attainment proportions of females and males, respectively, in each of the race populations. The Asian, Non-Hispanic White, and Hispanic population are missing data for several years because of a change in survey grouping methods. For example, only prior to 2003, Asians were grouped with Pacific Islanders. The data represents only those who indicated one racial identity.

When comparing high school or above attainment of females and males, there are no significant gaps. In addition, the trends of both genders are similar to the overall trends in high school or above completion.

5.1.2. College or Above Completion

We also examine trends in the proportion of each race population that completed at least college from 1940 to 2020.

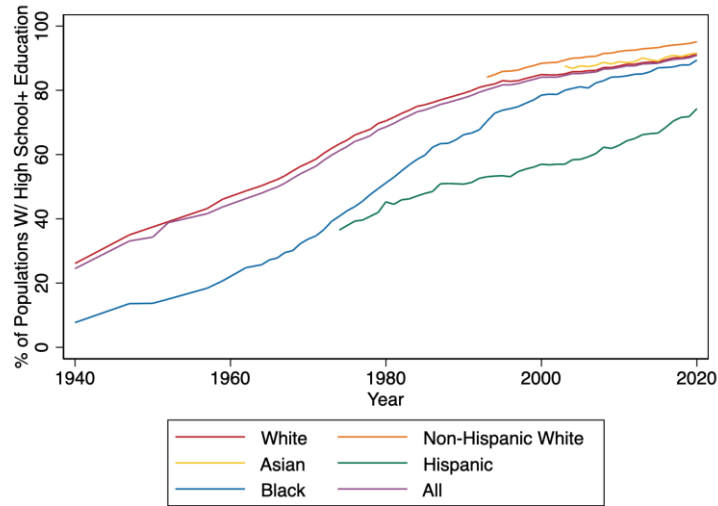


Figure 3: College or Above Completion of Different Races (1940 - 2020)

Notes: The graph plots college or above attainment proportions of each of the race populations. The Asian, Non-Hispanic White, and Hispanic population are missing data for several years because of a change in survey grouping methods. For example, only prior to 2003, Asians were grouped with Pacific Islanders. The data represents only those who indicated one racial identity.

Generally, there has been an increase in the completion rate of college or above education among the different races. However, compared to high school completion trends, the proportion of populations that completed college increased at a much slower rate. Further, in contrast with high school completion trends, where the Asian and White populations have similar completion rates, a significantly larger proportion of the Asian population attained college or above education. There are several possible reasons for this. Firstly, when immigrants from Asia went to the U.S., they usually had extensive professional skills and educational training.

Now, this is even more so. Studying abroad or living abroad are not easy nor cheap feats, and thus, those who have the economic resources to live in the U.S. are more willing to invest in their children’s education. Secondly, the culture of tiger parenting flourishes among the Asian population because of extensive Asian values related to hard work and studying. Thus, these values demonstrate themselves in Asian descendants’ high level of educational attainment. Finally, we can see that the Hispanic population also falls behind in college education.

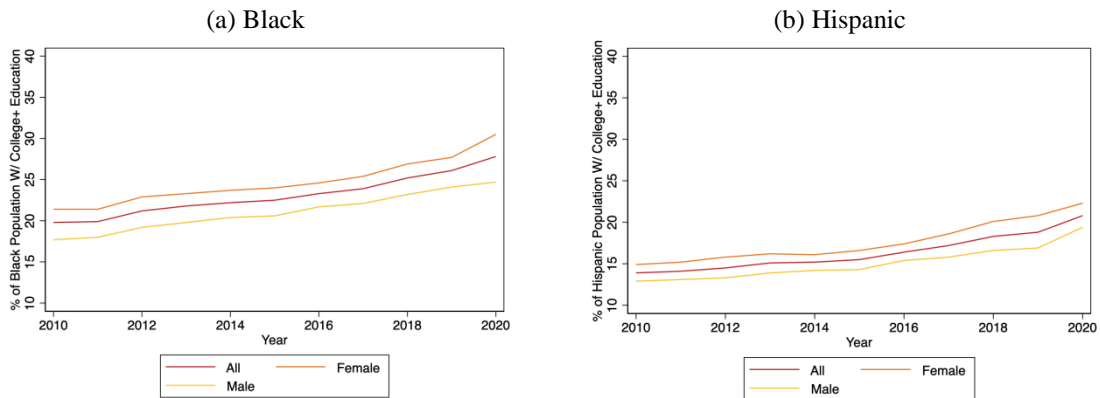


Figure 4: College or Above Completion of Different Genders in Black and Hispanic Populations (2010 - 2020)

Notes: The graphs plot college or above attainment proportions of females and males in Black and Hispanic populations, respectively. The data represents only those who indicated one racial identity.

Figures show that in the past ten years, there has been a visible gap between the educational attainment of Black men and women and Hispanic men and women. A

possible explanation for this could be disparities in the criminal justice system. According to the National Association for the Advancement of Colored People,

"One out of every three Black boys born today can expect to be sentenced to prison, compared one out six Latino boys; one out of 17 white boys." Thus, when Black and

Hispanic boys are being disproportionately incarcerated, their access to education is limited. Insert a picture in the document.

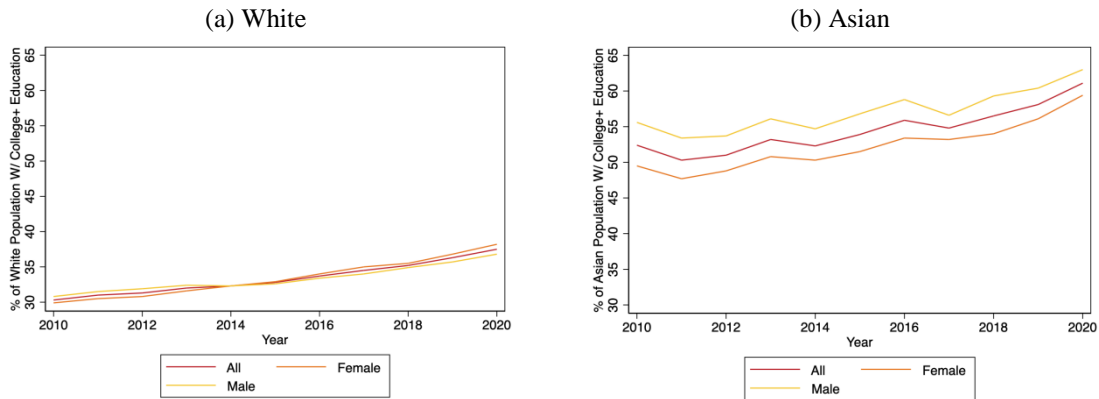


Figure 5: College or Above Completion of Different Genders in White and Asian Populations (2010 - 2020)

Notes: The graphs plot college or above attainment proportions of females and males in White and Asian populations, respectively. The data represents only those who indicated one racial identity.

In the white population, female students start by being disadvantaged, but gradually the gap closes. In the Asian population, however, males consistently complete college more often than females. Further research suggests that the six main origins of Asian populations in the U.S. are China, India, and the Philippines, countries with histories of heavy gender disparities. One possible reason is that immigrants from these could have retained

some of such unequal cultures that still affect their distribution of education today.

5.2. Education Quality

The level of education attained, however, does not signify that people are receiving quality education.

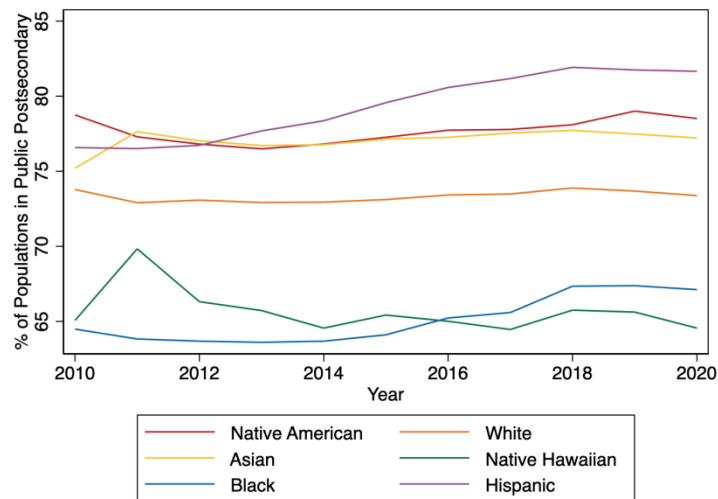


Figure 6: Attendance at Public Post-Secondary Education Institutions (2010 - 2020)

Notes: The graph plots attendance at public post-secondary schools among different race populations. The data represents only those who indicated one racial identity.

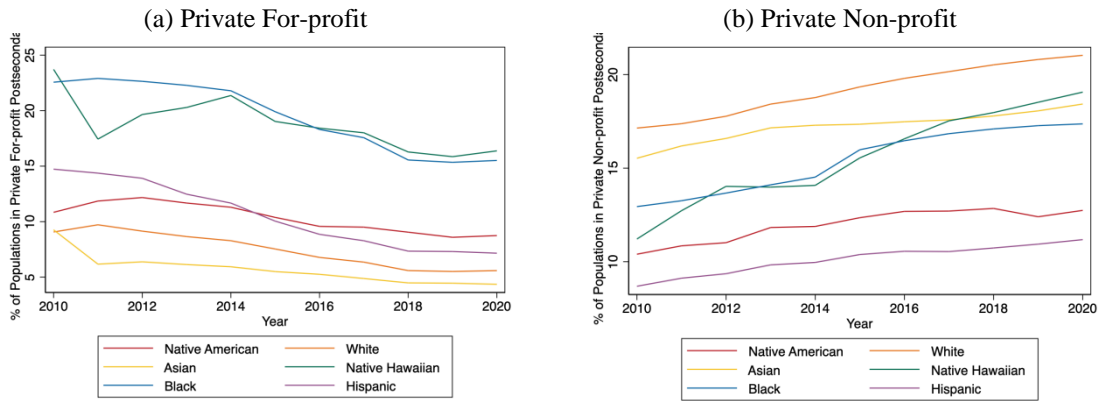


Figure 7: Attendance at Private Post-Secondary Education Institutions (2010 - 2020)

Notes: The graphs plot attendance at private for-profit and private non-profit post-secondary schools, respectively, among different race populations. The data represents only those who indicated one racial identity.

There have been minimal changes in the proportions of race populations enrolled in public post-secondary institutions in the past ten years. Figures show that there are increases in the enrollment of private non-profit institutions and decreases in the attendance of private for-profit institutions, but these changes are slight. As such, even though the number of students with high school or college diplomas has increased, their quality of education has not improved. Moreover, disadvantaged race populations, such as Blacks and Hispanics, attended private for-profit institutions, which often provides inadequate education, at a disproportionately high rate. In contrast, the White and Asian populations enrolled at high quality private non-profit institutions more often than people of other races.

6. CONCLUSION

This paper examines the trends of education attainment and quality in the United States. We discover that, generally, the level of education attainment has increased, while race and gender disparities have softened. However, the Hispanic population is still behind this increasing trend. Although overall education attainment has improved, the quality of education has not. Specifically, minority races disproportionately attend private for-profit institutions, while majority races enroll in private non-profit schools. Therefore, we propose that future policies should target improving not only the education level of minority groups, but also the quality of education.

The limitation of this research lies in the lack of a more profound analysis of identified insights due to inadequate data. For example, reasons for more significant Black and Hispanic female representations, in comparison to men, at high-level education institutions would benefit from more solid data evidence. Further, education quality may be inadequately summarized by

the types of institutions students enroll in because of the lack of data. A valuable addition would be to discuss race compositions within high-quality post-secondary institutions, such as the Ivy Plus colleges, in comparison with the race compositions of the country. Ultimately, we encourage further research into the possibilities proposed.

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