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CLOSING THE RACE GAP:

Alleviating Young African American Unemployment Through Education

a policy brief by: Rory O'Sullivan, Konrad Mugglestone, and Tom Allison





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About Young Invincibles

Young Invincibles is a non-partisan, non-profit organization that seeks to amplify the voices of young Americans and expand opportunity for our generation. Young Invincibles engages in education, policy analysis, and advocacy around the issues that matter most to this demographic. Young Invincibles primarily focuses on health care, education and economic opportunity for young adults, and works to ensure that the perspectives of young people are heard wherever decisions about our collective future are being made.



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INTRODUCTION

The Great Recession forced a generation of young adults into joblessness, and no group was hit harder than young African Americans. Meager job opportunities exacerbated economic barriers already faced by this community, including persistent racial discrimination. This report shows how higher education can reduce economic disparities by increasing African Americans' job prospects and earning potential.

African American Young Adult **Unemployment Persists at Alarmingly High Levels**

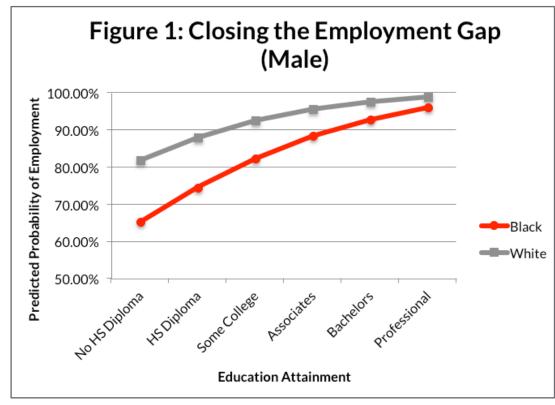
In May 2014, six-and-a-half years after the start of the Recession. African American millennials (18- to 34-years-old) faced a **16.6** percent unemployment rate, which is well over twice the unemployment rate for white millennials in the same age range

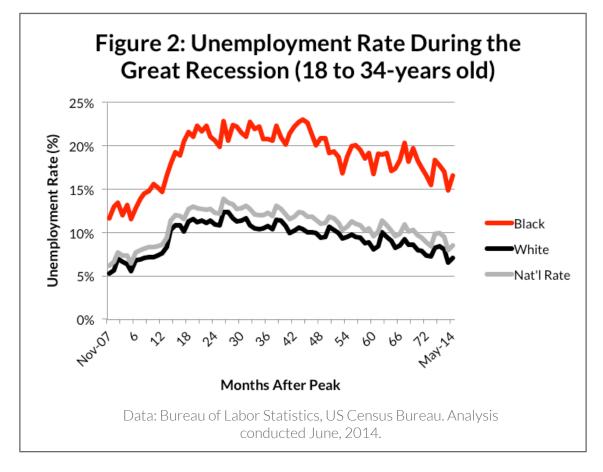
(7.1)percent) over eight percentage points higher than the national unemployment rate for the same age group (8.5 percent).¹ Also distressing the distribution of unemployment - only 14.3 percent of young adults identify as solely African American,² yet African Americans make up over a quarter of the unemployed 18- to 34-year-old population.³

Long-term unemployment

scars future job prospects for decades. The average young adult who experiences six months of unemployment falls \$45,000 behind in lifetime earnings (approximately \$23,000 during the time of unemployment and an additional \$22,000 in lagging wages for the next decade because of the slower start to a career).4

Additionally, Young Invincibles recently found that the average unemployed 18 to 24 yearold costs their state and federal government approximately \$4,100 per year (~\$9,900 for the typical 25 to 34 year-old). If we include the enormous number of discouraged millennials who have left the workforce after months of fruitless job-hunting, the nation loses approximately \$25 billion annually.⁵ The overwhelming majority of these costs derive from lost tax revenue, not social safety net expenditures. As African Americans represent over a quarter of unemployed young adults, this is a problem that impacts





both the future of a large portion of this generation, but also all Americans.

Since African American young adults face disproportionately high unemployment rates, it is critical to understand recent unemployment trends – and their economic impact – ahead of considering policy solutions.

Key Findings

Young Invincibles conducted an analysis of racial disparities in education and unemployment and drew several conclusions:

- Race is associated with disparate unemployment rates at every level of education:
 - o African American males without a high school diploma are approximately 15 per-

- centage points less likely than white male high school dropouts to have a job.
- o African American females with no high school diploma are approximately 12 percentage points less likely than similarly educated white females to have a job.
- Our models project that, holding all else equal, an African American male needs some college credit to have a similar probability of employment as a white male high school dropout. Similar trends exist among women.
- ▶ Increasing educational attainment is key to closing the employment gap. While young African American unemployment is higher than whites at every educational level, the added value of each additional degree of educational attainment, in terms of employment opportunity as well as income, is much

greater for young African Americans than young whites.

- o The effect of a high school diploma on employment probability for African American men is 50 percent larger than the same degree for a white male, but a professional degree offers a black male a 146 percent larger effect than the same degree for a white male. Similar, though less pronounced trends exist among women.
- An African American male with a bachelor's degree is only 5 percentage points less likely to have a job than a white male bachelor's degree holder. An African American female with a bachelor's is only 3 percentage points less likely to be employed than a similarly educated white woman.
- Among professional degree holders, the racial gap between races is virtually erased.

BACKGROUND

Compared to other groups, African American millennials face a unique set of challenges. Unlike with white young adults, where men and women experience relatively similar unemployment rates, black males have significantly lower employment rates than black females. In May, black men (aged 18 to 34) faced an 18.3 percent unemployment rate, compared to a 15.0 percent rate for black women.6

Even among those who are employed, the quality of jobs is worse for African American young adults. African American men (aged 18 to 34) are 30 percent more likely to be working a part-time position than white men of the same age group, with approximately 1 in 4 working a part-time position.⁷ African Americans also experience an overall wage gap: In 2012, the median income of a white 18 to 34 year-old was \$25,000, compared to \$19,800 for an African American millennial⁸

Why Do African Americans Face **Such Difficult Prospects?**

Without a doubt, the legacy of racial discrimination across centuries continues to impact economic disparities, and so young African Americans start on an uneven playing field. African American young adults have less economic and educational opportunity due to a lack of inherited wealth from previous generations. This results in persisting deficits in their parents' net worth and low homeownership rates. The average college-educated, middle class, white American has a net worth of around \$75,000. In contrast, a similar college-educated, middle class black American has a net worth of not even \$17.500.9

For many American families, homeownership is an essential economic asset- providing security for a child's primary and secondary education, and fostering higher educational achievement¹⁰ - yet only 41.6 percent of African-Americans own a home, while almost 64 percent of whites own their place of residence. 11 These foundational differences are then compounded by the racial employment and wage gap.

Moreover, a number of scholars have examined the black-white employment and wage gap and several studies have found evidence of current racial discrimination throughout the hiring process. 12 For instance, one well-publicized study found that fictitious resumes with white-sounding names received 50 percent more callbacks

for interviews than those with African American-sounding names, despite the rest of the resumes being identical.¹³ Indeed, according to one survey, more than a third of African Americans reportedly experienced racial discrimination during a hiring process.¹⁴

Researchers identify additional factors that can negatively impact African American employment outcomes. Place of residence (i.e. rural, suburban, or center city location) impacts employment, given that low-skill manufacturing jobs have left city centers. Another issue is the lower marriage rate among young African Americans (especially men) compared to whites. Employers can perceive unmarried individuals as less stable during the hiring process. Married individuals, with children and a spouse present, had an unemployment rate of 4.4 percent in 2013, compared to 11.6 percent among other individuals with children and no spouse. The process of the compared to 11.6 percent among other individuals with children and no spouse.

Beyond this, the higher incarceration rate among the African American population explains some

of the gap. 18 One study suggests that an African American male without a high school diploma has an approximately 70 percent chance of being imprisoned by his mid-thirties. 19 Having a felony on one's record makes meaningful employment – especially in a recession – extremely difficult to find.

These factors help explain the disparities

when comparing employment rates at similar educational attainment rates. Additionally, researchers regularly point to low educational attainment among the African American population as a major barrier for advancement.

Indeed, while it cannot address some of the structural or discriminatory barriers described earlier, increasing educational attainment has a significant ability to close the gaps in employment and wages, but by how much? One recent study found a non-existent wage-gap between college-educated black men and white men with well educated parents, as long as they weren't born in the South.²⁰ Although race remains a relevant part of the equation, a number of earlier studies all point out that education explains a significant part of the employment gap.^{21,22,23}

While more and more millennials are going to college, it is clear that too many young African Americans are being left behind. An analysis of 2013 CPS data (shown in Table 1) finds that among 25 to 34 year-olds, African Americans

Table 1: Educational Attainment By Race and Gender (25 to 34 year-olds)

	Bla	ack	Wł	nite
	Men	Women	Men	Women
No HS Diploma	12.0%	8.1%	6.1%	4.7%
HS Diploma	35.6%	30.2%	26.8%	20.3%
Some College	24.0%	24.5%	19.5%	17.7%
Associate's	8.0%	11.3%	10.2%	12.7%
Bachelor's	16.5%	18.1%	28.6%	30.7%
Master's	3.0%	6.4%	6.1%	11.4%
Ph.D./J.D./M.D.	0.9%	1.5%	2.7.%	2.4%

Data: U.S. Census Bureau Current Population Survey (CPS), 2013.

"Black" and "White" categories include individuals who reported one race only and who reported non-Hispanic.

are nearly twice as likely to have dropped out before getting a high school diploma, and are roughly half as likely to have a post-baccalaureate degree. Similar relationships exist at almost every education level, across both genders.

These gaps are especially significant because recent data has shown that the pay gap between those with a college degree and those without is widening. People with a four-year degree are making almost twice as much per hour (98 percent) than those without - an increase from the 85 percent more than they were making in 2003.²⁴ Furthermore, recent research suggests that, on average, the added financial benefit of a college degree (even after removing the costs of attendance) is approximately \$590,000 for men, and \$370,000 for women, over a lifetime.²⁵ Given that approximately 65 percent of the job openings in the next five to six years will require at least some college coursework, closing the education gap is an imperative we cannot ignore. 26

Taken together, we know that acquiring higher degrees of education is a key to better employment outcomes for more people. However, given the steep climb for African Americans, is it possible that a college degree improves employment outcomes to a greater degree for African Americans millennials than whites?

HOW EDUCATION CLOSES THE GAP

In order to test this, Young Invincibles conducted statistical analysis on the U.S. Census Bureau's 2013 Current Population Survey March Annual Social and Economic Supplement data. To get a sense of how much education matters, we predicted employment outcomes for white and black millennials (aged 18 to 34). We held constant a number of other factors that we know impact employment outcomes. This approach allowed us to identify how much each additional degree helped African Americans and whites.²⁷

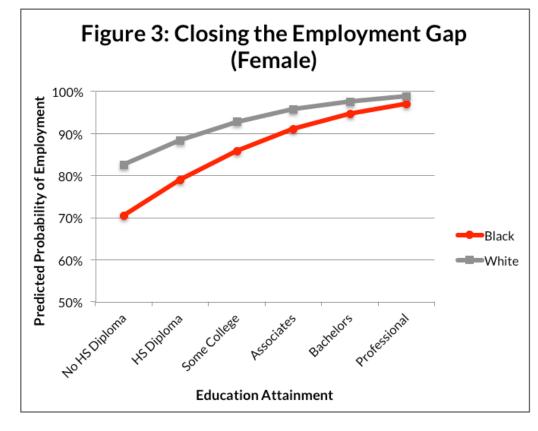
Table 2: Predicted Probability of Employment by Education Attainment, Race and Gender

	Bla	ack	Wł	nite
	Men	Women	Men	Women
No HS Diploma	65.3%	70.6%	81.8%	82.6%
HS Diploma	74.5%	79.1%	88.0%	88.5%
Some College	82.3%	85.9%	92.5%	92.9%
Associate's	88.4%	91.1%	95.6%	95.9%
Bachelor's	92.8%	94.7%	97.6%	97.7%
Professional	96.0%	97.1%	98.9%	99.0%

Holding school enrollment status, veteran status, work disability status, southern region, rural/urban status, city center/suburban status, marital status, and number of children at their observed values.

Professional Degrees narrowed to 25-34-year-old subsample.

As shown in Table 2, among low-education millennials. African Americans with the same characteristics and education as whites are substantially less likely to be employed. Black men without a high school diploma are over 15 percentage points less likely to be employed than white men with the same degree of education. In fact, an African American male has to have at least



taken some college classes before he has the same employment prospects as a white male without a high school diploma. African American millennials have to earn two educational levels higher than their white counterparts in order to have the same employment probabil-

ity. By contrast, African Americans and whites have nearly equal probabilities of employment at high degrees of education.

Increased educational attainment clearly closes the gap, and closes it dramatically. Table 3 shows the marginal effect of each degree attained on one's employment probability. **The added value of each**

cantly higher for African Americans than for whites. Furthermore, the value of each degree relative to the same for whites increases dramatically with each level. For instance, a high school diploma offers African American men a 50 percent larger effect on their employment probability than the same degree for a white male, but a professional degree offers a black male a 146 percent larger effect than the same

degree for a white male. Similar trends also exist among

women, although the differences are less pronounced.

additional degree is signifi-

Educational attainment is not only a key for closing the employment gap among millennials, but also the wage gap. This is especially true among young men. The trend is less pronounced

Table 3: Marginal Effect of Reaching the Next Level of Ed Attainment on Employment Outcomes by Race and Gender

	Bla	ack	Wł	nite
	Men	Women	Men	Women
HS Diploma	9.3%	8.5%	6.2%	6.0%
Some College	7.8%	6.8%	4.5%	4.4%
Associate's	6.1%	5.1%	3.1%	3.0%
Bachelor's	4.4%	3.6%	2.0%	1.9%
Professional	3.2%	2.4%	1.3%	1.2%

Holding school enrollment status, veteran status, work disability status, southern region, rural/urban status, city center/suburban status, martial status, and number of children at their observed values.

Professional Degrees narrowed to 25-34-year-old subsample.

among women, as they have a smaller wage gap to close. Table 4 shows the median wages of 25 to 34 year-olds by race, gender, and educational attainment. The marginal impact of each degree on the wages of African American males is significantly higher than for white males.

A bachelor's degree raises the median wage of black men by \$10,000 per year, or a 28 percent increase from the median wage of the same person with an associate's degree. In contrast, for a white male, a bachelor's degree raises his median income by only \$6,100 per year - a 13 percent increase. The value of a post-baccalaureate degree is even higher; the median income of an African American man with an advanced degree is a full \$21,000 per year, or 46 percent higher than African American men with bachelor's degrees. White men see a \$15,100 per year - or 29 percent - increase in wages for a similar rise

in educational attainment.

NATIONAL POLICY SOLUTIONS

It is clear that there are a range of causes of the wage and employment gap, including employment discrimination, all of which call for a range of solutions. But because we know that education can be a significant player in combating this disparity, we focus here on ways to foster higher educational attainment among all young people, but particularly among students of color. The scan below outlines a non-exhaustive list of proven solutions and new ideas that can guide those who need it through all of the stages of the college process - from early awareness, to admissions, to affordability.

Table 4: Median Income and Relative Income Increase By Education Attainment, Race, and Gender (25-34)

	Black				WI	nite		
	Men	Δ%	Women	Δ%	Men	Δ%	Women	Δ%
Less than a HS Diploma	\$25,200		\$19,300		\$29,200		\$21,800	
High School Diploma	\$27,200		\$25,300		\$37,400		\$27,100	
Associate's Degree	\$35,300	30%	\$29,600	17%	\$46,100	23%	\$35,500	31%
Bachelor's Degree	\$45,300	28%	\$39,500	33%	\$52,200	13%	\$42,400	19%
Professional Degree	\$66,300	46%	\$47,400	20%	\$67,300	29%	\$52,500	24%

NOTE: Based on combined data from the 2010, 2011, and 2012 Annual Social and Economic Supplement of the Current Population Survey. Earnings in 2009 and 2010 are adjusted to 2011 dollars using the Consumer Price Index for all urban consumers. Median earnings are the median of combined data.

The "Black," and "White" categories include individuals who reported one race only and who reported non-Hispanic.

SOURCES: U.S. Census Bureau, 2010a, 2011a, 2012a; Bureau of Labor Statistics, 2013a; original calculations by College Board's Sandy Baum, Jennifer Ma, and Kathleen Payea. Additional calculations by Young Invincibles' Konrad Mugglestone.

Original table was prepared for College Board's "Education Pays", released in September 2013.

Inside these three categories of policy interventions, the recommendations unveil specific challenges to completing a post-secondary degree from the student and family perspective. Some of these policy recommendations are already in practice at either the state or the federal level but could be expanded or strengthened. Others are new ideas yet to be tried or pending as legislation in Congress. Also, some policies will have to be implemented at the state level. though the federal government can play a role in encouraging adoption and developing best practices.

It is essential that we implement policies to simplify the process, provide more information, and increase access to valuable guides like

lege decisions, but evidence shows that access to important information, such as graduation rates, would allow students and their parents to match them to the right school. Some students have access to a guide who has navigated the maze before – such as a college-educated parent or counselor. But given the statistics on educational attainment, many young African Americans do not have such easy access to these guides in their household.

It is essential that we implement policies to simplify the process, provide more information, and increase access to valuable guides like counselors. Below we outline a number of proven approaches that would increase the ability of African Americans to navigate this labyrinth successfully.

American Counseling Fellows - School counselors increase educational attainment by providing social, career, and academic support for the students.³¹ A wealth of research demonstrates student access to counseling leads to higher test scores, higher graduation rates,³² and higher rates of college enrollment.³³ Participants in a program called College Possible – a program that provides counseling on college applications and the SAT or ACT – were about 30 percent more likely to enroll in a four-year college.³⁴

The nation faces a massive shortage of counselors. In 2012, there were 459 students per counselor, which is significantly fewer than the

Early Awareness and Counseling

Choosing a college is like entering a labyrinth with few signposts and hundreds of paths to take. With over 7,000 post-secondary institutions in the United States, 28 and over 100 questions on the Free Application for Federal Student Aid.²⁹ accessing and succeeding in college is a complicated process, and finding your way requires the right information. Low-income minority students need information on affordability, such as the cost of attendance, financial aid availability and scholarship availability. Also essential is some understanding about which schools are "reach" schools and which are "safety" schools. Student body diversity, culture, extracurricular opportunities, graduation rates, and employment outcomes are also worth considering in selecting a college.

Students of all backgrounds struggle with col-

recommended 250-1 ratio.35 Students aren't getting advice they sorely need. Over 40 percent of high debt borrowers acknowledged that they did not receive federally mandated loan counseling.³⁶

We can increase the number of these vital aides through expanding initiatives like the National College Advising Corps - a program that successfully places recent college graduates into underperforming high schools as counselors by using a model similar to that of another successful program, Teach For America.³⁷ In July 2013, President Obama directed federal agencies to partner with AmeriCorps to create service opportunities that advance national goals.³⁸ We believe the Department of Education should create an American Counseling fellows program modeled on the National College Advising corps. AmeriCorps volunteers would supplement veteran counselors in predominantly lowincome schools that disproportionately serve African American students. Counseling fellows would help with college applications, financial aid, and career advice increasing college enrollment rates, reducing mismatch, and ultimately improving job prospects.³⁹

Expanding College Opportunities - Many of the nation's low-income, predominantly minority, high-achieving students are unsure of which universities they can successfully attend. As a result, over 40 percent of low-income, highachieving students' applications go to non-selective schools, compared to less than 10 percent of high-income students' applications. 40 This results in "under-matching" where low-income high-achieving students who could attend the most highly regarded institutions in the nation end up in institutions where they are not challenged nor given as much of an economic boost.

This is unfortunate because many of the nation's most elite institutions provide the most financial aid. More than sixty of America's selective universities claim to meet disadvantaged students' full financial needs, and the list is growing.⁴¹

Transforming the Expanding College Opportunities program (ECO) into a national initiative could help tackle this issue. ECO is a test program designed to provide customized packages of information about colleges to the students who need it most. These packages include lists of schools that are accessible for students based on academic performance. They also provide key statistics comparing colleges, and include pre-filled forms to make it easier to have application fees waived. The low-income students who receive these packages are almost 20 percent more likely to apply to schools with students at their ability level, and evidence shows that they achieve educational outcomes on par with their high-income peers. These results are especially impressive given the affordable cost of the package is \$6 per student.42 With approximately 3.3 million⁴³ students expected to graduate from high school in 2014-2015, providing these packages to the bottom 50 percent of household earners would cost less than \$10 million. This low cost would help increase social mobility, pushing students from low-income backgrounds to apply to our nation's most prestigious institutions.

FAFSA Reform - The Free Application for Federal Student Aid (FAFSA) form is available in January, but few people file taxes during this month⁴⁴, and low-income students accepted into college rarely know what their financial aid and federal grant packages will look like until late in the process due to FAFSA's heavy reliance on the most recent income tax information, which

is available only weeks before.

Instead of using prior year (PY) information to determine financial aid, we should use easily available financial information from the year prior to the most recent financial year (known as "prior-prior" or PPY). PPY tax information has been shown to have either small or no changes on over 70 percent of the federal grants awarded. It also simplifies the process because the Department of Education can auto-fill the complicated FAFSA forms with PPY financial information. More importantly, switching to a PPY system has been demonstrated to benefits students from the lowest-income families the most, many of which are minority families. The solution of the system has been demonstrated to benefits the most, many of which are minority families.

The number of questions on the FAFSA could also be reduced to simplify the process. With over one hundred questions, it should come as no surprise that a 2012 survey conducted by Young Invincibles found that students found the form to be "complex" and "confusing." Advocates and policy experts like The College Board and National College Access Network have called for the FAFSA to ask only two questions: adjusted gross income and family size. 49,50

Affordability

Knowing which colleges to apply to and how to apply to them are both essential, but for African American students – many of whom are low-income – the cost of college is one of the greatest barriers to educational achievement. Focus groups of students from across the country say that increasing costs and uncertainty about how to afford college make it difficult to know whether one can remain in college for extended periods of time.⁵¹ In the following sections, we discuss two existing areas of investment –com-

munity colleges and Pell Grants – ripe for expansion at the federal level because they successfully aid minority students in affording higher education.

Community Colleges - Low-income minority students disproportionately utilize our nation's community colleges because they represent an excellent value for the price. In 2011, approximately 39 percent of all black students, and 50 percent of all Hispanic students attended 2-year institutions. Unfortunately, public four-year institutions are given 86 percent more federal funding per student than public two-year institutions. Sa

Research suggests that these dollars matter. Decreased funding for institutions decreases completion rates.⁵⁴ Unfortunately, compared to four-year institutions, a disproportionately small amount of funding for community colleges comes from federal government revenue.⁵⁵

While community colleges are largely funded by state and local sources, Title III of the Higher Education Act, the "Strengthening Institutions" provision, authorizes the Department of Education to provide grants to institutions that predominantly serve low-income students. A performance report of this program found that it improved student enrollment, graduation rates, and the cost per degree awarded.⁵⁶ Unfortunately, despite its successes, this program is relatively small. In 2013, the program awarded \$76.4 million to 192 institutions.⁵⁷ This program could be expanded to allow more grants to these institutions that are often low-income and minority students' first contact with higher education.

Pell Grants - The federal Pell Grant program

provides grants to low-income students across the nation to enable them to acquire post-secondary education.⁵⁸ In the 2013-2014 school year, the maximum grant allowed was \$5,645. This program positively impacted 9.4 million students in the 2011-2012 school year.⁵⁹ The overwhelming majority of students in one survey, 87 percent, believe that a federal grant has enabled them to attend college. 60

Pell improves outcomes in both enrollment and completion: \$1,000 in grant aid improves enrollment by 4.1 percentage points. 61 African Americans who receive Pell Grants are more likely to earn their degree than those without the grants, and are more likely to earn those degrees in high-paying science, technology, engineering, and math (STEM) fields.62

The program benefits African Americans at higher rates than any other race or ethnicity: 54.5 percent of African American students received a Pell grant in the 2011-2012 school year, compared to 27.7 percent of white students, or 42.2 percent of Hispanic students. 63 A greater percentage of African American students also received the largest Pell grants: 17.1 percent of African American students received grants ranging from \$3000-\$5500 (max). By contrast, only 9.6 percent of white students received grants of that size.⁶⁴

However, the purchasing power of Pell Grants is shrinking as the cost of tuition rises. The share of college costs covered by next year's maximum Pell Grant will be the smallest since the program was founded: a maximum Pell Grant will cover less than one third of the cost of college. 65 Despite cuts, Pell Grants currently run a surplus.66 so the maximum Pell Grant can and should be expanded to cover a greater percentage of college costs. It should also be made part of our nation's mandatory funding as a centerpiece of our financial aid system. This means that future budget conflicts and government shutdowns cannot put the financial status of millions of our nation's most vulnerable students in jeopardy.

Legislation to boost the maximum Pell Grant already exists. Senator Mary Landrieu (D-LA) and Senator Mazie Hirono's (D-HI) legislation, the CHANCE (Creating Higher Education Affordability Necessary to Compete Economically) Act boosts the Pell Grant's maximum award from \$5,730 to \$8,900, mirroring the average state resident undergraduate tuition. 67,68

Admissions

Recent white and black high school graduates are beginning to enroll in post-secondary institutions at comparable rates.⁶⁹ However, significant disparities in completion rates remain. Since degree attainment drives positive economic outcomes, it is important to understand how to change this.

Selective and elite institutions produce degrees at far better rates than less selective ones. 70 And selective institutions are more likely to provide large need-based financial aid packages.⁷¹ Unfortunately, white students are five times as likely as black students to enroll in a highly selective college, and two to three times as likely to gain admission -- even after accounting for income differences between black and white families.⁷²

This is significant not because of the elitism or prestige in attending an elite institution, but because of their graduation rates. Students attending more selective schools are more likely to graduate, graduate faster, and have better

Alternatives

to race-based

affirmative action

can increase school

earnings, even after controlling for student ability. One study found that the most selective public flagships graduated 86 percent of their students within six years, compared to 51 percent at the least selective public colleges and universities. 74

For all of these reasons -- better financial aid packages, higher graduation rates, and superior economic outcomes – it is essential that we find ways to place more African American students into our nation's more successful institutions. While solving the under matching problem will help to close the gap, we can implement policies that affect the admissions process to better serve these students.

Efforts to increase minority admissions at institutions through affirmative action have been complicated by the Supreme Court's decision in Fisher v. University of Texas, instructing courts to use a test known as "strict scrutiny" to determine the legality of race-conscious admissions.⁷⁵ Given how alternatives to race-based affirmative action can increase diversity at quality institutions, states should explore whether race-proxy schemes or other policies could be implemented in their own state. Opportunities for the federal Department of Education to encourage these policies should be explored as well.

Guaranteed Admissions - The federal government should offer guidance to institutions on how they can change their admissions processes to help close the gap. Several states have experienced success with guaranteed acceptance of

a designated percentage of the top ranked students from each high school to in-state public universities, a viable alternative to race-based affirmative action. Texas, Florida, and California have all tried this, for example, with guaranteed acceptance given to the top 10 percent, 20 percent, and 4 percent of high school graduates, respectively.⁷⁶

Studies have shown that these approaches increase both the racial and socioeconomic diversity of the institutions affected. A 10 percent approach increases the percentage of admitted students in the bottom two socioeconomic quartiles from 10 percent to 30 percent.⁷⁷ The larger the percentage admitted, the greater the benefits for minority students. A 10 percent plan doubles the number of eligible minorities in the acceptance pool.⁷⁸ For the nation's most selective institutions, including private schools, researchers project a 10 percent plan

would increase African American acceptance by 50 percent. Adding in a socioeconomic status consideration with a 10 percent plan would double the number of accepted African American students.⁷⁹

Transfer Pathways - Community colleges also are vital pipelines for students to get into four-year institutions. The substantially cheaper annual price of community college makes the first two years of a bachelor's degree more affordable. Howeverness on ever, fostering strong partnerships between two-year and four-year institutions could make transitions for lower income, minority students into four-year degree programs much easier.

In the 2008 renewal of the Higher Education Opportunity Act, Congress included an amendment charging the Department of Education to encourage agreements between institutions and across state lines, with recommendations for policies like common course numbering.80 However, there is little evidence that the Department has taken advantage of this authority. We believe that the Department should use its ability to target two-year institutions that serve students of color and offer guidance and technical expertise on how to best smooth the transition between two-year and four-year institutions.

The federal government could further assist institutions in implementing agreements by incentivizing adoption of the most successful models. Valencia College, a community college in Orlando, Florida and winner of the 2011 Aspen Prize demonstrates the success of such a partnership. Due to their partnership with nearby University of Central Florida (UCF) called "DirectConnect", graduates of Valencia College cannot be denied admittance into UCF, and approximately 40 percent of their graduates take advantage of the opportunity. Perhaps more importantly, almost 50 percent of Valencia's students are underrepresented minority students.81 This kind of innovation should be incentivized across the country with a College Connection Grant program. The program would provide national grants partnerships between community colleges and fouryear institutions that provide guaranteed access for two-year graduates. Our nation's community colleges award over 556,000 associate degrees annually.82 If these programs were to succeed across the nation at the level of Valencia College's program, over 220,000 more students would enroll in bachelor's programs.83

CONCLUSION

Each one of these policies will help America's young adults acquire the post-secondary education they need to thrive in the workforce. Each policy proposed here addresses a different aspect of the educational process, from college readiness, to admissions, to affordability and completion. There is no single solution that will solve the employment and wage gap, but increasing educational attainment through these broad national policies would be an essential start.

However, we recognize that federal policy influences college access and success only so much. States and localities play an extremely important part in determining the direction of higher education institutions. Nearly three-quarters of college students attend public institutions, and those colleges and universities rely on state budgets and policies that derive from state governments and institutions. As Young Invincibles' Student Impact Project has demonstrated, state support for public higher education systems varies dramatically, so we can expect student challenges to completion to vary as well.

In the coming months, Young Invincibles' regional offices in California, Texas, and Illinois will release issue briefs with policy solutions to increase degree attainment, particularly for minority students, tailored specifically to their states' unique situation and policy landscape.

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Appendix A: National Report Methodology

Data: 2013 United States Census Bureau Current Population Survey (CPS) March Annual Supplement Data. N in model – 31,339.

For Closing the Gap, Young Invincibles utilized 2013 data gathered from the March Annual Social and Economic Supplement of the Current Population Survey (CPS) – a survey of households conducted annually by the US Census Bureau. These survey results were narrowed to 18-34-year old respondents, resulting in a sample of ~31,300 observations. A probit regression model was utilized in order to generate predicted probabilities of employment for the groups of interest.

While educational attainment, race, and gender are all key independent variables in the report. numerous other factors may help explain why someone is employed or not. In order to narrow down on the effects attributed to changes in educational attainment, Young Invincibles included control variables accounting for veteran status, work disability status, school enrollment, region, rural/urban residency, suburban/city center residency, marital status, and the number of children the respondent has living with them.84 The predicted probabilities were generated holding observed values constant in order to more accurately represent the sample population.85 Then predicted probabilities were subtracted from each other at each level in order to calculate marginal effects. These probabilities and effects were generated for each specific subset of interest within the population (i.e. white females, African American males. etc.).

Because it would be unreasonable to assume

that many people under 24-years-old would have a post-baccalaureate degree, we narrowed the sample to the standard 25-34-year-old subgroup to calculate predicted probabilities of employment for the highest degree of education.

We recognize that no model can perfectly predict outcomes, and that any model is only as good as its data. There are certainly other factors that disproportionately impact African Americans that are difficult to capture in this model. For instance, high incarceration rates among African American males adversely affect employment opportunity, and incarceration questions are not asked in the Current Population Survey. However, we believe that this model provides statistically and substantively significant evidence that young African American face an uphill battle in the employment market, and that increasing education access will help these struggling Americans to close the gap.

Appendix B: Additional Figures and Tables

Table 1: Educational Attainment By Race and Gender (25 to 34 year-olds)

	Bla	ack	Wł	nite
	Men	Women	Men	Women
No HS Diploma	12.0%	8.1%	6.1%	4.7%
HS Diploma	35.6%	30.2%	26.8%	20.3%
Some College	24.0%	24.5%	19.5%	17.7%
Associate's	8.0%	11.3%	10.2%	12.7%
Bachelor's	16.5%	18.1%	28.6%	30.7%
Master's	3.0%	6.4%	6.1%	11.4%
Ph.D./J.D./M.D.	0.9%	1.5%	2.7.%	2.4%

Data: U.S. Census Bureau Current Population Survey (CPS), 2013.

Table 2: Predicted Probability of Employment by Education Attainment, Race and Gender

	Bla	ack	Wł	nite
	Men	Women	Men	Women
No HS Diploma	65.3%	70.6%	81.8%	82.6%
по по ріріопіа	(62.6 - 67.9)	(68.0 - 73.1)	(80.6 - 83.0)	(81.2 - 83.8)
US Diploma	74.5%	79.1%	88.0%	88.5%
HS Diploma	(72.3 - 76.6)	(77.0 - 81.0)	(87.3 - 88.7)	(87.8 - 89.3)
Como Collega	82.3%	85.9%	92.5%	92.9%
Some College	(80.5 - 84.1)	(84.3 - 87.4)	(92.0 - 93.0)	(92.4 - 93.4)
Associate's	88.4%	91.1%	95.6%	95.9%
Associates	(86.9 - 89.8)	(89.8 - 92.2)	(95.2 - 96.0)	(95.5 - 96.2)
Dacholor's	92.8%	94.7%	97.6%	97.7%
Bachelor's	(91.6 - 94.0)	(93.7 - 95.5)	(97.2 - 97.9)	(97.4 - 98.0)
Drofossional	96.0%	97.1%	98.9%	99.0%
Professional	(95.1 - 96.8)	(96.4 - 97.6)	(98.6 - 99.1)	(98.7 - 99.1)

Note: 95% confidence intervals in parentheses

[&]quot;Black" and "White" categories include individuals who reported one race only and who reported non-Hispanic.

Table 3: Marginal Effect of Reaching the Next Level of Ed Attainment on Employment Outcomes by Race and Gender

	Bla	ack	Wh	nite
	Men	Women	Men	Women
HS Diploma	9.3%	8.5%	6.2%	6.0%
пэ ырына	(8.4 - 10.1)	(7.6 - 9.4)	(5.6 - 6.8)	(5.3 - 6.7)
Como Collogo	7.8%	6.8%	4.5%	4.4%
Some College	(7.1 - 8.5)	(6.2 - 7.6)	(4.1 - 4.9)	(3.9 - 4.8)
Associate's	6.1%	5.1%	3.1%	3.0%
Associates	(5.6 - 6.6)	(4.6 - 5.7)	(2.9 - 3.3)	(2.7 - 3.2)
Bachelor's	4.4%	3.6%	2.0%	1.9%
Bacrieior S	(4.0 - 4.8)	(3.2 - 4.0)	(1.8 - 2.1)	(1.7 - 2.0)
Drafaccional	3.2%	2.4%	1.3%	1.2%
Professional	(2.8 - 3.5)	(2.1 - 2.7)	(1.2 - 1.4)	(1.1 - 1.3)

Note: 95% confidence intervals in parentheses.

Holding school enrollment status, veteran status, work disability status, southern region, rural/urban status, city center/suburban status, martial status, and number of children at their observed values. Professional Degrees narrowed to 25-34-year-old subsample.

Table 4: Median Income and Relative Income Increase By Education Attainment, Race, and Gender (25-34)

	Black				W	hite		
	Men	Δ%	Women	Δ%	Men	Δ%	Women	Δ%
Less than a HS Diploma	\$25,200		\$19,300		\$29,200		\$21,800	
High School Diploma	\$27,200		\$25,300		\$37,400		\$27,100	
Associate's Degree	\$35,300	30%	\$29,600	17%	\$46,100	23%	\$35,500	31%
Bachelor's Degree	\$45,300	28%	\$39,500	33%	\$52,200	13%	\$42,400	19%
Professional Degree	\$66,300	46%	\$47,400	20%	\$67,300	29%	\$52,500	24%

NOTE: Based on combined data from the 2010, 2011, and 2012 Annual Social and Economic Supplement of the Current Population Survey. Earnings in 2009 and 2010 are adjusted to 2011 dollars using the Consumer Price Index for all urban consumers. Median earnings are the median of combined data.

The "Black," and "White" categories include individuals who reported one race only and who reported non-Hispanic.

SOURCES: U.S. Census Bureau, 2010a, 2011a, 2012a; Bureau of Labor Statistics, 2013a; original calculations by College Board's Sandy Baum, Jennifer Ma, and Kathleen Payea. Additional calculations by Young Invincibles' Konrad Mugglestone.

Original table was prepared for College Board's "Education Pays", released in September 2013.

Table 5: Probit Model Results

Variable	Coefficient	Std. Error.	P - Value
Black	-0.242	0.081	0.003
White	0.229	0.073	0.002
Hispanic	0.206	0.075	0.006
Asian	0.275	0.084	0.001
Sex	0.018	0.023	0.440
Black * Sex	0.150	0.054	0.006
Educational Attainment	0.270	0.011	<0.001
Vetran Status	-0.137	0.063	0.029
Work Disability	-0.479	0.072	<0.001
School Enrollment Status	0.003	0.015	0.819
South (region)	0.016	0.023	0.495
Rural/Urban	-0.052	0.028	0.062
City Center/Suburban	-0.010	0.024	0.672
# of Children	-0.019	0.011	0.102
Marital Status	0.0361	0.028	<0.001
Constant	0.321	0.078	<0.001

Observations = 31339

Log Likelihood = -9469.4962

Pseudo R-squared = 0.0755

