

AT DUKE UNIVERSITY

Young Scholars Summer Research Institute 3rd Year Cohort

Research Papers

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Samuel DuBois Cook

The Samuel DuBois Cook Center on Social Equity (Cook Center) was named after Dr. Samuel DuBois Cook, a distinguished political scientist, scholar, educator, author, administrator, civil and human rights activist and public servant. Dr. Cook, a professor in the Duke University political science department became the first African-American to hold a regular and/or tenured faculty appointment at a predominantly white southern college or university. He went on to serve 22-and-a-half years as president of Dillard University in New Orleans.

Samuel DuBois Cook Center on Social Equity

The Duke University Samuel DuBois Cook Center on Social Equity is an interdisciplinary research center within Trinity School of Arts and Sciences that is comprised of faculty and scholars from across Duke and a diverse international group of affiliated universities, research centers and non-governmental organizations. Its mission is to promote equity, across all domains of human interactions, through interdisciplinary research, teaching, partnerships, policy, and practice. The Cook Center seeks to employ the innovative use of new and existing data, develop human capital, incorporate stakeholder voices though civic engagement, create viable collaborations, and engender equity-driven policy and social transformation at the local, national and international levels.

Young Scholars Summer Research Institute

The Young Scholars Summer Research Institute is sponsored by the Samuel DuBois Cook Center on Social Equity at Duke University in partnership with Durham Public Schools (DPS) in Durham, North Carolina. It is a three-week program that provides middle and high-school students enrolled in DPS with training to enhance their writing, research and presentation skills. In keeping with the Samuel DuBois Cook Center's central mission as a community of scholars engaged in the study of the causes and consequences of inequality, program participants will be exposed to curriculum related to the economic, political, social, and cultural dimensions of inequality.

During the Young Scholars Summer Research Institute, students receive instruction from distinguished middle and high-school teachers, university professors, and leaders from community organizations. The program's main focus is on the development of the students' research, writing, presentation and critical-inquiry skills, culminating in a capstone presentation of the student's research topic and findings before institute peers, university scholars, and Durham community members.

A Gap That Braces Can't Fix: The Achievement Gap between Minority Students and White Students

By: Rachel Ruff

Abstract

The purpose of this study is to identify how standardized tests affect the achievement gap between minority and white students. The information gathered compares the different problems that minority groups have with standardized tests. The minority groups discussed in this paper include American Indian/Alaska Natives, African Americans, Hispanics, and Asian Americans/Pacific Islanders. While each group has unique problems with standardized testing, all of these problems contribute to the achievement gap.

Introduction

This paper will examine how standardized tests within public education are a contributing factor to the achievement gap between minority students and white students in the United States. A **standardized test** is any form of test that (1) requires all test takers to answer the same questions, or a selection of questions from a common bank of questions, in the same way, and that (2) is scored in a "standard" or consistent manner, which makes it possible to compare the relative performance of individual students or groups of students.¹

The term is primarily associated with large-scale tests administered to students. The term **achievement gap** is frequently defined as the differences between the test scores and overall success of minority students and the test scores plus overall success of their white peers.² For the

¹ "Standardized Test," *The Glossary of Education Reform*, November 12, 2015, accessed July 18, 2017, http://edglossary.org/standardized-test/.

² "Achievement Gap Definition," *The Glossary of Education Reform*, December 19, 2013, accessed July 18, 2017, http://edglossary.org/achievement-gap.

purposes of this paper, a **minority group** is a subordinate group whose members have significantly less control or power over their lives than members of a dominant or majority group.³

Thesis Statement

Standardized tests and government policies contribute to the widening achievement gap between minority and white students. Standardized tests are supposed to determine where a student is academically, but standardized test are being used to separate minorities and, as an effect of separation, widening the achievement gap between minority and white students.

This paper will answer the following questions: How do governmental policies regarding education affect the achievement gap? How are standardized tests affecting the achievement gap between different minority groups and white students?

Methodology and Review of Literature

The data collected for this paper was all secondary research. This research came from scholarly articles, and news post from sources like *Huffington Post*, *Washington Post*, and New York Times. EricEd (Institute of Education Sciences) gave me information on American Indians/Alaska natives and how language does affect their ability to learn. PMC, US National Library of Medicine, showed the actual data proving parental involvement impacts the achievement gap within African American students. The Michigan Family Review (from the University of Michigan) demonstrates that minority groups have different problems with standardized testing, but they all contribute to the achievement gap. The National Report Card

³ Vernellia Randall, "Race, Racism, and Law", *Racism.org*, accessed July 20, 2017, https://academic.udayton.edu/race/01race/minor01.htm.

gave me information on demographics on standardized test and helped determine which ethnic and racial groups were considered a minority.

Data Analysis

The Current Environment of Standardized Testing

Preliminary research by the Council of the Great City Schools, which represents large urban districts, found that students take an average of 113 standardized tests between pre-K and 12th grade. It said testing time for 11th graders was as high as 27 days, or 15 percent of the school year, in one district and that did not count Advanced Placement, career and technical education course and college entrance exams. 5

When taking a standardized test, every exam taker answers the same question in the same setting. Such tests give answers to superficial questions, usually as multiple choice. They do not measure the ability to think deeply or creatively. Their use potentially encourages a narrowed curriculum, outdated methods of instruction, and harmful practices such as grade retention and tracking.⁶ While our understanding of the brain and how people learn and think has progressed enormously, standardized tests have not changed accordingly. Test makers still assume that knowledge can be broken into separate bits and that people learn by absorbing these individual parts. Today, cognitive and developmental psychologists understand that knowledge is not separable bits and that people (including children) learn by connecting what they already know with

⁴ Kimberly Hefling, "Do students take too many tests? Congress to weigh question," *PBS*, January 17, 2015. accessed July 25, 2017, http://www.pbs.org/newshour/rundown/congress-decide-testing-schools/.

⁵ Ibid.

⁶ "What's Wrong With Standardized Tests?," *FairTest*, May 22, 2012, accessed July 26, 2017, http://fairtest.org/facts/whatwron.htm.

what they are trying to learn. If they cannot actively make meaning out of what they are doing, they do not learn or remember.

The United States government spends about \$1.8 billion on testing, and standardized tests still are not productively assessing students.⁸ The separation of minority students can mean that they are singled out because of their test scores, and/or minority students are purposefully put in specific classes because of their test scores.

After analyzing the current environment of testing, the next section will be talking about a government policy that contributed to the achievement gap and environment.

Government Policies Affecting Standardized Testing

No Child Left Behind Act (NCLB)

On January 8, 2002 President George W. Bush signed the No Child Left Behind Act. "The primary purpose of NCLB is to ensure that students in every public school achieve important learning goals while being educated in safe classrooms. To increase student achievement, the law requires that school districts assume responsibility for all students reaching 100 percent student proficiency levels within 12 years on tests assessing important academic content." This law was a reform of the Elementary and Secondary Education Act (ESEA), which was enacted in 1965. NCLB pushed for stronger accountability within schools for results, more flexible control and local control, greater options for parents and better teacher practices.

⁷ Ibid.

⁸ Joy Resmovits, "School Testing In U.S. Costs \$1.7 Billion, But That May Not Be Enough" *The* Huffington Post November 29, 2012, accessed July 23, 2017, http://www.huffingtonpost.com/2012/11/29/school-testing n 2214362.html.

⁹ M.L. Yell, "The Purpose of No Child Left Behind," *Education.com*, July 20, 2010, accessed July 26, 2017, https://www.education.com/reference/article/purpose-no-child-left-behind/.

This law caused two problems: the "diminished faith" in the NCLB plan and resentment at federal intrusion into states' rights. The NCLB law's purpose was to close the achievement gap, but scores say otherwise. It is true that minority students have scored significantly higher than decades ago, but the achievement gap has not changed. In fact it may have gotten larger. According to the Nation's Report Card, the mathematic and reading scores of minorities for grades 4-8 were lower than the scores of 2005, but higher than the scores of 1990. 10

The Effect on Minority Groups

The policy *No Child Left Behind* (NCLB) has significantly widened the achievement gap for minorities, English Language Learners (ELL), and low-income students. Minority groups such as American Indian/Alaska Natives, African Americans, and Hispanics are affected heavily in their own way from these policies. These effects play a part in widening the achievement gap. Although the impact of NCLB is different in minority groups, all their effects contribute to the widening of the achievement gap. It is important to acknowledge these policies to prevent the enlargement of the achievement gap. The achievement gap can lead to longer term gaps, including high school and college completion and the kinds of jobs students secure as adults.

Indicators of Achievement Gaps

- Performance on test (statewide, SATs, standardized test, etc.)
- Access to key opportunities (advanced mathematics, physics, higher education, etc.)
- Attainments (high school diploma, college degree, employment)¹¹

¹⁰ "NAEP Report Cards - Home," *The Nation's Report Card*, accessed July 26, 2017, https://www.nationsreportcard.gov/.

¹¹ "Identifying Achievement Gaps in Your School, District, and Community," *NEA*, accessed July 23, 2017, http://www.nea.org/home/12464.htm.

Minority Groups Affected by the Achievement Gap

American Indians and Alaska Natives

The American Indian and Alaskan Native population, which is not very large, struggles with the loss of their culture and language. Although languages share many common aspects, they are typically unique, emanating from a group's particular interactions with its environment. While reflecting their external realities, language and culture also helps to form a group's world view. American Indians/Alaska Natives (AI/AN) are victim to losing the majority of their people, language, and culture due to historic events (European expansion). Due to the loss of language and culture the AI/AN minority group has problems with standardized test not being relatable in a sense that tests are biased to fit the description of a middle class white student. ¹² Most AI/AN students don't know English as their first or fluent language and are more likely to have a hard time understanding the references and language of the standardized test. As a result of the loss of language, culture, and not being familiar with American values, AI/AN students will forever have this achievement gap with white students.

<u>African Americans</u>

The examination of ethnic score differences have been more rigorous, specifically being that the largest gaps exist between white and African American students. A recent study done with 158 children, their parents, and their teachers prove that parental involvement plays an important role in education. ¹³ Parental involvement among black families has a positive effect on

¹² Thomas R. Hopkins, "EVALUATING AMERICAN INDIAN AND ALASKA NATIVE EDUCATION," Evaluating American Indian & Alaska Native Education, accessed July 27, 2017, http://www.ankn.uaf.edu/curriculum/Articles/History/TomHopkins/Evalind.html.

¹³ David R. Topor, Susan P. Keane, Terri L. Shelton, and Susan D. Calkins, "Parent Involvement and Student Academic Performance: A Multiple Mediational Analysis," *Journal of Prevention & Intervention in the Community*, January 12, 2010, accessed July 20, 2017, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3020099/.

black student performance on both the Reading and Math IRT scores. Those students who discussed some aspects of their lives with their parents did better on the tests than those who did not. The racial group differences across admissions tests, such as the SAT, ACT, Advanced Placement Program examinations and other measures of educational achievement, have been fairly consistent. Since the 1960s, the population of students taking these assessments has become increasingly diverse. On average, they score about .82 to 1.18 standard deviations lower than white students in composite test scores. The Black-White Gap includes: In mathematics, a 26-point difference at the 4th grade level and a 31-point difference at the 8th grade level and in reading, a 27-point difference at the 4th grade level and a 26-point difference at the 8th grade level. ¹⁴ The black-white test score gap does not appear to be an inevitable fact of nature. ¹⁵ It is true that the gap shrinks only a little when black and white children attend the same schools. ¹⁶ This means that the achievement gap can be fixed between black and white students. It is also true that the gap shrinks only a little when black and white families have the same amount of schooling, the same income, and the same wealth. ¹⁷

<u>Hispanics</u>

High stakes testing causes additional damage to the many Hispanic students who are mostly English language learners (ELLs). The tests are often inaccurate for ELLs, leading to misplacement or retention. ELLs are, alongside students with disabilities, those least likely to pass graduation

¹⁴ Chris Glavin, "Racial Achievement Gap," *K12 Academics*, June 28, 2016, accessed July 19, 2017, http://www.k12academics.com/Achievement%20Gap/racial-achievement-gap#.WXi3GLaOzIU.

¹⁵ "The Black-White Test Score Gap," *The New York Times*, accessed July 21, 2017, http://www.nytimes.com/books/first/j/jencks-gap.html.

¹⁶ Ibid.

¹⁷ Ibid.

tests. The continuing gap is particularly troubling given that Hispanics are the largest, youngest and fastest growing minority in the United States. The group now includes 50.5 million people, accounting for 16 percent of the total population, and over the last ten years accounted for 56 percent of the nation's growth rate. This means that more than 11 million Hispanic children are currently between the ages of five and 17. In comparison, the white population increased by 14.3 million and accounted for 26 percent of US population growth. The fact that Hispanics are more likely to attend public schools that are, more minority-heavy, and lower quality doesn't necessarily help their case.

Asian Americans and Pacific Islanders

Asian Americans and Pacific Islanders (AAPI) are a small minority group but are duly affected by standardized testing. AAPIs have been ignored and stereotyped about how their test scores should or should not be. The test scores for AAPIs are seen to be the highest in every type of test. But AAPIs are not always in the top rankings. A fiction about this minority is that AAPIs Are a Homogenous Racial Group with Uniformity in Educational and Financial Attainment, Culture, Religion, and Histories. Asian Americans and Pacific Islanders have more differences than similarities between other groups that are put in the Asian American and/or the Pacific Islander category. It is critical for educators and policymakers to recognize that there are numerous Asian American and Pacific Islander ethnicities, many historical backgrounds, and a full range of socioeconomic spectra, from the poor and underprivileged to the affluent and highly educated. It

¹⁸ Sharon R. Ennis., Ríos-Vargas Merarys, and Nora G. Albert, "The Hispanic Population: 2010," *Census Bureau*, May 2011, accessed July 23, 2017.

¹⁹ "Asian Americans and Pacific Islanders Facts, Not Fiction: Setting the Record Straight," *National Commission on Asian American and Pacific Islander Research In Education*, www.nyu.edu/projects/care.

²⁰ Ibid.

is not okay to generalize a description of Asian American and Pacific Islander students. This generalization also creates a gap for Asian Americans and Pacific Islanders.

Conclusion

Standardized test are widening the achievement gap between all minority groups. The reason standardized tests are widening the gap is, the test is mostly biased to white middle class students. This leaves minorities struggles in taking these tests. A solution could be to help test makers adjust the tests to make it fair for all students. For future research I propose that a topic called the Stereotype Threat be addressed. The Stereotype Threat is when minority students go into testing sessions believing the stereotype that they will fail. This threat puts more pressure on minority students than needed. For future research, I would like to discuss, Are standardized tests scores affecting the minority population in Honors or AP classes in public high schools?

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