

Chapter 9 – Discrimination in Education

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I. Discrimination

Attitudes versus Action

Several terms are important:

Discrimination: Unfavorable actions that people harbor against others, especially population groups.

Prejudice: Unfavorable feelings and attitudes that people harbor against others, especially population groups.

Racism: Encompasses both discrimination and prejudice.

Discrimination need not convey notions of injustice or injury – in general, discrimination refers only to the differential treatment of persons. As Schiller mentions, we discriminate, for example, when we assign the tallest boys to the basketball team.

The Relevancy Standard

To come up with a relevant concept of discrimination, need to recognize on which differential treatment is based. Assigning taller boys to a basketball team, for example, serves a very specific and productive function.

Cannot make this kind of argument when assigning jobs or education across race.

Discrimination based on irrelevant or nonproductive criteria must be considered as injurious to the public welfare.

U.S. Supreme Court Case – in 1971, Court ruled that intelligence tests and other hiring criteria that were not related to job performance were illegal. These tests, which generally ruled out many minority applicants, were a form of discrimination.

Figure 9.1 shows that Blacks and Whites have different perceptions about equal opportunity. Whites are more likely to answer that yes to the question “Do blacks in your community have as good a chance as whites.” The poll was from 1997.

Although there are striking differences in the responses across race (e.g., Whites were more optimistic than Blacks about equality by significant margins), a majority of Blacks thought that they had as good of chance as Whites in housing and education (but not in employment).

It would be interesting to see how perceptions change over time.

Costs and Benefits of Discrimination

Although society as a whole does not benefit from discrimination based on race, sex, etc., it is possible that some groups do benefit.

When blacks and hispanics are discriminated against in the labor market, receiving lower wages than equally qualified whites. Hence, white workers who are immunized against competition from minority workers receive higher wages. Employers who actually hire minority workers benefit by getting higher-quality labor than they are, in fact, paying for.

Some whites can lose, too. Those whites who are in the same occupations as discriminated workers have their wages pushed down by oversupply.

Figure 9.2. shows the supply and demand analysis in two labor markets, one of which discriminates. This analysis assumes that there is a barrier to entry, so that a firm cannot enter and hire the low-wage, high-productivity, discriminated workers.

Proving Discrimination

Economists have given a great deal of attention to figuring out how to *prove* discrimination – the key problem is separating whether a firm is treating someone differently because of race or gender, or whether the firm is using a productive criteria (like educational attainment) that may be correlated with race or gender.

There are several kinds of processes for figuring out whether there is discrimination:

Smoking guns: There are cases that involve blatant discrepancies in treatment – for example, if a minority group was required to take special tests or possess superior qualifications. These are rare examples, in real life, however.

Inference based on end results: Schiller argues that if we see highly skewed results like significantly fewer minorities in positions of power or graduating from college, we can infer that there is discrimination somewhere along the way.

Many economists would feel uncomfortable with taking, for example, black-white differences in occupations, wages, or education, and attributing that difference to discrimination without further thought. There are likely other factors (family structure, for example) that may have nothing to do with schools or jobs that help explain at least part of the difference. The key point, then, is not that differences in wages or education are fully explained by factors other than discrimination, but the “default” that these differences come from discrimination is too strong of a statement to make.

In general, economists like to run “experiments” where other factors are held constant, and the only factor that varies is race. If, holding all else constant, we saw that race affected the likelihood of college admittance or job offers, we would have more conclusive evidence of discrimination.

Experiments and audit studies: There is a recent, fascinating study done by Marianne Bertrand and Sendhil Mullainathan, called “Are Emily and Brandon More Employable than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination.” See <http://gsb.uchicago.edu/pdf/bertrand.pdf> for the actual article.

In this paper, the authors test whether employers discriminate against black job applicants through an unusual experiment. They selected 1,300 help-wanted ads from newspapers in Boston and Chicago and submitted multiple resumes from phantom job seekers. The job openings involved administrative, sales, clerical and managerial positions, and they submitted resumes patterned after real resumes of people who were actually seeking similar jobs. The researchers randomly assigned the first names on the resumes, choosing from one set that is particularly common among blacks and from another that is common among whites.

For example, “Kristen” and “Tamika,” and “Brad” and “Tyrone,” applied for jobs from the same pool of want ads and had equivalent resumes. Nine names were selected to represent each category: black women, white women, black men and white men. Last names common to the racial group were also assigned. Four resumes were typically submitted for each job opening, drawn from a reservoir of 160. Nearly 5,000 applications were submitted from mid-2001 to mid-2002. The authors kept track of which candidates were invited for job interviews. No single employer was sent two identical resumes, and the names on the resumes were randomly assigned, so applicants with black- and white-sounding names applied for the same set of jobs with the same set of resumes.

Apart from their names, applicants had the same experience, education and skills, so employers had no reason to distinguish among them. Here are the key results:

Race discrimination: Applicants with white-sounding names were 50 percent more likely to be called for interviews than were those with black-sounding names. Interviews were requested for 10.1 percent of applicants with white-sounding names and only 6.7 percent of those with black-sounding names.

There were differences among the nine names associated with black women, but not among the names within each of the other groups. At the low end, the interview-request rate was 2.2 percent for Aisha, 3.8 percent for Keisha and 5.4 percent for Tamika, compared with 9.1 percent for Kenya and Latonya and 10.5 percent for Ebony. The names chosen for black women were not uncommon; they represent 7.1 percent of all names listed on Massachusetts birth certificates for black girls from 1974 to 1979.

No gender discrimination: Within racial groups, applications with men's

or women's names were equally likely to result in calls for interviews, providing little evidence of discrimination based on sex in these entry-level jobs.

Location: The 50 percent advantage in interview requests for white-sounding names held in both Boston and Chicago, and for both men and women.

Credentials: The likelihood of being called for an interview rises sharply with an applicant's credentials — like experience and honors — for those with white-sounding names, but much less for those with black-sounding names.

Audit Studies: Other researchers sent a small number of matched black and white "auditors" to apply for jobs in person. Typically, though not always, the black job seekers were less likely to be invited for an interview or offered a job. Those findings, however, were criticized because the applicants knew the intention of the study and might have behaved differently. In addition, the auditors might not have been well matched with the jobs in question; they could have been overqualified or underqualified.

II. Racial Discrimination in Education

There were two landmark court decisions in education: *Plessy v. Ferguson* in 1896 where the U.S. Supreme Court effectively condoned discrimination with a "Separate, but equal" doctrine and *Brown v. Board of Education* in 1954 determined that segregated facilities were inherently unequal.

Disparate Outcomes

As Schiller notes, Blacks and Whites go into the education system comparatively equal but come out of the system very different.

Test scores: Nine-year-old whites, for example, score 5-8% better on reading, science, and math tests. These gaps grow over time.

Dropout rates: Over 92% of whites finish high school, only 86% of blacks and 71% of Hispanics.

Illiteracy: A 1975 study showed dramatic gaps in "functional" illiteracy by race.

College graduation: Graduation rates for whites is about 10-15 percentage points higher than for Blacks or Hispanics.

Schiller labels these facts as "indirect evidence" on discrimination. Do these different outcomes, however, prove in any way that discrimination is present?

School Segregation

A large percentage of black and Hispanic children attend schools that are highly segregated — that is, dominated by one race. Table 9.1 shows that most black students attend schools with a majority (50%) of minority students, though the percentage has fallen over time. This is

particularly true for blacks attending schools with an overwhelming minority enrollment – it has fallen from about two-thirds in the late 1960s to about one-third from 1980 onward. In part, this is because of desegregation efforts in the 1970s – the busing of minority students to white schools. Segregation levels for Hispanics have not increased, rather than declining, however.

In a recent study, Jonathan Guryan studied whether the desegregation benefited black students. He finds that desegregation plans of the 1970s reduced the high school dropout rates of blacks by 1-3 percentage points, and can account for about half of the decline in dropout rates of blacks between 1970 and 1980. A similar analysis suggests that desegregation plans had no effect on the dropout rates of whites.

If you are interested, you can view this paper at:

<http://www.gsb.uchicago.edu/fac/jonathan.guryan/research/GuryanDeseg.pdf>

Classroom Segregation

Even if *schools* were more integrated, *classrooms* might not be. In part, integration was achieved by busing black pupils to previously white schools. In some cities, like Milwaukee, the black pupils were maintained in different classrooms. More generally, it is thought that classrooms are more segregated than schools.

One form of separating students, that Schiller asserts is a “subtle form of classroom segregation” is *tracking* – where more able students are separated from others and taught differently. The reason he claims this is segregation is that IQ tests and other achievement tests are used for tracking.

Equality of Facilities

The Coleman Report (1966) was cited by school districts around the country as evidence that integrating black kids into white schools would have little or no effect on student achievement. It explained differences in academic achievement between whites and blacks as a byproduct of a culture of poverty. This culture of poverty supposedly had a greater influence on blacks because of a higher concentration of poverty among blacks.

Most measured individual differences between black schools and white schools were relatively small. Teachers' training, teachers' salaries, and curriculum were relatively equal. Little difference between predominantly black/white schools in funding, buildings age, library facilities, number of textbooks, teacher characteristics and class size.

The Kain-Singleton study tracked 1.8 million elementary school pupils in 4,500 Texas schools for five years in the 1990s. It did find several measures of school quality that contributed to disparities across race, unlike the Coleman Report.

Surprisingly, economists and others have found weak or non-existent relationships between educational inputs (e.g., smaller class sizes) and educational outputs (e.g., test scores and some labor market outcomes). One leading economist, Eric Hanushek, in "The Economics of Schooling: Production and Efficiency in Public Schools," *Journal of Economic Literature*,

September 1986, argues the effects of educational inputs such as per pupil spending, teacher experience, and teacher degree level have been shown to be relatively unimportant predictors of outcomes, and the impact of any particular input to be inconsistent across studies.

III. Class Discrimination in Education

Poor individuals are more often provided substandard educational facilities.

School Finances

One example is with school finances: about half of elementary and secondary school expenditures are financed by local property taxes – this creates great disparities both across states and across school districts within a state. Many states, including Kentucky, have passed school finance equalization laws which redistributes funds from rich- to poor-school districts.

Melissa Clark (see <http://www.princeton.edu/~maclark/kerapdf>) studied the Kentucky Education Reform Act (KERA), implemented in 1990. It included a new funding system to correct large financial disparities between school districts, curriculum revision and standardization, and increased school and district accountability. KERA did successfully equalize per-pupil expenditures across rich and poor districts. KERA's effects on student achievement have been more mixed. Black students in Kentucky have experienced sizeable test score gains since KERA's implementation, but the scores of white students have remained unchanged relative to their peers in surrounding states. There is no evidence that KERA has narrowed the gap in test scores between rich and poor districts.

Educational Attainments

Poor children drop out of high school at over twice the rate of non-poor children, and some leave before they even enter high school. Schiller notes that “College admissions are still reserved primarily for those who can support themselves or can afford to forego several years of employment income.”

This neglects to note, however, that the opportunity cost of attending college is lower for poor students, and that many federal grants and loans are means-tested.

Table 9.2 shows that college attendance does increase with income, but that there are not significant racial differences within income class in attendance. In Table 9.3, Schiller shows a correlation between higher income (not defined) and college attendance, and the same for high ability (again not defined). Those with low incomes / low abilities are the least likely to go on to college, and those with high incomes / high abilities were most likely to go.

To see more details on this study, go to:

<http://www.ed.gov/offices/OUS/PES/finaid/enroll98.html> or download the full report at <http://www.ed.gov/offices/OUS/PES/finaid/enroll98.pdf> .

Although Schiller does not mention it, this Mathtech Inc. study reports that of those students who say they do not plan to attend college immediately after high school, 57% percent of the bottom income, top test score students report that it is because they cannot

afford to attend, 38% of the middle income, top test students give this reason, and 21% of the top income, top test score students give this reason. A substantial number have financial constraints, but the number is far from 100%.

IV. Sex Discrimination in Education

The disadvantages that women confront are more subtle – steering toward courses that are “traditionally female” and often lower wage. Schiller cites uneven sex ratios in a number of disciplines – only 30% of physics, chemistry or computer science majors are women.

It is not always clear, however, whether these kinds of divergences reflect some barrier to entry (e.g., “educational sexism”, gender bias in testing, lack of role models) or some reflection of preferences. There are no *formal* requirements for any major related to one’s gender.

Graduate degrees: Schiller asserts that “female college graduates have had difficulty gaining access to the professional schools that confer the necessary credentials for many desirable jobs. Secretarial schools have always been easy to get into, but law schools, medical schools, and business schools have often been a different story.”

There are far fewer women graduating with advanced degrees in some disciplines (like engineering) that tend to pay pretty well.

Schiller later asserts that this is a “pattern of sex discrimination.” (Page 172).