Dear Commissioner Lindsey and Deputy Commissioner Shipchandler:

The purpose of this letter is to explain to the Minnesota Department of Human Rights (MDHR) that the agency’s understanding of the effects of modifying discipline policies on measures of racial differences in discipline rates is the opposite of reality and to impress upon the agency its obligation to explain the matter to entities that have been misled by agency actions.

Recent MDHR actions regarding racial differences in discipline outcomes appear to be based on the understanding, which has been promoted for some time the U.S. Departments of Education, Health and Human Services, and Justice (and recently by the U.S. Government Accountability Office), that relaxing standards and otherwise generally reducing adverse discipline outcomes will tend to reduce (a) relative racial and other demographic differences in rates of experiencing the outcomes and (b) the proportions more susceptible groups make up of persons experiencing the outcomes. In fact, generally reducing any outcome tends to increase, not reduce, both (a) and (b) as to the outcome.

That is, reducing an outcome and thereby increasingly restricting it to those most susceptible to it, while tending to reduce relative differences in rates of avoiding the outcome (i.e., experiencing the opposite outcome), will tend to increase relative differences in the outcome itself; correspondingly, reducing the outcome, while tending to increase the proportions groups
more susceptible to the outcome make up of persons avoiding the outcome, will tend also to increase the proportions such groups make up of persons experiencing the outcome itself.¹

Attached hereto are my December 8, 2017 testimony² explaining this issue to the U.S. Commission on Civil Rights and the handout for a March 22, 2018 meeting in which I explained the issue to the staff of the U.S. Department of Education.


The Star Tribune column discusses the issue with respect to the failure to understand that advantaged areas like Minnesota that commonly have comparatively low rates of adverse health outcomes tend to show comparatively large relative racial and socioeconomic differences in rates of experiencing those outcomes but comparatively low relative differences in rates of avoiding the outcomes. The longstanding failure to understand this patterns is also the subject of the concluding paragraphs of my “United States Exports Its Most Profound Ignorance About Racial Disparities to the United Kingdom,” Federalist Society Blog (Nov. 2, 2017).

The same statistical tendency underlies comparatively large relative racial differences in adverse discipline outcomes in suburban schools compared with central city schools and with regard to subjectively-identified offenses compared with objectively-identified offenses. See the Suburban Disparities and Offense Type Issues subpages of the Discipline Disparities page of jpscanlan.com.

These are things that it is essential for civil rights organizations to understand to effectively perform their missions. That is especially the case if in fact some school districts have bias problems. For it is impossible to identify those districts – or to determine whether the problems are increasing or decreasing over time – without understanding the ways measures of differences tend to be affected by the prevalence of the outcome. See my “The Misunderstood Relationship

¹ In this letter I discuss the pertinent statistical issue with reference to racial differences. The points made about relative differences apply to any demographic difference. But the proportions more susceptible groups make up of persons experiencing the outcome is a function of the relative difference between a group’s rate and the rate for all other persons rather the relative difference between two groups’ rates. Those proportions will be affected by changes in frequency of an outcome is the same way as relative differences when there are only two groups. The matter will be more complicated when there are several groups. But the complication is not of consequence to the main issues addressed in this letter.

² To facilitate consideration of issues raised in documents such as this I include links to referenced materials in electronic copies of the documents. Such copies are available by means of the Measurement Letters page of jpscanlan.com. If the online version of the letter is amended, such fact will be noted on the first page of that version.


Many graphical and tabular illustrations of the patterns may be found in the methods workshop I gave at arms of the University of Minnesota in 2014 (abstract), as well as similar workshops given at other American universities between 2012 and 2015 (University of Massachusetts Medical School (2015), University of California, Irvine (2015), George Mason University (2014), University of Maryland (2014), Harvard University (2012), American University (2012)).

In addition to understanding the reasons that generally reducing adverse discipline outcomes tend to increase, not reduce, the aforementioned (a) and (b) as to the outcomes, it is important that MDHR understand that recent general reductions in discipline rates across the country, including in Minnesota, Minneapolis, and St. Paul, have in fact been accompanied by increased relative racial differences in discipline rates. See the following subpages of the Discipline Disparities page of jpscanlan.com: California Disparities, Colorado Disparities, Connecticut Disparities, Florida Disparities, Maryland Disparities, Minnesota Disparities, Oregon Disparities, Rhode Island Disparities, Utah Disparities, Beaverton, OR Disparities, Denver Disparities, Henrico County, VA Disparities, Kern County (CA) Disparities, Milwaukee Disparities, Los Angeles SWPBS, Loudoun County (VA) Disparities, Minneapolis Disparities, Montgomery County, MD Disparities, Portland, OR Disparities, St. Paul Disparities, South Bend Disparities.

These patterns have occurred, moreover, notwithstanding that administrators are commonly taking actions to reduce racial differences beyond generally reducing discipline rates. Anything that actually reduce the strength of the forces causing racial differences in discipline outcomes will tend to reduce all measures of racial disparity. But where discipline rates are being materially reduced, the reductions in the strength of the forces causing racial differences in discipline outcomes commonly will have to be substantial to cause an increase in the relative racial difference in discipline rates not to be observed.

There are a number of pernicious consequences of federal and state governments’ leading school administrators and others to mistakenly believe that generally reducing adverse discipline will tend to reduce certain measures of racial disparity when in fact such actions will tend to increase those measures. For one thing, entities that follow government guidance to generally reduce adverse discipline outcomes increase the chances that the government will accuse them of discrimination. Further, when policies that are supposed to reduce measures of racial disparity in fact increase those measures, observers who believe that racial bias plays a large role in observed
differences will tend to believe that bias must be increasing. And all observers will believe that, whatever nature of the problem causing racial differences in discipline rates, the problem must be getting worse. It is entirely possible that school administrators in various locales have been terminated as a result of the mistaken understanding that generally reducing discipline rates should be reducing relative differences in discipline rates and the proportions African Americans make up of discipline students.

The consequences of the mistaken understanding are especially serious in the case of entities acting under agreements requiring actions that will tend to increase relative differences in discipline rates (and the proportions African Americans make up of disciplined students) while the entities’ compliance with the agreement is being evaluated with the expectation that compliance should reduce those measures. See my “Compliance Nightmare Looms for Baltimore Police Department,” Federalist Society Blog (Feb. 8, 2017). See also my September 20, 2016 letter to the Oklahoma City School District, which operates under such an agreement with the U.S. Department of Education based on the mistaken understanding.

Thus, it is essential that MDHR devote whatever resources are necessary to understanding these issues. And it is imperative that MDHR advise the public and school administrators that the understanding reflected in MDHR actions that generally reducing discipline rates will tend to reduce relative racial differences is incorrect. That is an especially pressing obligation in the case of the school districts that MDHR has recently cited for racial disparities in discipline outcomes, the more so in the case of districts with which MDHR has executed agreements, or is in the process of negotiating agreements, to address those disparities. See my July 17, 2017 letter to the U.S. Departments Education, Health and Human Services, and my April 12 and April 17, 2018 letters to the U.S. Government Accountability Office advising them of similar obligations to correct the mistaken understandings they have promoted.

I will be circulating copies of this letter to various Minnesota school districts.

Sincerely,

/s/ James P. Scanlan

James P. Scanlan

Attachments
Federal government policy regarding racial differences in school discipline outcomes has been consistently based on the belief that relaxing discipline standards and otherwise reducing adverse discipline outcomes will tend to reduce (a) relative (percentage) racial differences in rates of experiencing the outcomes and (b) the proportions African Americans and other racial minorities make up of persons experiencing the outcomes. In fact, exactly the opposite is the case.

By way of clarification, if the minority suspension rate is 15% and the white rate is 5%, the ratio of the minority rate to the white rate would be 3.0. That is, the minority rate is 200% greater than the white rate. The 200% figure is the relative, or percentage, difference. In the same situation, assuming minorities are 20% of students, they would be 43% of suspended students.

Federal policy has been based on the belief that activities that generally reduce suspensions (like Positive Behavioral Interventions & Support (PBIS) programs) will tend to reduce the 3.0 ratio and the 43% proportion figures. In fact, such activities will tend to increase those figures.

Test Score Illustration

Table 1 provides a simple illustration of why this is the case. The table is based on hypothetical test scores of higher- and lower-scoring groups (which are denominated AG for advantaged group and DG for disadvantaged group).

The first row of the table shows the pass rates for the two groups at a particular cutoff. The pass rates are 80% for AG and 63% for DG. Thus, AG’s pass rate is 1.27 times (27% greater than) DG’s pass rate.\(^1\)

---

\(^1\) While I commonly refer to patterns of relative differences in this statement, the table actually presents rate ratios (also termed risk ratios or relative risks). The relative difference is the rate ratio minus 1 where the rate ratio is above 1 and 1 minus the rate ratio where the rate ratio is below one. In the former case, the larger the rate ratio, the larger the relative difference; in the latter case, the smaller the rate ratio, the larger the relative difference. It is more common to employ the disadvantaged group’s rate as the numerator for the favorable as well as the adverse outcome, which is the approach as to favorable outcomes of the “four-fifths” or “80 percent” rule for identifying disparate impact under the Uniform Guideline for Employee Selection Procedures. I have sometimes employed this approach, as in “Can We Actually Measure Health Disparities?,” Chance (Spring 2006) (http://www.jpscylan.com/images/Can_We_Actually_Measure_Health_Disparities.pdf). More recently, however, I have usually used the larger figure as the numerator for both rate ratios, in which case, as to both favorable and adverse outcomes, the larger the rate ratio, the larger the relative difference. Choice of numerator in the rate ratio, however, has no bearing the patterns described here whereby measures tend to be affected by the prevalence of an outcome.
Table 1. Illustration of effect of lowering test cutoff on relative difference between pass rates of advantaged group (AG) and disadvantaged group (DG)

<table>
<thead>
<tr>
<th>Cutoff</th>
<th>AG Pass Rate</th>
<th>DG Pass Rate</th>
<th>AG/DG Pass Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 High</td>
<td>80%</td>
<td>63%</td>
<td>1.27</td>
</tr>
<tr>
<td>2 Low</td>
<td>95%</td>
<td>87%</td>
<td>1.09</td>
</tr>
</tbody>
</table>

The second row shows what would happen if the cutoff is lowered to the point where AG’s pass rate is 95%. Assuming normal test score distributions, DG’s pass rate would be about 87%. With the lower cutoff AG’s pass rate would be only 1.09 times (9% greater than) DG’s pass rate. The fact that lowering a cutoff tends to reduce relative differences in pass rates is the reason why lowering a test cutoff is universally regarded as reducing the disparate impact of tests on which some groups outperform others.

At this point it may seem that I have contradicted my point at the outset. But, whereas lowering a cutoff tends to reduce relative differences in pass rates, it tends to increase relative differences in failure rates. This pattern is illustrated in Table 2. The table presents the same information as Table 1, but with the failure rates of the two groups added, along with the ratio of DG’s failure rate to AG’s failure rate (in the final column). The column with the rate ratios for test passage is highlighted in blue and the column with the rate ratios for test failure is highlighted in red.

Table 2. Illustration of effect of lowering test cutoff on (a) relative difference between pass rates and (b) relative difference between failure rates of advantaged group (AG) and disadvantaged group (DG)

<table>
<thead>
<tr>
<th>Cutoff</th>
<th>AG Pass Rate</th>
<th>DG Pass Rate</th>
<th>AG Fail Rate</th>
<th>DG Fail Rate</th>
<th>AG/DG Pass Ratio</th>
<th>DG/AG Fail Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 High</td>
<td>80%</td>
<td>63%</td>
<td>20%</td>
<td>37%</td>
<td>1.27</td>
<td>1.85</td>
</tr>
<tr>
<td>2 Low</td>
<td>95%</td>
<td>87%</td>
<td>5%</td>
<td>13%</td>
<td>1.09</td>
<td>2.60</td>
</tr>
</tbody>
</table>

The final (red highlighted) column shows that with the initial cutoff DG’s failure rate was only 1.85 times (85% greater than) AG’s pass rate. With the lower cutoff, DG’s failure rate is 2.60 times (160% greater than) AG’s failure rate.

That is, as the prevalence of test passage and test failure generally changed as a result of lowering the cutoff, the relative difference in the increasing side of the dichotomy (test passage) decreased and the relative difference in the decreasing side of the dichotomy (test failure) increased.

As suggested at the outset, appraisals of discipline disparities issue sometimes focus on the proportions racial minorities make up of persons disciplined (compared with the proportions such groups make up of students). Patterns of changes in the proportions groups make up of persons experiencing either of the two outcomes as the prevalence of the outcomes changes are corollaries to the patterns shown in Table 2.
Table 3 is the same as Table 2, but with two more columns added on the right. These columns show the proportions DG makes up of persons who pass the test (highlighted in blue) and persons who fail the test (highlighted in red) in circumstances where DG makes up 50% of persons who take the test.

Table 3. Illustration of effect of lowering test cutoff on (a) relative difference between pass rates and (b) relative difference between failure rates of advantaged group (AG) and disadvantaged group (DG) and proportion DG makes up of (c) persons who pass the test and (d) persons who fail the test (where DG makes up 50% of test takers)

<table>
<thead>
<tr>
<th>Cutoff</th>
<th>AG Pass Rate</th>
<th>DG Pass Rate</th>
<th>AG Fail Rate</th>
<th>DG Fail Rate</th>
<th>AG/DG Pass Ratio</th>
<th>DG/AG Fail Ratio</th>
<th>DG Prop of Pass</th>
<th>DG Prop of Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 High</td>
<td>80%</td>
<td>63%</td>
<td>20%</td>
<td>37%</td>
<td>1.27</td>
<td>1.85</td>
<td>44%</td>
<td>65%</td>
</tr>
<tr>
<td>2 Low</td>
<td>95%</td>
<td>87%</td>
<td>5%</td>
<td>13%</td>
<td>1.09</td>
<td>2.60</td>
<td>48%</td>
<td>72%</td>
</tr>
</tbody>
</table>

The penultimate column shows that lowering the cutoff causes the proportion DG makes up of persons who pass the test to increase from 44% to 48%. That would reduce the difference between the proportion DG makes up of persons who take the test and the proportion it makes up of persons who pass the test.

But the final column shows that lowering the cutoff also increased the proportion DG makes up of persons who fail the test, from 65% to 72%. That would increase the difference between the proportion DG makes up of persons who take the test and the proportion DG makes up of persons who fail the test.

These patterns are not peculiar to test score data or the numbers I used to illustrate them. Rather, changing the frequencies of virtually any outcome and its opposite tends to cause the relative difference in the increasing outcome to decrease and the relative difference in the decreasing outcome to increase (with related effects on the proportions groups more susceptible to the outcomes make up of persons who experience the increasing outcome and the decreasing outcome).

This will not invariably happen with the consistency that will be observed with hypothetical test score data. For many factors are at work. But it will typically happen, especially when the changes in the prevalence of an outcome are substantial. In the school discipline context in particular, generally reducing discipline rates, while tending to reduce relative racial differences in rates of avoiding discipline (analogous to test passage), will tend to increase relative racial differences in rates of being disciplined (analogous to test failure). And in fact that is being observed all across the country as school districts have been generally reducing discipline rates while mistakenly believing that doing so should reduce relative racial differences in discipline rates (or the proportions racial minorities make up of student who are disciplined).²

It is important to recognize that the situation is not one where the government has reasoned that, while the above-described patterns will be found in test score data, there are reasons why the patterns will not ordinarily be found in other situations. Rather, despite dealing with issues about demographic differences in test outcomes for half a century, the government has failed even to understand that lowering a test cutoff tends to increase relative differences in failure rates.

It is also important to understand that an increase in the relative difference in the adverse outcome does not mean that a disparity has increased in some meaningful sense any more than the reduction in the relative difference in the favorable outcome means that a disparity has decreased in a meaningful sense. Rather, the problem is that neither relative difference is a useful indicator of the strength of the forces causing the outcome rates of two groups to differ (or, as we might otherwise put it, the size of the difference in the circumstances of two groups reflected by their outcome rates). That is quite important to recognize as we endeavor to understand the causes of disparities and determine whether they are growing larger or smaller over time or are larger in one setting than another.

Still focusing on either Table 2 or Table 3 (though the former is somewhat simpler), one may think of the pass and fail rates as reflecting any favorable and adverse outcome rates that result from decisions of individual decision-makers. In the school discipline context, consider the failure rates as if they are the suspension rates of minorities and whites and the pass rates as if they are the groups’ rates of rates of avoiding suspension. To the extent that bias on the part or decision-makers contributes to the differences between rates, any actions that reduce that bias will tend to reduce all measures of racial differences between favorable or adverse outcomes.

At the same time, however, simple reductions in adverse discipline outcomes, such as those resulting from PBIS programs, will tend to change the measures of difference in the manner reflected in the tables. Thus, in consequence of general reductions in discipline rates, a school district that substantially reduces suspension rates will tend to show a pattern of changing measures of differences in outcome rates akin to that found in movement from the first row to the second row of the two tables.

In circumstances where decision-makers, including teachers and administrators, are being encouraged to generally reduce suspension rates, all other things being equal, the results for decision-makers who do not try very hard to reduce suspension rates will tend to look more like the first row than the second row. The results for decision-makers who try very hard to reduce suspension rates will tend to look more like the second row than the first row.

Thus, consider a situation where the two rows reflect the results of actions of two different decision-makers and an effort is made to determine which decision-maker is more likely to have made racially biased decisions. One would reach opposite conclusions depending on whether one examined relative differences in the favorable outcome or relative differences in the adverse outcome. In fact, however, there is no rational basis for distinguishing between the two rows with regard to the question of which is more likely to reflect the results of biased decisions.

It should be evident that it is essential for school administrators endeavoring to address discipline disparities issues, and those monitoring those efforts and otherwise attempting to ensure equal
treatment for all groups, to understand these patterns. Yet the situation is not simply that virtually no one involved in such efforts understands these patterns; rather, virtually everyone involved in such efforts proceeds on a belief about the effects of generally reducing discipline rates on the measures most commonly employed in quantifying racial and other demographic disparities that is the opposite of reality.

**Illustration of the Effects of Substituting a Reprimand for What Would Otherwise Be a First Suspension on Proportions More Susceptible Groups Make up of Persons Suspended**

Data made available in Department of Education reports provide other simple illustrations of the effects of generally reducing adverse discipline outcomes rates on measures of racial or other demographic differences in discipline outcomes.

Tables 4 and 5 are based on data from a March 21, 2014 Department of Education report titled “Data Snapshot: School Discipline.” The data in the report enable one to determine the proportions demographic groups make up of K-12 and preschool students who are suspended (a) one or more times and (b) two or more times.

**Table 4. Illustration of effect of giving all students a reprimand instead of their first suspension on proportion African Americans make up of K-12 and preschool students receiving one or more suspensions**

<table>
<thead>
<tr>
<th>Setting</th>
<th>Number of Suspensions</th>
<th>AA Proportion of Students Experiencing the Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-12</td>
<td>One or more</td>
<td>37%</td>
</tr>
<tr>
<td>K-12</td>
<td>Two or more</td>
<td>43%</td>
</tr>
<tr>
<td>Preschool</td>
<td>One or more</td>
<td>44%</td>
</tr>
<tr>
<td>Preschool</td>
<td>Two or more</td>
<td>48%</td>
</tr>
</tbody>
</table>

Table 4 provides that information with regard to African American students in K-12 and preschool. The first row of the first set of two rows shows the proportion African Americans make up of K-12 students suspended one or more times (37%) and the second of those rows shows the proportion they make up of K-12 students suspended two or more times (43%). Suppose, then, that in every situation that otherwise would have resulted in a first suspension, the students were given a reprimand rather than a suspension. In such case, the figure in the second row would tend to become the figure for one or more suspensions. Thus, the 37% figure for the proportion African Americans make up of K-12 students suspended one or more times would tend to rise to 43%.

---

3 [https://www2.ed.gov/about/offices/list/ocr/docs/crdc-discipline-snapshot.pdf](https://www2.ed.gov/about/offices/list/ocr/docs/crdc-discipline-snapshot.pdf)

4 The document provided information on the proportions demographic groups made up of K-12 and preschool students suspended one time and suspended multiple times. From the information provided in the report, one can then determine the proportions the groups made up of persons suspended (a) one or more times and (b) two or more times.
The second two rows of the table provide a similar illustration for preschool. In this setting, giving students a reprimand instead of their first suspension would tend to cause the proportion African Americans make up of students suspended one or more times to increase from 44% to 48%.

Table 5 presents the same type of information for boys, who commonly have higher suspension rates than girls and thus commonly make up a larger proportion of suspended students than the approximately 50% that they make up of all students. Here, too, the Department of Education data show that in both K-12 and preschool, giving students a reprimand rather than what would otherwise be their first suspension would tend to increase the proportion boys (the group more susceptible to suspension) make up of students suspended one or more times.

Table 5. Illustration of effect of giving all persons a reprimand instead of their first suspension on proportion boys make up of K-12 and preschool students receiving one or more suspensions

<table>
<thead>
<tr>
<th>Setting</th>
<th>Number of Suspensions</th>
<th>Male Proportion of Students Experiencing the Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-12</td>
<td>One or more</td>
<td>70%</td>
</tr>
<tr>
<td>K-12</td>
<td>Two or more</td>
<td>72%</td>
</tr>
<tr>
<td>Preschool</td>
<td>One or more</td>
<td>80%</td>
</tr>
<tr>
<td>Preschool</td>
<td>Two or more</td>
<td>82%</td>
</tr>
</tbody>
</table>

Illustration of Effects of the Prevalence of Adverse Discipline Outcomes in Different Settings on Measures of Racial Disparity in Those Settings

I often describe the statistical pattern at work in the discipline context (and essentially every other context where disparities are quantified in terms of relative differences or measures that are functions of relative differences) as that whereby the rarer the outcome, the greater tends to be the relative difference in experiencing it and the smaller tends to be the relative differences in avoiding it. One important, though universally misunderstood, manifestation of that pattern is that in settings (or among subpopulations) where adverse discipline outcomes are comparatively uncommon, relative racial differences in rates of experiencing those outcomes will tend to be larger, while relative differences in the corresponding favorable outcome will tend to be smaller, than in settings where the outcomes are comparatively common.

Tables 6 and 7 are based on data from the Massachusetts and Loudoun County, Virginia. Both are areas where policymakers or others have expressed concern that, though the areas have comparatively low suspension rates, relative racial differences or other measures of racial differences in suspensions are comparatively high.
The two tables may be compared to Table 2 above (save that they do not show the rates at which the two groups avoid suspension, the equivalent of test passage) with columns reordered to be more consistent with the way the issues are commonly discussed (and with the same color-coding for the rate ratios for the adverse and favorable outcomes). But I have added an additional column at the end termed EES, for estimated effect size. This column presents a measure of the strength of the forces causing outcome rates of two groups to differ that is theoretically unaffected by the prevalence of an outcome. I describe it (and its strength and weaknesses) in my “Race and Mortality Revisited,” *Society* (July/Aug. 2014)\(^5\) and various other places.

<table>
<thead>
<tr>
<th>Area</th>
<th>AA Rate</th>
<th>White Rate</th>
<th>AA/White Ratio-Susp</th>
<th>White/AA Ratio - No Susp</th>
<th>EES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Massachusetts</td>
<td>10.0%</td>
<td>2.7%</td>
<td>3.70</td>
<td>1.08</td>
<td>0.65</td>
</tr>
<tr>
<td>National</td>
<td>16.4%</td>
<td>4.6%</td>
<td>3.57</td>
<td>1.14</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Table 6 shows the common patterns whereby the setting with comparatively low suspension rates (Massachusetts compared with national figures) shows larger relative differences in suspension rates, but smaller relative differences in rates of avoiding suspension, than are found nationally. The EES figures – .65 in Massachusetts and .71 nationally – indicate that the forces causing suspension rates of African American and white students to differ (whatever those forces may be) are weaker in Massachusetts than nationally.\(^6\)

Table 7 presents similar information from schools in Loudoun, County Virginia (an affluent suburb of Washington, DC), where suspension rates are very low. In this case, the concern about large racial disparities was prompted by the comparatively high ratio of the proportion African Americans made up of suspended students to the proportion they made up of students.\(^7\)


\(^7\) That areas with low African American representation among students tend to have higher such ratios than other areas even when the areas have same suspension rates for African American students and for other students is among a number of reasons beyond the statistical patterns addressed here that comparisons of the proportion a group makes up of persons potentially experiencing an outcome and the proportion the group makes up of persons actually experiencing the outcome cannot effectively quantify the forces causing outcome rates of advantaged and disadvantaged groups to differ. See references in the succeeding note. See also the IDEA Data Center Disproportionality Guide subpage of the Discipline Disparities page of jpscanlan.com. [http://jpscanlan.com/disciplinedisparities/ideadatacenterguide.html](http://jpscanlan.com/disciplinedisparities/ideadatacenterguide.html)
The ratio African American suspension rate to the white suspension rate is actually slightly lower in Loudoun County than nationally, while the relative difference in rates of avoiding suspension is much lower in Loudoun County than nationally. The EES figures – .55 in Loudoun County and .71 nationally – indicate that the forces causing suspension rates of African American and white students to differ are considerably weaker in Loudoun County than nationally.\textsuperscript{8}

Table 7: Out-of-school suspension rates for African American and white students in Loudoun County (VA) Public Schools and nationally in 2012-2013, with measures of difference

<table>
<thead>
<tr>
<th>Area</th>
<th>AA Rate</th>
<th>White Rate</th>
<th>AA/White Ratio-Susp</th>
<th>White/AA Ratio - No Susp</th>
<th>EES</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCPS</td>
<td>4.65%</td>
<td>1.3%</td>
<td>3.54</td>
<td>1.04</td>
<td>0.55</td>
</tr>
<tr>
<td>National</td>
<td>16.4%</td>
<td>4.6%</td>
<td>3.57</td>
<td>1.14</td>
<td>0.71</td>
</tr>
</tbody>
</table>

Neither Massachusetts nor Loudoun County has any idea that to the extent that racial disparities in school discipline can be effectively measured, their disparities are smaller, not larger, than nationally. Nor do they have any idea that the actions to generally reduce discipline rates that they see as means of reducing the measures of racial disparity that are causing them concern will in fact tend to increase those measures.

Table 8, which is based on Table 8 of the aforementioned "Race and Mortality Revisited," is similar to Tables 6 and 7. But rather than comparing figures from a particular geographic area with national figures, Table 8 compares figures in preschool (where suspensions are comparatively rare) with figures from K12 (where suspensions are much more common). The table presents figures on multiple suspensions, which is the outcome respecting which racial disparities received the greatest attention when racial disparities in preschool suspensions first received substantial attention in 2014.\textsuperscript{9}

\textsuperscript{8} These data are discussed more fully in the Loudoun County (VA) Disparities subpage of the Discipline Disparities page of jpscanlan.com (http://jpscanlan.com/disciplinedisparities/loudounctydisparities.html). That subpage also discusses data showing that between the 2009-2010 and the 2013-2014 school years general reductions in suspension rates were accompanied by an increase in the relative differences between African American and white suspension rates and a decrease in the relative difference between African American and white rates of avoiding suspension, with negligible change in the EES. See also my September 5, 2017 letter explaining this issue to the Loudoun County School Board.


\textsuperscript{9} The facts receiving special attention in coverage of the issue were that African Americans were 18% of preschool children but 48% of preschool students receiving multiple suspensions. The figures in Table 8 are the suspension rates that can be derived from data in the previously mentioned Department of Education March 2014 document “Data Snapshot: School Discipline.” The 18% and 48% figures were also highlighted in a March 21, 2014 Department of Education report titled “Data Snapshot: Early Childhood Education.”

https://www2.ed.gov/about/offices/list/ocr/docs/crdc-early-learning-snapshot.pdf
Table 8. African American and white rates of multiple suspensions in preschool and K-12, with measures of difference

<table>
<thead>
<tr>
<th>Level</th>
<th>AA Mult Susp Rate</th>
<th>White Mult Susp Rate</th>
<th>AA/Wh Ratio Mult Susp</th>
<th>Wh/AA Ratio No Mult Susp</th>
<th>EES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschool</td>
<td>0.67%</td>
<td>0.15%</td>
<td>4.41</td>
<td>1.01</td>
<td>.49</td>
</tr>
<tr>
<td>K12</td>
<td>6.72%</td>
<td>2.23%</td>
<td>3.01</td>
<td>1.05</td>
<td>.51</td>
</tr>
</tbody>
</table>

As will commonly be observed, Table 8 shows that in the setting where suspensions are less common (preschool) relative differences in multiple suspension rates are greater, while relative differences in rates of avoiding multiple suspensions are smaller, than in the setting where suspensions are more common (K-12). In this case, however, the EES figures are very similar suggesting that, whatever the forces causing African American and white suspension rates to differ, they are of approximately the same strength in the two settings.

Table 9 is based on data from a 2012 Department of Education report titled “Helping to Ensure Equal Access to Education: Report to the President and Secretary.” Data were provided only on the proportion African Americans make of students and expelled students overall and in zero tolerance schools. The actual expulsions rates were not available. But based on the data available, one can present those two proportions in each setting and derive therefrom the relative difference between the African American rate and the rate for all other students.

Table 9: Proportions African Americans make up of students and expelled students overall and in schools with zero tolerance policies, with ratio of the African American expulsion rate to the white expulsion rate

<table>
<thead>
<tr>
<th>Setting</th>
<th>AA Proportion of Students</th>
<th>AA Proportion of Expulsions</th>
<th>AA/Non-AA Expulsion Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>18%</td>
<td>39%</td>
<td>2.91</td>
</tr>
<tr>
<td>Zero Tolerance Schools</td>
<td>19%</td>
<td>33%</td>
<td>2.10</td>
</tr>
</tbody>
</table>

In accordance with the pattern described above, the ratio of the African American expulsion rate to the expulsion rate of other students was higher where expulsions were presumably less common (overall) than in the setting where expulsions were presumably more common (zero tolerance schools). (I do not present an EES figure because one needs the actual expulsion rates to derive such figure.) There nevertheless continues to be a near universal belief that zero tolerance policies lead to larger relative racial differences in adverse disciplines outcomes (and larger African American proportions or persons experiencing those outcomes) than more lenient policies.

An understanding of these patterns is also essential to drawing sound inferences about processes based on the comparative size of disparities. Relative racial differences in suspension rates are commonly greater, while relative differences in rates of avoiding suspension are commonly smaller, among girls (where suspensions are less common) than among boys (where suspensions are more common).

---

are more common). Correspondingly, relative gender differences in suspension are commonly greater, while relative gender differences in rates of avoiding suspension are commonly smaller, among whites (where suspensions are less common) than among African Americans (where suspensions are more common). See the Discipline Disparities page of jpscanlan.com.\textsuperscript{11}

Similarly, relative racial differences in suspensions will commonly be greater, while relative differences in avoiding suspensions will commonly be smaller, among students without disabilities (where suspensions are less common) than among students with disabilities (where suspensions are more common). Correspondingly, relative differences between the suspension rates of students with and without disabilities will commonly be greater, while relative differences between rates at which such groups avoid suspension will commonly be smaller, among whites (where suspensions are less common) than among African Americans (where suspensions are more common).

On cannot draw inferences about processes on the basis that one of these disparities is larger than another, or otherwise usefully hypothesize about why any disparity is larger than another, without understanding the above-described and other patterns by which measures tend to be affected by the prevalence of an outcome.

**Conclusion**

The failure to understand the ways the prevalence of an outcome affects relative differences in rates of experiencing an outcome and relative differences in rates of avoiding the outcome is but part of a larger failure of the government (and the social science and statistical communities) to understand the ways standard measures of differences between outcome rates of advantaged and disadvantaged group tend to be affected by the prevalence of an outcome. For more extensive treatment of that issue with regard to all analyses of demographic differences in outcome rates in the law and the social and medical sciences, see the aforementioned "Race and Mortality Revisited," my November 14, 2016 Comments for Commission on Evidence-Based Policymaking,\textsuperscript{12} and my October 8, 2015 letter to the American Statistical Association.\textsuperscript{13} With regard to the way the larger failure has undermined Department of Education analyses of demographic differences regarding student outcomes apart from discipline, see my “Innumeracy at the Department of Education and the Congressional Committees Overseeing It,” Federalist Society Blog (Aug. 24, 2017).\textsuperscript{14} See also the July 17, 2017 letter to the Departments of Education, Health and Human Services, and Justice mentioned in note 2 supra, which, in addition to advising the agencies of their obligations to correct prior guidance to school administrators as to the likely effects of generally reducing discipline rates on measures of discipline disparities, suggests that the agencies halt all funding of research into demographic

\textsuperscript{11} http://jpscanlan.com/disciplinedisparities.html

\textsuperscript{12} https://www.regulations.gov/document?D=USBC-2016-0003-0135

\textsuperscript{13} http://jpscanlan.com/images/Letter_to_American_Statistical_Association_Oct_8_2015_.pdf

\textsuperscript{14} http://www.fed-soc.org/blog/detail/innumeracy-at-the-department-of-education-and-the-congressional-committees-overseeing-it
differences that fails to consider implications of the ways the measures employed tend to be affected by the prevalence of an outcome.

But the mistaken belief that generally reducing an adverse outcome should tend to reduce, rather than increase, relative differences in rates of experiencing the outcome (and the proportions groups more susceptible to the outcome make up of persons experiencing it) – which informs federal civil rights policies regarding criminal justice, lending, employment, and voter qualification, as well as school discipline – is an extreme example of the larger failure of understanding. And it has pernicious consequences. These include the many anomalies where by complying with government encouragements to relax standards and otherwise reduce adverse outcomes, entities covered by civil rights law increase the chances that the government will accuse them of discrimination. Similar anomalies exist in situations where individual actors who comply with their employers’ instruction to reduce adverse outcomes increase the chances that their employees will accuse them of discrimination. Further, in contexts where actions that are supposed to be reducing measures of racial disparity are followed by increases in those measures, observers will conclude that the forces causing outcome rates to differ must be growing stronger, often prompting increasing distrust in the fairness of systems.

Such conclusions will not have a sound statistical basis. But so far very few people understand that.
Materials for Meeting of Department of Education Staff with James Scanlan
(Mar. 22, 2018)

Issues (pages 1-2)

Illustrative Tables and Figures (pages 3-7)

Extended References (pages 8-11)
ISSUES

Issue 1:

Guidance by the Department of Education (DOE), as well as Departments of Justice (DOJ) and Health and Human Services (HHS), regarding school discipline policies has been premised on the belief that relaxing standards and otherwise generally reducing suspension rates will tend to reduce (a) the ratio of the African American suspension to the white suspension rate and (b) the proportion African Americans make up of suspended students. In fact, exactly the opposite is the case.

Recommendations for DOE action:

a. Communicate (ideally in conjunction with DOJ and HHS) to school administrators, the public, and Congress (by Dear Colleague letters and otherwise) that prior guidance as to the effects of policies on measures of racial disparity was incorrect.

b. Advise Congress of the ways statutes involving education and youth justice issues are premised on the mistaken belief that generally reducing adverse outcomes will tend to reduce the measures of disproportionality typically used by the government.

c. Review all agreements with school districts to determine whether the agreements require modifications to practices that tend to increase (a) and (b) while contemplating measuring compliance in terms of reductions in (a) and (b).

Issue 2:

There exists a general failure of persons and entities analyzing demographic differences regarding rates at which advantaged and disadvantaged groups experience favorable or adverse outcomes to recognize the ways measures employed in such analyses tend to be affected by the prevalence (frequency) of the outcomes. Analyses of such differences and guides thereon have almost invariably been unsound and misleading because they have not addressed (a) the extent to which observed patterns of changes in a measures are functions of the change in the prevalence of the outcome and (b) the extent to which such patterns reflect something significant about underlying processes, including the effects of policies aimed at mitigating the comparative disadvantage of certain groups.

Recommendations for DOE action:

a. Withdraw (or withdraw DOE association with) all research involving analyses of demographic differences that has attempted to quantify such differences, and all materials providing guidance on quantifying those differences, that have failed to consider the effects of the prevalence of an outcome on measures employed or discussed.
b. Review all DOE research and research grants to determine whether they fail to address the implications of the effects of the prevalence of an outcome on the measures employed or discussed; halt all funding that cannot be shown to address those implications in a useful manner.

c. In conjunction with other agencies, form a committee to reform the analyses of demographic differences.

Key references (available on web by means of title search or on Measurement Letters page of jpscanlan.com):


Letter to United States Departments of Education, Health and Human Services, and Justice (July 17, 2017)

Comments of James P. Scanlan for Commission on Evidence-Based Policymaking (Nov. 14, 2016)
Table 1. Illustration of effects of lowering a test cutoff on measures of differences in test outcomes of advantaged group (AG) and disadvantaged group (DG) (based on situation where groups are of equal size) (Table 1 of July 17, 2017 letter to DOE, HHS, DOJ)

<table>
<thead>
<tr>
<th>Row</th>
<th>(1) AG Pass Rate</th>
<th>(2) DG Pass Rate</th>
<th>(3) AG Fail Rate</th>
<th>(4) DG Fail Rate</th>
<th>(5) AG/DG Pass Ratio</th>
<th>(6) DG/AG Fail Ratio</th>
<th>(7) DG Prop of Pass</th>
<th>(8) DG Prop of Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>80%</td>
<td>63%</td>
<td>20%</td>
<td>37%</td>
<td>1.27</td>
<td>1.85</td>
<td>44%</td>
<td>65%</td>
</tr>
<tr>
<td>2</td>
<td>95%</td>
<td>87%</td>
<td>5%</td>
<td>13%</td>
<td>1.09</td>
<td>2.60</td>
<td>48%</td>
<td>72%</td>
</tr>
</tbody>
</table>

Table 1 illustrates that lowering a test cutoff – and thereby generally increasing pass rates and generally reducing failure rates – tends to reduce relative differences in pass rates (Column 5) and increase relative difference in failure rates (Column 6). Table also shows that lowering cutoffs tends to increase both the proportion DG makes up persons who pass (Column 7) and the proportion DG makes up of persons who fail (Column 8).

Considerations:
- Improving education in way that enables everyone scoring between the two cutoffs to reach the higher cutoff will have the same effect as lowering the cutoff.
- In circumstances where favorable and adverse outcome rates in the two rows result from actions of decisionmakers, there is no rational basis for distinguishing between the two rows with respect to the likelihood of decisionmaker bias.
- Other things being equal, decisionmaker who employs more relaxed standards or are more cautious about imposing adverse outcomes will tend show results more like those in Row 2 than Row 1.
- Patterns in the two rows are akin to those one would find where Row 1 involves more serious (often deemed objectively-identified) offenses while Row 2 involves less serious (often deemed subjectively-identified) offenses. See Offense Type Issues subpage of Discipline Disparities page of jpscanlan.com.
- Regarding Columns 4 and 8, a pattern that it is crucial to know, though virtually no one in fact knows, is that generally reducing an adverse outcome tends to (a) reduce the proportion of a disadvantaged group that experiences the outcome but (b) increase the proportion the disadvantaged group makes up of persons who experience the outcome.
- Lowering the cutoff decreased the absolute (percentage point) difference between pass (or fail) rates from 17 to 8. Usually when observers say that general reductions in suspensions decreased a disparity (mainly Daniel Losen and colleagues), they are referring to the percentage point difference. That does not mean that the absolute difference is a useful measure of association. See "Race and Mortality Revisited.," Society (July/Aug. 2014) and Figures 1 and 2 and Table 6 infra.
Table 2. Illustration of effect of giving all students a reprimand instead of their first suspension on proportion African Americans make up of K-12 and preschool students receiving one or more suspensions (Table 4 of testimony to Commission on Civil Rights)

<table>
<thead>
<tr>
<th>Setting</th>
<th>Number of Suspensions</th>
<th>AA Proportion of Students Experiencing the Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-12</td>
<td>One or more</td>
<td>37%</td>
</tr>
<tr>
<td>K-12</td>
<td>Two or more</td>
<td>43%</td>
</tr>
<tr>
<td>Preschool</td>
<td>One or more</td>
<td>44%</td>
</tr>
<tr>
<td>Preschool</td>
<td>Two or more</td>
<td>48%</td>
</tr>
</tbody>
</table>

Table 2 illustrates that a policy of giving reprimands instead of what would otherwise be first suspensions will tend to increase proportion African Americans make up of persons with one or more suspensions.

Table 3. African American and white rates of multiple suspensions in preschool and K-12, with measures of difference (Table 8 of Commission on Civil Rights testimony and Table 8 or “Race and Mortality Revisited,” Society (July/Aug. 2014))

<table>
<thead>
<tr>
<th>Level</th>
<th>(1) AA Multiple Susp Rate</th>
<th>(2) Wh Multiple Susp Rate</th>
<th>(3) AA/Wh Ratio Mult Susp</th>
<th>(4) Wh/AA Ratio No Mult Susp</th>
<th>(5) EES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preschool</td>
<td>0.67%</td>
<td>0.15%</td>
<td>4.41</td>
<td>1.01</td>
<td>.49</td>
</tr>
<tr>
<td>K12</td>
<td>6.72%</td>
<td>2.23%</td>
<td>3.01</td>
<td>1.05</td>
<td>.51</td>
</tr>
</tbody>
</table>

Table 3 illustrates that relative differences in receiving multiple suspensions are larger (Column 3), but relative differences in avoiding multiple suspensions are smaller (Column 4), in preschool (where multiple suspensions are comparatively rare) than in K-12 (where multiple suspensions are more common). Column 5 shows that, to the extent that the forces causing black and white rates to differ can be measured, they are about the same in both settings. Illustration is based on data from March 21, 2014 DOE report titled “Data Snapshot: Early Childhood Education” underlying the fact highlighted in the document, and much-cited in discussions of it, that African American children, who make up 18% of preschool students, make up 48% of preschool students with multiple suspensions.
Table 4. States regarded favorably and unfavorably in March 21, 2014 DOE document. 1) titled “Data Snapshot: School Discipline.”

<table>
<thead>
<tr>
<th>State</th>
<th>Proportion of restrained students who were students with disabilities</th>
<th>Way state was regarded by DOE</th>
<th>Likely degree to which states follows DOE guidance on restraints</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nevada</td>
<td>96%</td>
<td>Unfavorably</td>
<td>High</td>
</tr>
<tr>
<td>Florida</td>
<td>95%</td>
<td>Unfavorably</td>
<td>High</td>
</tr>
<tr>
<td>Wyoming</td>
<td>93%</td>
<td>Unfavorably</td>
<td>High</td>
</tr>
<tr>
<td>Arkansas</td>
<td>43%</td>
<td>Favorably</td>
<td>Low</td>
</tr>
<tr>
<td>Louisiana</td>
<td>41%</td>
<td>Favorably</td>
<td>Low</td>
</tr>
<tr>
<td>Mississippi</td>
<td>40%</td>
<td>Favorably</td>
<td>Low</td>
</tr>
</tbody>
</table>

See Restraint Disparities subpage of the Discipline Disparities page of jpscanlan.com regarding reasons why following DOE guidance to restrict the use of physical restraints to the most extreme cases tends to increase, not reduce, the proportion students with disabilities make up of restrained students.

Table 5: Proportions African Americans make up of expelled students overall and in schools with zero tolerance policies, with ratio of the African American expulsion rate to the white expulsion rate (based on 2012 DOE report titled “Helping to Ensure Equal Access to Education: Report to the President and Secretary”) (Table 9 of Commission on Civil Rights testimony)

<table>
<thead>
<tr>
<th>Setting</th>
<th>(1) AA Proportion of Students</th>
<th>(2) AA Proportion of Expulsions</th>
<th>(3) AA/Non-AA Expulsion Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>18%</td>
<td>39%</td>
<td>2.91</td>
</tr>
<tr>
<td>Zero Tolerance Schools</td>
<td>19%</td>
<td>33%</td>
<td>2.10</td>
</tr>
</tbody>
</table>

Table 5 illustrates that the African American/white expulsion ratio is greater in schools without zero tolerance policies than in schools with zero tolerance policies.¹

¹ One can derive the rate ratio in Column 3 from the figures in Columns 1 and 2 even though one does not have the actual rates. One needs the actual rates to attempt to determine whether forces causing rates to differ are greater in schools with or without zero tolerance policies. This is one of the reasons, but not the only reason, one can never analyze a demographic difference in the basis of a comparison between the proportion a group makes up of students and the proportion it makes up of students experiencing an outcome. See Section C the Kansas Law paper “The Mismeasure of Discrimination,” Section I.B of the Texas Department of Housing brief, and Section C of the November 14, 2016 Comments to the Commission on Evidence-Based Policy Making (listed in Section B of Extended References); see also the IDEA Data Center Disproportionality Guide subpage of the Discipline Disparities page of jpscanlan.com.
Figure 1. Absolute differences between rates of AG and DG pass (or fail) rates at various cutoff points defined by AG fail rate (Figure 2 CEBP Comments)

![Figure 1: Absolute differences between rates of AG and DG pass (or fail) rates at various cutoff points defined by AG fail rate](image)

Figure 2. Ratios of (1) DG fail rate to AG fail rate, (2) AG pass rate to DG pass rate, (3) DG failure odds to AG failure odds (Figure 2 from the CEBP Comments)

![Figure 2: Ratios of (1) DG fail rate to AG fail rate, (2) AG pass rate to DG pass rate, (3) DG failure odds to AG failure odds](image)

Figures 1 and 2, which are based on the same specifications as Table 1, illustrate the effect of lowering a cutoff from a point where almost everyone fails to the point where almost everyone passes. Notice that direction of change in the absolute difference tends to track direction of change of the smaller of the two relative differences (initially (1)/diamond marker, later (2)/rectangle marker). Because observers who rely on relative differences to measure disparities commonly rely on the larger of the two relative differences (school discipline, mortgage outcomes, poverty, unemployment), such observers tend to reach opposite conclusions about directions of changes in disparities from observers who rely on absolute differences.
Table 6. Favorable outcome rates of advantaged group (AG) and disadvantaged group (DG) at four levels of prevalence with different favorable outcome frequencies, with measures of difference

<table>
<thead>
<tr>
<th></th>
<th>(1) AG Fav Rate</th>
<th>(2) DG Fav Rate</th>
<th>(3) AG/DG Fav Ratio</th>
<th>(4) DG/AG Adv Ratio</th>
<th>(5) Absolute Diff (Perc Points)</th>
<th>(6) Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>20.0%</td>
<td>9.0%</td>
<td>2.22 (1)</td>
<td>1.14 (4)</td>
<td>11.0</td>
<td>2.53</td>
</tr>
<tr>
<td>B</td>
<td>40.0%</td>
<td>22.6%</td>
<td>1.77 (2)</td>
<td>1.29 (3)</td>
<td>17.4</td>
<td>2.28</td>
</tr>
<tr>
<td>C</td>
<td>70.0%</td>
<td>51.0%</td>
<td>1.37 (3)</td>
<td>1.63 (2)</td>
<td>19.0</td>
<td>2.24</td>
</tr>
<tr>
<td>D</td>
<td>80.0%</td>
<td>63.4%</td>
<td>1.26 (4)</td>
<td>1.83 (1)</td>
<td>16.6</td>
<td>2.31</td>
</tr>
</tbody>
</table>

Table 6 Illustrates that across all prevalence ranges general increases in favorable outcomes tend to reduce relative differences in those outcomes (Column 3) while increasing relative differences in the corresponding adverse outcomes (Column 4). The highlighted absolute difference column (5) shows that generally increasing an uncommon outcome (e.g., rates of advanced proficiency) tends to increase absolute (percentage point) differences between rates, as reflected by movement from row A to Row B; but generally increasing a common outcome (e.g., rates of achieving basic proficiency) tends to reduce absolute differences between rates, as reflected by movement from Row C to Row D.

See Educational Disparities page of jpscanlan.com and its subpages. See discussion of Table 5 in "Race and Mortality Revisited," Society (July/Aug. 2014) and discussion (at 337-339) regarding the implications of failure to understand the pattern by which absolute differences tend to be affected by the prevalence of an outcome with respect to disparities reduction elements in pay-for-performance programs, especially in Massachusetts.
EXTENDED REFERENCES

All items listed below are available online and most can be accessed by web searches for their titles. Items that may not be found by web searches should be available on the Measurement Letters page of jpscanlan.com.

A. Short items explaining the mistaken understanding of effects of relaxing standards on measures of demographic difference involving school discipline or criminal justice outcomes (essentially primers on Issue 1)

“Things Do doesn’t know about racial disparities in Ferguson,” The Hill (Feb. 22, 2016)
“Things government doesn’t know about racial disparities,” The Hill (Jan. 28, 2014).

B. More extensive treatments of Issue 1 or Issue 2 with respect to the full range of matters to which the issues pertain

Comments of James P. Scanlan for Commission on Evidence-Based Policymaking (Nov. 14, 2016)
“Race and Mortality Revisited,” Society (July/Aug. 2014)
Amicus curiae brief of James P. Scanlan in Texas Department of Housing and Community Development, et al. v. The Inclusive Communities Project, Inc., Supreme Court No. 13-1731 (Nov. 17, 2014)
“The Mismeasure of Discrimination,” Faculty Workshop, University of Kansas School of Law (Sept. 20, 2013)

---

2 Explains that lowering National Collegiate Athletic Association academic standards for participation in intercollegiate athletics will tend to increase the proportion African Americans make up of athletes disqualified from participation.
C. Recent articles or blog posts discussing, with respect to certain current issues, government policies or actions based on an understanding of the effects of generally reducing school discipline or criminal justice outcomes on measures of racial disparity that is the opposite of reality

“The misunderstood effects of the Baltimore police consent decree,” The Daily Record (Feb. 15, 2018)
“Innumeracy at the Department of Education and the Congressional Committees Overseeing It,” Federalist Society Blog (Aug. 24, 2017) *

D. Web pages on jpscanlan.com

Discipline Disparities page and 41 subpages

Subpages address various issues. About 25 pertain to situations where general reductions in discipline rates were in fact associated with increased relative racial/ethnic differences in discipline rates or where the settings with comparatively low discipline rates had comparatively high relative demographic differences in discipline rates.

Education Disparities page and its 7 subpages

The subpages mainly pertain to research examining demographic differences in educational outcomes in terms of relative differences in the favorable or the adverse outcome, or absolute differences between rates, without consideration of the ways the measures employed tend to be affected by the prevalence of the outcome. That is, researchers failed to understand that general improvements in educational outcomes tend to reduce relative differences in favorable outcomes while increasing relative differences in the corresponding adverse outcomes, or that such improvements tend to increase absolute differences for uncommon outcomes like advanced proficiency but reduce absolute differences for common outcomes like basic proficiency.

³ This item also discusses some complex issues regarding inferences related to likelihood that bias plays a role in racial differences akin to those addressed on the Offense Type Issues subpage of the Discipline Disparities page of jpscanlan.com.
E. Letters to DOE, DOJ, or HHS Regarding School Discipline Issues

Departments of Education, Health and Human Services, and Justice (July 17, 2017)
Department of Justice (Apr. 13, 2017)
Departments of Education and Health and Human Services of Education (Aug. 24, 2015)
Department of Justice (Apr. 23, 2012)
Department of Education (Apr. 18, 2012)

F. Letters to DOE contractors and grantees and other entities that conduct research or provide guidance on research regarding demographic differences in discipline or education outcomes (known DOE contractors/grantees denoted with asterisk)

American Institutes for Research (Aug. 25, 2017) *
Pyramid Equity Project (Nov. 28, 2016) *
University of Oregon Institute on Violence and Destructive Behavior and University of Oregon Law School Center for Dispute Resolution (July 5, 2016) *
University of Oregon Institute on Violence and Destructive Behavior and University of Oregon Law School Center for Dispute Resolution (July 3, 2016) *
New York City Center for Innovation through Data Intelligence (June 6, 2016)
Texas Appleseed (Apr. 7, 2015)
Wisconsin Council on Families and Children’s Race to Equity Project (Dec. 23, 2014)
Education Law Center (Aug. 14, 2014)
IDEA Data Center (Aug. 11, 2014) *
Annie E. Casey Foundation (May 13, 2014)
Education Trust (April 30, 2014)

G. Letters to school districts regarding difficulties in their particular situations arising from their own mistaken beliefs, or the mistaken beliefs of others, that generally reducing discipline rates will tend to reduce (a) relative differences in discipline rates or (b) the proportion disadvantaged groups make up of persons disciplined

Metro Nashville Public Schools (Feb. 14, 2018)
Loudoun County Public Schools (Sept. 5, 2017)
Duval County Public Schools (Aug. 2, 2017)
Oklahoma City School District (Sept. 20, 2016)
Antioch Unified School District (Sept. 9, 2016)
Houston Independent School District (Jan. 5, 2016)
H. DOE-sponsored documents warranting withdrawal

As suggested in the Recommendations regarding Issue 2, all DOE-sponsored documents measuring or providing guidance on measuring demographic differences in educational outcomes should probably be withdrawn. Those listed below are merely some notable examples.

IDEA Data Center Technical Assistance Guide titled “Methods for Assessing Disproportionality in Special Education (revised March 2014).”

Institute of Education Sciences study titled “Disproportionality in school discipline: An assessment of trends in Maryland, 2009-12” (March 2014).

Institute of Education Sciences/Regional Educational Laboratory guide titled “School discipline data indicators: A guide for districts and schools” (April 2017).


---

4 See the IDEA Data Center Disproportionality Guide subpage of the Discipline Disparities page of jpscanlan.com. See also pages 8-9 of the August 24, 2015 letter to the Secretaries of DOE and HHS.

5 This item, which is made available on the DOE “School Climate and Discipline: Know the Data” page and treated on the Maryland Disparities subpage of the Discipline Disparities page of jpscanlan.com, is problematic both because it measures suspension disparities in relative terms and because it reflects the mistaken belief that generally reducing discipline suspension rates would be expected to reduce relative racial differences in suspension rates.

6 This item has problems similar to those of the IDEA Data Center Technical Assistance Guide.

7 On February 28, 2018, DOE postponed implementation of this regulation until 2020. By then the agency should recognize that one cannot usefully measure demographic based on relative differences in outcome rates (or other measures that tend to change solely because the prevalence of an outcome changes).