From: James Scanlan <jps@jpscanlan.com>

To: Meredith.Miceli@ed.gov, richelle.davis@ed.gov

Cc:

Date: Tuesday, August 12, 2014 03:21 pm

Subject: Measuring Disproportionality

Dear Drs. Miceli and Davis:

This note pertains to your roles as project officers on the IDEA Data Center disproportionality guide and as Department of Education officers generally involved in data issue.

I write a about the ways that standard measures of differences between outcome rates tend to be systematically affected by the prevalence of an outcome, especially the pattern whereby the rarer an outcome the greater tends to be the relative difference in experiencing it and the smaller tends to be the relative difference in avoiding it. Thus, for example, reducing discipline rates or rates of assignment to special education tend to increase relative differences in experiencing those outcomes while reducing relative differences in rates of avoiding the outcomes. Absolute differences between rates are also affected by the prevalence of an outcome, though in a more complicated way.

A fairly extensive explication of the issues may be found in this recent article. "Race and Mortality Revisited," Society (July/Aug. 2014)

http://jpscanlan.com/images/Race_and_Mortality_Revisited.pdf More succinct explanations may be found in references 1 to 3.

I explained these issues in a letter to the Department of Education dated April 18, 2012, which may be found here. http://jpscanlan.com/images/Department of Education Letter.pdf

I recently created a web page explaining the pertinence of the referenced patterns to the IDEA Data Center Disproportionality guide.

http://jpscanlan.com/disciplinedisparities/ideadatacenterguide.html

I will be giving a methods workshop on these issues from 10:00 to 12:00 on October 10 in room 1101 of Morill Hall of the Maryland Population Research Center.[4] A more extended abstract pertaining to the content of the work shop may be found in reference 5 and examples that may be used in the workshop may be found in reference 6. The workshop is open to the public in case you would like to attend.

Whether or not you can attend the workshop, I hope you find the references of interest and consider the points they make in your future work. Other materials that pertain to Department of Education issues include the Discipline Disparities and Education Disparities pages of jpscanlan.com and their subpages.

Sincerely, James P. Scanlan Attorney at Law 1529 Wisconsin Avenue, NW Washington, DC 20007 Office phone: 202-338-9224

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- 1. "Things government doesn't know about racial disparities," The Hill (Jan. 28, 2014). http://thehill.com/blogs/congress-blog/civil-rights/196543-things-the-legislative-and-executive-branches-dont-know
- 2. "The Paradox of Lowering Standards," *Baltimore Sun* (Aug. 5, 2013) http://jpscanlan.com/images/Paradox of Lowering Standards.pdf
- 3. "<u>Misunderstanding of Statistics Leads to Misguided Law Enforcement Policies</u>" (*Amstat News*, Dec. 2012):

http://magazine.amstat.org/blog/2012/12/01/misguided-law-enforcement/

- 4. "Rethinking the Measurement of Demographic Differences in Outcome Rates," Methods Workshop to be presented to the Maryland Population Research Center of the University of Maryland, Oct. 10, 2014: http://www.popcenter.umd.edu/new_e/event_1406225824132
- 5. "The Mismeasure of Association: The Unsoundness of the Rate Ratio and Other Measures That Are Affected by the Prevalence of an Outcome," Methods Workshop to be presented to Minnesota Population Center and Division of Epidemiology and Community Health of the School of Public Health of the University of Minnesota, Minnesota, Minnesota, Sept. 5, 2014 (forthcoming)

Abstract: http://jpscanlan.com/images/University of Minnesota Workshop Abstract.pdf

6. The Mismeasure of Group Differences in the Law and the Social and Medical Sciences," Applied Statistics Workshop at the Institute for Quantitative Social Science at Harvard University, Cambridge, Massachusetts, Oct. 17, 2012: http://jpscanlan.com/images/Harvard Applied Statistic Workshop.ppt

Attachments: