

# Disproportionality in Special Education

## Assignment or Discipline

- IDEA Data Center (IDC) Disproportionality Guide’s Four Measures (see [IDEA Data Center Disproportionality Guide](#) subpage of Discipline Disparities page)
  - Rate comparisons
    - (a) relative differences in assignment rates
    - (b) absolute differences in assignment rates
      - Representational comparisons
    - (c) relative difference between proportion DG comprises of pool and proportion DG comprises of those assigned
    - (d) absolute difference between proportion DG comprises of pool and proportion DG comprises of those assigned

Table 23(a). Effects of Prevalence of Outcome on Measures from IDC Guide for Identifying “Significant Disproportionality” in Special Education

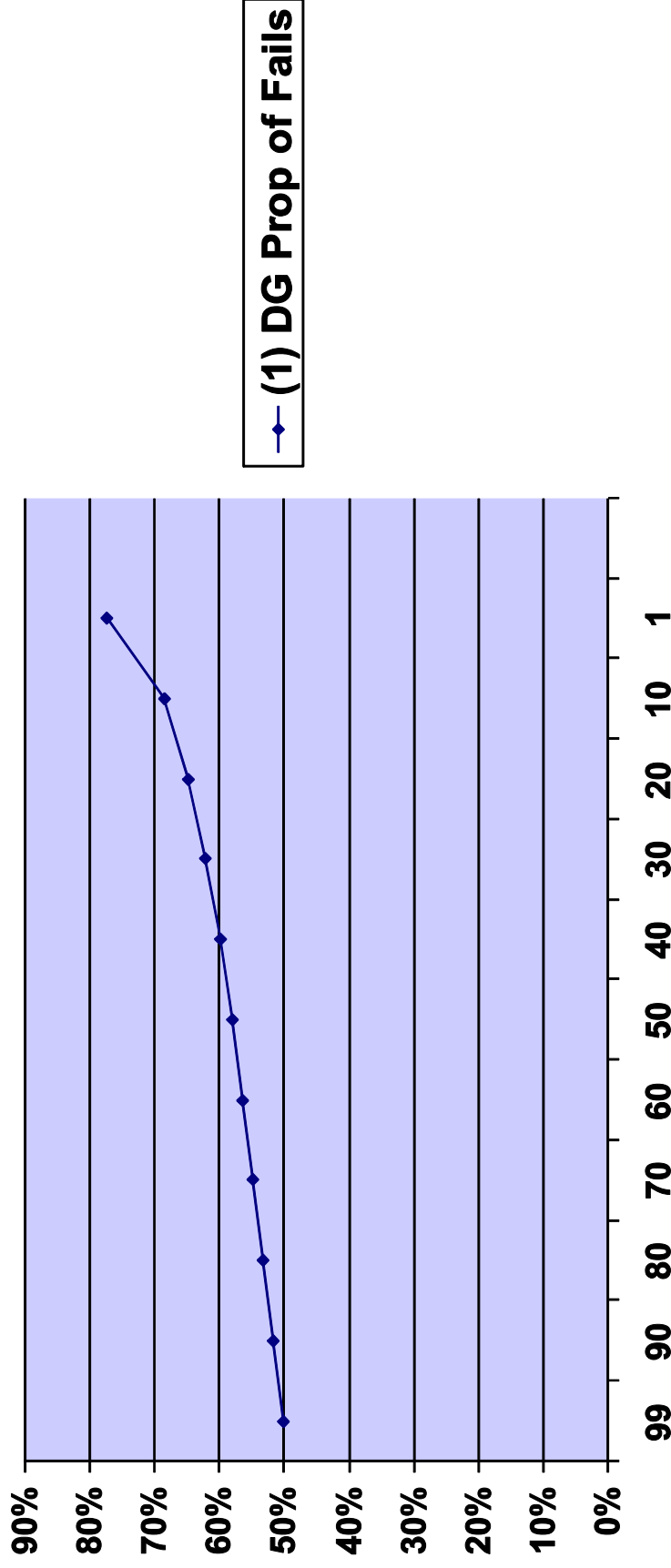
(1) DG Prop Pool	AG Adv Rate	DG Adv Rate	(a) DG/AG Ratio Adv Rate
20%	20%	36.7%	1.83
20%	10%	21.8%	2.18
20%	3%	8.4%	2.79
70%	20%	36.7%	1.83
70%	10%	21.8%	2.18
70%	3%	8.4%	2.79

See [IDEA Data Center Disproportionality Guide](#) subpage of Discipline Disparities page.  
 Implications of circumspection and review.

Table 23(b). Effects of Prevalence of Outcome on Measures from  
 IDC Guide for Identifying “Significant Disproportionality” in  
 Special Education

(1) DG Prop Pool	(a)			(b) Abs Df Btw Rates (pp)
	AG Adv Rate	DG Adv Rate	DG/AG Ratio Adv Rate	
20%	20%	36.7%	1.83	16.7
20%	10%	21.8%	2.18	11.8
20%	3%	8.4%	2.79	5.4
70%	20%	36.7%	1.83	16.7
70%	10%	21.8%	2.18	11.8
70%	3%	8.4%	2.79	5.4

**Fig. 7. Proportion DG Comprises of (1) Persons Who Fail at Various Cutoff Points Defined by AG Fail Rate (where DG is half the population)**



**Cutoffs Defined by AG Fail Rate**

This is an abbreviated version of Figure 6, which was used to illustrate Corollary 2 to IR1. The figure is used here to show that as an adverse outcome declines in prevalence, the proportion DG comprises of persons experiencing the outcome increase, and, hence, as shown in Table 23(c) and 23(d) *infra*, the relative and absolute differences between the proportion DG comprises of the pool and the proportion DG comprises of the persons experiencing the adverse outcome both increase.

Table 23(c). Effects of Prevalence of Outcome of Measures from IDC Guide for Identifying “Significant Disproportionality” in Special Education (b5618a1)

(1) DG Prop Pool	AG Adv Rate	DG Adv Rate	(a) DG/AG Ratio Adv Rate	(b) Abs Df Btw Rates (pp)	(2) DG Prop of Adv
20%	20%	36.7%	1.83	16.7	31.4%
20%	10%	21.8%	2.18	11.8	35.2%
20%	3%	8.4%	2.79	5.4	41.1%
70%	20%	36.7%	1.83	16.7	81.1%
70%	10%	21.8%	2.18	11.8	83.6%
70%	3%	8.4%	2.79	5.4	86.7%

See [IDEA Data Center Disproportionality Guide](#) subpage of Discipline Disparities page.

Table 23(d). Effects of Prevalence of Outcome on Measures from IDC Guide for Identifying “Significant Disproportionality” in Special Education

(1) DG Prop Pool	AG Adv Rate	DG Adv Rate	(a) DG/AG Ratio Adv Rate	(b) Abs Df Btw Rates (pp)	(2) DG Prop of Adv	(c) Rel Df Bwt (1) and (2)	(d) Abs Df Btw (1) and (2)
20%	20%	36.7%	1.83	16.7	31.4%	57.2%	11.4
20%	10%	21.8%	2.18	11.8	35.2%	76.2%	15.2
20%	3%	8.4%	2.79	5.4	41.1%	105.6%	21.1
70%	20%	36.7%	1.83	16.7	81.1%	15.8%	11.1
70%	10%	21.8%	2.18	11.8	83.6%	19.4%	13.6
70%	3%	8.4%	2.79	5.4	86.7%	23.9%	16.7

See [IDEA Data Center Disproportionality Guide](#) subpage of Discipline Disparities page.

# Summary Re IDC

## Disproportionality Measures

General reductions in assignment rates tend to:

- (a) increase relative difference in assignment rates (IR1)
- (b) reduce absolute differences in assignment rates (IR2)
- (c) increase relative differences between DG proportion of pool and DG proportion of those assigned (Corollary 2 to IR1)
- (d) increase absolute difference between DG proportion of pool and DG proportion of those assigned (Corollary 2 to IR1)

- We can, however, draw sound inferences on the basis of the rates of assignment of AG and DG (EES).
- We cannot draw sound inferences on the basis of the proportion DG comprises of pool and the proportion it comprises of persons assigned because we can only interpret the actual outcome rates.



- A further problem with the measures of differences between the proportion DG comprises of the pool and the proportion DG comprises of those experiencing an outcome, such as measures (c) and (d) in IDC guide, is that result is affected by the proportion DG comprises of the pool in a way that is unrelated to the strength of the forces causing the rates to differ, as illustrated in Table 23(d) and 24.
- But this is nuance of an measure that is unsound for other reasons.

Table 23(d). Effects of Prevalence of Outcome of Measures from IDC Guide for Identifying “Significant Disproportionality” in Special Education (b5618a1)

(1) DG Prop Pool	AG Adv Rate	DG Adv Rate	(a) DG/AG Ratio Adv Rate	(b) Abs Df Btw Rates (pp)	(2) DG Prop of Adv	(c) Rel Df Bwt (1) and (2)	(d) Abs Df Btw (1) and (2)
20%	20%	36.7%	1.83	16.7	31.4%	57.2%	11.4
20%	10%	21.8%	2.18	11.8	35.2%	76.2%	15.2
20%	3%	8.4%	2.79	5.4	41.1%	105.6%	21.1
70%	20%	36.7%	1.83	16.7	81.1%	15.8%	11.1
70%	10%	21.8%	2.18	11.8	83.6%	19.4%	13.6
70%	3%	8.4%	2.79	5.4	86.7%	23.9%	16.7

See [IDEA Data Center Disproportionality Guide](#) subpage of Discipline Disparities page.

Table 24. Effects of DG Representation in Pool on Measures from  
 IDC Guide for Identifying “Significant Disproportionality” in  
 Special Education

(1) DG Prop Pool	AG Adv Rate	DG Adv Rate	(a) DG/AG Ratio Adv	(b) Abs Df Btw Rates (pp)	(2) DG Prop of Adv	(c) Rel Df Bwt (1) and (2)	(d) Abs Df Btw (1) and (2)
20%	10%	21.8%	2.18	11.8	35.2%	76.2%	15.24
30%	10%	21.8%	2.18	11.8	48.2%	60.9%	18.27
40%	10%	21.8%	2.18	11.8	59.2%	48.0%	19.20
50%	10%	21.8%	2.18	11.8	68.5%	37.1%	18.52
60%	10%	21.8%	2.18	11.8	76.6%	27.6%	16.56
70%	10%	21.8%	2.18	11.8	83.6%	19.4%	13.55
80%	10%	21.8%	2.18	11.8	89.7%	12.1%	9.70