Evaluation Brief:

The relation between office discipline referrals and school enrollment status: Do rates differ
based on enrollment size?

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Research Statement and Rationale

This evaluation brief examines the rate of office discipline referrals (ODRs) for different
school-grade levels based on student enrollment. Using a cohort of schools that recorded ODRs
over 3-years with the School-wide Information System (SWIS), rates are compared across years
for elementary, middle, high school, and K-8/12 grade levels.

The two evaluation questions addressed are (a) "Based on school size, what is the number
of schools with ODRs for each grade level across a 3-year cohort?" and (b) "Based on school
size, what is rate of ODRs for each grade level, across each year?" Descriptive summaries that
address these two questions can provide benchmark data against which school and district staff
using SWIS to collect and summarize ODR data can compare their schools. In addition, these
summaries can serve to evoke further discussion and examination of the role that ODRs might
play in school-wide behavior support research and practice.

Data Sources

The data sources for this research brief are (a) the School-wide Information System
(SWIS) and (b) the Common Core of Data provided by the U.S. Department of Education's
National Center for Education Statistics (NCES). SWIS is a web-based application that allows
school personnel to record, track, and use office referral data to make data-based decisions for
behavior support at individual-student, student-group, and school-wide levels (May et al., 2003).
The NCES Common Core of Data includes information describing school, student, and staff
characteristics for public elementary and secondary schools in the United States, reported
annually by state education officials (Department of Education, National Center for Education
Statistics, 2006).

Data Presentation

Sample

The cohort of schools in this report included public schools from any U.S. state if they
met the following criteria: (a) used SWIS with integrity[1] to collect ODR data during the entire 3-
year span of 2005-06 to 2007-08; and (b) agreed to share their SWIS data, in aggregated form,
for research purposes. Preschools, private schools, and alternative schools were excluded from
analyses.

These 1,129 schools were classified by grade level and by student enrollment. Grade-
level categories included K-6 (*n* = 750), 6-9 (*n* = 213), 9-12 (*n* = 61) and K-8/12 (*n* = 105). Using

data reported to NCES in 2005-06, schools also were categorized into the following five NCES school enrollment categories: less than 300, 300-499, 500-999, 1000-1499, and 1500 or more. See Table 1 for classification of sample by grade level and enrollment.

Table 1
Number of SWIS Schools with ODRs Based on School Size Across a 3-year Cohort

School enrollment[a]	Grade level			
	K-6	6-9	9-12	K-8/12
Less than 300	143	12	6	37
300-499	333	42	9	37
500-999	262	129	16	30
1000-1499	12	30	30	1
1500 or more	0	0	0	0
Total	750	213	61	105

[a]School enrollment categories are based on 2005-06 NCES criteria.
$n = 1,129$ schools across years of 2005-06, 2006-07, 2007-08.

ODR rates were calculated for each school by dividing the total number of ODRs by the number of students enrolled for the year. In order to improve comparability across schools with varying school days, this value was then divided by the total number of days for the year and multiplied by 100, thus providing an "average daily rate" of ODRs per 100 students for each school. Only "major" ODRs were included in the analyses (referrals recorded by schools as a result of a "minor" behavior violation are used inconsistently across elementary schools and less commonly by middle and high schools).

Tables 2-4 provide ODR rates for each grade level, classified into NCES school enrollment categories, for each of the three cohort years.

Table 2
Office Discipline Referrals by Student Enrollment for 3-year Cohort of 1,129 Schools During 2007-2008

School enrollment[a]	K-6	6-9	9-12	K-8/12
	ODR rate M (SD)	ODR rate M (SD)	ODR rate M (SD)	ODR rate M (SD)
Less than 300	.37 (.34)	1.44 (1.29)	1.78 (2.75)	.80 (.75)
300-499	.40 (.43)	1.09 (.81)	1.30 (.50)	.58 (.41)
500-999	.30 (.43)	.82 (.63)	1.03 (.95)	.71 (.70)
1000-1499	.17 (.08)	.52 (.42)	.67 (.39)	.20 (--)
1500 or more	--	--	--	--
Total	.36 (.41)	.86 (.71)	.99 (1.12)	.69 (63)

Note. ODR rate = ODR per 100 students per day.
[a]School enrollment categories are based on 2005-06 NCES criteria.

Table 3

Office Discipline Referrals by Student Enrollment for 3-year Cohort of 1,129 Schools During 2006-2007

School enrollment[a]	K-6	6-9	9-12	K-8/12
	ODR Rate *M* (*SD*)	ODR Rate *M* (*SD*)	ODR Rate *M* (*SD*)	ODR Rate *M* (*SD*)
Less than 300	.40 (.33)	1.40 (1.15)	1.06 (1.02)	.89 (.78)
300-499	.41 (.45)	1.12 (.86)	1.13 (.71)	.69 (.45)
500-999	.28 (.24)	.96 (.68)	1.48 (.94)	.91 (1.00)
1000-1499	.22 (.06)	.51 (.47)	.78 (.73)	.14 (--)
1500 or more	--	--	--	--
Total	.36 (.37)	.95 (.75)	1.06 (.85)	.82 (.76)

Note. ODR rate = ODR per 100 students per day.
[a]School enrollment categories are based on 2005-06 NCES criteria.

Table 4

Office Discipline Referrals by Student Enrollment for 3-year Cohort of 1,129 Schools During 2005-2006

School enrollment[a]	K-6	6-9	9-12	K-8/12
	ODR Rate *M* (*SD*)	ODR Rate *M* (*SD*)	ODR Rate *M* (*SD*)	ODR Rate *M* (*SD*)
Less than 300	.43 (.33)	1.74 (1.31)	1.25 (1.27)	.85 (.69)
300-499	.44 (.64)	1.31 (1.03)	1.63 (.75)	.84 (.55)
500-999	.29 (.26)	1.02 (.82)	1.51 (1.18)	.78 (.59)
1000-1499	.16 (.08)	.63 (.54)	.88 (.68)	.27 (--)
1500 or more	--	--	--	--
Total	.38 (48)	1.07 (.90)	1.19 (.94)	.82 (.61)

Note. ODR rate = ODR per 100 students per day.
[a]School enrollment categories are based on 2005-06 NCES criteria.

Summary of Findings

Total ODR rates indicate differences from 2005-06 to 2007-08 for all grade levels. Elementary school (K-6) ODR rates are .38 in 2005-06, and .36 in both 2006-07 and 2007-08. Middle schools vary from 1.07 to .95 to .86 for the three years, and high school ODR rates vary from 1.19 to 1.096 to .99 for the same three years. Schools in the K-8/12 category have an ODR rate of .82 in the earlier two years with.69 in 2007-08. Although these differences in the average daily rate of ODRs are apparent across all grade levels, they are less pronounced for elementary schools.

Importantly, even though these analyses were conducted using a 3-year cohort, rates across years are presented as differences rather than reductions. This description allows for varying years of SWIS implementation across schools, a variable not controlled for in these analyses.

In addition to presenting total rates for each grade level across cohort years, Tables 2-4 break-out ODR rates according to school enrollment size. The pattern of total ODR rates is fairly stable when considering school enrollment levels, although there is some inconsistency for high school and K-8/12 school categories. However, the smallest high schools (i.e., "less than 300") are represented by only 6 schools in the sample. K-8/12 schools present less-clear patterns, perhaps because of their wider possible range of grades (Spaulding et al., in press).

Finally, the descriptive summaries in this evaluation brief provide levels of ODR-rates that might be expected for any school using SWIS to collect and summarize office referral data. These rates might be considered guidelines for a "normal" ODR rate, based on grade level served and student enrollment. One finding is that, for the schools in this cohort, the larger the school, the lower the ODR rate for all grade levels.

References

Department of Education, National Center for Education Statistics (2006). *Public Elementary/Secondary School Universe Survey Data, 2005-06* [Database]. Retrieved August 20, 2008, and available from Common Core of Data, National Center for Education Statistics Web site, http://nces.ed.gov/ccd/

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[1] To reduce potential error in the data, several data checks were conducted prior to descriptive analyses which resulted in removal of schools with extreme or outlying SWIS values (e.g., schools sharing SWIS accounts, schools with multiple SWIS accounts, schools where students with ODRs was greater than the school enrollment).