

ODR Across Grade Levels

What are the patterns of office discipline referrals across grade levels?

Evaluation Brief

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Schools use office discipline referral (ODR) data to design and evaluate maximally effective and efficient behavioral support practices for their entire student populations. Research exists that suggests specific ODR patterns across grade levels that could indicate when support needs are greatest. Based on ODR data from one elementary-middle school with grades K-6, Putnam, Luiselli, Handler, and Jefferson (2003) found that the frequency of ODR increases during the elementary grades. Similarly, Tidwell, Flannery, and Lewis-Palmer (2003) examined ODR data from 16 elementary schools and found an increase in ODR rates from Grade 1 to Grade 5. Focusing both on frequency and type of behavioral violations in middle school grades, Tobin and Sugai (1999) showed that frequency of ODR for aggression related behaviors in Grade 6 predicted frequency of ODR for similar behaviors in the later middle school grades, and high ODR frequency in the later middle school grades predicted suspensions in Grade 9. In addition, Tobin, Sugai, and Colvin (1996) demonstrated that the type of behavior students engage in during Grade 6 predicts the type of behavior they engage in during Grade 8. Data from the longitudinal High School & Beyond dataset indicated that prior discipline problems in general and suspension and truancy in particular predicted dropping out of high school (Wehlage & Rutter, 1986). More recent high school data indicate that the drop-out rate of 16-24 year olds decreased from 14.1% in 1980 to 8.7% in 2007 (U.S. Department of Education, 2009). Students dropping out of school in 9th and 10th grades will likely impact the frequency of ODR in 11th and 12th grade. These findings suggest that patterns

of overall ODR frequencies as well as ODR frequencies by type of problem behavior across grade levels might offer insights into how to allocate resources and expertise to meet the behavioral support needs of students in varying grade levels. Within this context, our goal was to examine if the overall ODR frequency patterns across grade levels that have been documented in the literature can be replicated with a large national sample of schools using the School-wide Information System (SWIS; May et al., 2006) to record ODR.

SWIS is a web-based ODR data collection system that allows schools to record the occurrence of a number of behavioral violations and subsequent administrative decisions. Two levels of behavioral violations exist in SWIS: minor violations and major violations. Minor violations include low-intensity defiance, low-intensity disruption, inappropriate language, and inappropriate physical contact. Major violations include abusive language, insubordination, sustained disruption, and fighting. SWIS users are also encouraged to record their schools' overall enrollment to facilitate calculations of ODR rates across schools with varying student numbers. SWIS does not record enrollment by grade level. However, the National Center on Education Statistics (NCES) provides this information for most public schools in the United States.

Method

Our sample included all schools that (a) were located in the United States, (b) were not labeled as "alternative," and (c) used SWIS to record ODR during the most recent year for which NCES grade level enrollment data were available (2006-2007). Our dataset included only major ODR by grade level, because many SWIS users do not consistently record minor ODR and major ODR tend to generate administrative decisions that can be of significant consequence to the student.

A total of 2214 schools met all inclusion criteria. These 2214 schools were located in 44 states; Illinois was most frequently represented with 247 (11.2%) schools, followed by Maryland with 236 (10.7%) schools and Oregon with 223 (10.1%) schools. Table 1 provides an overview of the sample by school level.

Table 1: Overview of sample by school level

	Number	Percent
K-6	1437	64.9
6-9	430	19.4
9-12	138	6.2
K8-12	209	9.4
Total	2214	100

We aggregated major ODR recorded in SWIS by grade level as well as enrollment by grade level recorded through NCES. It is important to note that some schools that are labeled “K-6” might only have Grades 1-5, while some schools that are labeled “6-9” might have Grades 4-9. Therefore, sample sizes for each grade level are not identical with the sample sizes for each school level. Table 2 provides an overview of the sample sizes by grade level, total enrollment by grade level, total major ODR by grade level, mean grade level enrollments and standard deviations, and mean grade level major ODR and standard deviations.

Table 2: Sample size by grade level, total enrollment by grade level, mean grade level enrollment and standard deviations, total major ODR by grade level, and mean grade level ODR and standard deviations.

Sample size by grade level	Total Enrollment by grade level	Total major ODR by grade level	Mean (SD) grade level enrollment	Mean (SD) major ODR by grade level
Grade 1 (n = 1452)*	112,210	55,307	77.28 (40.73)	37.44 (51.23)
Grade 2 (n = 1456)	108,485	58,366	74.51 (37.91)	39.48 (55.56)
Grade 3 (n = 1458)	108,020	61,930	74.09 (38.72)	41.95 (50.68)
Grade 4 (n				

= 1448)	107,180	69,253	74.02 (40.50)	47.25 (57.14)
Grade 5 (n = 1406)	104,827	77,135	74.56 (45.13)	54.42 (66.17)
Grade 6 (n = 909)	118,850	139,572	130.75 (107.83)	152.31 (216.36)
Grade 7 (n = 617)	113,954	184,159	184.69 (119.31)	296.56 (366.01)
Grade 8 (n = 614)	113,930	184,502	185.55 (120.51)	302.15 (342.26)
Grade 9 (n = 201)	45,558	84,166	226.66 (215.30)	419.53 (618.55)
Grade 10 (n = 192)	38,384	57,065	199.92 (188.36)	296.66 (405.78)
Grade 11 (n = 188)	35,768	41,713	190.26 (185.69)	221.63 (328.15)
Grade 12 (n = 189)	32,710	28,148	173.07 (172.49)	148.71 (216.55)

*n indicates the number of schools in the dataset with the given grade level.

For example, a total of 1452 schools in our dataset had Grade 1. Within those 1452 schools, a total of 112,210 first graders were enrolled. The 1452 schools recorded 55,307 major ODR for first graders. The mean number of first graders in the 1452 schools was 77.28, with a standard deviation of 40.73. The mean number of major ODR recorded for first graders in the 1452 schools was 37.44, with a standard deviation of 51.23. We included means and standard deviations of enrollment to get a sense of the overall density of students by grade level within a school and the variability of it within our dataset. We included means and standard deviations of major ODR to get a sense of the average frequency of ODR by grade level within a school and the variability of it in our dataset.

To evaluate frequency patterns of ODR across grade levels, we calculated for each grade level the number of major ODR per 100 students enrolled by

dividing the number of major ODR for a grade level by the enrollment for that grade level and multiplying by 100. Major ODR per 100 students represents the number of ODR given by grade level. One student might receive multiple ODR. In addition, we calculated the number of students who received a major ODR per 100 students enrolled by dividing the number of students per grade level who received a major ODR by the number of students enrolled at that grade level and multiplying by 100. Students with major ODR per 100 students enrolled represents the number of unique students per grade level who received a major ODR.

Results

Overall, results replicated the findings that have been documented in the research literature. Figure 1 illustrates major ODR/100 students by grade level. The frequency of major ODR increased steadily from Grade 1 to Grade 5, increased quite dramatically from Grade 5 to Grade 6 and from Grade 6 to Grade 7, peaked in Grade 9, and then declined quite rapidly throughout the remaining high school grades. The middle school grades (6-9) clearly emerged as a period where student behavior support needs are particularly high. These high support needs might be due to students' entry into adolescence and concomitant tendency to challenge adult authority represented by institutionalized behavioral rules. At the same time, it is interesting to note that the mean number of students enrolled in Grade 6 (130.75) was almost twice as large as the mean number of students enrolled in Grade 5 (74.56), and that mean enrollment increased steadily until it peaked in Grade 9 (226.66) (see Table 2). This suggests that overall school size might make effective delivery of behavior support more challenging at a developmental period when it appears most critical.

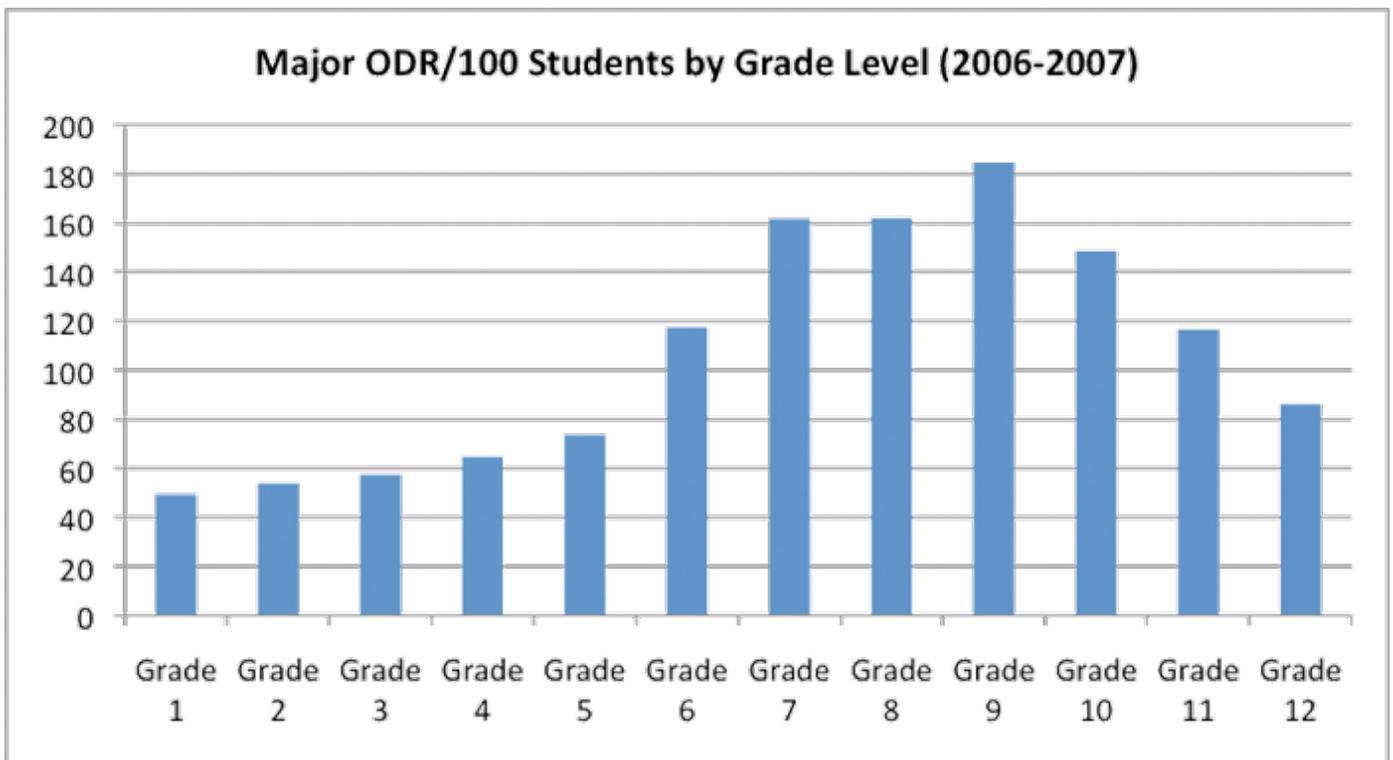


Figure 1: Major ODR per100 students across grade levels. Horizontal line indicates average across all grade levels.

Given that the literature suggests that students who experience behavioral challenges in prior years tend to drop out in high school (Wehlage & Rutter, 1986), the steady decline in ODR frequency after Grade 9 is of concern, because it might be a reflection of behavioral support systems not meeting the needs of those students who have significant support needs. On the other hand, the decline in ODR after grade 10 might also be partially due to students' increasing maturity. It is also worth noting that the frequency of ODR per 100 students exceeds 100 from Grade 6 through Grade 11. This might suggest that more students in those grade levels are likely to receive multiple ODR than students in the other grade levels.

The number of unique students who received a major ODR per 100 students enrolled by grade level is illustrated in Figure 2. The overall trends are similar to the frequency of major ODR given across grade levels. The number of students who received a major ODR rose steadily from Grade 1 to Grade 5, increased more sharply from Grade 5 to Grade 6 and from Grade 6 to Grade 7,

peaked at Grade 9, and then declined steadily through Grade 12. This overall pattern is likely due to the same speculations offered above. During the middle school years (Grades 6-9) more students receive one or more major ODR than during the elementary school years. The number of students who receive one or more major ODR declines in the high school years, possibly because many students with behavioral challenges opted to drop out of school, or because students are beginning to mature into young adults.

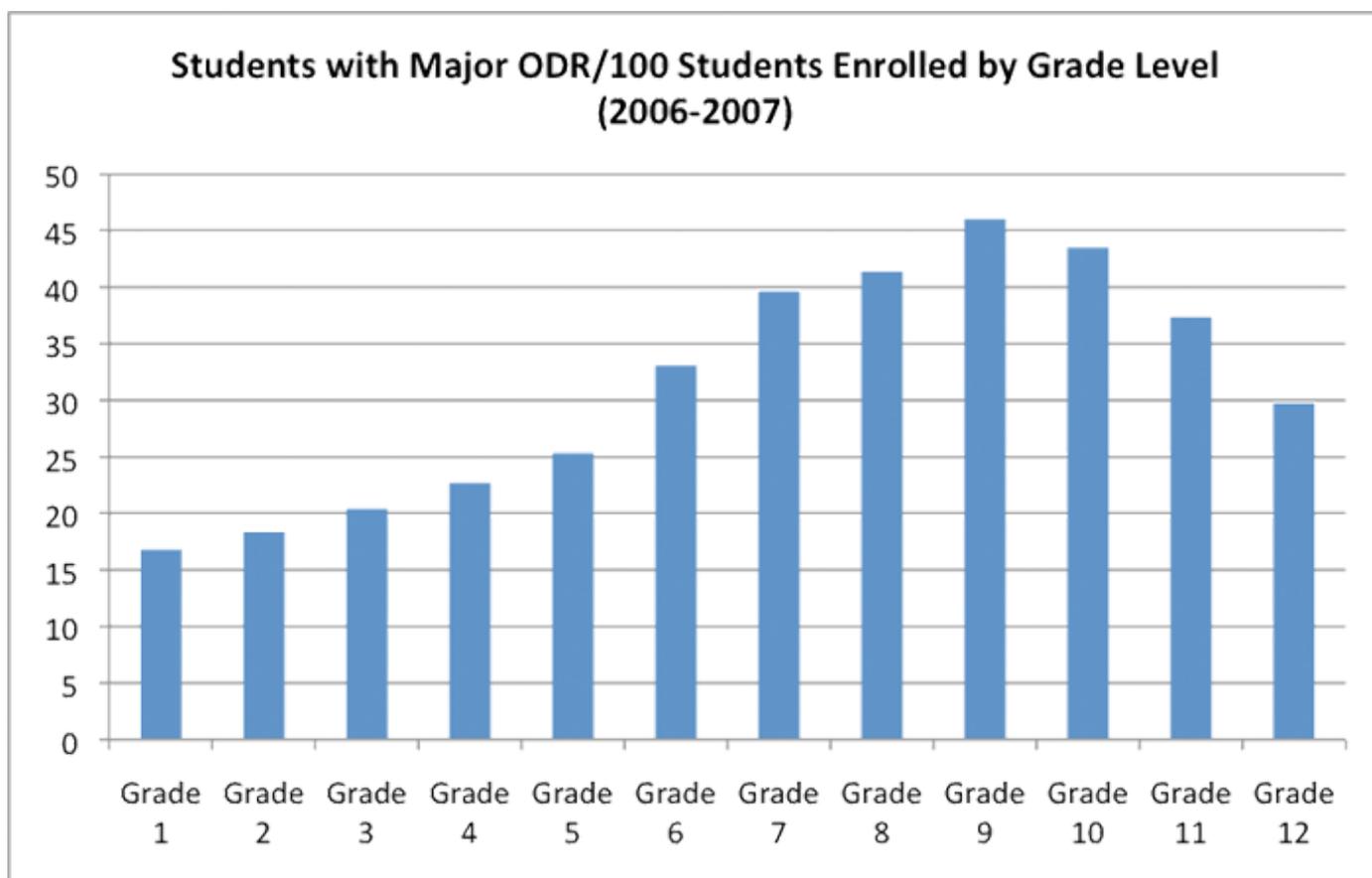


Figure 2: Students with major ODR per 100 students enrolled across grade levels. Horizontal line indicates average across all grade levels.

Discussion

The patterns of ODR frequency in our dataset closely matched those reported in the literature. These patterns suggest that the behavioral support needs of school populations increase steadily with grade level until a peak is reached at Grade 9, when frequency of ODR begins to decline. From a developmental perspective, these patterns are to be expected. From the perspective of

behavior support delivery, these patterns suggest that support demand increases with increasing grade level. If one assumes that the decline in ODR frequency after grade 9 is primarily due to students with high support needs leaving school, then one could conclude that behavior support delivery might have to be strengthened in the middle school years. However, the decline in ODR frequency after grade 9 could also be due to students' increasing maturity, which might make behavioral violations as a way to challenge adult authority less common. In general, our findings might allow schools to allocate resources within their building to meet the demands of students at varying grade levels in the most effective and efficient manner.

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