

***If discipline referral rates for the school as a whole are reduced, will rates for students with disabilities also be reduced?***

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Students with disabilities are over-represented in school discipline (Cooley, 1995; Fabelo et al., 2011; Krezmien, Leone, & Achilles, 2006; Rausch & Skiba, 2006; SRI International, 2006; Zhang, Katsiyannis, & Herbst, 2004). Taking the school-wide framework known as Positive Behavioral Interventions and Supports (PBIS, Horner et al., 2009; Sailor, Dunlap, Sugai, & Horner, 2009; Sugai & Horner, 2010), many schools have been able to reduce rates of discipline referrals for the school as a whole (Bradshaw, Debnam, Koth, & Leaf, 2009; Simenson et al., 2012). PBIS is a multi-component intervention based on a three-tiered model of primary, secondary, and tertiary levels of *prevention* adapted for schools from community health (Walker et al., 1996; Walker & Shinn, 2002). Almost all schools begin with a focus on primary prevention (Tier 1) which consists of school-wide, universal interventions for all students and staff, although the goal is to achieve full implementation of all 3 tiers, using a Response to Intervention type approach (Tobin, Rossetto Dickey, Horner, & Sugai, 2008).

Although research on PBIS has been funded for more than a decade by the federal Office of Special Education Programs with the idea that PBIS, as a framework for implementing evidence based practice, will enable students in special education who are included in general education schools to be more successful, outcomes are traditionally reported for the school as a whole and separate analyses for sub-groups are not common (Vincent, Cartledge, May, & Tobin, 2009). Disaggregating data can be helpful for school leaders who are interested in making sure their interventions benefit small sub-groups, such as students receiving special education services, not just the dominant groups.

A recent search for studies with a focus on outcomes for students receiving special education services within schools implementing a PBIS school-wide framework had limited findings. Cheney, Blum, and Walker (2004) reported that students identified as “at-risk” for special education benefitted from a school-wide positive behavior support program. The current report seeks to address the potential benefit for a reduction in office discipline referrals for students with Individualized Education Programs (IEPs) of PBIS and/or school-wide discipline in accord with the School Wide Information System (SWIS, May et al., 2006; see <http://www.swis.org>). SWIS often is used as part of the data for decision-making processes in conjunction with PBIS (Tobin, 2006).

**The primary purpose of the study was to answer the question: “If schools are able to reduce discipline referral rates for major offences for the school as a whole, will the number of students in special education (i.e., students with an IEP) who receive discipline referrals be reduced?”**

For this study, we analyzed SWIS records from schools across the nation. Although the number of students with (IEPs) in each school was not available, the number of students with IEPs who received Office Discipline Referrals (ODRs) was available, along with the total number of all students who received ODRs and other information to be explained in more detail shortly.

The study was limited to schools that had at least 5% of the students in their SWIS data set listed as having an IEP, each of the years involved. The reason for this criterion was that in

the final year, 2010-2011, SWIS initiated a policy that when a student’s name is first entered into the data set, information about whether or not the student has an IEP must be entered. Previously, entering IEP data was optional and it had been noticed that many schools did not enter it at all and others entered IEP sporadically rather than systematically (see Appendix for more technical notes this). In order to work with schools we could assume to be fairly consistently entering IEP data for students with ODRs, even before SWIS made that mandatory in 2010-2011, all schools that entered at least one special education student in their SWIS data set were identified, the percentage of the total enrollment listed as having both an IEP and an ODR was calculated, and only schools with at least 5% of the total enrollment listed as having both an IEP and an ODR were included in the data set for the final analysis. In addition to seeking schools that appeared to be consistently entering IEP status in their SWIS data, we selected schools that reduced their rate of ODRs substantially. “Rate per day per 100 students” is calculated by the following formula:  $((\text{Number of ODRs} / \text{Number of school days}) / \text{Enrollment}) * 100$ .

A “substantial” reduction was defined as at least a 10% reduction in referrals for major offenses over a three year period. A “major” offence is different from a “minor” offence in that “minor” offences are low intensity problem behaviors that are violations of behavioral expectations (rules) but not of sufficient intensity to warrant administrative action. For specific descriptions of major offences (e.g., arson, assault), see Todd, Horner, & Tobin (2010).

The initial set of national SWIS data came from schools that had agreed to allow their data to be used in research and met the following requirements: (a) continuous use of data for 3 years: 2008-2009, 2009-2010, and 2010-2011; (b) were entering IEP data these 3 years (identified – at first – as having at least one student in their SWIS data set with an IEP, later changed to the 5% criteria described above); (c) not an alternative or juvenile justice school; (d) entered their enrollment and number of school days; and (e) had at least a 10% decrease in rate of major ODRs from the first to the last year ( $\text{PctChange} = (\text{Major\_OdrRate201011} - \text{Major\_OdrRate200809}) / \text{Major\_OdrRate200809}$ ; any school with a less than -0.10 value was eliminated).

The number of schools meeting the 5% criterion all 3 years was 90. From that number, it was necessary to eliminate 5 schools with errors (e.g., enrollment data missing or enrollment of 29 students but 54 students have IEPs and ODRs and only 29 school days the a school year) or other indications that the years would not be comparable (e.g., type of school – grade levels served -- changed during the 3 years).

The final number of schools for the study of students with IEPs was 85. By grade levels served, 13 were elementary schools, 50 were middle schools, 18 were high schools, 2 were PreK-8, and 2 were PreK-12. The following list shows the 22 states involved and the number and percentage of schools located in each state:

	Frequency	Percent
Colorado	1	1.2
Florida	2	2.4
Illinois	16	18.8
Iowa	2	2.4
Kansas	2	2.4
Kentucky	5	5.9
Maryland	1	1.2
Michigan	8	9.4
Minnesota	1	1.2
Missouri	1	1.2

Nebraska	1	1.2
New Hampshire	7	8.2
New Jersey	1	1.2
New York	6	7.1
North Carolina	1	1.2
Ohio	14	16.5
Oregon	7	8.2
Pennsylvania	1	1.2
South Carolina	3	3.5
South Dakota	1	1.2
Tennessee	3	3.5
Vermont	1	1.2
Total	85	100.0

These 85 schools, all of whom reduced ODR rates for the school as a whole over 3 years by 10% or more, on average also reduced the number of ODRs for students with IEPs. Table 1 shows the average number of students referred during the year in each school, the standard deviation, and the total number for the year for all schools combined.

Table 1

*The Number of Students, Including Students in Special Education, Involved in ODR Declines*

	All Students with ODRs	ODR Students with IEPs
Year 1 2008-2009	Average = 264 ( <i>SD</i> = 143) Total = 22,399	Average = 46 ( <i>SD</i> = 24) Total = 3,940
Year 2 2009-2010	Average = 246 ( <i>SD</i> = 132) Total = 20,890	Average = 42 ( <i>SD</i> = 22) Total = 3,547
Year 3 2010-2011	Average = 220 ( <i>SD</i> = 117) Total = 18,709	Average = 41 ( <i>SD</i> = 20) Total = 3,492

Figure 1 illustrates the decline in the total number of all students who had ODRs and Figure 2 illustrates the decline in the total number for students with IEPs who had ODRs.

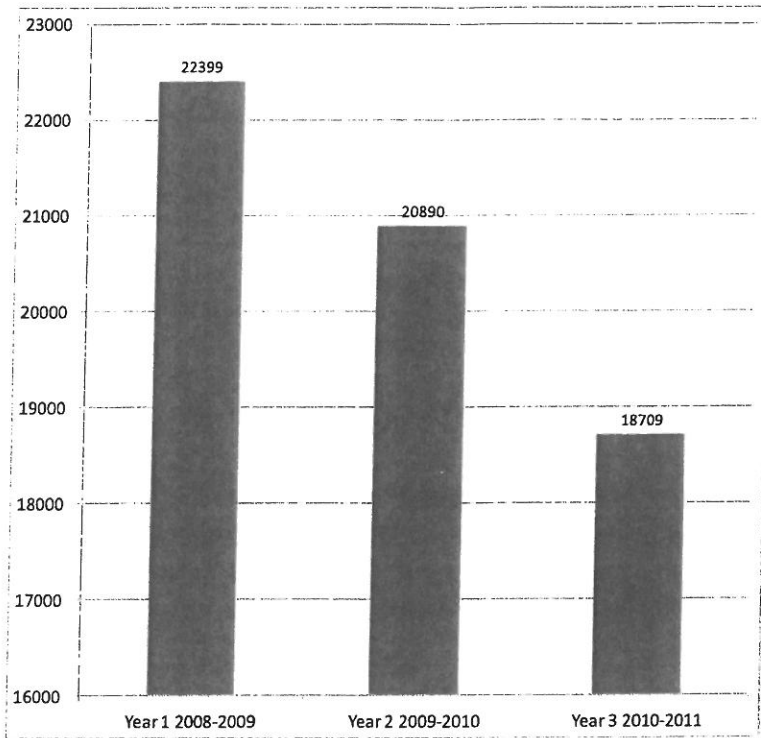


Figure 1. Total Number of All Students with ODRs for All Schools (N = 85).

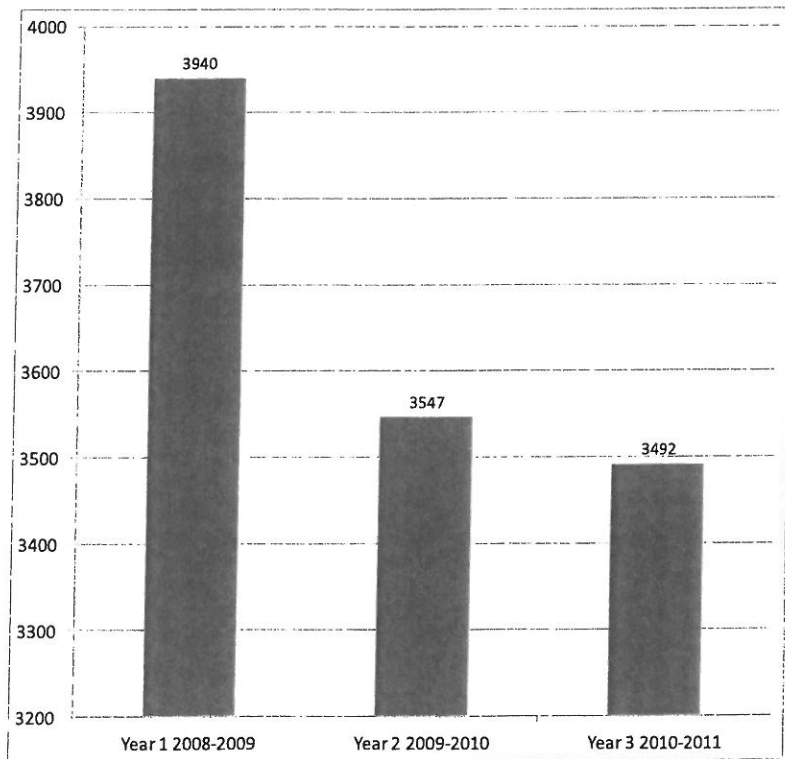


Figure 2. Total Number of Students with ODRs and IEPs for All Schools (N = 85).

The results of this analysis indicate that if schools reduce their rates of major ODRs, the number of students with IEPs who receive ODRs, as well as the total number of all students involved in disciplinary incidents, in general, will be reduced over time. However, the percentage of all students with ODRs who are students with IEPs may tend to increase slightly over time, possibly reflecting the reality that it may be easier to resolve general education students' behavior problems than those of students in special education. It may also reflect the intensified documentation needs for students with IEPs.

The results must be viewed cautiously, given the lack of information about the interventions being implemented that were associated with the overall reduction in major ODR rates, and the lack of information what additional factors may have influenced the increases and decreases in the percentages of students with ODRs who also had IEPs. Schools should study their data to see if interventions that are helping the school as a whole are also helping students in special education.

### *Conclusion*

PBIS, when implemented well, is known to reduce ODR rates for major problem behaviors for students as a whole. However, results typically have not been disaggregated to indicate if students in special education, as well as general education students, benefit. The results of this study indicate that if schools that are using SWIS (many PBIS schools do) reduce their rates of major ODRs, the number of students in special education who receive ODRs, as well as the total number of all students involved in disciplinary incidents will be reduced over time. This is important because students in special education generally tend to be over-represented in disciplinary incidents and unless data are disaggregated, overall results for all students may not provide information needed to understand the impact of school-wide interventions, such as PBIS, on sub-groups with special needs.

In this sample of 85 schools, 47 (54%) used at least one on-line measure of fidelity of implementation of PBIS (see Tobin, Vincent, Horner, Rossetto Dickey, & May, 2012, for information on such measures) during the 3-year period studied. Others may have been using PBIS without measuring fidelity or may have used paper and pencil assessment tools.

This study answered the following question for a national sample of 85 schools that reduced Office Discipline Referral (ODRs) rates by 10% or more: "If schools are able to reduce discipline referral rates for major offences for the school as a whole, will the number of students in special education (i.e., students with an IEP) who receive discipline referrals be reduced?" The answer was "yes."

Future researchers are encouraged to use measures associated with Tier 2 and Tier 3 interventions, such as the *Individual Student School-wide Evaluation Tool* (ISSET, Anderson et al. 2011) and the *Benchmarks for Advanced Tiers* (BAT; Anderson et al. 2009), in addition to using instruments that assess only the implementation of Tier 1 (e.g., *School-wide Evaluation Tool*, SET, Horner et al., 2004). In particular, attention should be given to interactions that would impact other subgroups within the larger student population such as factors like race, ethnicity, and culturally responsive implementation (Tobin & Vincent, 2011; Vincent, Cartledge, May, & Tobin, 2009; Vincent, Randall, Cartledge, Tobin, & Swain-Bradway, 2011; Vincent, Sprague, & Tobin, 2012; Vincent, Swain-Bradway, Tobin, & May, 2011; Vincent, Tobin, Hawken, & Frank, in press; Vincent & Tobin, 2011) of a full three-tiered approach to PBIS that benefits students in special education.

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### **Appendix: Technical Notes**

We were interested in schools that include students in special education in their documentation of disciplinary problems. It might be possible for a school to have a policy where students in special education do not receive ODRs but rather, if a behavior problem occurs, it would be managed in some other way. However, in this study of extant disciplinary data, it was not possible to know if any of the schools involved had such special programs. Federal law does require schools to track disciplinary incidents involving students in special education that might be related to a change in placement, such as an out-of-school suspension, which the law says includes sending a student home due to behavior problems. Some schools used to avoid counting this as an ODR for special education student but that is no longer allowed. However, schools are not required to use SWIS to track such events. Thus, schools that appear in the SWIS data set as ones that are not tracking ODRs for students in special education must be considered outliers for purposes of the current analysis. In the SWIS data set, “zero” was the default and was used if the school did not report whether or not a student with a discipline referral had an IEP (SWIS contained information only on students with discipline referrals). Thus, when SWIS indicated that a school had “zero” students with IEPs who received discipline referrals, typically that school simply was not recording information on IEPs in the SWIS data set. Prior to 2010-2011, recording IEP information in SWIS was optional. In 2010-2011, the SWIS software was revised so that when a student’s name was initially entered, information on the student’s IEP status would be required. However, the school staff still had the option of having a policy of always indicating “no IEP” if they did not want to track that in the SWIS data set. That is, SWIS is a service that the schools pay to use and it is designed for their use, not for use in a research project (although they may give permission for secondary data analysis). In other words, unlike a research project with paid, trained, and supervised data collectors and procedures for calculating inter-observer agreement, SWIS data is school self-report data. This is important to take into consideration when we find schools reporting that “zero” students in special education received ODRs, especially if they have students in special education included in their school. It would be unusual for none of the students in special education to have a discipline referral, given that typically students in special education are over-represented in the group of students who have discipline problems.