High school reform remains a national priority and focus. On a federal level, the Obama administration recently set a goal that, by 2020, the United States will once again attain the highest proportion of college graduates in the world (U.S. Department of Education, 2011). To realistically attain such a goal, high schools must be in a position to adequately prepare their students for postsecondary experiences. As such, improving high schools has become a significant priority among legislative and policy-making groups, professional educational associations as well as federal research centers and foundations (Association for Supervision and Curriculum Development, 2011; Bill and Melinda Gates Foundation, 2009; National Governor’s Association, 2011).

Although there are many areas to focus on when considering how to improve our nation’s high schools, student behavior is an essential element in creating effective learning environments that facilitate instruction. Unfortunately, there is ample evidence to suggest that high schools are quite challenged in meeting the behavioral needs of their students. The findings were that tardies, defiance/disrespect and skip/truancy were the most common types of ODRs generated at the high school level. Those in the freshman class were the most likely of all students to receive an ODR, and the majority of those students who generated multiple referrals requiring intensive behavior supports (e.g., 6 or more ODRs), did so by mid-winter of the academic year.

At the high school level, student behavior issues, ranging from those that are mild to more severe, have largely been addressed on a case-by-case basis through individual student referrals to a discipline office, resulting in exclusionary consequences such as school suspensions (R. Skiba & Rausch, 2006). Although these exclusionary responses are the most common ways in which behavioral issues are handled, they are associated with a number of undesirable outcomes, such as diminished instructional minutes, which, in turn, are the strongest predictor of academic achievement (Algozzine, Wang, & Violette, 2011). Other well-documented deleterious correlates, associated with student behavior and subsequent school punitive responses, are school dropout and entry to the juvenile justice system (McEvoy & Welker, 2000; Skiba & Rausch, 2006; Wald & Losen, 2003).

Historically, school responses to student behavior have focused on punishing or excluding the individuals who grave concern when they happen on school grounds. For example, 7.7% of 9th to 12th grade students reported being threatened or injured with a weapon on school property, and nearly 20% of students reported being bullied within the last 12 months.

At the high school level, student behavior issues, ranging from those that are mild to more severe, have largely been addressed on a case-by-case basis through individual student referrals to a discipline office, resulting in exclusionary consequences such as school suspensions (R. Skiba & Rausch, 2006). Although these exclusionary responses are the most common ways in which behavioral issues are handled, they are associated with a number of undesirable outcomes, such as diminished instructional minutes, which, in turn, are the strongest predictor of academic achievement (Algozzine, Wang, & Violette, 2011). Other well-documented deleterious correlates, associated with student behavior and subsequent school punitive responses, are school dropout and entry to the juvenile justice system (McEvoy & Welker, 2000; Skiba & Rausch, 2006; Wald & Losen, 2003).

Historically, school responses to student behavior have focused on punishing or excluding the individuals who...
engage in the misbehavior. However, recent attention to addressing student behavior has additionally focused on ways to address the broader school culture and to design systems for behavioral supports for students on a prevention-oriented basis (McIntosh, Horner, & Sugai, 2009). Understanding the social context in which behaviors occur, rather than focusing solely on the individual student, is increasingly being regarded as a preferred way to address student behavior (Brown-Chidsey & Steege, 2005; Sinclair, Christenson, & Thurlow, 2005). By focusing on patterns of behavior on a whole-school basis, we can begin to put behavior in a social context and move away from focusing exclusively on responding punitively to the individual behavior of high school students.

**Use of Office Disciplinary Referrals as Schoolwide Behavioral Indices**

As part of a focus on the entire school as the unit of analysis, office discipline referrals (ODRs) are an indicator often used to track schoolwide behaviors and the surrounding conditions when behavioral concerns occur (e.g., location, behavioral type, time of day). ODRs are written records of schoolwide behavioral issues commonly collected in most schools and are a source of data already available to school personnel. However, very little has been written about the use of ODRs at the high school level in terms of how they might operate in evaluating whole school behavior, school contextual factors that contribute to such behaviors, and the results of systemwide behavioral interventions intended to address the issues. A major purpose of this study is to start a dialogue about how ODRs might be utilized at the high school level to broaden our understanding of the social context of behavior.

**ODRs as Metrics of School Behavior Indices in Elementary and Middle Schools**

The literature about ODRs has primarily been concentrated in elementary and middle schools (e.g., Irvin et al., 2006; Irvin, Tobin, Sprague, Sugai, & Vincent, 2004). A number of caveats have been articulated about their use in evaluating student behavior. One concern is that ODRs tend to be a reflection of student overt (externalizing) behaviors rather than those more internalizing in nature (Kalberg, Lane, & Menzies, 2010; McIntosh, Campbell, Carter, & Zumbo, 2009). Another is that they include only those reported to the office, and each school (or teacher) defines and applies referral procedures differently; thus, a student behavior may result in different responses in different schools.

Despite the aforementioned concerns with respect to the use of ODRs, they are potentially useful sources of data naturally collected in schools, particularly when they are viewed as reflecting not only student behavior but also other school factors, such as policy implementation, school climate, and contextual issues as well as administrator and staff philosophy and priorities (Morrison, Peterson, O’Farrell, & Redding, 2004; Morrison, Redding, Fisher, & Peterson, 2006). Although ODRs are susceptible to incongruities in collection (e.g., ambiguously defined behavior codes, inconsistency in when and under what conditions data are collected, lack of staff training in their use), a number of procedures have been documented that increase their utility as a credible indicator of schoolwide behavioral performance.

For example, the schoolwide information system (SWIS; May et al., 2003), an electronic database that retains electronic records of ODRs, has been developed and utilized to allow for the collection, reporting, and analysis of ODRs through the use of a standard protocol. Applying Messick’s (1988) unified approach to construct validity, Irvin and colleagues (Irvin et al., 2004, 2006) have documented that ODRs can function as a credible schoolwide metric of school behavior when school staff systematically use standard procedures, aligned with databases such as SWIS. Standard procedures include staff professional development in defining operationally defined student behaviors in mutually exhaustive categories, instruction in when and how to write ODRs, and ways to generate and utilize reports based on ODRs. Irvin and colleagues, through surveying school personnel employing SWIS procedures in elementary and middle schools, found that ODRs were seen as useful and efficient indices of schoolwide behavior and were sensitive to evaluating outcomes of school-based behavioral interventions. Similarly, Sprague, Sugai, Horner, and Walker (1999) concluded that ODRs were useful sources of data in determining and evaluating the types and intensity of interventions needed in 11 elementary and nine middle schools across seven districts. Overall, although there are certainly limitations to the use of ODRs as measures of school climate or schoolwide indicators of behavior, when ODRs are written and utilized in a systematic manner, they can function as clinically relevant pieces of schoolwide behavioral data used to drive and evaluate interventions. Having a better understanding of how ODRs operate, particularly at the high school level, is important as we broaden our understanding of systemwide high school behavior and how to address behavior in our school reform efforts.

**ODRs as Indices of Schoolwide Positive Behavior Support (SWPBS) Implementation Outcomes**

ODRs are schoolwide metrics used to evaluate universal applications of SWPBS. SWPBS is a prevention-oriented approach to teaching expected behaviors to the entire stu-
dent body, focusing on the delivery of supports along a multiltiered continuum, beginning with universal (school-wide) supports that are intended to systematically define and teach behavioral expectations, followed by acknowledging all students for engaging in them. Group or specialized supports for students and, ultimately, individualized or intensive supports for those who are most at risk are then offered for those who continue to struggle behaviorally (Horner et al., 2009). Data are used to evaluate the outcomes of the support and to facilitate decisions about the needed intensity of each intervention.

The preponderance of studies using ODRs is based in elementary and middle schools. Case study evaluation of SWPBS at the middle school level has shown some evidence that when SWPBS is implemented with fidelity, it is associated with reductions in ODRs and improved school climate (Lassen, Steele, & Sailor, 2006). More recently, an elementary level evaluation of SWPBS employing a randomized, wait-list control experimental design has similarly documented that, when implemented with fidelity, SWPBS is associated with reductions in ODRs, perceptions of school safety, and the proportion of third graders meeting state reading benchmarks (Horner et al., 2009).

High school SWPBS findings. Although there is far less available research on SWPBS implementation at the high school level, preliminary case study evaluations have also employed ODRs as a metric in evaluating the universal components of SWPBS. For example, Bohanon and colleagues, in an evaluation of a large urban high school implementing universal SWPBS with fidelity, reported associated reductions in ODRs (Bohanon et al., 2006; Morrissey, Bohanon, & Fenning, 2010).

In addition, there have been two national forums exclusively focused on high school universal SWPBS implementation that have featured structured dialogue among those implementing SWPBS in high schools. Two monographs about high school implementation are products of these efforts. The first forum, held in May of 2004, involved participants from 29 high schools and 10 states (Bohanon-Edmonson, Flannery, Eber, & Sugai, 2005). One of the recommendations at that time was for an increased focus on considering the unique factors of high schools when implementing SWPBS and evaluating the outcomes of such efforts. In the summer of 2009, a second forum was held with participants who had experienced success with universal SWPBS implementation for at least one year (based on SWPBS fidelity measures), engaged in structured team meetings, and could report on student outcomes. The resulting monograph (Flannery & Sugai, 2009) provided information from the perception of implementers about how they adapted typical universal SWPBS procedures to accommodate the nuances in high schools (e.g., departmentalized structure, adolescent developmental/independent stage of students, multiple administrators, sheer size, database issues) to make universal SWPBS work for them. Although the findings reported were not based on controlled studies, the combined results of the two forums demonstrated that universal SWPBS implementation is possible at the high school level and that adjustments need to be made because of the unique nature of high schools.

Given the national focus on high school reform and the importance of examining school level behavior as part of such efforts, the purpose of this study is to begin a dialogue about how ODRs might be used in high schools for these purposes. We explore ODRs in a large sample of high schools that formally collected SWIS discipline data during the 2005–2006 school year. The same school-based data set utilized in the Spaulding and colleagues’ (2009) study was used in the current research. Therefore, as was found in the Spaulding et al. study, the sample includes schools employing SWIS procedures in utilizing ODRs as part of their universal efforts in examining behavior. A primary rationale for studying ODRs and their patterns in the sample of high schools is that it allows us to gain a better understanding of the types of problem behaviors that generate ODRs in high schools, as well as patterns around the ways in which particular types of ODR might accumulate across the year, and what percentage of students accrue multiple ODRs, and in which categories. We would expect that the types of behaviors to emerge would be primarily nonviolent in nature and would represent the types of discipline issues typically handled in high schools, such as tardies and truancies (Fenning et al., 2008; R. Skiba & Rausch, 2006). We anticipate that the descriptive findings will inform us as to how ODRs might operate within a social context at the high school level and how they might function to evaluate the outcomes of universal behavioral interventions.

Method

Data Collection

The data for this study were obtained from a national database of ODRs. These data were entered by local districts using an Internet-based application, SWIS. SWIS is a database interface system with a number of protocols in place to ensure more consistent and accurate data. To receive training and obtain access to SWIS, a district “SWIS facilitator” must be identified and work with school personnel to (a) develop a referral system sufficient to support more accurate and usable data and (b) define in operational terms the types of behaviors that are managed in the classroom versus those that are sent to the office (e.g., ODRs). Once trained in the use of SWIS, the facilitator must provide direct training on the use of SWIS application to enter data and retrieve reports (Todd & Horner, 2007).

The primary data entry categories available for reporting of behavior referrals include behavior, date, time, motivation, and location. Only date, location, and behavior type were used in this study. Motivation was not included because
the most frequent motivation provided for an ODR was “unknown” (40%) or unclear (22%). A total of 35 behavior categories are provided and defined in the SWIS database (definitions available at www.swis.org). The database also allows the school to designate each behavior as “major” and/or “minor.” This is usually designated based on the severity of the offense or the repetition of an offense. Generally, a minor behavior is managed in the classroom and a major in the office. For example, a bomb threat would clearly be a major ODR. In another example, the school policy may require the first two student disruptive events reported by a single teacher as minor referrals, and then beginning with the third incident, the teacher would submit a major ODR and refer the student to the office. In the current analyses, only ODRs categorized as “major” were used.

Sample Characteristics

The study sample included high schools that had data in SWIS from the 2005–2006 school year and provided consent for their data to be accessed for research purposes. Schools identified as alternative or juvenile justice schools were excluded from analysis, resulting in a total of 112 high schools. The school demographic information (e.g., student enrollment, free/reduced lunch rate [FRL; proxy for socioeconomic status; SES], and locale) was collected from the NCES database. In all, 55% of the schools had fewer than 1,000 students. Of the 112 high schools, 27% reported that 51% to 100% of their student body received FRL. Eight schools did not report FRL data and four did not report student enrollment. Schools were grouped into three location categories: 50% were rural (population below 25,000), 20% were midsize city (25,000–250,000), and 27% were large cities (more than 250,000).

Demographics were also available at the student level and behavioral referral level. There were 45,751 students with at least one referral in the data sample. Males and females were evenly represented, with 51% of students being male and 49% female. SES of the sample was determined using the general indicator of the percentage of the student population who receive FRL. Ethnic representation of student populations can be entered in SWIS, but was not required at the time of analysis, so a large percentage of the sample was missing this information (73%). It is worthy to note that in the Spaulding et al. (2009) study, a comparison of the student demographic data of SWIS with NCES databases found that the demographic characteristic data from SWIS was similar to the NCES data with a few notable differences. The exceptions for high schools were (a) more schools with larger enrollment (more than 1,000), (b) fewer schools with enrollment less than 100, (c) fewer high-SES schools (more schools where students received FRL), and (d) fewer schools with 0% to 10% non-White in SWIS than in the NCES database.

Basic descriptive statistics were the primary analysis for this article. Due to the differences in student enrollment and/or the number of school-day days, when calculating rate of ODRs across schools, the metric number of ODRs per 100 students per school day was used. To use this metric, both the number of school days in the school year (available in SWIS database) and the school enrollment (available in SWIS and NCES) are necessary ([total ODRs / enrollment × 100] / number of school days per school year). In this study, 22 schools were missing one or both of these data and thus were excluded from any analysis of rate of ODRs, reducing the final sample for these analyses to 90 high schools.

Results

Rate of ODRs

From the 112 high schools in the sample, a total of 190,169 major behavior incidents were recorded. Ninety of the schools provided enrollment and days in the school year which allowed the calculation of ODR rate. The average ODR rate across the schools was 1.2 ($SD = 0.49$). This rate of referrals (1.2) in a school of 1,200 students would mean approximately 12.4 ODRs per day, or 62 per week. The mean ODR rate per 100 students per school day for 91 high schools as reported by the SWIS national database for 2005–2006 (http://www.swis.org) was 1.51 ($SD = 1.62$). Schools with fewer than 100 students had the highest average (1.9) whereas larger schools (more than 1500) were much lower with an average of only 0.92. There was some difference in ODRs in schools with high FRL (71%–100%) and low FRL (0%–33%), which had averages of 1.0 and 1.5, respectively. There was
only slight difference in the average of ODRs between rural (1.1), midsize city (0.09), and large city (1.3).

A majority of the ODRs were from classrooms with a mean of 64% (SD = 18.8%), with the next closest location being Hall/Breezeway at 7.73% (SD = 8.22%). The distribution of ODRs by grade level was also examined. Overall, the percentage of ODRs generated by the sample decreased with grade level—40% from 9th graders to 29%, 18%, and 13% from 10th, 11th, and 12th graders, respectively.

The data were analyzed using the three standard groups used by SWPBS for reporting of ODRs (zero–one, two–five, and six or more ODRs). About 70% of students received zero to one ODRs, 19% received two to five ODRs, and 11% of students received six or more ODRs. Figure 1 provides the mean percentage of students who generated the ODRs in each of the standard groups. The 19% of students in the sample with two to five ODRs during the academic year produced about 40% of the total ODRs. The students in the sample generating the most referrals (six or more) produced 45% of the total number of ODRs in the database.

### Types of Problem Behaviors

Students in this sample received ODRs for behaviors in 19 different behavior categories. There were also ODRs for whom the reporter indicated “other behavior” (8.2%) or “unknown” (0.3%). The total ODRs, percentage of all ODRs, and the standard deviation are presented in Table 1. The most commonly reported problem behaviors in all of the ODRs were defiance/disrespect (24.2%), skip/truant (18.6%), and tardy (17.7%).

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Percentage of All Categories of Office Discipline Referrals (N = 112 schools)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage of all ODRs</td>
</tr>
<tr>
<td></td>
<td>n</td>
</tr>
<tr>
<td>Defiance/disrespect</td>
<td>45,203</td>
</tr>
<tr>
<td>Skip/truant</td>
<td>38,984</td>
</tr>
<tr>
<td>Tardy</td>
<td>44,674</td>
</tr>
<tr>
<td>Disruption</td>
<td>19,110</td>
</tr>
<tr>
<td>Other behavior</td>
<td>11,834</td>
</tr>
<tr>
<td>Abusive/inappropriate language</td>
<td>10,586</td>
</tr>
<tr>
<td>Fighting</td>
<td>6,255</td>
</tr>
<tr>
<td>Dress code violation</td>
<td>3,352</td>
</tr>
<tr>
<td>Harassment/bullying</td>
<td>1,988</td>
</tr>
<tr>
<td>Use/possession of tobacco</td>
<td>1,956</td>
</tr>
<tr>
<td>Use/possession of drugs</td>
<td>1,156</td>
</tr>
<tr>
<td>Lying/cheating</td>
<td>1,396</td>
</tr>
<tr>
<td>Forgery/theft</td>
<td>1,180</td>
</tr>
<tr>
<td>Property damage</td>
<td>616</td>
</tr>
<tr>
<td>Use/possession of alcohol</td>
<td>421</td>
</tr>
<tr>
<td>Unknown</td>
<td>405</td>
</tr>
<tr>
<td>Use/possession of weapons</td>
<td>393</td>
</tr>
<tr>
<td>Vandalism</td>
<td>367</td>
</tr>
<tr>
<td>Use/possession of combustible items</td>
<td>178</td>
</tr>
<tr>
<td>Bomb threat/false alarm</td>
<td>58</td>
</tr>
<tr>
<td>Arson</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>190,169</td>
</tr>
</tbody>
</table>

Note: ODR = office discipline referrals.

### Accumulation of ODRs Across the Year

As described previously, ODRs within SWPBS are summarized into three categories: zero to one ODR, two to five ODRs, and six or more ODRs. As the year progresses, students can move between categories as students accumulate ODRs across the year, resulting in the percentage of students in the zero-to-one ODR category decreasing across the year, and the percentage of students in the categories of two-to-five and six or more ODRs increasing as subsequent referrals are generated. Students will be duplicated across categories when examined by months. In other words, a student who was in the first category (zero–one) in August and received more ODRs in September and/or October would transition into the two-to-five group in October.

The accumulation pattern for the students in the sample who received ODRs was calculated. Across the year (August–July), 118,938 students accumulated a total of 190,169 ODRs and the rate of change was steady in all categories with no large peaks throughout the year in any grouping. Table 2 indicates how many ODRs were generated each month and the number of students who generated ODRs for that specific month. For example, in the month of September, 3,730 students received 2 to 5 referrals, which summed to a total of 9,980 referrals, whereas in March of the same school year, 4,573 students received 2 to 5 referrals, which equaled a total of 12,310 referrals.

### Examination of the Top Three Problem Behaviors

More than 60% of the ODRs in this sample are recorded within the top three categories of problem behaviors (Table 1). As a result, further analysis of the most common behaviors leading to referrals and the students that contributed to them was done. A total of 34,129 students received ODRs in one or more of these top three categories. Figure 2 reports the distribution of those students (N = 34,129 students) across these three categories. The number of students who received one or more ODRs in each of these categories is equal, with defiance/disrespect being the largest category at 18,771 students. Many of the students who received a referral in one of these categories received at least one referral in another of the categories (27%) and 10% of the students who received referrals for one or more of these top behaviors did so across all three of the most common behavioral categories. Of all students receiving an ODR in the top three categories, 25% of the students (n = 8,532) had only received an ODR related to defiance/disres-
respect, whereas 30% \((n = 10,239)\) of the students with a defiance/disrespect ODR also had at least one ODR for skip/truant and/or tardy. In all, 75% of the students with ODRs in these categories \((n = 25,598)\) had at least one ODR related to attendance—either skip/truant and/or tardy, with 17% \((n = 5,802)\) of the students receiving at least one for both of these behaviors (skip/truant and tardy).

Table 2. Per Month Count of Students and Office Discipline Referrals \((N = 112\) schools)

<table>
<thead>
<tr>
<th>Month</th>
<th>1</th>
<th>2–5</th>
<th>6+</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>Number of ODRs</td>
<td>Number of students</td>
<td>Number of ODRs</td>
<td>Number of students</td>
</tr>
<tr>
<td>August</td>
<td>2,106</td>
<td>2,106</td>
<td>853</td>
<td>2,210</td>
</tr>
<tr>
<td>September</td>
<td>6,792</td>
<td>6,792</td>
<td>3,730</td>
<td>9,980</td>
</tr>
<tr>
<td>October</td>
<td>8,257</td>
<td>8,257</td>
<td>4,516</td>
<td>11,986</td>
</tr>
<tr>
<td>November</td>
<td>8,280</td>
<td>8,280</td>
<td>4,605</td>
<td>12,413</td>
</tr>
<tr>
<td>December</td>
<td>6,604</td>
<td>6,604</td>
<td>2,921</td>
<td>7,532</td>
</tr>
<tr>
<td>January</td>
<td>7,350</td>
<td>7,350</td>
<td>3,556</td>
<td>9,363</td>
</tr>
<tr>
<td>February</td>
<td>7,864</td>
<td>7,864</td>
<td>4,233</td>
<td>11,239</td>
</tr>
<tr>
<td>March</td>
<td>8,173</td>
<td>8,173</td>
<td>4,573</td>
<td>12,310</td>
</tr>
<tr>
<td>April</td>
<td>6,918</td>
<td>6,918</td>
<td>3,197</td>
<td>8,392</td>
</tr>
<tr>
<td>May</td>
<td>6,576</td>
<td>6,576</td>
<td>3,279</td>
<td>8,476</td>
</tr>
<tr>
<td>June</td>
<td>1,105</td>
<td>1,105</td>
<td>220</td>
<td>516</td>
</tr>
<tr>
<td>July</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>70,028</td>
<td>70,028</td>
<td>35,683</td>
<td>94,417</td>
</tr>
</tbody>
</table>

Note: ODR = office discipline referrals.

a Due to the cumulative nature of this total no absolute total is included in the table.

Figure 3. Cumulative percentage of students the ending year with \(\geq 6\) ODRs by month of first referral \((n = 11,161\) all ODR categories, 3,830 skip/tardy categories, 1,603 defiance/disrespect category)

Note: ODR = office discipline referrals.

Examination of Students With Six or More Referrals

The last analysis was for the students who received six or more ODRs in any behavior category by the end of the year. Specifically, Figure 3 indicates the month in which those students (with six or more ODRs by the end of year) began to accumulate referrals. The data presentation also allows for a comparison of students with six or more ODRs in any category with those students who had six or more ODRs within the top three categories of behavior. For the purposes of the analyses, tardy and skip/truant were combined into a single
category as they both relate to missing some or all of class. Within the first full month of school (September), 59% \((n = 6,071)\) of these students had begun receiving formal ODRs to the office (from any category). By December, the percentage of students rose to 93%. Similarly, in an examination of the skip/truant/tardy data as well as the defiance/disrespect data, 50% \((1,965 \text{ and } 824 \text{ students, respectively})\) of the students who, across the school year, received six or more ODRs had already received at least one ODR in the category by the end of September. By December, this percentage increased to 91% for both groups. These three sets of data (e.g., all ODRs, skip/truant/tardy, defiance/disrespect) indicate that the vast majority of students who acquire six or more ODRs during the school year begin generating them early and continue at a similar rate across the year.

**Discussion**

High schools face the challenges of supporting all students to meet high academic standards, and maintaining a safe and positive school climate for students to learn and teachers to teach. High school teachers report that behavioral issues impact their teaching to a larger extent than their elementary colleagues (NCES, 2009). Taking a systems approach to meeting these challenges requires the ongoing collection and use of data for decision making. The primary purpose of this descriptive research was to describe the patterns of ODRs for high schools as well as identify some of the challenges and future research needed for high schools using discipline data. The overall patterns of ODRs in 112 high schools, the accumulation of ODRs by the students with high rates of ODRs (six or more), and the specific patterns of the top three ODRs in high schools were examined.

**Overall Patterns of ODRs in High Schools**

The descriptive analysis of the data set indicated that there was an average rate of 1.2 ODRs per hundred students per day, which is comparable with other studies (Bohanon et al., 2006; Spaulding et al., 2009). The ODRs reported in our study are slightly under the SWIS National database of 1.6. Because the 20 schools that were eliminated from our analysis included those from alternative or juvenile justice settings, and these would likely be settings where we would anticipate that a higher number of ODRs would be likely generated, our data are possibly an underestimate of ODRs generated at the high school level. In this study, as well as others, ODRs in high schools appear to have a high base rate of referrals (Morrison et al., 2006; R. Skiba & Rausch, 2006; Spaulding et al., 2009; Wald & Losen, 2003). The sheer number of ODRs is not surprising, given the developmental stage of adolescence (e.g., questioning authority), the number of adults that high school students interact with across the day, and a schedule that perhaps creates an increased opportunity for behavioral concerns to occur (e.g., four–eight class changes per day, open campus, increased probability of being in unstructured settings). More work needs to be done to replicate these findings in high schools that differ with respect to a range of school contextual variables (e.g., discipline philosophies, size, gender, racial/ethnic composition). The overall rate of ODRs was fairly stable across locale and the percentage of students qualifying for FRL, but varied across school size. Smaller schools had the highest rate of ODR and largest schools, the lowest. This difference across school size could be due to variance in student–teacher ratio or to teachers in small schools “knowing” all the students.

Prior research studies focused on lower grade levels have indicated that ODRs gradually increase from elementary through high school (Spaulding et al., 2009). This study found ODRs to be highest for 9th graders and then decreased in subsequent high school grades (e.g., decreases from 9th to 10th, 10th to 11th). The transition to high school has been documented as a difficult time for students in academics, social behavior, and attendance (Roderick & Camburn, 1999; Seidman, Aber, Allen, & French, 1996). This supports the need to focus professional development for teachers and staff of freshman students and for SWPBS efforts to perhaps be concentrated with those in the 1st year of high school. There is also a need for preventive interventions and further research in which cohorts of students are followed across the four years of secondary school, as it is not known whether the decrease in ODRs as students age is due to improvements in older students’ behavior or related to undesirable outcomes, such as those who generate referrals dropping out of high school (Wald & Losen, 2003).

**Accumulation of ODRs**

An implication of a higher rate of ODRs for high schools is the sheer quantity of students that will need additional support. It is generally accepted in the implementation of SWPBS that a school’s systems are working when approximately 80% of students receive zero to one ODRs, 15% receive two to five ODRs, and no more than 5% receive six or more (Sugai, Sprague, Horner, & Walker, 2000). In our sample, about 20% of the students had two to five referrals and contributed about 40% of the ODRs. If these general percentages (80%, 15%, and 5%) are applied to the large population in high schools, the actual number of students requiring these targeted and intensive supports for one or more behaviors would be quite large. For example, using the average from this study sample, a high school with an enrollment of 2,000 students and 19% of the students receiving two to five referrals would need to develop targeted...
level supports in some area of behavior for 380 students. It is noteworthy that in this study, those students who are likely to need Tier 2 or Tier 3 supports begin to obtain ODRs early in the school year, with the vast majority of students (e.g., 93%) having met the threshold of six or more ODRs by the midpoint of the year (e.g., semester change). Clearly, these students need support at the beginning of the school year to change their behavior so as to not miss instructional time (and to save administrative time). There is need for future research and practice to (a) monitor student behavior closely and intervene in the very early months of the school year, (b) develop and evaluate systems to deliver the additional supports to students, and (c) conduct research to validate the types of targeted and intensive support systems for students in high schools.

Due to the high number of ODRs generated for attendance-related behaviors, more research and guidance for practice is needed to understand the use of the guidelines of zero to one, two to five, and six or more ODRs for determining the level of intensity of support in high schools. Typically, a student with six or more referrals would be considered for individual intensive support, but this might not make sense for attendance behaviors (e.g., tardy). The higher rate of accumulation of these behaviors may be due to the data collection procedures used in schools. Typically, schools have standard procedures for regular observation and recording of this behavior each period, up to eight periods per day.

**Examination of Most Frequent ODRs**

As has been previously reported, nonviolent offenses tend to be the most common types of behavioral concerns seen in educational settings (R. Skiba & Rausch, 2006). The findings of the current study indicate that skip/truant, tardy, and defiance/disrespect are among the most common types of high school ODRs. The closer examination of these top three behaviors indicated that the rate of ODRs for this sample was almost three times the average for all ODRs. Of the students with six or more ODRs, 75% had an ODR in skip/truant and/or tardy. The largest percentage of ODRs was defiance/disrespect, but the majority of those students also had at least one ODR in attendance (e.g., skip, tardy). When SWPBS supports are planned, it is likely that punctuality, behavior, and respect would need to be directly taught and acknowledged on a schoolwide basis at an early point in the school year, perhaps reducing the need for more intensive interventions associated with group and individual supports. Additional factors, perhaps not considered in other settings when examining a variety of infractions, might need to be considered at the high school, given the more adult-like responsibilities that adolescents have (e.g., student employment outside of school, caring for younger siblings).

**Implications for SWPBS at the High School Level**

Initial research efforts to examine the implementation of SWPBS in high schools have been exploratory in nature (Bohanon-Edmonson et al., 2005; Flannery & Sugai, 2009). These case studies and description of school systems and practices are building the foundation for SWPBS as a potential approach to high school behavioral and academic challenges. This study’s broad look at ODRs in high schools can inform the development of implementation plans for SWPBS in high schools. The four integrated elements considered in SWPBS implementation plans are outcomes, systems, practices, and data (Sugai et al., 2010). Outcomes are academic and behavior targets that will be used to guide the school’s implementation and evaluation. This descriptive study provides information for high schools when developing relevant outcomes such as the impact of reductions in attendance and disrespect categories on their school and differences across grade level of the students. Previous research also would warrant a focus on outcomes by ethnicity (Skiba, Michael, Nardo, & Peterson, 2000).

SWPBS also emphasizes the establishment of organizational supports or systems that give school personnel capacity to use effective interventions accurately and successfully. One of the critical systems is ongoing professional development for staff. In general, McIntosh, Campbell, et al. (2009) have expressed the need to provide ongoing professional development opportunities that focus on improving the accuracy of ODRs (e.g., inconsistency of definitions, staff tolerance, teacher bias, administrator perceptions, and student ethnicity). Professional development also will need to focus on motivation or function of behaviors. This is new content for most high school staff and will likely increase the accuracy of reporting behavioral function on ODR forms, and increase the likelihood that intervention decisions that are made are function based and tied to the specific needs of the student and context (Crone, Horner, & Hawken, 2004). Other topics for future professional development include (a) direct instruction in writing behavioral referrals, (b) importance of consistency in reporting ODRs, (c) clarification of categories for motivations behind behavior, (d) impact of function/motivation on student’s behavior, (e) importance of analysis by ethnicity and grade, and (f) using ODRs and other data for decision making.

A second system that high schools struggle with is the data system. The current data systems used by high schools are developed for accountability, focusing on yearly reports to the school board or state educational agency. This results in the inability of school staff to easily access data to monitor students on an ongoing basis. In addition, these data systems do not easily allow for accurate examination of academic and behavioral data together. The ease of data accessibility is
important to school teams who use it for decision making (Flannery & Sugai, 2009). New systems or “dashboards” need to be developed so school teams can examine this data efficiently on at least a monthly basis.

Practices, the third integrated element, focuses on the adoption of evidence-based interventions and strategies. The findings from this study indicated that across high schools, more than 60% of the ODRs generated were in the areas of defiance/disrespect and skip/truancy/tardy. Clearly, high schools need to emphasize the development of their beginning practices, both academic and social, to prevent these behaviors. Also the pattern for high school students who are at risk for—and/or ultimately—drop out of school is often marked with an inconsistent pattern of attendance, such as skipping school, losing instructional minutes, and experiencing discipline consequences, such as suspension (R. J. Skiba et al., 2000; Tobin & Sugai, 1999; Wald & Losen, 2003). Schools should examine the literature on dropout prevention especially as it relates to the school context (e.g., McEvoy & Welker, 2000; Sinclair et al., 2005) as well as the monographs focused on implementation of SWPBS in high schools (Bohanon-Edmonson et al., 2005; Flannery & Sugai, 2009) to identify interventions and practices.

As mentioned earlier, providing 20% of the students targeted or individualized supports is a large task. It is important for schools to perhaps not automatically think of the three levels (80%, 15%, and 5%) commonly considered in elementary and middle school settings as stringent cutoff points to begin services, but as a continuum for delivery of preventive services that occur early on in the year. Within the universal SWPBS model, supports are delivered on a continuum that might be reconceptualized at the high school level. For example, a number of focused services could be conceptualized for targeted behaviors and/or subpopulations within the school (e.g., teaching particular behavioral expectations tied to skip, tardy, and disrespect in designated locations), but implemented on a universal (schoolwide) basis, given the sheer numbers of referrals generated in these domains. For a school with large numbers of ODRs generated by ninth graders, it might be more efficient for the school to add some additional universal supports for all ninth graders related to attendance and disrespect as a preventive system, thus stopping the need to provide targeted services to a large group of ninth graders who receive two to five referrals. High schools need to take a systematic approach that includes (a) provision of more comprehensive universal supports to meet the needs of more than 80% of students, (b) teaching/reteaching of behaviors early in the year, (c) provision of supplementary supports in addition to universal behavioral programming, and (d) use of empirically validated screening tools (Brown-Chidsey & Steege, 2005; Kalberg et al., 2010; Sugai & Horner, 2007).

As high schools identify new programs or practices to meet the needs of these students, they must also ensure that they have the personnel and time to implement them. High schools often have a large number of initiatives, student supports, or practices in their schools (Flannery & Sugai, 2009). The school team should examine their current initiatives/strategies such as drug prevention programs, anger management groups, and so on to be sure the school is being efficient in addressing the needs of all students in a systematic manner, not duplicating efforts or the work of multiple teams, using evidence-based practices, and collecting data on outcomes. Once a systematic approach is taken to provide behavioral supports along a continuum, additional practices can be developed planfully and in a way that avoids duplication of existing services and supports.

Schools need to establish the practice of the use of data for decision making to develop and monitor effects of preventive interventions. Kincaid, Childs, Wallace, and Blase (2007) found that staff identified the use of data as a key component to the implementation of SWPBS. Moroz (2004) found that 70% of the respondents claimed the use of data for decision making was a high priority, but 63% reported data-based decision-making procedures were not in place. The teams noted that resistance to the use of data was due to staff’s lack of involvement and time constraints with data entry, organization, and reporting (Moroz, 2004). Last, SWPBS data analysis at the high school level needs to include academic performance and problem behavior data, when exploring predictors of student outcomes and successful high school completion (Spaulding et al., 2009). Ways for teams to review these data, and intervene as early—yet as efficiently—as possible, are directions for future study. Future research might examine the relationships among ODRs, attendance rates, academic concerns, and dropout rates with a high school population to obtain base rate information about these highly interrelated variables.

The results of this descriptive analysis provide useful but preliminary messages for high schools implementing SWPBS: (a) ODRs in high schools appear to have a high base rate of referrals, and decrease over the age spans (e.g., 9th to 10th), suggesting a need to prioritize behavioral supports for 9th graders; (b) more than 70% of total ODRs occur in the areas of disrespect, disruption, and attendance (e.g., skip, truancy, tardy) with 75% of the students with six or more referrals having at least one for attendance, which is an area of future focus; and (c) students accumulating multiple referrals do so in the early part of the year, which would lead to recommendations for interventions in the beginning months of school.

**Limitations of Findings**

The current results should be viewed with some caution as data were drawn only from high schools that used the SWIS system and did not include alternative—or those within juvenile justice—systems. Given that high schools, unlike
lower grades, often place students with significant and chronic problem behaviors in alternative schools (Sughrue, 2003) and ODR rates appear to be much higher in alternative schools, more research is needed on the discipline problems of alternative schools as well as the interaction between the availability of alternative schools and the discipline problems of other high schools in the district. This analysis also did not control for contextual variables such as school size, discipline philosophy, gender, and racial/ethnic composition. In addition, an analysis of ODRs from a larger sample would be helpful to establish a norm for high school ODRs. The collection of more substantial high school base rate data could be used in designing reliable and valid decision rules as to when students in high school are not responding to less-intensive interventions and should receive more intensive supports through either group/targeted or individual supports. Future research as to when students’ social and behavioral needs can be maintained and/or supported by universal supports at the high school level should be examined.

The use of ODRs in and of themselves is a limitation given that they are not complete records of behavioral infractions. The previously identified limitations should be considered when comparing totals across schools, or even within one school across time (Morrison et al., 2004, 2006). Researchers (Lassen et al., 2006; McIntosh, Campbell, et al., 2009; Walker, Cheney, Stage, & Blum, 2005) have cautioned school communities to address the variety of influences (e.g., inconsistency of definitions, internal vs. external behaviors, staff tolerance/bias, and administrator perceptions) that can affect ODR data by providing professional development opportunities that focus on improving the accuracy of ODRs.

Due to missing data, it was not possible to meaningfully examine perceived behavior motivation (function) and data on the student characteristic of ethnicity. In previous studies, ethnic minority students (e.g., African American males) have been shown to be disproportionately represented in ODR samples, reflecting potential biases in referral mechanisms (Fenning & Rose, 2007; R. Skiba & Rausch, 2006). It is important that high schools enter and examine this data, and that researchers examine the ODR rates and patterns by ethnicity at the high school level as well as systematically compare high schools that differ with respect to ethnic minority composition, SES, and urban or rural environments.

In summary, this is a descriptive analysis of ODR data from 112 high schools across the nation that used the SWIS database. It provides initial information about ODR data patterns in high schools that are not useful to educational researchers and schoolwide teams when making decisions about what support systems are needed and what is working to meet social and behavioral needs in a building. At the same time, these data raise more questions about the relationships between multiple variables, inclusive of a range of school contextual factors, such as discipline philosophy, and the policies and practices that high schools engage in to address behavioral concerns. Future analysis is necessary to explore the general use of ODRs in a high school setting, perhaps as reliable progress monitoring measures of universal systems of support as well as to gauge how specific variables might predict ODRs, such as the influence of SES, school location, school size, and academic data.

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