

## ABSTRACT

Title of Thesis:

A LONGITUDINAL ANALYSIS OF  
DISPROPORTIONALITY IN STATEWIDE  
EXCLUSIONARY DISCIPLINE OF STUDENTS  
WITH DISABILITIES

Alisa Michele Williams, Master of Arts, 2016

Thesis Directed By:

Associate Professor Emeritus William Strein, D.Ed.,  
Counseling, Higher Education, and Special Education

The study examined the state-by-state changes in the rates of exclusionary discipline of students with disabilities compared to their non-disabled peers. Historically, students with disabilities have been excluded at rates that are out of proportion with their population. This study used state discipline to investigate the current status of disproportional exclusion of students with disabilities and if there are any regional trends in the discipline of students receiving special education services. Results indicate that in both the 2009-2010 and 2011-2012 school years, there were significant differences between the rates at which students with and without disabilities were disciplined. Students with disabilities were suspended at higher rates during both school years and expelled at higher rates during the 2011-2012 school year. Results also suggest that rates of suspensions and expulsions continue to be high, particularly for students with disabilities. Findings may help states and schools develop policies that promote fair discipline of students with disabilities.

A LONGITUDINAL ANALYSIS OF DISPROPORTIONALITY IN STATEWIDE  
EXCLUSIONARY DISCIPLINE OF STUDENTS WITH DISABILITIES

By

Alisa Michele Williams

Thesis submitted to the Faculty of the Graduate School of the  
University of Maryland, College Park, in partial fulfillment  
of the requirements for the degree of  
Master of the Arts

2016

Advisory Committee:

Associate Professor Emeritus William Strein, D.Ed., Chair

Clinical Assistant Professor Jill Berger Jacobson, Ph.D.

Assistant Professor Kelli Cummings, Ph.D.

© Copyright by  
Alisa Michele Williams  
2016

## Table of Contents

Table of Contents .....	ii
Chapter 1: Introduction .....	1
Rationale for Research Questions .....	3
Chapter 2: Literature Review .....	4
IDEA Regulations .....	4
Exclusionary Discipline .....	7
Alternative Discipline Procedures .....	13
Possible Causes of Disproportional Discipline of Students with Disabilities .....	18
IDEA 2004 and Subsequent Discipline Reform .....	25
Chapter 3: Methods .....	28
Description of Sample .....	28
Measures .....	30
Data Analysis .....	32
Chapter 4: Results .....	36
Chapter 5: Discussion .....	44
Discipline of Students With and Without Disabilities .....	44
Regional Trends in Discipline .....	46
Merits of the Study .....	47
Limitations .....	48
Future Directions .....	49
Appendix A: Mean Discipline Ranks .....	52
Appendix B: Discipline percentage tables .....	54
References .....	66

# A LONGITUDINAL ANALYSIS OF DISPROPORTIONALITY IN STATEWIDE EXCLUSIONARY DISCIPLINE OF STUDENTS WITH DISABILITIES

## **Introduction**

The history of education of students with disabilities is filled with practices that have later been deemed unethical, such as institutionalization and segregated teaching. Most of this history has been defined by exclusionary education and the slow progress toward inclusion over the course of the 20<sup>th</sup> century (Yell, 2012). Students with disabilities are still vulnerable to being excluded from schools through unfairly administered discipline practices. Although exclusionary procedures can be used to discipline general education students, a growing body of research shows that special education students are excluded from school at rates that are disproportionate to their population. Some have argued that the disproportionate exclusion of students with disabilities is a modern method of segregating those students who do not fit with school norms (Williams et al., 2013). Given the historical precedent for excluding students with disabilities from educational opportunities, school administrators must be wary of any practices that risk denying these students the education to which they are legally entitled.

Current discipline practices are largely dependent on exclusionary punishments such as suspension and expulsions (Brown, 2007; Noltemeyer & Mcloughlin, 2010a). While many school districts are turning to proactive behavioral interventions, such as positive behavior interventions and supports (PBIS) approaches, to reduce the need for more extreme discipline, exclusionary discipline continues to be prominently used in schools. Studies have shown that exclusionary discipline is disproportionality handed down to vulnerable groups. Much of the research on disproportionality has focused on the

unequal suspension and expulsion of African American males; however, students with disabilities are also given these punishments at much higher rates than would be expected based on their population (Losen & Gillespie, 2012). Although there is less research on the use of corporal punishment in public schools, the data available suggest that this punishment is also used more frequently on students with disabilities (Human Rights Watch, 2009).

Disproportional discipline of certain groups of students suggests that school administrators are not following objective, unbiased guidelines for managing student misbehavior. Rather, disproportionality may arise when administrators consciously or unconsciously allow assumptions about certain groups of students to color how they view misbehavior (Williams et al., 2013). The legal protections in place to protect students with disabilities from discrimination may not be translating into just discipline practices. Legislation aimed at reducing disproportional discipline (e.g., Individuals with Disabilities Education Act, 2004) may be the starting point for reducing unequal, unjust discipline. However, more investigations are needed to determine if legislative mandates have been effective and where future policies need to focus.

The current study investigates the following research questions:

1. To what degree, if any, has the disproportional discipline of students with disabilities changed between 2009 and 2011 subsequent to the revision of IDEA in 2004?
2. Are there any regional trends in the use of exclusionary discipline between 2009 and 2011 subsequent to the revision of IDEA in 2004?

### **Rationale for Research Questions**

**To what degree, if any, has the disproportional discipline of students with disabilities changed since the implementation of IDEA 2004?**

In line with research showing that exclusionary discipline is on the rise (Losen & Gillespie, 2012; Losen & Skiba, 2010), the proportion of students with disabilities who have been suspended or expelled may have increased from 2004 to 2011. Because students with disabilities are more likely to be suspended or expelled than their peers without disabilities, these students may have been more affected by increased use of exclusionary discipline, leading to a greater proportion of students with disabilities excluded over time. However, considering that IDEA 2004 prompted changes to disciplinary practices in order to address disproportional discipline, the proportion of students with disabilities who were excluded may have decreased from 2004 to 2011.

**Are there any regional trends in the use of exclusionary discipline since the implementation of IDEA 2004?**

There are demonstrated differences between school districts and states regarding which discipline practices are considered acceptable and which are most widely used. For example, in nineteen states, schools are legally permitted to use corporal punishment to control student misbehavior, whereas the remaining thirty-one as well as the District of Columbia have outlawed this practice (CED, 2010). The cultures of certain districts or states may influence the discipline practices that school administrators choose to hand down, and it is therefore possible that there are regional differences in disproportional discipline.

## **Literature Review**

The 1954 Supreme Court ruling of *Brown v. Board of Education*, which held that students could not be excluded or segregated from public school based on unalterable characteristics, led to push for inclusion in schools (Yell, 2012). Although most are familiar with the application of this ruling to racial desegregation, the “separate but not equal doctrine” also applies to students with disabilities who are receiving special education services. Following this court case, educational policies began to reflect the inclusion of students with disabilities in general education settings. The inclusion of students with disabilities became federal policy in 1975 with the passage of the Education for All Handicapped Children Act, later renamed the Individuals with Disabilities Act (IDEA), which was considered an education Bill of Rights for students (Yell).

### **IDEA Regulations**

IDEA allocates funding to schools that provide students with disabilities with: a) nondiscriminatory testing, evaluation, and placement, b) education in the least restrictive environment, c) procedural due process, d) a free education, and e) an appropriate education (Jacob, Decker, & Hartshorne, 2010). Under IDEA, students must be eligible for special education services under the following disability categories: learning disability (LD), speech or language impairment, mental retardation/intellectual disability/cognitive disability (CD), emotional disturbance (ED), autism, hearing impairment, visual impairment, deaf-blindness, orthopedic impairment, traumatic brain injury (TBI), other health impairment (OHI), developmental delay (DD), or multiple disabilities (Jacobs et al.)



According to the National Center for Educational Statistics (2014), the number of students served under IDEA has declined slightly, having reached a peak of 6.7 million students during the 2004-2005 school year. In 2011-2012 school year approximately 6.4 million students, or 13% of the total student population, received special education services. The group of students most commonly served under IDEA was students with LD (36%), while the next largest group was students with OHI (12%), followed by students with speech (11%) and language impairments (11%). Students with CD constituted 7% of those served under IDEA, while both students with DD and ED made up 6% of those served. Students with multiple disabilities constitute 2% of those served, while those with hearing impairments or orthopedic impairment made up 1% of those served. Students with deaf-blindness, TBI, and visual impairments accounted for less than 1% of children served under IDEA.

In recognizing the importance of inclusion, IDEA requires that students who receive special education must also be taught with their non-disabled peers to the maximum extent appropriate (IDEA Regulations, 34 C.F.R. § 300.550[b][1]). Only when the nature or severity of their disabilities prevent them from receiving an appropriate education in a general setting can students be moved to separate classes or schools (IDEA Regulations, 34 C.F.R. § 300.550[b][2]). Students placed in long-term alternative settings must continue to receive free and appropriate public education (IDEA, 20 U.S.C. § 1412[a][1]).

Students with disabilities must follow the same rules and may be subject to the same discipline procedures as students in the general population of the school; however, alternatives to the normal school discipline procedures can be included as part of a

students' individual education plans (IEPs; Yell, 2012). When disciplining students that qualify under IDEA, schools must take a student's disability into consideration (Yell). Manifestation determination hearings must determine if the student's behavior that violated the school's code of conduct had a direct or substantial relationship to the student's disability or was the direct result of the school's failure to properly implement the student's IEP (IDEA Regulations, 34 C.F.R., § 300.530[e][1]). If the hearing determines that the behavior was a result of neither the student's disability nor improper IEP implementation, the student may be disciplined in the same way as a non-disabled student and the change in placement may continue.

Although under most circumstances, IDEA prohibits schools from using long-term suspensions and expulsions if a student's behavior is related to his or her disability, there are exceptions to this policy. Schools may exclude students with disabilities from school for up to 45 school days without a manifestation determination if the student: a) brings, possesses, or acquires a weapon at school, on school premises, or at a school function, b) knowingly possess, uses, or sells illegal drugs or a controlled substance at school, on school premises, or at a school function, or c) has inflicted serious bodily injury to another person while at school, on school premises, or at a school function (IDEA, 34, C.F.R. § 300.530[g][1] *et seq.*).

Although discipline of students with disabilities has improved since the years of institutionalization, it is still not without controversy. The use of exclusionary discipline procedures has been scrutinized due to their associated negative consequences and the potential for misuse and abuse.

## **Exclusionary Discipline**

Exclusionary discipline removes students from their typical educational environment and includes suspensions (short-term disciplinary removals) and expulsions (long-term disciplinary removals; Noltemeyer & Mcloughlin, 2010; Yell, 2012). Although in many school districts, certain behaviors are marked for automatic expulsion (e.g. possessing a firearm), the specific behaviors that merit suspensions versus expulsions are often unclear, creating the potential for subjective use of these punishment procedures (Brown, 2007). For example, in one large, urban school district, principals decided on a case-by-case basis whether a student being disciplined for fighting would be suspended or expelled, and they also had considerable power to decide if an expelled student could return to school (Brown). Many excluded students in this district reported feeling like they had been unfairly treated and that the suspensions and expulsions were handed down for minor offenses that should not have merited such harsh punishment, often despite lack of evidence (Brown).

The US Department of Education allows suspensions of students with disabilities, reasoning that in order to maintain safety, schools may need to remove these students from their typical setting (Yell, 2012). Long-term disciplinary removals constitute a change of placement for students with disabilities, and are intended for students who are potentially violent or dangerous (Yell). Because of the risk of violating IDEA provisions on discipline and change of placement, expulsion of students with disabilities should be used with caution (Yell).

The use of suspensions and expulsions has been on the rise since the 1970's (Losen & Gillespie, 2012; Losen & Skiba, 2010); however, its increased use is not

necessarily merited. The punitive nature of exclusion ends up “sanctioning the ‘problem’ students, not alleviating students’ problems” (Brown, 2007, p. 449). Although schools commonly rely on these practices to manage student misbehavior, exclusion results in many negative consequences. By removing students from their classrooms, learning time is significantly reduced and students have greater difficulties readjusting to school when they return (Brown; Losen & Skiba, 2010; Noltemeyer & McLoughlin, 2010a). Students recognize that their exclusion causes them to miss out on classroom instruction, and many excluded students are below grade level in writing, reading, and mathematics (Brown). Although some argue that exclusion of problem students helps the good students learn, exclusion has not been found to increase test scores or graduation rates of those who are not excluded (Losen & Gillespie). Schools with high rates of suspensions tend to have poorer school climates that are not improved by excluding disruptive students (Skiba & Sprague, 2008).

Suspensions and expulsion not only fail to decrease disruptive behavior or violence (Skiba, 2002; Skiba & Peterson, 2000), but may actually increase it (Advancement Project, 2010). This may be due to some students viewing removal from the classroom as a reward rather than a punishment (Atkins et al., 2002). By itself, exclusionary discipline does not address students’ problematic behaviors, nor does it teach them alternative strategies that could prevent the need for future discipline (Brown, 2007). High rates of suspensions fuel a chain reaction of school disengagement, further suspensions, school failure and dropout, and eventual incarceration (Christle, Jolivette, & Nelson, 2005; Gregory, Skiba, & Noguera, 2010; Mayer & Leone, 2007).

Considering both the history of exclusion of students with disabilities from educational settings and the potential, long-term negative consequences of exclusionary discipline, schools need to be careful in their approach to exclusionary discipline, especially of students with disabilities. However, trends in the use of these practices suggest that suspensions and expulsions are not handed down in a fair, systematic way. Factors that influence the odds of a student being suspended or expelled can be divided into four categories: school characteristics, family/household characteristics, student demographic characteristics, and student academic and social skills (Bowman-Perrott et al., 2011).

### **School Characteristics.**

School characteristics have been found to have greater influence on suspension rates than student factors (Skiba & Peterson, 2000; Wu, 1980, cited in Noltemeyer & McLoughlin, 2010b; Wu, Pink, Crain, & Moles, 1982), which gives credence to the argument that disproportional discipline has less to do with actual student misbehavior and more to do with school culture and policies (Losen & Martinez, 2013). Socio-economic status predicts exclusionary discipline rates, and schools with the highest rates of students eligible for Free and Reduced School Lunch Program average more than four times as many suspensions and expulsions as schools with the lowest rates (Wauchope, 2009). School size may also influence exclusion rates and although one study has found higher rates of exclusion in smaller schools (Wauchope, 2009), others have found no relationship (Christle, Nelson, & Jolivette, 2004; Christle et al., 2007). The studies finding no relationship used correlational analysis rather than multilevel procedures to analyze the effect of school size on individual exclusion rates (Krezmien, Leone, &

Achilles, 2006) whereas the study finding a relationship between school size and exclusion compared discipline rates of the largest 25% and smallest 25% of schools in their sample. The relationship between school size and exclusion is still unclear and studies using more sophisticated analysis methods are necessary to determine what, if any, relationship exists.

In a study on student- and school-level factors that may predict exclusion, Noltemeyer and Mcloughlin (2010b) found that when controlling for poverty, school typology may predict student disciplinary exclusion. School typology is determined based on school and community characteristics, including population density, school size, geographic, local and community income levels. Urban schools with very high poverty rates tend to suspend and expel students more frequently than schools with other typological characteristics. Urban and suburban schools, in general, tend to expel students more often than rural schools. The interaction between race and school typology predicted even higher levels of discipline, except expulsions, with disproportionate discipline of African American students greatest in urban, very high poverty schools and lowest in rural, low poverty schools (Noltemeyer & Mcloughlin).

### **Student Demographic Characteristics.**

Student demographic characteristics that have been found to effect whether or not a student is suspended or expelled include student's ethnicity, gender, age, and disability status (Bowman-Perrott et al., 2011). In particular, students who are African American, male, or have a behavioral or emotional disability are significantly more likely to be punished with exclusionary discipline (Bowman-Perrott et al.; Losen & Gillespie, 2012). African-American students are twice as likely to be excluded compared to white peers

(Bowman-Perrot et al.). Males are up to four times more likely to be excluded compared to females (Bowman-Perrott et al.).

Although one can find school districts with high rates of suspensions among any racial group (e.g. 40.5% of white students in Arizona's Miami Unified District were suspended at least once during the 2009-2010 school year), certain racial groups are at greater risk of being suspended than others (Losen & Gillespie, 2012). The national rates of suspension for K-12 students of different racial groups during the 2009-2010 school year are as follows: 1 out of every 6 African American students, 1 in 13 Native American, 1 in 14 Latino/a, 1 in 20 Caucasian, and 1 in 50 Asian American students (Losen & Gillespie).

Boys are suspended at higher rates than girls (Losen & Gillespie, 2010). However, suspension rates for African American girls are increasing at a greater rate than all other race/gender combination (Losen & Gillespie).

Grade-level also appears to play a role in whether or not a student is suspended or expelled. High schools have the highest rates of total exclusionary discipline (Wauchope, 2009). During the 2009-2010 school year, one in every nine secondary school students was suspended at least once (Losen & Martinez, 2013). Furthermore, students from racial minorities and other at-risk groups face even greater disparities in discipline at this level (Losen & Martinez). The exact form of suspension seems to also vary by grade. Elementary and high schools have higher rates of out-of-school suspensions, whereas middle schools have higher rates of in-school suspensions (Wauchope, 2009). In schools that are a mix of both elementary and middle school students, the middle school students were given more in-school suspensions.

Students with disabilities are consistently found to be expelled around twice the rate as their non-disabled peers (Losen & Gillespie, 2012). Whereas students without disabilities are more likely to be suspended only once, students with disabilities are slightly more likely to be suspended multiple times during a school year, especially students with ED, BD, ADHD, or LD (Bowen-Perrott et al., 2011; Losen & Gillespie). The interaction between ability status and ethnic group shows even more shocking disparities in discipline. During the 2009-2010 school year, 1 in 4 African American K-12 students with disabilities were suspended at least once (Losen & Gillespie).

Citing previous studies that indicated students with disabilities and racial minority students are suspended at rates disproportionate to their total enrollment, Krezmien and colleagues (2006) sought to investigate whether suspension rates have changed over time, and if race, disability status, or a combination of the two affect a student's risk of being suspended. The investigators drew data from Maryland's state-reported records of enrollment, suspensions, and special education services from 1995 to 2003. Six disability categories in line with those of IDEA (ID, speech/language, ED, OHI, LD, autism) were used to determine the odds of a student being suspended in 2003 based on their race and disability category, with the reference group being white students with no disabilities.

Krezmien and colleagues found that the odds ratio was highest for students with ED for every racial group (white, African American, Hispanic, and Asian) with the exception of American Indian students. For this latter group, ED had the second highest odds ratio, while OHI had the highest. OHI was a significant predictor of suspensions for all other races except Hispanic students. OHI includes students with Attention Deficit Hyperactivity Disorder (ADHD), who may be more likely to violate school rules or



norms and thus be disciplined. Students with LD were also found to have high suspension odds for every racial group. The only disability category that did not convey a heightened risk of suspension was autism, and in this study students with autism had lower odds of being suspended than students without disabilities. However, this is in contrast to other reports of students with autism being at high risk for harsh discipline (Human Rights Watch, 2009). Because this study was limited to data from Maryland, there may be other factors affecting the low odds reported.

Exclusionary discipline is especially problematic for students with disabilities who have individualized behavioral interventions and supports for them in their school settings, and who may potentially be denied these supports through exclusion (Krezmien et al., 2006). Students with ED are suspended and expelled at higher rates than any other group of students and yet these students also require intensive behavioral interventions to help manage their disability (Krezmien et al.). Exclusionary discipline that takes them away from the intensive behavioral interventions they are entitled to is likely not an effective, long-term solution for these students' educational needs. For students who have reactive, hostile and impulsive behavior patterns, exclusionary discipline appears to encourage further disruptive behavior, as punishment interacts with these students' deficient behavior skills to encourage a cycle of school misbehavior (Atkins et al., 2002). These students are also the ones who would require intensive behavior plans to help them learn more effective school behaviors.

### **Alternative Discipline Practices**

Overly-harsh discipline, such as unsupervised exclusion for minor offenses, is not the only avenue available to schools for managing unacceptable student behavior. More

effective responses to misbehavior include after-school detention, Saturday school, parent conferences, and in-school suspension, but these alternatives are often underutilized by school districts (Losen & Gillespie, 2012; Skiba & Peterson, 2000). Ideally, schools can prevent problem behavior from occurring in the first place through: a) setting and enforcing limits on unacceptable behavior, b) providing opportunities for the development of academic and social competence, and rewarding success (Hartzell, 1975), and c) better teacher training for working with challenging students (Losen & Gillespie, 2012). Tobin and Sprague (2000) specifically recommend nine practices for reducing behavioral problems at school, thus reducing the need for reactionary punishments. They present these practices in the context of alternative schools, but these practice would benefit students in other schools in both general and special education (Tobin & Sprague). These practices include: a) low student to teacher ratio, b) highly structured classrooms with behavior management systems, c) positive methods to increase appropriate, d) school-based adult mentors, e) Functional Behavior Assessments for greater understanding of problem behaviors, f) social skills instruction, g) effective academic instruction, h) parental involvement, and i) positive behavioral interventions and supports (PBIS).

Districts that implement proactive behavior management plans will likely see a reduction in student misbehavior and thus a lessened need for harsh discipline. One such proactive approach, PBIS, has garnered significant attention from researchers and school policy makers alike. PBIS is the only approach to discipline specifically mentioned in IDEA (PBIS & Law, 2014). Schools with PBIS use observable behavioral expectations to guide students' appropriate school behaviors and reinforce students' use of these

behaviors (Lane, 2011; Cook, Frye, Slemrod, Lyon, Renshaw, & Zhang, 2015). The goal is to improve student behavior by establishing a positive school climate that clear expectations that are actively taught, leading to a reduced need for discipline (Osher, Bear, Sprague, & Doyle, 2010). Schools that have implemented PBIS have reported improvements in school safety and academic outcomes as well as a reduction in problem behaviors (Skiba & Sprague, 2008).

Many studies have demonstrated the effectiveness of PBIS in reducing behavior problems across an entire school and specifically for students with disabilities. One 3-year study of elementary schools in Hawai'i and Illinois found that the implementation of school-wide PBIS programs led to increases in perceptions of school safety and decreases in office discipline referrals (Horner, Sugai, Smolkowski, Eber, Nakasato, Todd, & Esperanza, 2009). In a meta-analysis of twenty-one PBIS studies specifically investigating the "Good Behavior Game", Bowman and colleagues (2015) found that this practice is an effective method of behavior management. This PBIS intervention promotes positive behaviors through interdependent group-oriented contingency rewards for behavioral expectations (Bowman, Perrott, Burke, Zaini, Zhang, & Vannest, 2015). This approach has been found to reduce disruptive/off-task behavior, although it is less effective at increasing attention-to-task/on-task behavior (Bowman et al.). Furthermore, the authors found that it was effective in improving the behavior of all students, but it was especially effective at improving the behavior of students at risk for or diagnosed with EBD (Bowman et al.)

However, not all studies comparing the effectiveness of PBIS for students with disabilities have found positive results. Studies investigating the effectiveness of PBIS

programs are limited. In a 6-year study of a rural Maryland middle school pre- and post-implementation of school-wide PBIS, the change in discipline procedure significantly decreased the number of out-of-school suspensions for severe (e.g. drugs and weapons) offenses, but slightly increased the number of out-of-school suspensions for mild (e.g. tardiness, disrespect) and moderate (e.g. fighting) offenses (Lane, 2011). In regards to disproportionality, the years following the implementation of PBIS saw a decrease in the overall number of ethnic minority students suspended, but an increase in the overall number of students with disabilities suspended.

These mixed results of this study are difficult to interpret, given that the study focused on one, rural Maryland middle school. The exact nature of the PBIS approach used by the target school was not described discipline data used by Lane (2011). It may be that not all PBIS programs are equally effective, and this school may have seen more success had they implemented the “Good Behavior Game” that was found effective in Bowman and colleagues’ (2015) meta-analysis.

Schools also need to be mindful that they are not implementing a PBIS program in name only, but are staying true to the principles of PBIS for the duration of a school year. For example, positive teacher involvement in student’s school lives has been found to decrease as the school year progresses (Stroet, Opdenakker, & Minnaert, 2015). While the PBIS program investigated by Lane (2011) was independently evaluated and rated as being implemented with integrity, teachers’ adherence to a strict PBIS program may fluctuate over the course of the school year and their stress and workload fluctuate.

As identified by Tobin and Sprague (2000), social skills instruction can also decrease the need for punitive discipline measures. Social-emotional learning

interventions (SEL) have been used to decrease the number of suspensions and expulsions in schools. SELs teach students foundational social competence skills (e.g., self-regulation, empathy, interpersonal problem-solving) that help them maintain their own positive behavior (Cook et al., 2015). In contrast to PBIS, which is largely implemented through behavioral contingencies, SELs directly teach students the expected behaviors through specific curriculum. SELs have been found to help reduce behavior problems over time, thereby in academic skills such as reading (O'Connor, Cappella, McCormick, & McClowry, 2014; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). As long as the lessons of the intervention are properly sequenced, involve active learning, are focused, and explicit, SELs help improve students' social-emotional skills, increase prosocial behaviors, and reduce conduct and internalizing problems (Durlak et al.).

Of course, there is no reason why schools cannot implement both PBIS and SEL programs. When combined, PBIS and SEL interventions are very effective at reducing students' externalizing and internalizing behavior problems (Cook et al., 2015). This is in contrast to using PBIS alone, which was less effective at reducing both types of behavior problems, and SEL alone, which was less effective at reducing externalizing behavior problems, and a control condition that saw no reduction in externalizing or internalizing behavior problems (Cook et al.) Teachers also rated the PBIS-SEL combined intervention favorably, reporting that this approach is would be feasible to implement could be done fairly (Cook et al.).

## **Possible Causes of Disproportional Discipline of Students with Disabilities**

The rate of disproportional discipline of students with disabilities steadily increased through the 1990's and early 2000's (Zhang, Katsiyannis, & Herbst, 2004) and this increase could not be accounted for by a general increase in the population of students with disabilities (Krezmien et al., 2003). Researchers have proposed several reasons for disproportional discipline practices, including zero-tolerance policies, difficulties students with disabilities have in adjusting to school, administrators' knowledge and attitudes, and ineffective behavioral management. In all likelihood, disproportional discipline rates are not caused by any one factor but rather a combination of all of these.

### **Zero-Tolerance Policies.**

Zero tolerance policies and procedures impose strict punishments for misconduct and do not allow for flexible decision-making regarding discipline (Mayer & Leone, 2007; Skiba & Peterson, 2000; Zhang et al., 2004). These policies are rooted in anti-drug trafficking policies from the 1980's that were adapted to address the increased national focus on school violence in the late 1980's and early 1990's (Advancement Project, 2010; Mayer & Leone; Williams et al., 2013). Policies that were originally intended to crack down on severe and dangerous behaviors such as violence and drug-trafficking are now being applied to a larger variety of less serious behaviors in schools without consideration for the circumstances or situational context surrounding school misbehavior (Mayer & Leone; Skiba & Sprague, 2006).

Following a review of the United States' compliance with the International Convention to End Racial Discrimination in All Forms, the United Nations called for

American school districts to review zero tolerance policies such that exclusionary discipline is used only in the most serious cases of school misconduct (United Nations Committee on the Elimination of Racial Discrimination in All Forms, 2008). Suspensions and expulsion are often not administered for the most serious misbehavior, as can be seen in Wauchope's (2009) review of acts that triggered zero-tolerance suspensions and expulsions. In response to federal legislation (i.e. the Guns Free Schools Act of 1994), New Hampshire instated policies that would allow schools to suspend or expel students for violent behaviors, drug-related offenses as well as "gross misconduct" or "neglect or refusal to conform to the reasonable rules of the school" (New Hampshire; Wauchope). During the 2007-2008 school year, 31% of suspensions were the result of verbal behavior or violence against persons, 7% were drug-related, and 60% were categorized as "other" (Wauchope). "Other" incidents likely fall under the "gross misconduct" or "neglect or refusal to conform to the reasonable rules of the school" provision of the law. It seems unlikely that these punishments are in response to the most serious misconduct.

Although zero-tolerance policies were intended to lead to greater consistency in school discipline, in reality the use of zero-tolerance discipline is as affected by school characteristics and school personnel as it is by student behavior (APA, 2006). The Advancement Project (2010) noted that zero tolerance policing have led schools to become "increasingly intolerant of young people, and the results are often absurd or outrageous" (p.13). The report catalogues cases of minor offenses that resulted in serious consequences, such as that of a 12-year old student in Stuart, Florida who was arrested in 2008 for a classroom disruption. The disruption: "passing gas" (p.13). In another case of questionable school discipline, an African American student in Mississippi received a

two-day suspension in 2008 for saying President Obama's name. In other cases, students exhibited behaviors that needed to be addressed; however, the responses seem excessive and unnecessarily harmful for the students. For example, the case of a 13-year-old New York City girl who in 2007 was escorted from the school in handcuffs because she wrote 'okay' on her desk.

As a result of inflexible school policies, responses like these are becoming more and more common for younger students (Advancement Project, 2010). Age-appropriate but disruptive behavior is now seen as a threat that requires police intervention. The Advancement Project describes the arrest of two five-year-olds and a six-year-old who threw a tantrum in their class. In response, the arresting Chief of Police reportedly said, "Do you think this is the first six-year-old we've arrested?" (p. 14).

Some may argue that the cases described by the Advancement Project and others are outliers, extreme examples of otherwise appropriately implemented policy aimed to crack down on misbehavior. However, the growing number of students being suspended and arrested for misdemeanor offenses (Advancement Project, 2010) suggests that there is not only limited consensus over what constitutes disruptive behaviors, but also lack of flexibility in applying truly appropriate punishments. The inflexibility of zero tolerance policies mean that school districts implementing them are especially prone to using excessive discipline as blanket punishment to be handed out at the discretion of administrators rather than as consequences fitted to a specific misbehavior. Suspension, in particular, are often misused in response to a range of minor offenses, with only a small percentage of them handed down to address behaviors that threaten school safety or security (Skiba & Sprague, 2006).



Whether harsh punishments such as suspensions and expulsions are given due to lack of clarity or lack of flexibility, ultimately it is the students who pay the price as inappropriate use of suspensions conflict with students' rights to an education (Wauchope, 2009). Flexible decision making is necessary to fairly discipline students with disabilities, whose behaviors may well be influenced by their disabilities. IDEA requires that schools consider students' disabilities and whether their IEPs were properly implemented when determining appropriate punishments. However, schools may be failing to do either of these when disciplining students with disabilities (Krezmien et al., 2006), and the one-punishment-fits-all approach of zero tolerance policies may make it easier for schools to do so.

### **Adjustment to School.**

Students with disabilities may have a more challenging time adjusting to school as a result of their behavioral and emotional difficulties (Zhang et al., 2004). Studies have found that students with LD (Grolnick & Ryan, 1990; Vaughn, Elbaum, & Boardman, 2001), autism and anxiety disorders (Human Rights Watch, 2009), and ED (Bradley, Doolittle, & Bartolotta, 2008) often struggle to meet the behavioral and emotional expectations of schools. Students with disabilities who possess stronger social skills and who are better socially adjusted are less likely to be disciplined with exclusionary procedures (Duran, Zhou, Frew, Kwok, & Benz, 2011; Bowman-Perrott et al., 2011).

Students with emotional and behavioral disorders have significant deficits in their behavioral and emotion regulation and need quality interventions to help them succeed socially and academically (Bradley et al., 2008). Students with emotional and behavioral disorders are also suspended and expelled at greater rates than students who qualify under

other IDEA categories (Cooley, 1995). Students on the autism spectrum are often disciplined for behaviors stemming from their difficulties with expected school behavior but which are typical for autistic individuals (HRW, 2009). It seems that if students are being disciplined for behaviors that should be expected based on their disability, as appears to be the case for students with EBD and autism, school personnel may lack the appropriate training in working with these students.

### **Administrators' Knowledge and Attitudes.**

Administrators may lack knowledge of the laws regarding the discipline of students with disabilities, or be unfamiliar with discipline procedures that can effectively curb negative behaviors while keeping students in school (Woods, 2004). There appears to be wide variability in how school administrators interpret discipline procedures (Wauchope, 2009). Administrators report lacking the specific knowledge and training they need to work with students with disabilities (Williams et al., 2013).

Furthermore, school administrators may lack familiarity with students with disabilities (Lasky & Karge, 2006, cited in Williams et al., 2006), and there are few opportunities for administrators to familiarize themselves with these students who make up only 13.2% of the population (Williams et al., 2013). Lack of experience with this population of students may lead administrators to harbor negative attitudes toward students with disabilities that are based on stereotypes rather than fact. The segregation brought about through exclusionary discipline practices may appear justified to school administrators who perceive students with disabilities as more dangerous than their non-disabled peers (Noltemeyer & McLoughlin, 2010; Williams et al.). Fear of litigation may also underlie the interactions between school personnel and students with disabilities,

which may lead school personnel to see students with disabilities as threats (Williams et al.).

In a review of 21 studies on school administrators' attitudes toward students with disabilities, Williams and colleagues (2013) identified statements made by administrators that indicated the administrators perceived students receiving special education services as threats, and coded these statements for the type of threat (i.e. individual vs. group; realistic vs. symbolic).

The authors found evidence for every type of threat, but group realistic threats were most common. Group realistic threats indicate that administrators see students receiving special education services as threats to the schools' available resources, especially money and time. Both the students receiving special education services and their parents were considered to be threats to school resources, with many administrators mentioning parents who sue schools and the amount of time and money litigation demands. Group realistic threats also included administrators' perceptions that they and their general education teachers will be unable to provide appropriate services due to their lack of knowledge and training regarding students with disabilities. Furthermore, they reported seeing students with disabilities as a threat to the education of the general student body.

The next most common type was group symbolic threats, which include threats to the self-concept and self-beliefs of their teachers as well as threats to their school's philosophy, academic performance and overall school community. Administrators also endorsed individual symbolic threats, which involved increases in the administrators' emotional stress, damage to how others' perceive them, and threats to their personal

beliefs (e.g. a school principal who would not support inclusion even if given unlimited resources to do so). Administrators were least likely to perceive students with disabilities as being threats that would impact their ability to perform their work, to their time, or to their behavior (individual realistic threats), although a few instances of these were reported.

A significant short-coming of this study is that it only looked at administrators' views, and did not investigate the rate of discipline practices at their schools, so it is unclear how the administrators' views impacted the discipline of their students with disabilities. The authors of the study argue that these perceptions by school administrators may contribute to discriminatory discipline practices toward students receiving special education services. For example, one administrator reported making a placement change decision out of desperations rather than sound policy.

This potential for disproportional discipline as a result of negative views toward students with disabilities was also investigated by Cooley (1995), who worked with the Kansas Board of Education to assess whether the acts leading to the suspension or expulsion of students with disabilities differed significantly from the acts leading to the suspension or expulsion of students without disabilities. Although school personnel perceived students with disabilities as more dangerous than their non-disabled peers, students with disabilities were found to be no more violent or prone to harming others than students without disabilities. The majority of the acts (92%) involved disobedience, altercations with other students and disrespect (i.e. offenses that violated the social code but did not endanger or seriously harm others). Although 31% of the offenses did involve weapons, in 90% of those cases the weapons were either the student's hands or

feet and did not fall under what most would consider a weapons violation. Students receiving special education services were no more likely to bring or use a weapon or to cause injuries than general education students. Despite the triggering acts being the same between the groups, students with disabilities were more than twice as likely to be suspended or expelled.

### **IDEA 2004 and Subsequent Discipline Reform**

The Individuals with Disabilities Education Improvement Act (IDEA 2004) was enacted in 2004 with final regulations implemented in 2006. One aim of this legislation was to reduce the disproportional discipline rates that affected racial minority students and students with disabilities. This law sought to ensure that students with disabilities would be disciplined in a similar fashion to the general student population (Mayer & Leone, 2007). IDEA 2004 also requires states to review school districts in order to identify and intervene with those whose rates of disproportional discipline exceed a threshold established by the state (Losen & Gillespie, 2012).

The results of studies conducted after the final IDEA regulations were issued (Bowman-Perrott et al., 2011; Noltemeyer & McLoughlin, 2010b) suggest that IDEA 2004 has not been enough to significantly reduce the disproportional discipline of students with disabilities, and the use of exclusionary discipline, particularly suspensions, appears to be increasing. A report on the 2009-2010 discipline data from the Office of Civil Rights (OCR) revealed that schools are continuing to suspend and expel students at unacceptably high rates, especially students from racial minority groups or who have disabilities (Losen & Gillespie, 2012). The report authors analyzed national, state and school district level data on the percentages of students who were expelled. State data

often revealed greater disparities than national data, and district level data showed the greatest disparities with national data. The study also indicated that certain groups of students continue to be excluded for relatively minor offenses. In North Carolina, while 13% of Caucasian students were suspended for cell phone use, over 30% of African American students were suspended for the same offense. The disparity is even greater for displays of affection, with approximately 13% of Caucasian students and over 40% of African American students being suspended.

The large variation in suspension risks, both between groups of students and between school districts and states, supports what others have suggested, that suspension use is driven by policy, practice and leadership differences, rather than level of student misbehavior. Losen and Gillespie (2012) point out that the large number of school districts with limited numbers of suspensions during the 2009-2010 school year indicates that there are effective alternatives to suspensions and that we do not have to accept the status quo of high and disproportionate exclusion rates.

Although Losen and Gillespie's (2012) report revealed that IDEA 2004 has not been sufficient in reducing national, state and particularly district level disparities in discipline practices, there were several limitations to their study. At the time of their analysis, the data from three states (New York, Florida, and Hawai'i) had to be removed due to uncorrected errors in the OCR database. Similarly, analysis was restricted to the 2009-2010 school year, although OCR has data collected beginning with the 1999-2000 school year. The current study will be able to use additional state data and will include multiple time points so that longitudinal trends in discipline can be assessed.

Despite the aim of IDEA 2004 to reduce disproportional discipline, the law may be permitting further disparities, particularly in regards to exclusion. IDEA established that schools must assess whether the problematic behavior of student with a documented disability was: a) a manifestation of their disability, or b) a result of inadequate school supports or inappropriate implementation of the students' IEP. IDEA 2004 placed more responsibilities on the students' and their families, making it more difficult to either establish disability manifestation or show negligence in IEP implementation (Turnbull, 2005). In this way, schools now have greater power to subjectively use exclusionary discipline (Brown, 2007).

At the state level, some have pursued significant policy changes regarding school discipline. For example, as of the 2010-2011 school year, Connecticut enacted a law to reserve out-of-school suspensions for the most serious offenses (Losen & Gillespie, 2012). A similar policy has been adopted in Maryland, where out-of-school suspensions and long-term expulsions are now only permitted to address actions that pose an imminent threat to students and staff or students' with extremely disruptive and chronic behavior problems (MSDE, 2014). Maryland also passed legislation that calls for a rehabilitative approach focused on positive behavior, and includes plans for monitoring disproportionate discipline (Losen & Gillespie). In 2011, Indiana implemented an evidence-based model of discipline aimed at reducing disproportionate discipline practices (Indiana Department of Education, 2014). Although similar legislation was considered in California in 2012, it was not passed into law (California Legislation Information, 2012).

## **Methods**

### **Description of Sample**

This study used archival data collected by the Office of Civil Rights (OCR) as part of the biennial Civil Rights Data Collection (CRDC) survey. In order to investigate longitudinal trends in disproportionate discipline rates, this study used the data from the 2009-2010 and 2011-2012 school years. Although CRDC data was also collected in 2006, a review of data indicated that the discipline variables collected in 2006 were not comparable to the data collected in later years. Additionally, a survey was conducted for the 2013-2014 school year and preliminary reports on the results are available, the raw data from that survey are not currently available to the public. As a result, the data from 2006 and 2013-2014 were excluded from this study. While this data is typically collected biennially, no data was collected in 2008, presumably in order to resign the CRDC survey that was then used in the 2009-2010 school year.

For the 2009-2010 survey, certain districts were guaranteed to be surveyed. These included districts with more than 3,000 students, all districts in states with 25 or fewer public school districts, schools for the deaf or blind, and districts monitored by the U.S. Department of Justice. The remaining districts were chosen using a rolling stratified sampling method that ensures a representative group of districts from each state are included in the survey. This procedure resulted in the inclusion of over 72,000 schools across 7,000 school districts. For the 2009-2010 survey, all participating schools were required to submit responses that were free of null or missing responses. In 2011-2012, every school in the country was included in the survey. The OCR reports that the overall



response rate for participating districts is 100%, with the exception being Minnesota which had a response rate of 99.6% for the 2009-2010 survey.

Although the OCR collects data at the school-level and aggregates it at the district-level, for the purposes of this study data was further aggregated at the state-level. This aggregation will follow the procedures used in Losen and Gillespie (2012). All surveyed districts from all states were included in the analysis unless they were virtual or online school districts or juvenile facilities. In accordance with Losen and Gillespie, online schools were excluded from analysis because of the inability to use exclusionary discipline. Juvenile facilities were excluded due to the high likelihood that these students had been removed from their local school for disciplinary infractions and were thus accounted for elsewhere in the data (Losen & Gillespie). A total of 454 juvenile facilities and 89 virtual schools were removed from the 2009-2010 dataset. A total of 549 juvenile facilities and 223 virtual schools were removed from the 2011-2012 dataset.

The data provided by the CRDC had been checked and reporting errors corrected as part of their data collection procedures. However, for the purposes of this study additional corrections needed to be made, which were specific to the data of students with disabilities. The enrollment of students with disabilities in Hawai'i was reported as zero for the 2011-2012 school year. This was corrected based on the state's population estimates collected at the beginning of the school year. A number of school districts in the 2011-2012 data reported errors in their total student enrollment (e.g., student populations of  $\leq 2$ ). A closer look at the schools in these districts indicated that single-sex schools were reporting errors in their opposite-sex enrollment (i.e., all boys' schools with

errors in the number of enrolled female students). These errors were corrected to reflect the single-sex populations of the schools, and their districts were included in analysis.

## **Measures**

Principals of schools who serve students in kindergarten through 12<sup>th</sup> grade were sent end-of-the-school-year surveys that collected information on variables such as student enrollment and discipline, and this information is available disaggregated by race, sex, and disability status (Office of Civil Rights, 2014). This method of data collection and the variables collected were consistent for the 2009-2010 and the 2011-2012 surveys.

All variables are reported as the total number of students who have received that form of discipline during that school year. While the categories “Students receiving only one out-of-school suspension” and “Students receiving more than one out-of-school suspension” do not overlap and a single student could only be counted under one of those categories, this is not the case with the other categories. For example, a student who received an in-school suspension in the fall semester and an expulsion without educational services in the spring semester would be counted under both “Students receiving one or more in-school suspension” and “Expulsion without services”.

The following definitions were provided by the CRDC to the participating school principals.

<p>Table 1.  <i>Definitions of CRDC Variables Used</i><sup>1</sup></p>	
Expulsion under zero-tolerance policies	Removal of a student from the school setting for an extended length of time because of zero-tolerance policies. A zero tolerance policy is a policy that results in mandatory expulsion of any student who commits one or more specified offenses (for example, offenses involving guns, or other weapons, or violence, or similar factors, or combinations of these factors). A policy is considered “zero tolerance” even if there are some exceptions to the mandatory aspect of the expulsion, such as allowing the chief administering officer of an LEA to modify the expulsion on a case-by-case basis.
Expulsions without educational services	An action taken by the local educational agency of removing a child from his/her regular school for disciplinary purposes, and not providing educational services to the child for the remainder of the school year or longer in accordance with local educational agency policy. This also includes removals resulting from violations of the Gun Free Schools Act that are modified to less than 365 days.
Expulsion with educational services	An action taken by the local educational agency of removing a child from his/her regular school for disciplinary purposes, and providing educational services to the child (e.g., school-provided at home instruction or tutoring; transfer to an alternative school or regular school) for the remainder of the school year (or longer) in accordance with local educational agency policy.

---

<sup>1</sup> Office of Civil Rights (2014)

Table 1 (cont.). <i>Definitions of CRDC Variables Used<sup>2</sup></i>	
Students receiving one or more in-school suspension	An in-school suspension is an instance where a child is temporarily removed from his or her regular classroom(s) for at least half a day for disciplinary purposes, but remains under the direct supervision of school personnel. Direct supervision means school personnel are physically in the same location as students under their supervision.
Students receiving only one out-of-school suspension and Students receiving more than one out-of-school suspension	For students without disabilities: Out-of-school suspension means excluding a student from school for disciplinary reasons for one (1) school day or longer. It does NOT include students who served their suspension in the school.  For students with disabilities (served under IDEA): Out-of-school suspension is an instance in which a child is temporarily removed from his/her regular school for at least half a day for disciplinary purposes to another setting (e.g., home, behavior center).

## Data Analysis

Proportions of disciplinary actions were calculated for both students with and without disabilities. These reflected the percentage of students from each population in each state that received a given discipline in a given school year. From these proportions, rank variables were created. These variables indicated how frequently a state reported using one form of discipline with one group of students during one school year as compared to other states. A higher ranking indicated that a higher percentage of students were given that form of discipline. In the event of ties, where two or more states reported the same percentage of students disciplined, the mean ranks were used.

---

<sup>2</sup> Office of Civil Rights (2014)

### Research Question 1.

To investigate whether the disproportional discipline of students with disabilities changed over time, a grouping variable was created that reflected both the survey year and abilities status, resulting in four groups, each with 51 subjects (all fifty states and the District of Columbia).

Table 2. <i>Research Question 1 Group Variables</i>	
Group 1	2009-2010 Students with Disabilities
Group 2	2009-10 Students without disabilities
Group 3	2011-2012 Students with Disabilities
Group 4	2011-2012 Students without Disabilities

Multiple Kruskal-Wallis H tests were run between the four groups with the six ranked discipline variables serving as dependent variables, in order to determine if there were differences between any of the group medians. For variables that yielded significant differences via the Kruskal-Wallis H test, Mann-Whitney U tests were conducted to assess differences between specific group pairs. The following pairwise comparisons were made:

- Students with vs. Students without Disabilities in 2009-10 (Group 1 vs. Group 2)
- Students with vs. Students without Disabilities in 2011-12 (Group 3 vs. Group 4)
- Students with Disabilities in 2009-10 vs. Students with Disabilities in 2011-12 (Group 1 vs. Group 3)

- Students without Disabilities in 2009-10 vs. Students without Disabilities in 2011-12 (Group 2 vs. Group 4)

### Research Question 2.

To investigate regional differences in the use of exclusionary discipline, a grouping variable was created according to the 4-area United States Census, which resulted in four groups:

Table 3. <i>Research Question 3 Group Variables</i>		
Region	States Included	Total Number of States in Group
West	AK, AZ, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY	13
Midwest	IL, IN, IA, KA, MI, MN, MO, NE, ND, OH, SD, WI	12
Northeast	CT, ME, MA, NH, NJ, NY, PA, RI, VT	9
South	AL, AR, DE, DC, FL, GA, KY, LA, MD, MI, NC, OK, SC, TN, TX, VA, WV	17

Multiple Kruskal-Wallis H tests were run using the 4-area census grouping variable. The six ranked discipline variables served as dependent variables. For this analysis, only the data for students with disabilities were used. For variables that yielded significant differences via the Kruskal-Wallis H test, Mann-Whitney U tests were then conducted to determine if there were differences between the group medians. Pairwise comparisons were conducted between all of the 4-area groups and all of the 9-area groups. In order to account for family-wise error, an alpha level of  $p < .01$  was used in lieu of the more tradition value of  $p < .05$  when determining if comparisons were statistically significant.

## Results

Expulsion of both students with disabilities and their non-disabled peers are infrequent in all 50 states and DC. Typically, less than 1% of both populations were expelled during the 2009-10 and 2011-12 school years with several states reporting no expulsions. However, the risk of expulsion did vary with students in some states having a much greater risk, particularly for students with disabilities. In comparison to expulsions, larger percentages of students with and without disabilities were suspended during both the 2009-10 and 2011-12 school year. No state reported zero suspensions during either of the survey years. Table 4 presents the median percentages for each form of discipline for each of the school years according to students' ability status. Table 5 presents median percentages for each region. The average discipline ranks for each group can be found in appendix A and the percentages of students disciplined by state are in appendix B.

Table 4. <i>Median percentage of students disciplined by school year and ability status</i>				
	2009-2010		2011-2012	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
Expulsions due to zero tolerance policies	.000	.000	.001	.000
Expulsions with services	.000	.000	.003	.001
Expulsions without services	.000	.000	.000	.000

Table 4 (cont.) <i>Median percentage of students disciplined by school year and ability status</i>				
	2009-2010		2011-2012	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
In-school suspensions	.087	.046	.090	.038
Only one out-of-school suspension	.054	.030	.066	.028
More than one out-of-school suspension	.054	.019	.056	.016

Table 5. <i>Median percentages of students disciplined by region</i>				
	West	Midwest	Northeast	South
Expulsions due to zero tolerance policies	.000	.001	.000	.000
Expulsions with services	.001	.001	.001	.001
Expulsions without services	.000	.000	.000	.000
In-school suspensions	.051	.065	.058	.108
Only one out-of-school suspension	.033	.035	.041	.051
More than one out-of-school suspension	.022	.027	.039	.045

### Research Question 1

A Kruskal-Wallis H test indicated that there was a statistically significant difference in all forms of discipline between the four student groups (students with vs. without disabilities, 2009-10 vs. 2011-12;  $p < .000$ ). That is, at least one of the groups had



a significantly different distribution in its discipline ranks compared to the other groups.

Table 6 presents the results of the Kruskal-Wallis H test.

Table 6. <i>Results of the Kruskal-Wallis H test for research question 1</i>				
	<i>H</i>	<i>SD</i>	<i>ES</i>	<i>p</i> -value
Expulsions due to zero tolerance policies	33.020	.002	.163	.00*
Expulsions with services	44.351	.002	.218	.00*
Expulsions without services	23.948	.001	.118	.00*
In-school suspensions	58.594	.064	.289	.00*
Only one out-of-school suspension	110.836	.023	.546	.00*
More than one out-of-school suspension	113.204	.039	.558	.00*

Results of the Mann-Whitney U test for research question 1 are included in Table 7. For the 2009-2010 school year, comparisons were statistically significant for in-school suspensions ( $U=578.000$ ,  $p<.000$ ), only one out-of-school suspension ( $U=359.000$ ,  $p<.000$ ), and more than one out-of-school suspension ( $U=273.000$ ,  $p<.000$ ). For the 2011-2012 school year, comparisons were statistically significant for all forms of discipline ( $p<.000$ ) with the exception of expulsions without educational services.

Comparing across years, disparities in discipline can also be seen. When the discipline of the 2009-10 students with disabilities was compared to the discipline of their 2011-2012 counterparts, results were statistically significant for all forms of expulsions, including zero-tolerance expulsions ( $U=702.500$ ,  $p<.000$ ), expulsions with services ( $U=630.000$ ,  $p<.000$ ), and expulsions without services ( $U=707.5000$ ,  $p<.000$ ). The comparisons of students with disabilities also yielded statistically significant results for only one out-of-school suspension ( $U=789.000$ ,  $p<.001$ ). For students without

disabilities, there were no statistically significant comparisons between the 2009-2010 and 2011-2012 school years.

Table 7. <i>Results of Mann-Whitney U tests for research question 1</i>			
	2009-10 Students with Disabilities vs. 2009-10 Students without Disabilities		
	Mann-Whitney U	Z	p
Expulsions due to zero tolerance policies	1199.500	-.679	.497
Expulsions with services	1077.000	-1.497	.135
Expulsions without services	1018.500	-1.894	.058
In-school suspensions	578.000	-4.835	.000*
Only one out-of-school suspension	359.000	-6.301	.000*
More than one out-of-school suspension	273.000	-6.877	.000*
	2011-12 Students with Disabilities vs. 2011-12 Students without Disabilities		
	Mann-Whitney U	Z	p
Expulsions due to zero tolerance policies	643.000	-4.401	.000*
Expulsions with services	479.000	-5.498	.000*
Expulsions without services	1291.000	-.064	.949
In-school suspensions	415.000	-5.926	.000*
Only one out-of-school suspension	86.000	-8.128	.000*
More than one out-of-school suspension	103.000	-8.015	.000*

Table 7 (cont.) <i>Results of Mann-Whitney U tests for research question 1</i>			
	2009-10 Students with Disabilities vs. 2011-12 Students with Disabilities		
	Mann-Whitney U	Z	p
Expulsions due to zero tolerance policies	702.500	-4.013	.000*
Expulsions with services	630.000	-4.488	.000*
Expulsions without services	707.500	-3.980	.000*
In-school suspensions	1278.000	-.151	.880
Only one out-of-school suspension	789.000	-3.423	.001*
More than one out-of-school suspension	1128.000	-1.154	.248
	2009-10 Students without Disabilities vs. 2011-12 Students without Disabilities		
	Mann-Whitney U	Z	p
Expulsions due to zero tolerance policies	1000.000	-2.011	.044
Expulsions with services	1141.000	-1.068	.286
Expulsions without services	949.000	-2.353	.019
In-school suspensions	1169.000	-.880	.379
Only one out-of-school suspension	1202.000	-.659	.510
More than one out-of-school suspension	1187.000	-.760	.447

## Research Question 2

### Using the 4-area census grouping variable.

The Northeast had the lowest discipline ranks (see Appendix A) for all forms of expulsion (ranging from 37.03 to 41.64). These states also had the lowest ranks for giving students only one out-of-school suspension ( $Mdn=83.53$ ), while the states in the West had the lowest ranks for in-school suspensions ( $Mdn=72.40$ ) and more than one out-of-

school suspension ( $Mdn=81.17$ ). The South had the highest ranks for all forms of discipline (ranging from 115.41 to 139.31).

A Kruskal-Wallis H test indicated that these rank differences were statistically significant for all forms of suspension, including in-school suspensions ( $p=000$ ), only one out of school suspension ( $p<.001$ ) and more than one out-of-school suspensions ( $p<.001$ ). There were no statistically significant differences for expulsions due to zero tolerance policies ( $p<.208$ ), expulsions with services ( $p<.090$ ), or expulsions without services ( $p<.143$ ). Table 8 presents the results of this Kruskal-Wallis H test.

Table 8. <i>Results of the Kruskal-Wallis H test for research question 2</i>				
	H	SD	ES	<i>p</i> -value
Expulsions due to zero tolerance policies	4.551	.002	.045	.208
Expulsions with services	6.501	.002	.064	.090
Expulsions without services	5.434	.001	.054	.143
In-school suspensions	27.786	.064	.275	.000*
Only one out-of-school suspension	17.499	.023	.173	.001*
More than one out-of-school suspension	16.921	.039	.168	.001*

Mann-Whitney U tests were conducted to investigate pairwise relationship for the discipline practices that were significant under the Kruskal-Wallis H test. Results of the Mann-Whitney U tests for research question 2 using the 4-area census grouping variable are included in Table 9. States in the South were found to have the greatest number of statistically significant differences between the other three groups.

Table 9. <i>Results of Mann-Whitney U tests for research question 2</i>			
West vs. Midwest			
	Mann-Whitney U	Z	<i>p</i>
In-school suspensions	196.000	-2.253	.024
Only one out-of-school suspension	278.000	-.660	.509
More than one out-of-school suspension	271.000	-.796	.426
West vs. Northeast			
	Mann-Whitney U	Z	<i>p</i>
In-school suspensions	153.000	-1.934	.053
Only one out-of-school suspension	194.000	-.955	.340
More than one out-of-school suspension	145.000	-2.124	.03
West vs. South			
	Mann-Whitney U	Z	<i>p</i>
In-school suspensions	123.000	-4.759	.000*
Only one out-of-school suspension	261.000	-2.700	.007*
More than one out-of-school suspension	200.000	-3.610	.000*
Midwest vs. Northeast			
	Mann-Whitney U	Z	<i>P</i>
In-school suspensions	195.000	-.534	.594
Only one out-of-school suspension	204.000	-.305	.760
More than one out-of-school suspension	164.000	-1.322	.186
Midwest vs. South			
	Mann-Whitney U	Z	<i>P</i>
In-school suspensions	224.000	-2.905	.004*
Only one out-of-school suspension	206.000	-3.189	.001*
More than one out-of-school suspension	226.000	-2.873	.004*

Table 9 (cont.) <i>Results of Mann-Whitney U tests for research question 2</i>			
	Northeast vs. South		
	Mann-Whitney U	Z	<i>p</i>
In-school suspensions	136.000	-3.270	.001*
Only one out-of-school suspension	118.000	-3.616	.000*
More than one out-of-school suspension	215.000	-1.750	.080

## **Discussion**

The findings of this study offer evidence that students with disabilities are disciplined at disproportionate rates compared to students without disabilities. Furthermore, there is evidence of regional trends in the forms of discipline given to students.

### **Discipline of Students With and Without Disabilities**

For the 2009-2010 school year, students with disabilities were disciplined with in-school suspensions, only one out-of-school suspensions, and more than one out-of-school suspensions at significantly higher rates than students without disabilities. For the 2011-2012 school year, students with disabilities were significantly more likely to receive all forms of discipline with the exception of expulsions without educational services. This latter form of discipline was assigned nearly equally and is reflected in the rankings for students with disabilities (*Mdn*=51.69) and students without disabilities (*Mdn*=51.31).

When discipline practices were compared across years, students with disabilities were more likely to be disciplined in 2011-2012 than 2009-2010; however, for students without disabilities there was no change in their likelihood of receiving any of the forms of discipline. Specifically, students with disabilities were more likely to receive a zero-tolerance expulsions, expulsions with services, and expulsions without services than students without disabilities. They were also given only one out-of-school suspensions at significantly higher rates than their 2009-2010 counterparts. Discipline rates for in-school suspensions and more than one out-of-school suspensions remained constant for students with disabilities between the two school years.

With the current data, it is difficult to address Research Question 1 as originally planned regarding changes in disproportional discipline since the implementation of

IDEA 2004. The use of only two time points renders any conclusions about changes in discipline rates tenuous.

Despite this limitation, this study found that students with disabilities were disciplined more frequently than students without disabilities at both time points. This corresponds with previous research on disproportional discipline of students with disabilities (Bowen-Perrott et al., 2011; Krezmien et al., 2006; Losen & Gillespie, 2012). Students with disabilities appear to be particularly vulnerable to suspensions, as this group was given all forms of suspensions at significantly higher rates for both time points. As previously mentioned, there are more restrictions for handing down expulsions. Because it is easier to have a subjective justification for suspending a student, this punishment can disproportionately affect students with disabilities. The results from this study support the notion that suspensions are subjectively, rather than objectively, administered.

However, by the 2011-2012 school year, disproportionate rates of expulsions could also be seen. This is in part because discipline rates increased for students with disabilities for all forms of discipline except for expulsions without services. For students without disabilities, no form of discipline increased in usage. Discipline rates may be on the rise, but these increases are affecting students with disabilities more so than their non-disabled peers.

The reason for the increase in expulsions is unclear, especially considering that expulsions have strict usage criteria. Expulsions due to zero tolerance policies may be higher during the 2011-12 school year because school administrators applied the punishment to a greater number of infractions, that is, infractions that would fall into the



“Other” category of the study from Wauchope (2009) and that would likely be more appropriately addressed with a less extreme form of discipline. Given the growing backlash against zero tolerance discipline policies, schools may see decreased rates of expulsions in the future. We may already be seeing this for students without disabilities.

The rise in expulsions without services for students with disabilities is concerning, particularly for students with disabilities. Schools may be favoring expulsions without services as a cost saving measure. However, the dramatic increase in the rates of this form of expulsion given to students with disabilities begs the question if these students are being properly served when they are expelled when they are not also receiving educational supports. Some have argued that schools are not properly implementing students’ IEPs or failing to take them into consideration when disciplining students with disabilities (Krezmien et al., 2006), and this may be contributing to the rise in the number of expulsions without services they receive.

### **Regional Trends in Discipline**

Southern states were found to discipline students at much higher rates compared to the other three regions. Southern states disciplined students with significantly more in-school and out-of-school suspensions than the states in the West and Midwest. When compared to states in the Northeast, southern states were more likely to discipline students with in-school suspensions and only one out-of-school suspension, but the regions had students receiving more than one out-of-school suspension at comparable rates.

When states in the West, Midwest, and Northeast were compared with one another, there were no statistically significant differences in how they disciplined their

students, indicating that they use all forms of suspensions and expulsions at comparable rates.

These differences in the use of suspensions between regions suggests that there are significant regional differences to how discipline is applied. These differences may be attributable to cultural views on what punishments are most appropriate for managing student behavior. Schools that favor harsh, punitive forms of behavior management may be more likely to use suspensions and expulsions to address less severe infractions. One indicator of a harsh, punitive discipline style is the acceptability and use of corporal punishment in schools. Of the 16 Southern states, 11 permit corporal punishment. Three (Mississippi, Arkansas, and Alabama) have the greatest percentage of students who are disciplined with corporal punishment (The Center for Effective Discipline, 2010). Four states in the West and four in the Midwest allow corporal punishment while in the Northeast, the region with some of the lowest discipline rates, corporal punishment is banned in all states.

### **Merits of the Study**

This study adds to the growing body of literature on disproportional discipline, specifically for students with disabilities. This study also includes a nearly 100% sample of school districts in 2009-2010 and 100% of school districts included in the 2011-2012 year. The inclusion of all fifty states and DC allowed for a better understanding of what school discipline practices look like across the entire country. Rather than grouping all suspensions and expulsions together, this study made comparisons across a variety of discipline measures, allowing for a more nuanced investigation of discipline practices.

## **Limitations**

The OCR has collected a significant amount of school and student data since 2000; however, the specific information requested has changed dramatically, particularly as a result of IDEA 2004. Because of the differences in data collection, it was impossible to compare more than two time points, which makes it difficult to analyze longitudinal discipline trends.

This study did not address district-level rates of discipline practices. Previous research indicates that a small number of schools account for a large proportion of exclusion, and there is a need to conduct school- and district-level rather than state-level analyses. Analysis of school and district level policies and practices could better show what specific factors contributing to disproportionality are present in these schools but not present in schools or districts where little or no disproportionality is found.

The CRDC used in this study lacks information on the student behaviors that led to the reported punishment. Although it is hypothesized that disproportionality stems in part from unfair treatment of vulnerable groups, this study has no way to test whether the reported discipline procedures were handed down fairly. For students with disabilities, in particular, there is no indication in the OCR database of whether schools considered the disability status of students before disciplining them. This information is necessary to determine how appropriate a given punishment is for a student with disabilities.

This dataset is also dependent on accurate reporting from school districts. Mistakes in reporting have been found in the past (e.g. reported numbers of suspensions that exceed the reported total number of enrolled students) and the OCR has taken steps to correct them. However, there may be errors in the database that are difficult if not

impossible to identify (e.g. reported numbers of suspensions that exceed the actual number of suspensions).

There are also limitations to the analyses used in this investigation. The hierarchical nature of the data was not addressed by the analyses, and as a result the differences found between states' discipline practices may be overestimates. Future research should take into consideration the hierarchical nature of the discipline data collected as part of the CRDC and use methods of analysis that statistically account for the nested nature of the data.

### **Future Directions**

State and school district culture can have a tremendous impact on what school procedures are favored. More research is needed on how elements of state and local culture impact a school's usage of specific discipline procedures. This study suggests that regional cultures exist that favor certain discipline procedures. However, even within a region there are outlier states. Among the Southern states during the 2011-2012 school year, Florida schools gave in-school suspensions to 36% of their students with disabilities while Maryland gave the same punishment to only 4% of their students with disabilities. Additional studies are needed to determine the factors that promote the use of in-school suspensions in one states but discourage its use in another. Additionally, grouping states by geographic region may not paint the most representative picture of the different school cultures shared between states. Other grouping criteria may yield more meaningful results that can better explain why certain discipline practices are followed.

There is a need for investigations into the impact that federal, state, and local policies have on school procedures, particularly discipline usage. Although this study

attempted to assess how federal legislation has impacted the disproportional use of discipline, the effectiveness of other policies must also be studied. Policies that promote alternative discipline procedures, such as school-wide positive behavioral supports (Osher, Bear, Sprague, & Doyle, 2010), would be especially valuable at reducing the amount of exclusionary discipline and hopefully keeping students in school, but only if these policies are implemented with integrity. One such policy that warrants future investigation is Maryland's recent policy of reserving out-of-school suspensions and long-term expulsions for specific and severe infractions (MSDE, 2014). Future research should investigate schools' adherence to the new suspension and expulsion policies to determine if it is being appropriately followed and if this results in a decrease in suspensions and expulsions.

The results of this study indicate that there are regional differences in discipline practices, specifically between Southern states and the other geographic areas of the country; however, it is unclear what has caused these differences. It is also unclear whether these differences contribute to greater levels of disproportionality. For example, do Southern states have higher rates of exclusionary discipline in general, or do they have significantly higher rates of exclusion of students with disabilities while suspending and expelling students without disabilities at rates consistent with other states? One hypothesis for these differences between geographic regions might be that other regions have favored the use of alternative behavioral management and discipline practices, such as PBIS, and do not need to rely on exclusionary discipline practices as much as Southern states. Another hypothesis might be that Southern states intentionally favor a more punitive disciplinary mindset, leading to greater use of exclusionary discipline. Future

research should investigate possible factors that may have led to discipline disparities between the different geographic regions, and if these differences lead to greater levels of disproportionality.

There is also need to continue to investigate the behaviors that lead to the punishments reported in the OCR database, in line with the research conducted by Cooley (1995) that focused on schools in the state of Kansas. Connecting punishments with the specific behaviors that triggered the need for discipline will help schools better understand whether punishments are being handed down fairly, and to have more informed interventions if they are not. Such studies that work closely with schools and districts rather than relying on a nation-wide but non-specific datasets, like the CRDC, will help address issues with potential reporting errors found in such dataset and can better tailor the data collected to the specific research question.

## Appendix A: Mean Discipline Ranks

Table A. <i>Mean discipline ranks by year and ability status</i>		
2009-10 Students with Disabilities vs. 2009-10 Students without Disabilities		
	Students with Disabilities	Students without Disabilities
Expulsions due to zero tolerance policies	53.48	49.52
Expulsions with services	55.88	47.12
Expulsions without services	45.97	57.03
In-school suspensions	65.67	37.33
Only one out-of-school suspension	69.96	33.04
More than one out-of-school suspension	71.65	31.35
2011-12 Students with Disabilities vs. 2011-12 Students without Disabilities		
	Students with Disabilities	Students without Disabilities
Expulsions due to zero tolerance policies	64.39	38.61
Expulsions with services	67.61	35.39
Expulsions without services	51.69	51.31
In-school suspensions	68.86	34.14
Only one out-of-school suspension	75.31	27.69
More than one out-of-school suspension	74.98	28.02
2009-10 Students with Disabilities vs. 2011-12 Students with Disabilities		
	Students with Disabilities	Students without Disabilities
Expulsions due to zero tolerance policies	39.77	63.23
Expulsions with services	38.35	64.65
Expulsions without services	39.87	63.13
In-school suspensions	51.06	51.94
Only one out-of-school suspension	41.47	61.53
More than one out-of-school suspension	48.12	54.88
Note: Lower ranks (higher numbers) indicate greater percentage of students disciplined		

Table A (cont.) <i>Mean discipline ranks by year and ability status</i>		
	2009-10 Students without Disabilities vs. 2011-12 Students without Disabilities	
	Students with Disabilities	Students without Disabilities
Expulsions due to zero tolerance policies	45.61	57.39
Expulsions with services	48.37	54.63
Expulsions without services	44.61	58.39
In-school suspensions	54.08	48.92
Only one out-of-school suspension	53.43	49.57
More than one out-of-school suspension	53.73	49.27
Note: Lower ranks (higher numbers) indicate greater percentage of students disciplined		



## Appendix B: Discipline Percentage Tables by State

Table B.1. <i>Percentage of students expelled due to zero-tolerance policies by state</i>				
	2009-10		2011-12	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
Alabama	.02	.01	.05	.02
Alaska	0	.004	0	.001
Arizona	.01	.02	.05	.03
Arkansas	0	.01	.05	.03
California	.06	.03	.15	.04
Colorado	.04	.05	.23	.06
Connecticut	.08	.06	.24	.08
Delaware	.12	.03	.007	.004
District of Columbia	0	0	.14	.02
Florida	.18	.06	.05	.005
Georgia	.04	.007	.06	.02
Hawai'i	0	.002	1.87	.001
Idaho	0	.02	.06	.02
Illinois	.009	.008	.05	.02
Indiana	.06	.05	.17	.06
Iowa	0	.003	.03	.02
Kansas	.02	.02	.24	.05
Kentucky	0	.001	.02	.006
Louisiana	.07	.08	.12	.03
Maine	.04	.01	.03	.006
Maryland	.037	.009	.02	.004
Massachusetts	.01	.004	.02	.005
Michigan	.04	.02	.18	.06
Minnesota	.004	.009	.06	.01
Mississippi	.04	.04	.12	.05
Missouri	.01	.003	.09	.04
Montana	0	.004	.05	.02
Nebraska	.04	.006	.05	.02
Table B.1.				

<i>Percentage of students expelled due to zero-tolerance policies by state</i>				
	2009-10		2011-12	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
Nevada	.11	.10	.24	.12
New Hampshire	0	.003	0	.005
New Jersey	.003	0	.03	.004
New Mexico	0	.03	.06	.02
New York	.02	.006	.03	.005
North Carolina	0	.003	.03	.004
North Dakota	.01	0	.03	.02
Ohio	0	.02	.07	.03
Oklahoma	.06	.02	.39	.11
Oregon	.04	.03	.22	.05
Pennsylvania	.08	.03	.10	.06
Rhode Island	.12	0	0	.005
South Carolina	0	.04	.13	.06
South Dakota	.18	0	.01	.02
Tennessee	.04	.21	.43	.17
Texas	0	.13	.31	.09
Utah	0	.006	.05	.02
Vermont	.009	0	.05	.02
Virginia	.06	.04	.15	.04
Washington	0	.20	.63	.10
West Virginia	.02	1.22	.14	.05
Wisconsin	0	.07	.16	.05
Wyoming	.07	0	.09	.03

Table B.2. <i>Percentage of students expelled with services by state</i>				
	2009-10		2011-12	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
Alabama	0	0.05	0.32	0.07
Alaska	0	0.02	0.20	0.05
Arizona	0.02	0.03	0.08	0.01
Arkansas	0.07	0.03	0.16	0.05
California	0.25	0.22	0.49	0.20
Colorado	0.09	0.54	0.43	0.19
Connecticut	0.21	0.16	0.53	0.22
Delaware	0.15	0.07	0.25	0.09
District of Columbia	0.06	0.03	0.31	0.11
Florida	0.05	0.05	0.06	0.02
Georgia	0.28	0.10	0.28	0.13
Hawai'i	0	0	0.17	0
Idaho	0.02	0.02	0.18	0.10
Illinois	0.05	0.03	0.24	0.12
Indiana	0.27	0.12	0.79	0.16
Iowa	0	0.009	0.11	0.02
Kansas	0.06	0.04	0.40	0.06
Kentucky	0.005	0.008	0.05	0.03
Louisiana	0.53	0.73	1.32	0.60
Maine	0.04	0	0.11	0.02
Maryland	0.03	0.11	0.25	0.14
Massachusetts	0.06	0.03	0.09	0.02
Michigan	0.11	0.052	0.40	0.10
Minnesota	0.02	0.02	0.28	0.13
Mississippi	0.15	0.08	0.35	0.09
Missouri	0.05	0.04	0.22	0.06
Montana	0.04	0.04	0.12	0.04
Nebraska	0.31	0.21	0.49	0.20
Nevada	0.48	0.22	0.04	0.008

Table B.2. (cont.) <i>Percentage of students expelled with services by state</i>				
	2009-10		2011-12	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
New Jersey	0.02	0.003	0.07	0.01
New Mexico	0.08	0.04	0.30	0.03
New York	0	0.06	0.21	0.06
North Carolina	0	0.05	0.09	0.02
North Dakota	0.02	0	0.07	0.04
Ohio	0.07	0.04	0.41	0.05
Oklahoma	0.25	0.17	0.91	0.37
Oregon	0.09	0.23	0.71	0.30
Pennsylvania	0.21	0.12	0.22	0.15
Rhode Island	0.15	0.01	0.02	0.003
South Carolina	0.06	0.11	0.71	0.12
South Dakota	0.052	0.16	0.16	0.03
Tennessee	0.28	0.73	0.81	0.26
Texas	0	0.20	0.76	0.22
Utah	0.02	0.04	0.08	0.02
Vermont	0.05	0.009	0.36	0.02
Virginia	0.27	0.10	0.26	0.08
Washington	0	0.10	0.69	0.08
West Virginia	0.06	0.18	0.52	0.20
Wisconsin	0.005	0.09	0.42	0.09
Wyoming	0.53	0.04	0.46	0.12

Table B.3. <i>Percentage of students expelled without services by state</i>				
	2009-10		2011-12	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
Alabama	5.00	0.07	0.02	0.07
Alaska	0	0	0.05	0.04
Arizona	2.00	0.023	0.02	0.06
Arkansas	12.00	0.06	0.05	0.11
California	0.02	0.021	0.13	0.05
Colorado	0.05	0.05	0.29	0.09
Connecticut	0	0.002	0.04	0.02
Delaware	0	0.04	0.007	0.03
District of Columbia	0	0.05	0.20	0.09
Florida	0.05	0.01	0.009	0.02
Georgia	0.04	0.10	0.12	0.13
Hawai'i	0	0.002	0	0
Idaho	0.02	0.045	0.04	0.08
Illinois	0.002	0.03	0.03	0.07
Indiana	0.12	0.31	0.32	0.37
Iowa	0.04	0.04	0.03	0.02
Kansas	0.01	0.04	0.08	0.07
Kentucky	0.01	0.003	0.009	0.008
Louisiana	0.01	0.14	0.11	0.17
Maine	0.04	0.09	0.05	0.043
Maryland	0.005	0.008	0.07	0.03
Massachusetts	0.01	0.01	0.03	0.01
Michigan	0.04	0.04	0.13	0.10
Minnesota	0.01	0.004	0.05	0.03
Mississippi	0.009	0.14	0.05	0.13
Missouri	0.08	0.04	0.05	0.09
Montana	0	0.04	0.03	0.09
Nebraska	0	0.004	0.02	0.02
Nevada	0.03	0.04	0.02	0.01
New Hampshire	0	0.006	0.09	0.008

Table B.3. (cont.) <i>Percentage of students expelled without services by state</i>				
	2009-10		2011-12	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
New Jersey	0.003	0.002	0.008	0.01
New Mexico	0	0.06	0.21	0.18
New York	0.05	0.007	0.04	0.01
North Carolina	0	0.02	0.03	0.02
North Dakota	0.02	0	0	0.04
Ohio	0.12	0.24	0.18	0.26
Oklahoma	0.02	0.03	1.25	0.49
Oregon	0.05	0.01	0.07	0.05
Pennsylvania	0	0.01	0.04	0.10
Rhode Island	0	0	0	0
South Carolina	0	0.22	0.05	0.27
South Dakota	0.05	0.005	0.04	0.03
Tennessee	0.04	0.39	0.51	0.44
Texas	0	0.02	0.06	0.03
Utah	0.02	0.001	0.008	0.01
Vermont	0.002	0	0.04	0.02
Virginia	0.12	0.01	0.05	0.03
Washington	0.04	1.53	0.62	0.21
West Virginia	0.01	0.007	0.008	0.009
Wisconsin	0.01	0.13	0.11	0.01
Wyoming	0.01	0	0.04	0.05

Table B.4. <i>Percentage of students receiving in-school suspensions by state</i>				
	2009-10		2011-12	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
Alabama	11.42	7.24	11.96	8.06
Alaska	8.41	4.18	7.38	3.59
Arizona	8.54	5.21	10.27	5.34
Arkansas	13.27	10.03	14.72	10.60
California	4.62	2.43	5.47	2.20
Colorado	6.31	3.19	6.44	2.70
Connecticut	14.46	5.84	13.45	5.16
Delaware	16.22	9.28	11.41	7.25
District of Columbia	1.06	0.50	5.26	2.03
Florida	62.45	7.31	36.29	13.97
Georgia	16.52	11.59	17.03	10.01
Hawai'i	1.19	0.37	3.51	0.001
Idaho	7.48	4.27	7.35	3.42
Illinois	8.24	4.34	10.18	4.78
Indiana	21.22	8.56	11.54	6.04
Iowa	8.49	3.80	10.74	3.55
Kansas	9.64	4.97	8.27	3.68
Kentucky	10.60	8.14	13.12	8.33
Louisiana	13.57	10.91	16.43	9.16
Maine	5.78	2.54	5.92	2.19
Maryland	3.65	2.27	4.20	1.75
Massachusetts	7.01	2.7	5.94	2.45
Michigan	6.38	3.38	6.16	3.07
Minnesota	6.58	2.43	7.53	2.66
Mississippi	15.75	14.25	14.53	12.25
Missouri	13.50	8.60	15.23	8.86
Montana	9.69	5.41	13.56	5.05
Nebraska	8.87	4.68	7.96	3.30
Nevada	8.68	7.29	6.40	3.04
New Hampshire	9.32	3.28	10.37	3.62

Table B.4. (cont.) <i>Percentage of students receiving in-school suspensions by state</i>				
	2009-10		2011-12	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
New Jersey	7.92	3.27	7.35	2.85
New Mexico	5.34	4.55	8.65	4.98
New York	11.42	2.59	9.01	3.65
North Carolina	8.41	6.75	15.01	7.93
North Dakota	8.54	2.30	5.25	2.35
Ohio	13.27	4.58	8.15	3.80
Oklahoma	4.62	6.70	10.64	5.57
Oregon	6.31	3.84	9.02	3.72
Pennsylvania	14.46	4.04	8.41	3.78
Rhode Island	16.22	3.06	8.05	4.28
South Carolina	1.06	12.33	16.73	10.09
South Dakota	62.45	4.29	13.80	4.99
Tennessee	16.52	11.48	13.44	9.17
Texas	1.19	11.09	19.62	9.61
Utah	7.48	1.55	2.54	1.15
Vermont	8.24	4.02	10.10	3.27
Virginia	21.22	4.77	11.36	4.84
Washington	8.49	2.65	7.61	2.91
West Virginia	9.64	6.24	8.76	6.25
Wisconsin	10.60	10.26	7.64	2.51
Wyoming	13.57	7.09	8.69	4.48



Table B.5. <i>Percentage of students receiving only one out-of-school suspension by state</i>				
	2009-10		2011-12	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
Alabama	7.12	4.57	7.69	4.80
Alaska	5.38	2.90	6.32	2.74
Arizona	5.14	3.18	7.79	3.35
Arkansas	5.70	4.25	7.09	4.11
California	6.20	3.61	7.62	3.19
Colorado	5.91	3.23	7.08	3.00
Connecticut	6.34	2.59	6.24	2.24
Delaware	8.59	4.95	6.2	4.38
District of Columbia	5.12	3.02	12.27	5.90
Florida	18.13	2.17	5.20	2.04
Georgia	6.57	4.356	8.08	4.01
Hawai'i	7.38	2.53	7.66	0.002
Idaho	3.03	2.01	4.51	1.97
Illinois	3.86	2.18	6.78	3.18
Indiana	6.64	3.41	7.57	3.50
Iowa	4.60	2.06	6.62	1.86
Kansas	5.44	2.87	4.78	2.08
Kentucky	4.18	2.95	5.55	2.78
Louisiana	7.16	4.90	9.82	4.56
Maine	4.09	1.92	5.04	1.81
Maryland	6.32	3.42	7.88	3.28
Massachusetts	5.02	2.25	5.73	2.09
Michigan	6.49	4.20	7.65	3.70
Minnesota	3.95	1.60	5.91	1.71
Mississippi	6.55	5.86	7.45	5.21
Missouri	5.33	3.35	6.44	3.36
Montana	5.23	2.27	6.56	2.30
Nebraska	4.27	2.39	5.74	2.24
Nevada	7.76	6.65	6.46	2.71
New Hampshire	4.96	2.06	5.29	2.10

Table B.5. (cont.)				
<i>Percentage of students receiving only one out-of-school suspension by state</i>				
	2009-10		2011-12	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
New Jersey	4.72	2.22	5.14	1.99
New Mexico	3.19	3.02	6.18	3.57
New York	7.12	1.10	4.40	1.60
North Carolina	5.38	3.95	8.78	3.95
North Dakota	5.14	1.01	2.46	1.17
Ohio	5.70	3.14	7.56	3.15
Oklahoma	6.20	3.52	7.16	3.51
Oregon	5.91	2.92	6.99	2.84
Pennsylvania	6.34	2.92	6.25	2.73
Rhode Island	8.59	3.56	8.32	4.09
South Carolina	5.12	5.10	8.27	4.40
South Dakota	18.13	1.33	4.38	1.74
Tennessee	6.57	3.01	6.62	3.85
Texas	.74	3.14	6.95	2.82
Utah	3.03	1.49	2.87	1.30
Vermont	3.86	1.65	5.65	1.96
Virginia	6.64	3.55	7.15	3.22
Washington	4.60	2.88	7.33	2.79
West Virginia	5.44	3.87	6.16	3.97
Wisconsin	4.18	2.31	7.50	2.42
Wyoming	7.16	7.82	4.77	2.06

Table B.6. <i>Percentage of students receiving more than one out-of-school suspension by state</i>				
	2009-10		2011-12	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
Alabama	5.96	3.24	6.72	3.62
Alaska	3.36	1.21	4.62	1.53
Arizona	4.06	1.85	5.08	1.83
Arkansas	5.11	2.84	5.74	2.61
California	5.80	2.15	6.02	1.71
Colorado	4.94	1.63	4.88	1.31
Connecticut	9.36	4.08	5.45	1.36
Delaware	15.18	3.79	7.59	3.46
District of Columbia	2.06	1.06	12.97	4.22
Florida	42.71	3.90	21.56	7.11
Georgia	6.55	3.65	7.59	4.01
Hawai'i	9.19	0.81	5.29	0
Idaho	1.31	0.79	3.03	1.06
Illinois	4.43	1.79	4.69	0.16
Indiana	6.78	2.69	6.57	2.36
Iowa	2.73	0.88	5.13	0.99
Kansas	4.09	1.53	4.10	1.33
Kentucky	3.28	1.48	4.04	1.55
Louisiana	6.89	3.86	9.09	2.97
Maine	4.36	1.14	4.65	1.05
Maryland	4.83	2.59	5.58	1.44
Massachusetts	6.63	1.93	5.47	1.42
Michigan	7.68	3.31	8.16	3.19
Minnesota	4.41	1.24	4.72	0.89
Mississippi	6.09	4.68	6.40	3.95
Missouri	5.50	2.94	6.30	2.58
Montana	3.71	1.21	5.25	1.42
Nebraska	4.36	1.36	5.20	1.38
Nevada	6.15	2.81	12.17	1.44
New Hampshire	6.90	2.08	6.73	1.73

Table B.6. (cont.) <i>Percentage of students receiving more than one out-of-school suspension by state</i>				
	2009-10		2011-12	
	Students with Disabilities	Students without Disabilities	Students with Disabilities	Students without Disabilities
New Jersey	5.35	1.76	4.95	1.56
New Mexico	2.56	1.78	5.76	2.63
New York	5.96	0.69	3.72	0.98
North Carolina	3.36	3.14	8.20	3.26
North Dakota	4.06	0.58	1.6	0.56
Ohio	5.11	2.52	6.41	2.12
Oklahoma	5.80	2.15	4.41	1.51
Oregon	4.94	1.13	5.35	1.46
Pennsylvania	9.36	1.89	5.10	2.05
Rhode Island	15.18	2.44	9.15	2.72
South Carolina	2.06	5.09	9.82	4.12
South Dakota	42.72	0.93	4.38	1.12
Tennessee	6.55	4.52	5.85	2.74
Texas	9.19	1.86	5.86	1.78
Utah	1.31	0.65	2.36	0.83
Vermont	4.43	1.38	5.45	1.32
Virginia	6.78	2.29	6.59	2.20
Washington	2.73	2.19	6.53	1.57
West Virginia	4.09	3.16	6.50	2.87
Wisconsin	3.28	1.45	7.68	1.42
Wyoming	6.89	0.98	2.92	1.02

## References

- Advancement Project (2010). *Test, punish, and push out: How “zero tolerance” and high-stakes testing funnel youth into the school-to-prison pipeline*.
- American Psychological Association Zero Tolerance Task Force. (2006). Are zero tolerance policies effective in schools? Washington, DC: American Psychological Association. Available: [www.apa.org/ed/cpse/zttfreport.pdf](http://www.apa.org/ed/cpse/zttfreport.pdf)
- Bradley, R., Doolittle, J., Bartolotta, R. (2008). Building on the data and adding to the discussion: The experiences and outcomes of students with emotional disturbance. *Journal of Behavioral Education*, 17, 4-23. doi: 10.1007/s10864-007-9058-6
- Bowman, Perrott, L., Burke, M.D., Zaini, S., Zhang, N., & Vannest, K. (2015). Promoting positive behavior using the Good Behavior Game: A meta-analysis of single-case research. *Journal of Positive Behavioral Interventions*, 1-11. doi: 10.1177/1098300715592355
- Bowman-Perrott, L., Benz, M.R., Hsu, H.Y., Kwok, O.M., Eisterhold, L.A., & Zhang, D. (2011). Patterns and predictors of disciplinary exclusion over time: An analysis of the SEELS national data set. *Journal of Emotional and Behavioral Disorders*, 21, 83-96. doi: 10.1177/1063426611407501
- California Legislation Information. (2012, September 5). *SB-1235 Pupils: suspension*. Retrieved from <http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml>
- The Center for Effective Discipline. (2010, July 1). *U.S.: Corporal Punishment and Paddling Statistics by State and Race*. Retrieved from <http://www.stop hitting.com/index.php?page=statesbanning>

- Christle, C., Nelson, C.M., & Jolivette, K. (2004). School characteristics related to the use of suspension. *Education and Treatment of Children, 27*, 509-526.
- Christle, C., Jolivette, K., & Nelson, C. (2007). School characteristics related to high school dropout rates. *Remedial and Special Education, 28*, 325-339.
- Cooley, S. (1995). Suspension/expulsion of regular and special education students in Kansas: A report to the Kansas State Board of Education. Topeka: Kansas State Board of Education. (ERIC Document Reproduction Service No. ED 393 403).
- Cook, C.R., Frye, M., Slemrod, T., Lyon, A.R., Renshaw, T.L., & Zhang, Y. (2015). An integrated approach to universal prevention: Independent and combined effects of PBIS and SEL on youths' mental health. *School Psychology Quarterly, 30*, 1-18. doi: 10.1037/spq0000102
- Duran, J.B., Zhou, Q., Frew, L.A., Kwok, O.M., & Benz, M.R. (2011). Disciplinary exclusion and students with disabilities: The mediating role of social skills. *Journal of Disability Policy Studies, 24*, 15-26. doi: 10.1177/1044207311422908
- Durlak, J.A., Weissberg, R.P., Dymnicki, A.B., Taylor, R.D., & Schellinger, K.B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development, 82*, 405-432. doi: 10.1111/j.1467-8624.2010.01564.x
- Gregory, A., Skiba, R.J., & Noguera, P.A. (2010). The achievement gap and the discipline gap: Two side of the same coin? *Educational Researcher, 39*, 59-68. doi: 10.3102/0013189X09357621

- Grolnick, W.S., & Ryan, R.M. (1990). Self-perceptions, motivation, and adjustment in children with learning disabilities: A multiple group comparison study. *Journal of Learning Disabilities, 23*, 177-184.
- Horner, R.H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A.W., et al. (2009). A randomized, wait-list controlled effectiveness trial assessing school-wide positive behavior support in elementary schools. *Journal of Positive Behavior Interventions, 11*, 133-144. doi: 10.1177/1098300709332067
- Indiana Department of Education (2014, May 20). Improving school behavior and discipline. Retrieved from <http://www.doe.in.gov/student-services/improving-school-behavior-and-discipline>
- Jacobs, S., Decker, D.M., & Hartshorne, T.S. (2010). *Ethics and Law for School Psychologists, 5<sup>th</sup> Edition*. New Jersey: Wiley.
- Krezmien, M.P., Leone, P.E., & Achilles, G.M. (2006). Suspension, race, and disability: Analysis of statewide practices and reporting. *Journal of Emotional Behavioral Disorders, 14*, 217-226.
- Lane, K. (2011). Addressing disproportionality in school discipline through universal school-wide positive behavior support. (Doctoral Dissertation). *PCOM Psychology Dissertations*. Paper 184.
- Losen, D.J., & Gillespie, J.F. (2012). *Opportunities suspended: The disparate impact of disciplinary exclusion from school*. The Civil Rights Project: University of California.
- Maryland State Department of Education. (2014). Report on Best Practices in School Discipline. Baltimore, MD: Author.

- Mayer, M.J. & Leone, P.E. (2007). School violence and disruption revisited: Equity and safety in the school house. *Focus on Exceptional Children*, 40, 1-28.
- National Center for Education Statistics. (January 2014). *Children and Youth with Disabilities*. Retrieved from [http://nces.ed.gov/programs/coe/indicator\\_cgg.asp](http://nces.ed.gov/programs/coe/indicator_cgg.asp)
- Noltemeyer, A.L. & Mcloughlin, C.S. (2010a). Changes in exclusionary discipline rates and disciplinary disproportionality over time. *International Journal of Special Education*, 25, 59-70.
- Noltemeyer, A., & Mcloughlin, C.S. (2010b). Patterns of exclusionary discipline by school typology, ethnicity, and their interaction. *Perspectives on Urban Education*, 7, 27-40.
- O'Connor, E.E., Cappella, E., McCormick, M.P., & McClowry, S.G. (2014). An examination of the efficacy of INSIGHTS in enhancing the academic and behavioral development of children in early grades. *Journal of Educational Psychology*, 106, 1156-1169. doi: 10.1037/a0036615
- Office of Civil Rights. (2014). Civil Rights Data Collection. Retrieved from <http://www2.ed.gov/about/offices/list/ocr/data.html?src=rt>
- Osher, D., Bear, G.G., Sprague, J.R, Doyle, W. (2010). How can we improve school discipline? *Educational Research*, 39, 48-58. doi: 10.3102/0013189X09357618
- Positive Behavioral Interventions and Supports. (2014). PBIS and the Law. Retrieved from <http://www.pbis.org/school/pbis-and-the-law>
- Skiba, R.J. (2002). Special education and school discipline: A precarious balance. *Behavioral Disorders*, 27, 81-97.



- Skiba, R.J. & Peterson, R.L. (2000). School discipline at a crossroads: From zero tolerance to early response. *Exceptional Children*, 66, 335-347. doi: 10.1177/001440290006600305
- Skiba, R., & Sprague, J. (2008). Safety without suspensions. *The Positive Classroom*, 66, 38-43.
- Tobin, T., & Sprague, J. (2000). Alternative Education Strategies Reducing Violence in School and the Community. *Journal of Emotional and Behavioral Disorders*, 8, 177-186. doi: 10.1177/106342660000800305
- United Nation Committee on the Elimination of Racial Discrimination in All Forms. (2008). *Consideration Of Reports Submitted By States Parties Under Article 9 Of The Convention. Concluding observations of the Committee on the Elimination of Racial Discrimination, United States of America*. Retrieved from <http://www.refworld.org/publisher,CERD,CONCOBSERVATIONS,USA,4885cf a70,0.html>
- Vaughn, S., Elbaum, B., & Boardman, A.G. (2001). The social functioning of students with learning disabilities: Implications for inclusion. *Exceptionality*, 9, 47-65. doi: 10.1080/09362835.2001.9666991
- Wauchope, B. (2009). Student discipline in New Hampshire schools. *The Carsey Institute at the Scholar's Repository*, Paper, 86, <http://scholars.unh.edu/carsey/86>
- Weissman, M. (2009). *Prelude to prison: Student perspectives on school suspension* (Doctoral dissertation). Retrieved from UMI: Dissertation Publishing. (3420942)

- Williams, J.L., Pazey, B., Shelby, L., & Yates, J.R. (2013). The enemy among us: Do school administrators perceive students with disabilities as a threat? *NASSP Bulletin*, 97, 139-165. Doi: 10.1177/0192636512473507
- Woods, G.R. (2004). *Middle and high school principals' knowledge of discipline provisions of the Individuals with Disabilities Education Act in the upper east Tennessee region* (Doctoral dissertation). Electronic Theses and Dissertations. (948)
- Wu, S. C., Pink, W. T., Crain, R. L., & Moles, O. (1982). Student suspension: A critical reappraisal. *The Urban Review*, 14, 245-303.
- Zhang, D., Katsiyannis, A., & Herbst, M. (2004). Disciplinary exclusion in special education: A 4-year analysis. *Behavioral Disorders*, 29, 337-347.