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Seclusion Amongst Elementary and High School Students: An Analysis of the Role of Demographic Variables in the Use of Seclusion in Kansas Schools

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Seclusion Amongst Elementary and High School Students: An Analysis of the Role of Demographic Variables in the Use of Seclusion in Kansas Schools

Abstract

Background Demographic variables are suspected to influence seclusion rates in educational settings. However, little is known about the connections between these variables and reported incidents of seclusion, particularly how seclusion is influenced by gender, special education status, race, and eligibility for free and reduced lunch.

Purpose The purpose of this study was to understand the relationships between demographic variables and seclusion rates for elementary and high school students. It was hypothesized that all predictor variables were directly related to the outcome variable in both cases.

Design/Method This study utilized data from the Kansas Discipline Incident System (Kan-Dis), which is an online web application accessible by all educational facilities in order to provide information regarding discipline incidents to the Kansas State Department of Education. Data were analyzed using a multiple linear regression model to understand the relationships between demographic variables and seclusion rates. More specifically, data were analyzed using R. Pearson's product moments correlation coefficient was utilized with a significance level set at a minimum of 0.001 with confidence intervals set at 95%.

Results Gender, race, special education status, and eligibility for free and reduced lunch were all determined to be positive and significant predictors of seclusion at the elementary level. At the high school level, special education acted as the only significant and positive predictor of seclusion while race and eligibility for free and reduced lunch were positive predictors but not significant. Gender was a negative predictor and was not significant.

Conclusions Results show that connections exist amongst demographic variables and seclusion rates at the elementary and high school levels.

Keywords: demographics, seclusion, elementary, high school, special education, EBD

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Demographic variables are suspected to influence seclusion rates in educational settings. However, little is known about the connections between these variables and reported incidents of seclusion, particularly how seclusion is influenced by gender, special education status, race, and eligibility for free and reduced lunch. The purpose of this study was to understand the relationships between demographic variables and seclusion rates for elementary and high school students. It was hypothesized that all predictor variables were directly related to the outcome variable in both cases. This study utilized data from the Kansas Discipline Incident System (Kan-Dis), which is an online web application accessible by all educational facilities in order to provide information regarding discipline incidents to the Kansas State Department of Education. Data were analyzed using a multiple linear regression model to understand the relationships between demographic variables and seclusion rates. More specifically, data were analyzed using R. Pearson's product moments correlation coefficient was utilized with a significance level set at a minimum of 0.001 with confidence intervals set at 95%. Gender, race, special education status, and eligibility for free and reduced lunch were all determined to be positive and significant predictors of seclusion at the elementary level. At the high school level, special education acted as the only significant and positive predictor of seclusion while race and eligibility for free and reduced lunch were positive predictors but not significant. Gender was a negative predictor and was not significant. Results show that connections exist amongst demographic variables and seclusion rates at the elementary and high school levels.

Introduction

Seclusion has been defined by the Council for Exceptional Children (CEC) as “the involuntary confinement of a child or youth alone in a room or area from which the child or youth is physically prevented from leaving” (CEC, 2009). CEC further clarifies that this is true regardless of intended purpose or the name applied to the steps of such a procedure. The principles surrounding the use of seclusion clarify that it should only be used when the behavior of a child poses impending danger of “serious physical harm to self or others” and should be circumvented whenever possible without jeopardizing the safety of both students and staff (U.S. Department of Education, 2012). Throughout the literature, seclusion and restraint are often coupled considering they are both emergency procedures, often happen sequentially (e.g. restraint leads to seclusion), and are reported in a similar fashion (Peterson, 2010).

Unfortunately, this makes the extrapolation of data regarding seclusion that much more challenging. No student is immune to the practice of seclusion, with the special education population being at a higher risk for exposure to this aversive procedure (Lorhmann-O'Rourke & Zirkel, 1998).

Now, more than ever before, students with significant behavioral issues are being included in general education environments (Peterson, 2010). Considering that a large number of these students were previously taught in specialized settings such as hospitals, special education settings, and treatment centers, aversive procedures may have been viewed as regular interventions for such a population (Peterson, 2010). Hence, such procedures have followed students into the general education setting making it vital that general education teachers, paraprofessionals, counselors, administrators, special education teachers, and all staff who may encounter these students be able to safely and effectively manage a behavioral crisis (Couvillon, Peterson, Ryan, Scheuermann, & Stegall, 2010). Unfortunately, in education, behavior management is a highly neglected area in which educators do not possess much needed knowledge and expertise (Maag, 2001). Lack of training regarding the limitations and dangers of aversive procedures in addition to inadequate staffing have resulted in the overuse and misuse of both seclusion and restraint (Moses, 2000; Ryan, Peterson, Tetreault, & van der Hagen, 2008; Peterson, 2010).

As the push continues to educate students with disabilities in the inclusive setting (Pudelski, 2013), general education teachers are faced with educating a population of students diagnosed with emotional and/or behavioral disorders. Such a population has been described as nearly impossible to teach and one who presents daunting challenges to teachers and other school personnel (Sutherland & Singh, 2004). Considering that students with emotional and behavioral disorders (EBD) often display high levels of both verbal and physical aggression, the need for aversive procedures such as seclusion continue to intensify (Pudelski, 2013). Thus, schools continue to examine more effective interventions designed to address behavioral crises that put others at risk (Smith, Katsiyannis, & Ryan, 2011).

General concern exists that, although the use of seclusion is restrictive and a potential for abuse exists, it is being used regularly in schools (CCBD, 2009; Ryan, Peterson, Tetreault., et al. 2007; Ryan, Sanders, Katsiyannis, & Yell, 2007; Westling, Trader, Smith, & Marshall., 2010). Seclusion comes with a litany of trepidations including decreased learning opportunities (CCBD, 2009; Gast & Nelson, 1977) , reinforcing the behavior it is supposed to eliminate (Ferleger, 2008), causing physical harm to children (CCBD) , causing psychological harm (Ferleger, 2008; Finke, 2001, & Westling, et al., 2010), IDEA violations (Ryan, Peterson, & Rozalski; 2007; Jones & Feder, 2009; Wolf, McLaughlin, & Williams, 2006) and death (GAO, 2009; Goodmark, 2009). Thus, it is no surprise that such a procedure warrants caution and concern.

At the current time, no federal laws or regulations exist that address the use of restraint or seclusion in schools (Miller, 2011; Butler, 2014). Instead, the federal position on seclusion is largely suggestive in nature and does not call for federal mandates concerning the use of aversive procedures (Peterson & Smith, 2013). In its place, schools have been solicited to revise or create legislation or policy in order to regulate the use of seclusion and restraint within the school setting (Council of Parent Attorney and Advocates, 2009; Duncan, 2009; National Disability Rights Network, 2009). Consequently, merely 19 states have vital protections against seclusion

and restraint for all students, with 32 protecting those with disabilities (Butler, 2014). Such protections are believed to be a result of multiple Congressional bills that have been proposed but not passed (e.g. S.2860; Public Law 106-310; H.R. 4247; H.R. 1381; H.R. 1893; S.2020; & S.2036).

Review of Literature

Literature involving the use of seclusion is meager at best (Ryan, Peterson, Rozalski, 2013). What minimal amount of research that has been conducted has primarily relied on anecdotes (COPAA, 2009; GAO, 2009; Scheuermann et al., 2013), convenience surveys (Westling et al., 2010) lists of cases (Lohrmann-O'Rourke & Zirkel, 1998) and frequency tables (Zirkel & Lyons, 2011). As a result, an inadequate amount of research exists for much needed analysis and understanding. Multiple studies offer recommendations regarding the practice of seclusion (Gast & Nelson, 1977; Ryan, Sanders, et al., 2007; Yell, 1994) or focus on reducing the use of the procedure all together (Ryan, Peterson, Tetreault, et al., 2007). Calls for research abound (Council for Children with Behavioral Disorders, 2009; Persi & Pasquali, 1999; Wolf et al., 2006) in addition to reports of related legal proceedings (Zirkel & Lyons, 2011). Alarming, no evidence-based research currently exists which has demonstrated that the use of seclusion is therapeutic, but only that it can be both physically and psychologically harmful to those involved (National Disability Rights Network, 2010). Furthermore, virtually no research exists showing its effectiveness (Peterson, 2010). Other research has uncovered reasons for seclusion use (CCBD, 2009; Ryan, Peterson, & Rozalski, 2007) including: punishment to decrease target behavior (Ferleger, 2008), as a therapeutic approach intent on setting limits or to avoid sensory overload (CCBD, 2009; Busch & Shore, 2000), and in an emergency situation in which a student is out of control and at risk of hurting himself or others (Ferleger, 2008). Multiple studies have also established that seclusion rates can be reduced (Martin, Krieg, Esposito, Stubbe, & Cardona, 2008).

Moreover, research detailing the relationships between demographic information and seclusion is scarce. A number of studies have indicated that seclusion appears to occur more often within elementary and middle school settings (Ryan, Peterson, Tetreault et al., 2007; Westling et al., 2010). Reports also indicate that nearly every type of disability has been represented within the population of students that have experienced seclusion (Hoffman, 2011). Furthermore, males tend to be more likely to be secluded even though gender differences that have been indicated are quite small (Persi & Pasquali, 1999).

In sum, little is known about the use of seclusion in educational settings. Disparate opinions, lack of federal definition and law, as well as an ill prepared population of educators, pose serious threats in regards to the use of this aversive procedure. With the majority of standing research being largely outside of the demographic realm, further inquiry regarding the characteristics of those students who are at-risk of seclusion, is warranted. In order to seek stronger evidence of links between demographic variables and seclusion rates, the focus of this study was narrowed to include the race, special education status, gender, and eligibility for free and reduced lunch of a sample population of students that previously experienced seclusion. The results of this study are expected to shed light on the factors that may predict the use of seclusion and to contribute to the slim amount of research currently available. This study aimed to answer

the following question: To what extent do gender, race, special education status, and eligibility for free and reduced lunch predict seclusion? It was hypothesized that a positive and predictive relationship does, in fact, exist between seclusion and all demographic variables explored in both the elementary and high school sample populations.

Research Methods

Participants

The sample that participated in the study consisted of all school-aged students in grades kindergarten through six and nine through twelve across the state of Kansas who were involved in seclusion during the 2009-2012 academic school years. Students included those in public, private, and interlocal elementary and high schools. All identifying information was withheld in order to maintain anonymity.

Sampling Procedures

All seclusion data was obtained from The Kansas Discipline Incident System (KAN-DIS). KAN-DIS is an online web application accessible by all public school districts and other various educational agencies across the state in an effort to provide information regarding discipline incidents. Each individual facility is asked to report specific aversive intervention data twice per academic year. The data, in turn, is then used to produce numerous discipline reports. KAN-DIS was launched in the 2009-2010 school year for the purpose of assisting school districts in monitoring seclusion and restraint data more closely and to provide technical assistance to districts across the state. Mere guidelines were in place during the dates of this study meaning districts were not required by law to report aversive incidents, but rather, were encouraged to do so. As of April 19, 2013, emergency safety intervention regulations have been put in place across the state of Kansas, making reporting a mandated procedure by law.

Procedure

In order to obtain data for analysis, the researcher contacted the Kansas State Department of Education and formally requested all available seclusion records for students in kindergarten through twelfth grade across the state for the years 2009-2013. Available demographic information in regards to race, disability status, gender, eligibility for free and reduced lunch, building level, and building type was specifically requested. Requested information was provided through 2012 and was given in an Excel format. All records involving students in a middle school, junior high school, special school, or other were removed from the study. Incomplete records involving one or more requested demographic areas not reported were also removed.

Data Analysis

Elementary. First, frequency data were obtained for all demographic variables reported. A total of 44, 017 incidents of seclusion were reported for the elementary setting from 2009-2012, with 26,946 included in the sample for this study. Only complete incidents including gender, race, disability status, and free and reduced lunch eligibility were included. From the sample, 85.9% of incidents involved male students, 88.6% of students received special education services, 70.9% qualified for free and reduced lunch, and 73.6% of students were White. Next,

the relationships between seclusion incidents and demographic variables were investigated. Specifically, seclusion incidents acted as the outcome variable with gender, race, disability status, and eligibility for free and reduced lunch serving as the predictor variables. Pearson's product-moment correlation coefficient with a significance set at a minimum of 0.001 and a confidence interval at 95% were used for analysis. Data were analyzed using R statistical software.

High School. Frequency data were also obtained for all demographic variables reported within the high school population. A total of 43,346 incidents of seclusion were reported for the high school setting from 2009-2012, with a mere 1,060 included in the sample for this study. A significant amount of the reported incidents in KAN-DIS for the high school population were incomplete and therefore removed. Only incidents including gender, race, disability status, and free and reduced lunch eligibility were included. From the sample, 94% of incidents involved male students, 98% received special education services, 51% qualified for a free and reduced lunch, and 87% of the students were White. The same demographic variables and their relationship to seclusion incidents were explored for high school students as elementary aged students. High school data were also analyzed using Pearson's product-moment correlation coefficient with significance set at a minimum of 0.001 and a confidence interval at 95%.

Results

Descriptive statistics were obtained for each sample and are displayed in Table 1.

Table 1

Descriptive Statistics for Elementary and High School Sample Populations

Variable	Elementary			<i>n</i>	High School	
	<i>N</i>	<i>M</i>	<i>SD</i>		<i>M</i>	<i>SD</i>
Incident	26,946	162.32	260.07	1,060	117.77	84.65
Male	23,149	139.45	244.89	996	110.71	83.66
Free	19,112	115.13	200.28	543	60.43	58.20
White	19,839	119.51	169.19	931	103.46	92.87
SPED	23,900	143.97	228.79	1,041	115.75	84.78

Elementary. According to the multiple linear regression analysis results for elementary aged students, male, white, eligibility for free and reduced lunch, and special education status account for 98% of seclusion variance ($p < 0.001$) (Table 2). The model was statistically significant as the p value was well below 0.001 with confidence levels at 95%. Males positively contributed to the model ($R^2 = 0.45$, $p < 0.001$) as well as White ($R^2 = 0.24$, $p < 0.001$), free and reduced lunch eligibility ($R^2 = 0.21$, $p < 0.001$) and special education status ($R^2 = 0.30$, $p < 0.001$). For the elementary sample, the null hypothesis was rejected as a significantly positive and predictive relationship existed amongst all variables explored and seclusion.

Table 2
Predictors of Seclusion in the Elementary Setting

Variable	Unstandardized Coefficient B	Standard Error	95% CI
Male	0.45*	0.03	[0.38, 0.53]
White	0.24*	0.03	[0.17, 0.31]
Free and Reduced Lunch	0.21*	0.03	0.15, 0.28]
Special Education	0.30*	0.03	[0.22, 0.37]

Note. $R^2=0.98$. $\Delta R^2=0.98$. $n = 26,946$. CI= confidence interval.

* $p<0.001$

High School. Multiple linear regression analysis results for high school aged students, male, White, eligibility for free and reduced lunch, and special education status account for 99% of the seclusion variance ($p<0.001$) (Table 3). The model was statistically significant as the p value was well below 0.001 with confidence levels at 95%. However, unlike the elementary model, only the variable special education was statistically significant ($p<0.01$). Overall, males negatively contributed to the model ($R^2=-0.07$). Special Education status ($R^2=0.98$, $p<0.01$), along with eligibility for free and reduced lunch ($R^2=0.02$), and White ($R^2=0.07$) positively contributed. For the high school population, the null hypothesis was not rejected as only special education status was significantly a positive predictor of seclusion.

Table 3
Predictors of Seclusion in the High School Setting

Variable	Unstandardized Coefficient B	Standard Error	95% CI
Male	-0.07	0.13	[-0.43, 0.29]
White	0.07	0.07	[-0.12, 0.26]
Free and Reduced Lunch	0.02	0.01	[-0.02, 0.08]
Special Education	0.98**	0.11	[0.66, 1.30]

Note. $R^2=0.99$. $\Delta R^2=0.99$. $n = 1,060$. CI= confidence interval.

** $p<0.01$

Discussion

The purpose of this study was to explore the relationship of demographic variables and their ability to predict seclusion incidents in the elementary and high school settings. Previous research is very limited in this regard (Connolly, 2014), and this study aimed to further expand the existing research base.

From included frequency data, it appears as though more incidents of seclusion occurred within the elementary setting ($N=26,946$) as compared with the high school setting ($N=1,060$). This finding further validates previous research (Ryan, Peterson, Tetreault., 2007; Westling et al., 2010) suggesting that seclusion happens more often in elementary settings. Lower seclusion rates could result from a number of different circumstances. Student size, fewer coping strategies, and a feeling of developmental appropriateness, may account for the higher use of seclusion amongst younger populations (Persi & Pasquali, 1999; Ryan, Peterson, Tetreault et al., 2008). Additionally, educators are more likely to ignore the behaviors of older students due to the size and strength of the individuals (Miller, Walker, & Friedman, 1989; Persi & Pasquali, 1999), which subsequently would result in lower seclusion rates. According to Sutherland and

Singh (2004), students with EBD are more likely to be absent from school, have lower grades, fail, and have higher dropout rates than students diagnosed with other disabilities. Increased absences as well as elevated drop out rates may contribute to lower seclusion rates at the high school level. Last, a decrease in seclusion in the high school setting may suggest that students have a better hold on their emotions and are able to make more responsible decisions regarding behavioral choices.

Persi and Pasquali (1999) suggested that males are more likely to be secluded. In this study, a positive and predictive relationship was found in the elementary sample population. At the same time, this was not the case in the high school setting with a negative predictive relationship being uncovered. This variation may be related to the size of male high school students and the preparedness of educators to place these students in a secluded setting. Data indicate that educators responsible for teaching students with EBD are some of the least qualified special educators, with a high percentage entering the teaching field through alternative certification programs rather than the traditional ones used to prepare most special education teachers (Billingsley, Fall, & Williams, 2006). Further, considering that the majority of the teaching population is female, there exists a real possibility that a large number of male high school students are bigger than those educators responsible for keeping them safe. This, along with a lack of feeling prepared, may help to explain why seclusion rates are lower amongst the male high school population. Size is not as likely to be a major factor amongst the elementary male population, leading to a greater likelihood that female teachers may be willing to restrain them.

Hoffman (2011) reported that nearly every disability category is represented within the population of students that have been secluded. This study indicated that a positive and predictive relationship exists between students in special education and seclusion within both the high school and elementary sample. While this finding lends support to Hoffman's study, specific disability categories were not available in order to further explore which populations of students were represented.

Last, within both settings, being White and eligible for free and reduced lunch had a positive predictive relationship on seclusion rates. However, these relationships were only significant within the elementary population. Higher seclusion rates may exist amongst the White population because the majority of people in Kansas are, in fact, White. Due to a large White population, one could assume that the educators in Kansas schools are also White, possibly leading to a perceived sense of security surrounding sameness when teachers are faced with the decision to seclude. Additionally, teachers and various other staff are not equipped with the resources or skills to properly manage children with high needs, especially those in high-poverty areas (Atkins, Hoagwood, Kutash, & Seidman, 2009). Students receiving free and reduced lunch may, in fact, dwell in poverty stricken homes. Consequently, teachers responsible for teaching these students may not be properly prepared to manage student behaviors and may, instead, choose to seclude them.

Limitations

One limitation of this study was that locations and demographic information of reporting schools was unknown. Because schools were not mandated to report seclusion incidents, there

were no clear indications as to which schools did and did not report them. Consequently, there was no way to discern school size or population characteristics. As a result, these findings are not able to be generalized to other populations. A second limitation of this study was the anonymity of students subjected to seclusion. As a result of no identifiable indicators, the researcher was unable to determine if the same student was responsible for numerous seclusion incidents. A third limitation of this study is that numerous data had to be removed due to being incomplete. Because schools and agencies were not required by law to report data from 2009-2012, no criteria were in place for what did and did not have to be reported. As a result, many incomplete records existed regarding demographic variables that could not be analyzed. Additionally, the variation within the demographics would surely have influenced the predictive relationships that were uncovered. Another limitation of this study was that complete reporting of data for the specified time period can only be assumed. There is no way to know whether or not all seclusion incidents were actually reported by educational agencies. Considering the lack of mandated reporting during the selected timeframe, the likelihood that the number of incidents reported in the data are, in fact, an underestimate of actual incidents is highly probable. Finally, numerous confounding variables exist outside the realm of this study including lack of guidelines, regulations, or accreditation standards (Ryan, Peterson, Tetreault, et al., 2008) an absence of staff training (Greene, Ablon, & Martin, 2006), educator preparedness, intervention models (Martin et al., 2008), and staff support.

Future Research and Implications for Practice

Research suggests that seclusion is an aversive intervention with potentially far reaching effects. That being considered, it is imperative that researchers continue exploring various aspects of seclusion in order to better understand this aversive practice. Future research should further investigate the demographics of students subjected to seclusion in order to gain a better understanding of factors that may influence its use. Researchers should also explore the disability statuses of the secluded population in an effort to understand which population is most at risk. This information can then be used to better inform educators of the needs and challenges facing such populations so as to better meet their diverse needs. Last, researchers could examine other predictors of seclusion outside the demographic realm including teacher training and/or personal feelings of preparedness, a history of involvement in previous seclusion incidents, and the presence of mental health services. One may also consider exploring the number of years in education, feelings of administrative support when dealing with behaviors, as well as personality characteristics of involved educators. All of these proposed avenues could shed light on much needed information for those advocates working tirelessly to ensure that students are being subjected only to evidence-based practices.

This study helps to uncover the demographics of a population at risk for seclusion. This information can be used to create an awareness amongst educators regarding the likelihood of seclusion with their students. Thus, a proactive approach can then be taken by educators to make certain that these students are being afforded the most positive educational experiences available.

References

- Atkins, M. S., Hoagwood, K. E., Kutash, K., & Seidman, E. (2009, Sept.). *Toward the integration of education and mental health in schools*. Paper presented at the Child and Adolescent Mental Health Services: Issues and Solutions Conference, Nashville, TN.
- Billingsley, B. S., Fall, A., & Williams, Jr., T. O. (2006). Who is teaching students with emotional and behavioral disorders?: A profile and comparison to other special educators. *Behavioral Disorders, 31*(3), 252-264.
- Busch, A. B. & Shore, M. F. (2000). Seclusion and restraint: A review of recent literature. *Harvard Review of Psychiatry, 8*, 261-270. doi: <http://dx.doi.org/10.3109/hrp.8.5.261>
- Butler, J. (2014, January). *How safe is the schoolhouse? An analysis of state seclusion and restraint laws and policies*. Retrieved from <http://www.autcom.org/pdf/HowSafeSchoolhouse.pdf>
- Connolly, J. (2014). *A grounded theory analysis of seclusion of students with disabilities in schools*. (Unpublished doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Full Text. (3619436)
- Council for Children with Behavioral Disorders. (2009, July). *CCBD's position summary on the use of seclusion in school settings*. Arlington, VA: Author.
- Council for Exceptional Children [CEC]. (2009, September). *CEC's policy on physical restraint and seclusion procedures in school settings*. Arlington, VA: Author.
- Council of Parent Attorneys and Advocates, Inc. (2009). *Unsafe in the schoolhouse: Abuse of children with disabilities*. Maryland: Butler.
- Couvillon, M., Peterson, R. L., Ryan, J. B., Scheuermann, B., & Stegall, J. (2000). A review of crisis intervention training programs for schools. *Teaching Exceptional Children, 42*(5), 6-17.
- Duncan, A., (2009). *Letter to chief state school officers*. Retrieved from <http://www2.ed.gov/policy/elsec/guid/secletter/090731.html>
- Ferleger, D. (2008). Human services restraint: Its past and future. *Intellectual and Developmental Disabilities, 46*, 154-165. doi: [http://dx.doi.org/10.1352/0047-6765\(2008\)46\[154:HSRIPA\]2.0.CO;2](http://dx.doi.org/10.1352/0047-6765(2008)46[154:HSRIPA]2.0.CO;2)
- Finke, L. M. (2001). The use of seclusion is not evidence-based practice. *Journal of Child and Adolescent Psychiatric Nursing, 14*, 186-190. doi: <http://dx.doi.org/10.1111/j.1744-6171.2001.tb00312.x>
- Goodmark, C. (2009). A tragic void: Georgia's failure to regulate restraint and seclusion in schools. *John Marshall Law Journal, 3*(2), 249-285.
- Government Accountability Office [GAO]. (2009). *Seclusions and restraints: Selected cases of death and abuse at public and private schools and treatment centers*. (GAO-09-719T). Washington, DC: Author.
- Greene, R. W., Ablon, J. S., & Martin, A. (2006). Use of collaborative problem solving to reduce seclusion and restraint in child and adolescent inpatient units. *Psychiatric Services, 57*(5), 610-612. doi: <http://dx.doi.org/10.1176/ps.2006.57.5.610>
- Hoffman, L. C. (2011). Article: A federal solution that falls short: Why the Keeping All Students Safe Act fails children with disabilities. *University of Notre Dame Journal of Legislation, 1*-54.

- Jones, N. L. & Feder, J. (2009). *The use of seclusion and restraint in public schools: The legal issues*. (Congressional Research Service, 7-5700 R40522).
- Lohrmann-O'Rourke, S. & Zirkel, P. A. (1998). The case law on aversive interventions for students with disabilities. *Exceptional Children*, 65(1), 101-123.
- Maag, J. W. (2001). Rewarded by punishment: Reflections on the disuse of positive reinforcement in schools. *Exceptional Children*, 67(2), 173-186.
- Martin, A., Krieg, H., Esposito, F., Stubbe, D., & Cardona, L. (2008). Reduction of restraint and seclusion through collaborative problem solving: A five-year prospective inpatient study. *Psychiatric Services*, 59(12), 1406-1412. doi: <http://dx.doi.org/10.1176/appi.ps.59.12.1406>
- Miller, J. P. (2011). Physical Education: Amending the Individuals with Disabilities Education Act to restrict restraint and seclusion in public and private schools. *Family Court Review*, 49(2), 400-414. doi: <http://dx.doi.org/10.1111/j.1744-1617.2011.01380.x>
- Moses, T. (2000). Why people choose to be residential childcare workers. *Child and Youth Care Forum*, 29(2), 113-126. doi: <http://dx.doi.org/10.1023/A:1009401311866>
- National Disability Rights Network. (2010, January). *School is not supposed to hurt: Update on progress in 2009 to prevent and reduce restraint and seclusion in schools*. Washington, DC: Author.
- Persi, J. & Pasquali, B. (1999). The use of seclusions and physical restraints: Just how consistent are we? *Child & Youth Care Forum*, 28(2), 87-103. doi: <http://dx.doi.org/10.1023/A:1021989121863>
- Peterson, R. (2010). *Developing School Policies & Procedures for Physical Restraint and Seclusion in Nebraska Schools. A Technical Assistance Document*. Lincoln, NE: Nebraska Department of Education.
- Peterson, R. L. & Smith, C. L. (2013). Law, policy, and litigation on physical restraint and seclusion in schools. In R.L. Peterson, J.B. Ryan, M. Rozalski (Eds.), *Physical restraint and seclusion in schools* (15-30). Arlington, VA: Council for Exceptional Children.
- Pudelski, S. (2013) The option of seclusion and restraint. *School Administrator*, 70(2), 34-37. Retrieved from <http://eric.ed.gov/?id=EJ1008379>
- Ryan, J. B., Peterson, R. L., Rozalski, M. (2007). State policies concerning the use of seclusion timeout in schools. *Education & Treatment of Children*, 30(4), 215-239. doi: 10.1353/etc.2007.0032
- Ryan, J. B., Peterson, R. L., Tetreault, G. & Van der Hagen, E. (2007). Reducing Seclusion Timeout and Restraint Procedures with At-Risk Youth. *Journal of At-Risk Issues*, 13(1), 7-12. Retrieved from <http://files.eric.ed.gov/fulltext/EJ853384.pdf>
- Ryan, J., Peterson, R., Tetreault, G. & van der Hagen, E. (2008). Reducing the Use of Seclusion and Restraint in a Day School Program. Chapter 11 in M.A. Nunno, D.M. Day & L.B. Bullard (Eds.) *For Our Own Safety: Examining the Safety of High-Risk Interventions for Children and Young People*. Washington, DC: Child Welfare League of America Press, 201-214.
- Ryan, J. B., Sanders, S., Katsiyannis, A., & Yell, M. (2007). Using time-out effectively in the classroom. *Teaching Exceptional Children*, 39, 60-67. doi: 10.1177/004005990703900407
- Scheuermann, B., Ryan, J. B., Peterson, R. L., & Billingsley, G. (2013). Ethical issues in the use of restraint and seclusion. In R. L. Peterson, J. B., Ryan, M. Rozalski (Eds.), *Physical*

Restraint and seclusion in schools (pp. 31-49). Arlington, VA: Council for Exceptional Children.

- Smith, C. R., Katsiyannis, A., & Ryan, J. B. (2011). Challenges of serving students with emotional and behavioral disorders: Legal and policy considerations. *Behavioral Disorders, 36*(3), 185-194. doi: 10.1177/1044207313513641
- Sutherland, K. S., & Singh, N. N. (2004). Learned helplessness and students with emotional or behavioral disorders: Deprivation in the classroom. *Behavioral Disorders, 29*, 169-181.
- U.S. Department of Education. (2012). *Restraint and Seclusion: Resource Document*. Washington, DC: Author.
- United States Senate Health, Education, Labor, and Pensions Committee. (2014). *Dangerous use of seclusion and restraints in schools remains widespread and difficult to remedy: A review of ten cases. Majority Committee Staff Report*. Washington, DC: Author.
- Westling, D. L., Trader, B. R., Smith, C. A., & Marshall, D. S. (2010). Use of restraints, seclusion, and aversive procedures on students with disabilities. *Research and Practice for Persons with Severe Disabilities, 35*, 116-127. doi: <http://dx.doi.org/10.2511/rpsd.35.3-4.116>
- Wolf, T. A., McLaughlin, T. F., & Williams, R. L. (2006). Time-out interventions and strategies: A brief review and recommendations. *International Journal of Special Education, 21*(3), 22-28.
- Yell, M.L. (1994). Timeout and students with behavior disorders; A legal analysis. *Education & Treatment of Children, 17*, 293-301.
- Zirkel, P. A. & Lyons, C. A. (2011). Lack of restraint in the use of restraints with students with disabilities: An empirical analysis of the case law. *Connecticut Public Interest Law Journal, 10*(2), 323-354.