

SCHOOL ADMINISTRATOR IMPACT UPON PHYSICAL RESTRAINTS IN
PUBLIC SCHOOLS

By

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School Administrator Impact Upon Physical Restraints in Public Schools

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Abstract

The purpose of a physical restraint is to control the behavior of a student. It can involve physically holding a person immobile against his or her will to using chemical or mechanical devices to control a person. In most medical, psychiatric, and law enforcement arenas, there are strict national standards that govern the use of physical restraint. This study was designed to contribute to the body of educational literature in regards to a school administrator's impact on the physical restraints utilized in public schools. To date, there are no national standards for the use of these procedures in schools. The first research question ascertained the frequency of physical restraints in school districts in western Pennsylvania and eastern Ohio. The second research question explored the specific behaviors that lead to the physical restraint. The final research question examined the application of a physical restraint and the school administrator's attitude towards physical restraint and the efficacy of physical restraint in public schools. A survey was administered to school administrators in western Pennsylvania and eastern Ohio. The following demographic variables were charted and analyzed: gender of respondent, age, ethnicity, years of experience, school size, educational certificates held, school type, school size, and number of students who receive special education services, types of trainings offered, training time spent on physical restraints, and de-escalation and

conditions under which a physical restraint would be utilized. Results were analyzed using SPSS Version 20 to compute descriptive and inferential statistics. Significant findings and implications for educational leaders were discussed.

Keywords: Autism, Behavior Intervention Plan, change in placement, chemical restraint, Child with a disability, commercial training program, due process, emotional disturbance, free appropriate public education, Functional Behavior Assessment, Individuals with Disabilities Act, Individualized Education Program, Least Restrictive Environment, Local Education Agency, Manifestation Determination, mechanical restraint, physical restraint, seclusion, special education, Specific Learning Disability, Stay Put Provision.

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Chapter 1

Statement of the Problem

The purpose of a physical restraint is to control the behavior of a student. It can involve physically holding a person immobile against his or her will to using chemical or mechanical devices to control a person. In most medical, psychiatric, and law enforcement arenas, there are strict national standards that govern the use of physical restraint. To date, there are no national standards for the use of these procedures in schools. “The lack of these commonly accepted written standards in the school’s use of physical restraint leaves school settings more susceptible to misunderstanding, improper implementation and abuse” (Council for Children with Behavioral Disorders [CCBD], 2009, p. 6).

Over the last several years, print and television media have brought to the attention of the public numerous incidents of death and injury as a result of physical restraint in public schools. The risks associated with restraints range from injuries to students or staff from kicks, punches, bites, falls, psychological trauma from being involved in involuntary restriction of movement of students to asphyxia, aspiration, and blunt trauma to the head or chest (Couvillon, Peterson, Ryan, Scheuermann, & Stegall, 2010).

In 1998, The *Hartford Courant*, a Connecticut newspaper, reported that 142 restraint related deaths occurred in the United States over a 10 year period in the 1990s, mainly due to asphyxia. The National Disability Rights Network (NDRN) has

graphically portrayed an alarming variety of abuses resulting from physical restraint procedures in school settings (Weiss, 1998).

In the early parts of the 21st century, national protection and advocacy groups, in an attempt to further the public's understanding of the risks of restraint, issued reports documenting abusive situations where restraints were improperly or irresponsibly used in school settings, leading to the injury or death of students. In the spring of 2009, the Government Accountability Office (GAO) in conjunction with the Congressional Committee on Education and Labor held a hearing regarding the abuses from restraint. This prompted United States Secretary of Education, Arne Duncan, to call on all states and school districts to examine their policies on the use of restraint and seclusion. In late 2009, federal legislation was introduced to regulate the use of these procedures in schools to prevent abusive situations (Couvillon et al., 2009).

Since the 1970s the number of students who present with serious behavioral issues has increased dramatically. Prior to the passage of the bill that would become Individuals with Disabilities Education Act (IDEA) in the 1970s, schools did not serve most students with emotional or behavioral disorders, autism spectrum disorders, TBI (Traumatic Brain Injury) or students with other health impairments, nor were they governed by laws that insured these students receive a free and appropriate education. The vast majority of these students were either housed in institutions or simply kept at home and out of school. Since the passage of IDEA, districts are mandated to provide these services and school systems must provide programming that integrates these students into the general population while training the staff on how to effectively manage

a wide range of behaviors, prevent and redirect dangerous behaviors, all while providing appropriate instruction.

There exist a number of commercial programs available to school districts to train school personnel on crisis intervention and the appropriate use of restraint and seclusion. All the programs have similar definitions of restraint and seclusion and protocols of when these methods should be employed. Restraint is defined as any method of one or more persons using their body or a mechanical device to restrict a person's freedom of movement or physical activity. Seclusion is the involuntary confinement of a student alone in a room or area from which the student is physically prevented from leaving. For the purposes of this paper, the researcher concentrated on physical restraints.

Special education, more than any other area in public schools, is entangled with and affected by increasingly complex issues. Litigation involving special education increased six fold in the 1990s (Thune, 1997). Educational practices have been driven by IDEA that mandates a free and appropriate education to children with disabilities. The principal is responsible for managing the array of special education services. According to Thune (1997), principals are being forced to operate educational programs under a growing number of federal and state mandates for which they have limited knowledge and available resources.

In 1975, the Education for All Handicapped Children Act was passed. One of the purposes of this law was to ensure that students with disabilities were not excluded from public schools (Altshuler & Kopels, 2003). Eventual reauthorization of this act led to the passage of the Individual with Disabilities Education Act of 1997. The Individuals with Disabilities Education Act Amendments of 1997 (IDEA, Public Law 105-17, 1997)

addressed appropriate disciplinary measures for students with disabilities (Taylor & Baker, 2002). The Office of Special Education Programs ([OSEP], 1997) lists six principles upon which IDEA is based. OSEP states that “understanding IDEA’s six principles is critical to understanding the spirit and intent of the law. The six principles of IDEA include:

- Providing a free and appropriate public education to all students with disabilities;
- Providing appropriate evaluation to students with disabilities;
- Providing an individualized education program for students with disabilities;
- Placing students with disabilities in their least restrictive environment;
- Allowing parent and student participation in decision making throughout the educational process for the special education student; and
- Producing procedural safeguards for students with disabilities to ensure that students with disabilities are protected.

Understanding these six principles is imperative for understanding the spirit and intent of the law.

Goor, Schwenn, and Boyer (1997) report that a growing number of exceptional children being served in a regular school setting requires a principal to have administrative preparation in special education law. According to Osborne, Dimattia, and Curran (1993), knowledge of special education law is essential to administrative decision making for two main reasons: (1) ensure an appropriate education for all students with

disabilities as required by IDEA, and (2) minimize losing potential lawsuits resulting from inappropriate implementation of special education legal requirements. The federal government holds the state education agency responsible for implementing the mandates of IDEA. Subsequently, the state education agency assigns the responsibility for the supervision of special education to the local education agencies (Turnbull, 1993).

Some school administrators have displayed frustration with the IDEA discipline procedures of 1997. In describing the controversy that the discipline procedures created in IDEA 1997, Skiba (2012) stated:

The difference in the treatment of students with disabilities who are violent or disruptive has created an intense controversy that continues to swirl around the disciplinary provisions of special education law. The often-heated controversy represents a fundamental clash between two basic values enacted into law and supported by the courts: the right of students with special needs to due process and a free and appropriate public education versus the right of schools to implement procedures they see as necessary to protect the safety of students and teachers. (p. 81)

Despite IDEA's passage over 10 years ago, educators and policymakers are still divided regarding the balance of maintaining student rights and allowing administrators flexibility in order to maintain a safe orderly school (Skiba, 2012). Some teachers and administrators believe IDEA insulates special education students from punishment and relieves these students from consequences for their behavior. Other teachers and administrators are concerned that special education students would be unfairly treated if

not for IDEA. Nearly everyone agrees that there must be a school climate that supports learning for all students.

Mandates of IDEA have serious implications for the principal as an instructional leader. According to Smith and Colon (1998), the success or failure of the special education process depends on the school administrator's knowledge and decision making ability. The potential for litigation has placed enormous demands on the school principal. Every administrative action or lack of action relevant to special education has the potential to lead to litigation. Today, school principals must divide their time between compliance with federal mandates and how they relate to student achievement, and the appropriate process for enforcing student discipline. The school principal must be administratively prepared to not only interpret the law, but also to understand the potential impact on significant court cases in policy and special education mandates. This knowledge or lack of knowledge in special education law may result in judicial consequences when school principals' decisions are not in compliance with federal mandates.

Although there is compelling evidence implying the frequent and common use of physical restraint in schools, little research has been conducted on the prevalence, appropriate application, or efficacy of physical restraint and almost no research has been conducted on the use of physical restraint in public school settings (CCBD, 2009). This lack of information coupled with a lack of national standards on the proper use of physical restraint provides school districts and school administrators with little guidance on how to effectively create safe schools for all students.

Problem Statement

The purpose of this study is to ascertain the frequency of physical restraints used in public schools, the reasons those restraints are occurring, and the school administrators' attitudes or beliefs regarding physical restraint. This study has three objectives:

1. What is the frequency of physical restraint in school districts in western Pennsylvania and eastern Ohio?
2. What specific behaviors lead to the physical restraint?
3. What is the relationship between the application of a physical restraint and the school administrator's attitude towards physical restraint and the efficacy of physical restraint in public schools?

Hypotheses

Based on a review of the literature, three hypotheses are evaluated in this research project. First, employees of school districts in western Pennsylvania and eastern Ohio utilize physical restraints. Second, physical restraints are utilized for a myriad of different reasons, including safety of the student, safety of staff, to gain or maintain instructional control, property destruction, and verbal aggression. Third, the school administrator's attitude toward physical restraint and instructional leadership behaviors have a direct correlation to the number of restraints that occur in the school and the student behaviors that lead to a physical restraint.

Significance

It is expected that the study will make three contributions to the following areas: frequency of restraints, the student behaviors that lead to those restraints and the instructional leadership behaviors towards restraint. First, the study will provide specific information about the frequency of restraints utilized in public schools in western Pennsylvania and eastern Ohio. There is currently little published data about the frequency of restraints in school. While there are four states that publish restraint frequency, there is no national data and limited local data.

Second, the study will outline the behaviors of the students that lead to the use of physical restraint. Because of the lack of national regulations, each state and locality have widely different standards of when and why restraint practices should be utilized. Student behaviors in one school district may lead to a restraint; the same student behavior in another district may result in different outcomes.

Third, the study will highlight the instructional leadership behaviors of the school administrator to determine if there is a correlation between leadership behaviors, attitudes toward the use of restraint and the frequency and student behavior that lead to physical restraints.

Limitations and Delimitations

This study is limited to the principals and assistant principals of school districts in western Pennsylvania and eastern Ohio completing the survey instrument. The instrument used will be a survey that required participants to self-report on their perceptions and experiences. As with any self-report, there is little control for

participants giving what they might feel are socially desirable answers; or, answers may be distorted because of personal bias about the topic of the survey. Hallinger and Murphy (1985) found that self-report data are often idiosyncratic and should be carefully analyzed.

This study is limited to the school administrators within western Pennsylvania and eastern Ohio. Caution should be exercised in making generalizations regarding the knowledge level of other school administrators throughout the states. The survey respondents utilized is administered online and there is no method to proctor responses or ascertain if any help was given.

Definition of Terms

Autism - Any disorder that falls under the category of "autism" from high functioning (often called Asperger's Syndrome) to severe mental retardation along with specific characteristics of non-interaction in the social environment and developmental delays that are characteristic of autism (Philpot, 2010).

Behavior Intervention Plan (BIP) – describes what modifications, positive intervention strategies, and skill instruction will be used in an effort to change the student's behavior. It is developed from the information in a Functional Behavioral Assessment (Philpot, 2010).

Change in Placement – A change in the educational program for a student with a disability. This change could encompass anything from moving to a new school to a one day in-school suspension.

Chemical Restraint – The use of medication to control behavior or restrict a person's freedom of movement.

Child with a disability - The term 'child with a disability' means a child (a) with mental retardation, hearing impairments (including deafness), speech or language impairments, visual impairments (including blindness), serious emotional disturbance, orthopedic impairments, autism, traumatic brain injury, other health impairments, or specific learning disabilities; and (b) who, by reason thereof, needs special education and related services (IDEA Amendments of 2004, Section 602, p. 9).

Commercial Training Program - Any training program, either for profit or not for profit, specializing in crisis intervention training for school systems.

Due Process – A procedure initiated by the students' parents, a public agency, or state educational agency conducted by an independent hearing officer when there is a dispute over how the school district is educating a student with a disability (Philpot, 2010). This procedure assures a person's rights are upheld within prescribed hearing procedures.

Emotional Disturbance - Emotional disability or emotional disturbance typically refers to the manifestation of symptoms of a mental health disorder in a child or adolescent. In the educational context, an emotional disability is a condition that, over a long period of time and to a marked degree, consistently interferes with a student's learning process and adversely affects the student's educational performance (Philpot, 2010).

Free appropriate public education - Special education and related services that “(a) have been provided at public expense under public supervision and direction and without charge; (b) meet the standards of the State educational agency; (c) include an appropriate preschool, elementary, or secondary school education in the State involved; and (d) are provided in conformity with the individualized education program required under section 614(d)” (IDEA Amendments of 2004, Section 602, p. 9).

Functional Behavior Assessment (FBA) – an organized collection and analysis of information about a student’s behavior. An FBA must be conducted whenever a change in placement of a student with a disability is being considered.

Individuals with Disabilities Act (IDEA) - Legislation created “that guarantees all children with disabilities access to a free and appropriate public education” (Federal Resource Center for Special Education, 1999, p. 124).

Individualized Education Program (IEP) - Written statement for each child with a disability that is developed, reviewed, and revised in accordance with section 614(d) (IDEA Amendments of 2004, Section 602, p. 14).

Least Restrictive Environment (LRE) - To the maximum extent appropriate, children with disabilities, including children in private or public institutions or other care facilities, are educated with children not disabled. The removal of children with disabilities from the regular educational environment occurs only when the nature or severity of the disability of a child is such that education in a regular classroom with the use of supplementary aids and services cannot be achieved satisfactorily (20 U.S.C.A. § 1412[a][5][A]).

Local Education Agency (LEA) – A public board of education or other public authority legally constituted within a State for either administrative control or direction of, or to perform a service function for, public elementary or secondary schools in a city, county, township, school district, or other political subdivision of a State, or for such a combination of school districts or counties as are recognized in a State as an administrative agency for its public elementary or secondary schools (IDEA Amendments of 2004, Section 602, p. 19).

Manifestation Determination – an inquiry about whether a student’s misconduct is caused by the student’s disability, an inappropriate IEP, or the schools’ failure to implement the

IEP as written. If any or all of the three components are true, the student cannot have a change of placement (Philpot, 2010).

Mechanical Restraint - The use of any device or object (tape, rope, weights, weighted blankets, etc.) to limit an individual's body movement to prevent or manage out of control behaviors.

Physical Restraint - Any method of one or more persons using their body to restrict a person's freedom of movement or physical activity.

Seclusion - The involuntary confinement of a student alone in a room from which the student is physically prevented from leaving.

Special Education - "Specially designed instruction, at no cost to parents, to meet the unique needs of a child with a disability, including (a) instruction conducted in the classroom, in the home, in hospitals and institutions, and in other settings; and (b) instruction in physical education" (IDEA Amendments of 2004, Section 602, p. 29).

Specific Learning Disability (SLD) - "a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which may manifest itself in an imperfect ability to listen, think, read, write, spell, or do mathematical calculations. The term includes such conditions as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia.

The term does not include children who have learning problems that are primarily the result of visual, hearing, or motor handicaps, of mental retardation, or emotional disturbance, or of environmental, cultural, or economic disadvantage” (Philpot, 2010).

Stay Put Provision – If the parent and school disagree on a child’s program, the child “stays put” in the last program agreed upon while the parties litigate. The purpose of this is to protect the child from being moved around during litigation (Philpot, 2010).

Summary

For a variety of different reasons, the use of physical restraint in public schools has increased dramatically. Schools, school systems, and school employees are finding themselves dealing with students who present behaviors that impose significant risks on themselves, the staff, and the system. The literature review examines the current application of restraint in public schools, the historical background of physical restraint, how IDEA moved the issue of physical restraint into the public schools, the widely divergent state standards, and policies governing restraint and the school administrator’s impact upon the number of restraints in public schools.

Chapter 2

Literature Review

The literature review regarding physical restraint is organized around five topics. First, the literature review focuses on the definition of a physical restraint and how it is employed in public schools today. Second, it addresses the early history of physical restraints, tracing its use through the early 1970s. Third, the literature review shows how IDEA moved the issue of physical restraint into the public school arena and addressed the justifications for and against the use of physical restraints. Fourth, the literature review shows the lack of national standards and the widely divergent state standards regarding physical restraint. Finally, the literature review identifies school administrator leadership qualities and its impact upon safe schools and physical restraint.

Definition and Use

Physical restraint is defined as an emergency response procedure by one or more staff members that directly restricts “a student’s movements by applying force to his or her limbs, head, or body as a means of regaining behavioral control and establishing and maintaining safety for the out of control student and other persons in close proximity” (Fogt, 2005, p. 3). Once thought of as a tool for exclusive use in mental and penal institutions, the use of physical restraints in public schools has become the norm (Ryan & Peterson, 2004). More and more school districts have to contend with students who present severe behavioral difficulties, are often unequipped to do so, and are challenged to prevent or contain these sometimes violent behaviors. Although there is little to no

research on the prevalence of physical restraint in public schools, anecdotal information based on court cases and legislation indicates it has become common practice in some school systems and occurs in most, if not all schools (Ryan & Peterson, 2004). The prevalence of restraints is due in part to the Individuals with Disabilities Act establishing the principle of educating all students in the least restrictive environment. This, coupled with high pressure advocacy groups and high profile media attention, has placed school systems and personnel in situations where they feel they must use restraints as a tool to keep schools safe (Ryan & Peterson, 2004).

Proponents of Physical Restraint

Proponents of physical restraint say restraint has helped advance the disability education movement by granting access to students who would otherwise need institutionalized or home schooled. Proponents of physical restraint in public schools contend that it is a practice necessary to contain or ensure the safety of all students. Restraint is seen as a means to prevent harm to a person (including self-injurious students), to prevent property damage, or to reduce disruption in a school environment (Stewart, 2010). Proponents contend that there is no universal alternative that works and that when used properly and when warranted, the effective use of physical restraint keeps schools safe and orderly. These conditions are:

- When preventative approaches have been implemented and failed;
- All staff members know and understand the permissible and impermissible situations for use; and
- When they are used to ensure the safety of all involved.

Although there are no set standards for restraint, there is some consensus on what physical restraints are and how they should be applied. Most professionals agree that physical restraint should be used as a last resort, after de-escalation strategies, training, program changes, behavior studies, and effective staff policies are in place and have failed (Ryan & Peterson, 2004). Staff members should know the permissible and impermissible situations that warrant restraint or seclusion. Proponents agree that restraint may be used when a student's behavior poses a threat to him, her or others, risk of property damage, or behavior causes a significant disruption to the environment. There is also some consensus on when these practices should not be used:

- For staff convenience;
- Due to lack of staff training or because staff is fearful;
- Used as punishment; and
- As a response to minor behaviors.

Opponents of Physical Restraint

According to the National Disabilities Rights Network (NDRN), in an investigative report, *School is Not Supposed to Hurt*, published in 2009, physical restraint and seclusion are rampant in today's schools. The report lists examples of students in public schools forcibly restrained and dragged to seclusion for a variety of different reasons. All of the incidents portrayed resulted in some sort of emotional or physical trauma to the student and, in some cases, led to the death of the child.

Michigan

A 15 year old boy with autism died while being physically restrained at school by four school employees who pinned him down for 60-70 minutes

on his stomach, with his hands held behind his back and his shoulders and legs held down. He became non-responsive after 45 minutes but the restraint continued and he eventually stopped breathing. He was the second child in Michigan to die from the use of restraint (p. 15).

Texas

A 14 year old middle school student was killed when his teacher held him down, ignoring his plea —"I can't breathe, I can't breathe." Knowing that the student with a mental illness and other disabilities was sensitive to food issues because he had been denied food when he was younger, the teacher sought to punish the student for his aggressive behavior by refusing him lunch. When the student tried to leave the classroom to go to the lunchroom the use of a deadly restraint by the teacher ensued (p. 15).

Georgia

A thirteen year old hanged himself in a small concrete-walled, locked seclusion room, using a cord provided by a teacher to hold up his pants. This eighth grader had pleaded with his teachers that he could not stand being locked within the small seclusion room for hours at a time. The boy had threatened suicide in school a few weeks before his death (pp. 15-16).

Colorado

A student with multiple disabilities, including self-injurious behavior, was held down by school staff or locked in a time-out room where he would severely injure himself and was left to sit in his own blood. The child's

experience made him terrified to go to school and his parents were forced to transfer him to an in-patient care institution (p. 17).

Tennessee

In an elementary school, students were held in stark plywood seclusion boxes measuring 4' x 3 ½' and extending almost to the ceiling of the classroom. A square covered with glass was carved out at the top of the box and gravity locks were on the door. School administrators reported that similar boxes were in use at four other schools (p. 21).

Wisconsin

Three elementary school students were forcibly isolated in a locked closet for hours at a time for nearly three years. Alone, unsupervised, and without access to a lavatory, these students frequently urinated or defecated in the room (p. 21).

Alabama

An eight year old boy with autism, in the second grade, was physically restrained by school staff to manage behavior issues (p. 21).

Florida

When a 12 year old girl with autism repeated names of movies, shoved papers off her desk, or waved her arms and kicked her legs toward approaching teachers, they responded by grabbing the 80 pound girl, forcing her to the ground and holding her there. This happened 44 times during the 2006-07 school year. She was held once for an hour, and, on

average, 22 minutes at a time. At least one incident left her back badly bruised (p. 23).

North Carolina

Children with mental illness were being taped to chairs and locked in closets by teachers. Students at one middle school were subjected to abusive restraint or seclusion including the use of handcuffs; excessive physical restraint resulting in bruising, and the use of a seclusion room, dubbed the —WWF Room, where students were encouraged to wrestle one another and teaching assistants to release aggression. At least six students with autism were abused by a teacher, who hit and pinched them, pulled their hair, and restrained the children in a special chair with bungee cords and duct tape. The teacher was convicted on charges of recklessly endangering students (p. 25).

Wyoming

A parent was shocked to arrive at her child's elementary school and find five adults restraining her screaming and crying child in a face down prone restraint position on the seclusion room floor. The child sustained multiple rug burns and bruises including finger marks around his neck. The abusive restraint was triggered by the child's refusal to run in his physical education class (p. 27).

These children's cases often prompt a burst of local media or even national media attention, but there is no federal legislation regarding the use of physical restraint or seclusion and state laws vary widely.

Dr. Reese Peterson (2010), Special Education Professor at the University of Nebraska, cited two recent cases in Iowa. In one, the parents of an 11 year old boy, who died while being held down in a prone restraint, called for a ban on all restraints, while the parents of a teenage boy sued the school district for not restraining their son. Consequently, he ran away from school and drowned. School districts are being placed in situations where there is little to no guidance on when and where the use of restraints should occur.

Policy

In the spring of 2009, the GAO, in conjunction with the CCEL convened a hearing regarding the abuses from restraint and seclusion. This prompted United States Secretary of Education, Arne Duncan, to call on all states and school districts to examine their policies on the use of restraint and seclusion. In late 2009, federal legislation was introduced to regulate the use of these procedures in schools to prevent abusive situations (Couvillon et al., 2009). However, there are still no federal guidelines regarding restraint and seclusion in public schools.

In July, 2009, Secretary of Education, Arne Duncan, informed chief states' school officers that the United States Department of Education (ED) would begin conducting research on state laws, regulations, and policies regarding the use of restraint in schools. In December of 2009, states were asked to review and confirm the accuracy of those

policies and guidelines. To date, Ohio has no state statutes or regulations addressing restraint, but is forming a committee to develop provisions on seclusion and restraint. Ohio has no restrictions on how or when a restraint may be performed. There is no language on how restraint is restricted to ensure the immediate safety of students or others. The state Department of Education allows for prone restraints and does not mandate districts to inform parents of restraints or seclusion. In addition, the state does not mandate staff training.

Pennsylvania has statutes and regulations that apply to all public schools on the use of restraint. The use of physical restraint is restricted to ensure the physical safety of the student and others: prone restraints are banned, parents must be notified immediately after the incident, and guidelines have been established for the training of school personnel (ED, 2010).

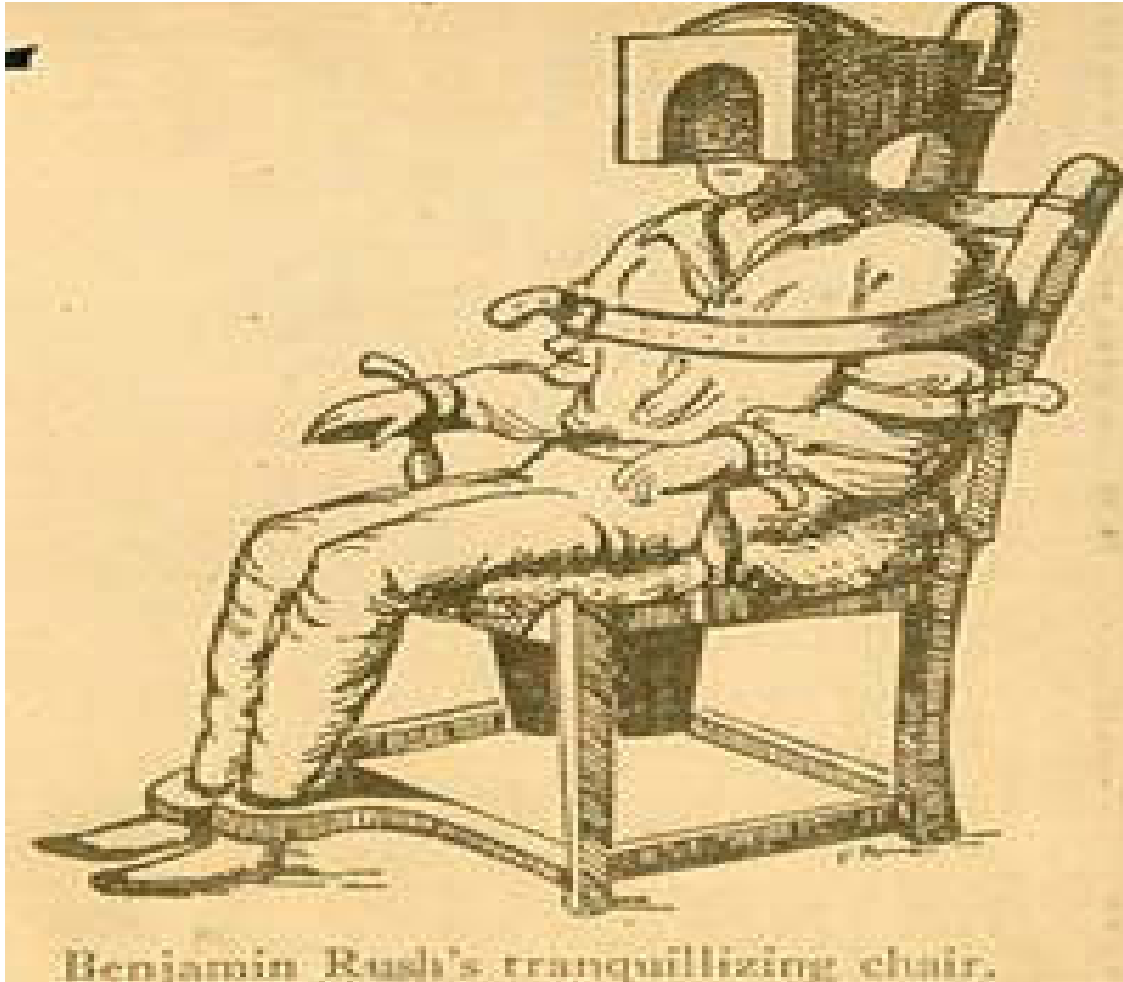
Historical Background of Physical Restraint

The documented historical use of physical restraint started in the late 1700s in mental institutions in France and England. The medical treatment of persons with disabilities began as a result of Enlightenment ideals (Colaizzi, 2005). In the 18th century, Dr. Philippe Pinel used restraint and seclusion in the institutions to ensure the safety of individuals (both patient and staff) while not infringing on the patient's right of autonomy, respect, and freedom (Fisher, 1994). This practice spread throughout Europe and into the United States by the 1800s in the form of asylum psychiatry.

Prior to the 1970s, in the United States, most people with disabilities who presented challenging or violent behavior were placed in institutions. These institutions

were typically large state run facilities. From the 1800s through the middle part of the 20th century, these institutions frequently overwhelmed the staff capacity, resulting in “custodial care” of patients and the routine and indiscriminate use of restraints and seclusions (Tovino, 2007).

By the 1840s asylums had become so overcrowded that behavior control became the central concern. The use of mechanical restraints (strait jackets, cells, manacles, specially designed coercion chairs) became a “moral” way to help individuals regain their self-control (Colaizzi, 2005). At this same time, the argument about the legality and morality of using restraint on patients began. Proponents argued it was a therapeutic, ethical, and a moral way of ensuring patient and staff safety. Opponents argued that restraint was an unwarranted and barbaric way of controlling other humans.

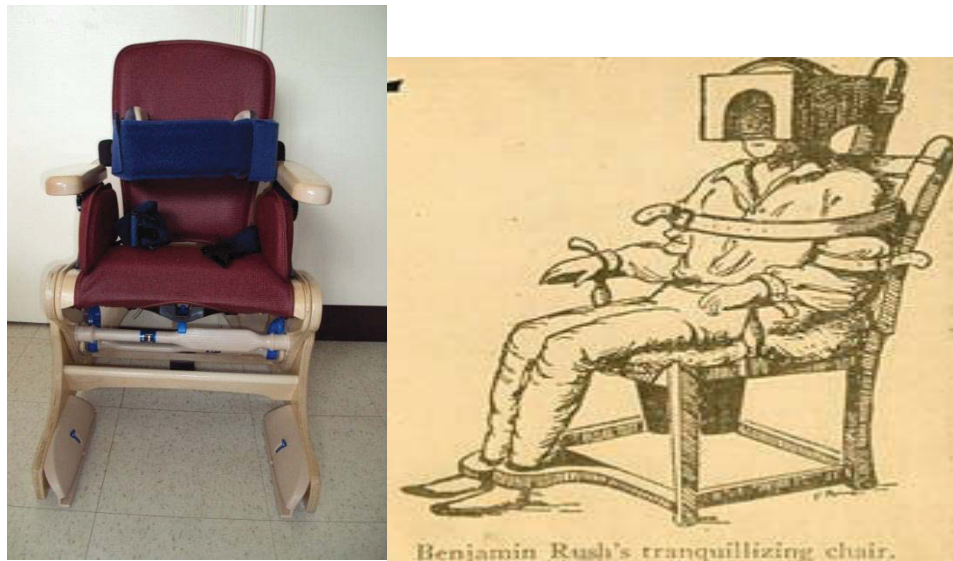


(U.S. National Library of Medicine, 2013)

The central argument between the two groups was punishment/discipline versus safety of the patient and staff. Proponents argued that using such techniques ensured the safety of all involved while giving staff the resources needed to therapeutically deal with the patient. Opponents believed that restraints were used primarily as a punishment/discipline instrument and led to widespread abuse of patients by asylum staff (Colaizzi, 2005).

By the 1950s several trends altered public perception of the widespread use of institutions to house people with dangerous or unmanageable behaviors. First, industrialization drew more and more people towards big cities and away from the state

institutions which were primarily located in rural areas. Second, military personnel returning from World War II and the Korean War who suffered disabling injuries were seen as needing appropriate places for them to recover from their injuries. The traditional institutions were viewed as not adequate for that task. Third, pharmaceutical companies began mass producing and trialing psychotropic medications that significantly reduced behavior issues with many patients. Fourth, community based placements were less costly than the state institutions (Stewart, 2010).



(Left, modern rifton chair used for posturing, feeding, student control; right, coercion chair introduced in 1800s to control patient behaviors)

With the passage of Education for Handicapped Children Act ([IDEA], 1975) and the stated goal of all children being educated in the least restrictive environment, schools saw a sharp increase in the number of students who presented dangerous or unmanageable behaviors (Tovino, 2007).

IDEA

The IDEA is the major federal statute for the education of children with disabilities. IDEA both authorizes federal funding for special education and related services and sets out principals under which special education and related services are to be provided. The requirements are detailed and comprehensive. Major principles include the following:

- States and school districts make available a free appropriate public education (FAPE) to all children with disabilities, generally between the ages of three to 21. States and school districts identify, locate, and evaluate all children with disabilities, regardless of the severity of their disability, to determine which children are eligible for special education and related services;
- Each child receiving services has an individual education program (IEP) spelling out specific special education and related services to be provided to meet his or her needs. The parent must partner in planning and overseeing the child's special education and related services as a member of the IEP team; and
- To the maximum extent possible, children with disabilities must be educated with children who are not disabled, and states and school districts provide procedural safeguards to children with disabilities and their parents, including the right to a due process hearing, the right to appeal to federal district court, and the right to receive attorney's fees.

In 1975, the Education for Handicapped Children Act (later known as the Individuals with Disabilities Act or IDEA) required schools to place children with

disabilities in the regular or general education classroom to ensure they were educated in the least restrictive environment. Many students with emotional and behavioral problems, regardless of disability label, are now included in the public school environment, many in general education schools and classes. This legal mandate shifted children from institutions to schools. Starting in the late 1970s, school staff and districts began restraining and secluding children in much greater numbers (Ryan, Robbins, Peterson, & Rozalski, 2009).

IDEA states that when the behavior of the child with a disability impedes the child's learning or the learning of others, the IEP team must consider the use of positive behavior interventions and supports (PBIS) to address that behavior. While IDEA emphasizes the use of positive behavior supports, it does not prohibit the use of restraint. Since the 1970s, the ED has noted that state laws may address the use of restraints and the techniques to be implemented.

Beginning in the 1980s and continuing to present, there has been an increasing number of lawsuits involving the use of restraint and seclusion in schools. As of 2010, 23 states have specific sets of laws that regulate the restraint of children in schools. While these laws typically have prohibitions, restrictions, and other procedural safeguards, they explicitly permit the use of restraint on all children.

There is emerging research that suggests that not only is restraint tolerated, it is encouraged (Stewart, 2010). Masters (2002) suggested that these factors include improved restraint procedures, the growth of national companies expounded restraint training, a lack of success with other interventions, and high staff turnover. These coupled with the thought that restraints are not viewed as universally negative, have led

to a feeling that society/schools have done what they can to ensure the safety of students within the confines of legal mandates.

There are two camps for the justification of the use of restraint on students in school. One believes that restraint is needed on a containment or safety basis. They believe that restraint is an accepted part of the school program and can be used to prevent harm, property damage, and undue disturbance to the school program (Stewart, 2010). The other camp believes that the use of restraint can be therapeutic and beneficial to children (Tovino, 2007).

Regardless of proponents being in the containment or therapeutic camp, restraint has helped advance the disability education movement by granting access to students who would otherwise need either institutionalized or home schooled. Proponents of physical restraint and seclusion in public schools contend that it is a practice needed to contain or ensure the safety of all students. Restraint is seen as a means to prevent harm to a person (including self-injurious students), to prevent property damage, or to reduce disruption in a school environment (Stewart, 2010). Proponents contend that there is no universal alternative that works and that when used properly and when warranted, the effective use of physical restraint keeps schools safe and orderly. These conditions are:

- When preventative approaches have been implemented and failed;
- All staff members know and understand the permissible and impermissible situations for use; and
- Is used to ensure the safety of all involved.

Although there are no set standards for restraint, there is some consensus on what physical restraint is and how they should be applied. Most professionals agree that

physical restraint should be used as a last resort after de-escalation strategies, training, program changes, behavior studies, and effective staff policies are in place and have failed (Ryan & Peterson, 2004). Staff members should know the permissible and impermissible situations that warrant restraint or seclusion. Proponents agree that restraint may be used when a student's behavior poses a threat to themselves or others, there is risk of property damage, or behavior causes a significant disruption to the environment. There is also some consensus on when these practices should not be used:

- For staff convenience;
- Due to lack of staff training or because staff is fearful;
- Used as punishment; and
- As a response to minor behaviors.

Opponents of restraint believe that the act by the professionals who are entrusted to keep students safe in school does more physical and emotional harm to the very student they are trying to keep safe. They chronicle a "culture of harm" detailing treatment of students from every area of the United States: urban, suburban, rural, wealthy, poor, White, and Black (NDRN, 2009). The use of restraint results in many detrimental effects not only to the student, but also to the staff who employ them: falls, injury, psychological trauma, and even death. A plethora of studies exists from the government and private and non-profit organizations that highlight the risks associated with the use of restraint:

- The President's New Freedom Commission on Mental Health (2009) states that the use of restraint creates significant risks for children, including serious injury or death, traumatization of people with a history

of trauma, loss of dignity, and other psychological harm. As such, the commission recommends that restraint use be reduced and that agencies view high rates of restraint as evidence of treatment failure;

- The Center for Mental Health Services, Substance Abuse and Mental Health Services Administration (2010) states that the use of restraint on persons with mental health and/ or addictive disorders has resulted in deaths, serious physical injury, and psychological trauma. In 1998, the Harvard Center for Risk Analysis estimated deaths due to such practices at 150 per annum across the nation. Children have been noted at especially high risk for death and serious injury;
- The GAO (2010) has reported that restraint can be dangerous to individuals in treatment settings because restraining them can involve physical struggling, pressure on the chest, and other interruptions in breathing;
- The Alliance to Prevent Restraint, Aversive Interventions and Seclusion (2012) has stated that aversives, restraint, and seclusion can cause emotional, psychological, and/ or physical damage as well as death;
- The American Psychological Association (2009) has recognized that restraint has the potential for injury of patients and staff, and the potential for abuse if used improperly; and
- The National Education Association (2010) has issued guidelines that discuss restraint of “violent” students, stating that physical restraint should

be used with a student only when there is an imminent risk either of harm to a person or property damage.

The majority of these groups believe that restraint is used as a method of first resort in many schools. They contend that because there is no federal legislation limiting its use, schools districts are not forced to change these aversive practices. The techniques used are often utilized or implemented by untrained personnel and this often results in the injury or death of students. They also argue that the same restraint procedures that are used in school are being used in hospitals, institutions, and other treatment facilities. There are federal guidelines in place for those settings (Stewart, 2010).

The risk of restraint can be divided into four categories: harm to self or others, the use of improper factors, secondary effects, and the risk of unwanted attention (Stewart, 2010). The greatest risk of harm is death. In addition to the death of a child, there are a number of physical and psychological traumas resulting from the use of restraint. Students who have been restrained have reported feeling dehumanized, assaulted, and traumatized by the event (Amos, 2004). Amos also argues that students with disabilities may be more vulnerable, less able to understand the justification, and may have physical conditions that could be exacerbated by the restraint. Students with asthma, a weakened heart, or on certain medication regimens are more susceptible to injury.

The staffs who restrain students may also be injured in an effort to respond to violent behavior (DosReis & Davarya, 2008). Injuries suffered can include both physical (from the result of a fall or blow from the student) and emotional. Staffs encounter emotional stress because of the highly personal threats they receive as part of their job

and that they feel distaste, discomfort, and guilt in needing to physically intervene (Bath, 1994).

Use Influenced by Improper Factors

There have been a number of studies that indicate that the use of restraint in schools is not based on clinical data or behavior research. Fisher (1994) reported that restraint is used because it is part of an organization's past practice, not on the premise of a therapeutic or safety basis. Fisher's literature review found that an array of factors such as cultural bias, staff role perceptions, and leader attitudes were more prevalent indicators of restraint than legitimate clinical factors. Persi and Pasquali (1999) reported on the disproportionate use of restraint according to race, gender, and culture. Young African-American males are restrained at a far greater rate than any other subgroup. Bath (1994) indicated that low staffing ratios, poor staff training, long hours, and other staffing problems can lead to more restraints. Finally, there are some indications that restraint is more commonly used on young children, because staff are either more fearful of older, larger students, or that it is simply more physically possible to do so with younger and smaller students (Ryan, Tetreault, Peterson, & Vander Hagan, 2007).

Secondary Effects

According to Chan, LeBel, and Webber (2012), there is significant dollar cost associated with restraints in schools and institutions. They contend it is actually more expensive to use restraints than to come up with positive alternatives to them. Restraint practices increase work related costs, reduce the quality and effectiveness of care, and

drive up the systematic cost, the organizational cost, and the personal cost of the organization and the individuals involved. Costs such as insurance, training, health care, and worker compensation claims all rise as a direct result of restraint practices.

Depending on the organization, restraints often lead to high staff turnover ratios, resulting in a further increase in training costs. A time/motion/task analysis of a typical restraint costs an organization an average of \$350, involves at least 25 different steps by 15 different staff, and claims more than 12 hours of staff time to manage and process (Chan et al., 2012).

Risk of Unwanted Attention

Organizations that use restraints' procedures are at risk of receiving unwanted negative attention from the media, advocacy groups, and/ or lawsuits. Parents and advocates have increasingly turned to the media when they feel schools are not receptive of their concerns. This media attention, regardless of the truth or accuracy of the concern, is generally not welcomed by schools, who simply issue a no comment statement to decrease the likelihood of a lawsuit. Advocacy organizations, like the Families Against Restraint and Seclusion, have sections on current deaths of children attributable to restraint. Other advocacy groups routinely become involved, request meetings, review records, and scrutinize an organization's restraint procedures (Stewart, 2010). The number of lawsuits involving restraint practices has grown exponentially over the past 30 years. These lawsuits, whether valid or not, require school systems to pay huge legal fees and the time and resources needed to defend them. Federal law even

allows a process for the attorneys of the parent to recover their legal fees from the school district (Stewart, 2010).

National and State Standards

In the spring of 2009, the GAO, in conjunction with the Congressional Committee of Education and Labor, convened a hearing regarding the abuses from restraint and seclusion. This prompted the United States Secretary of Education, Arne Duncan, to call on all states and school districts to examine their policies on the use of restraint and seclusion. In late 2009, federal legislation was introduced to regulate the use of these procedures in schools to prevent abusive situations (Couvillon et al., 2009). However, there are still no federal guidelines regarding restraint and seclusion in public schools.

In July, 2009, Secretary of Education, Arne Duncan, informed Chief State School Officers that the Department of Education would begin conducting research on state laws, regulations, and policies regarding the use of restraint and seclusion in schools. In December of 2009, states were asked to review and confirm the accuracy of those policies and guidelines. Although policy is slated to come out for the 2013-2014 school year, to date, Ohio has no state statutes or regulations addressing seclusion and restraint. The Department of Education has formed a committee to develop provisions on seclusion and restraint. Ohio has no restrictions on when or how a restraint may be performed. There is no language of how restraint or seclusion is restricted to ensure the immediate safety of student or others, for allowance of prone restraints, or for informing parents of restraints or seclusion, and for mandating staff training. However these constraints are for secure facilities only. There is nothing the Department of Education regulates regarding restraint.

Pennsylvania has statutes and regulations that apply to all public schools on the use of restraint and seclusion. The use of physical restraints or seclusion is restricted to ensure the physical safety of the student and others, prone restraints are banned, parents must be notified immediately after the incident, and guidelines are in place for the training of school personnel. As of 2009, Pennsylvania is only one of four states collecting and reporting information on the use of restraints in educational programs, one of 13 states that obtain consent through the IEP process prior to the emergency use of restraints, one of 17 states requiring staff training, and one of eight states that prohibit the use of prone restraints (ED, 2010).

State	Statewide Restrictions on Restraint	Restraint restricted to ensure immediate physical safety of student or others	Prone Restraint Banned	Automatic notice to parents after restraint	School staff training mandated
AL	None	No	No	No	No
AK	None	No	No	No	No
AS	None	No	No	No	No
AZ	None	No	No	No	No
AR	None	No	No	No	Yes
CA	Regulated	No	No	No	No
CO	Statute, Regulations	Yes	Yes	Parent and DOE	Yes
CT	Statute, Regulations	Yes	Yes	Parent	Yes
DE	Regulations for children with Autism only	No	No	No	No
FL	Guidelines	Yes	Yes	Parent	Yes
GA	None	No	No	No	No
HI	Statue	No	No	Parent and DOE	Yes
IA	Regulations	No	Yes	Parent	Yes
ID	None	No	No	No	No
IL	Statutes, Regulations	Yes	No	Parent	Yes
IN	None	No	No	No	No
KS	Guidelines	Yes	No	Parent and DOE	Yes
KY	Guidelines	No	No	No	No
LA	None	No	No	No	No
ME	Regulations	Yes	No	Parent	Yes
MD	Regulations	No	No	Parent	Yes
MA	Statute and Regulations	Yes	No	Parent and DOE	Yes
MI	Guidelines	No	Yes	Parent and DOE	Yes
MN	Regulations	Yes	No	Parent and DOE	Yes

MS	None	No	No	No	No
MO	None	No	No	No	No
MT	Statute, Regulations	No	No	No	No
NE	None	No	No	No	No
NV	Statute	No	No	Parent	yes
NH	Guidelines	Yes	No	Parent	Yes
NJ	None	No	No	No	No
NM	Guidelines	No	No	Parent	Yes
NY	Regulations	No	No	Parent	Yes
NC	Statute	No	No	Parent	Yes
ND	Guidelines	Yes	No	No	Yes
OH	Statute	No	yes	No	No
OK	None	No	No	No	No
OR	Regulations, Guidelines	No	No	Parent	Yes
PA	Regulations	Yes	Yes	Parent	Yes
RI	Regulations	Yes	No	Parent and DOE	Yes
SC	None	No	No	No	No
SD	None	No	No	No	no
TN	Statute	No	No	Parent	Yes
TX	Regulations	No	No	Parent and DOE	Yes
UT	Statute	No	No	No	No
VT	Guidelines	No	No	Parent	Yes
VA	Guidelines	Yes	No	Parent	Yes
WA	Regulations	Yes	Yes	No	No
WI	Guidelines	Yes	No	No	Yes
WY	None	No	No	No	No

Without federal legislation, each state has developed its own protocols and guidelines in the use of restraints and seclusion. Each district within each state has taken the state mandates and created their own policies and procedures. This widely divergent focus on the use of restraint and seclusion in schools has resulted in literally thousands of different policies and its implementation is done a thousand different ways.

School Administrators' Attitude towards Physical Restraint and The Efficacy Of Physical Restraint in Public Schools

Before reviewing leadership qualities, it is imperative to recognize that individuals in a position to decide whether or not to utilize a restraint must often do so in response to a crisis or an emergency situation. There is often not time to weigh other options, consult with experts, check IEPs, or do research. This study acknowledges those factors and recognizes them as limitations when a crisis does occur. However, an administrator's pre-preparation and the use of restraint in non-emergency situations should focus on prevention (DePaola & Walther-Thomas, 2003).

After an extensive search, there is no research in regard to school administrators' attitudes associated with physical restraint. It is arguable that school leaders who view physical restraints as necessary to a positive and safe school culture are more likely to adopt policies and procedures that encourage its use. Administrators finding restraints unnecessary are more likely to emphasize preventative programming and other positive behavior supports (Fogt, 2005).

State and local policies and regulations play a huge role in the amount of restraints in schools. Districts and states that have preset standards for what constitutes the appropriate use of restraint are far ahead of districts that do not (Gaskin, Elsom, & Happell, 2007). These regulations can serve as part of the school handbook, articulated in writing and described in practice and training, and used as a basis to evaluate implementation (Stewart, 2010). They can also be used to impose sanctions on those

systems that do not implement them. In other words, state policies can force school systems to implement policies and procedures.

A key component to school leadership is establishing the culture of the school. The leaders' attitudes towards safety and restraint in school in many ways shape the culture regarding student behavior and staff responses to student behavior. In other words, principals who utilize restraint procedures are more likely to work in a building where there are more restraints. Conversely, principals who do not utilize other types of behavior modifications are more likely to work in a school with fewer restraints. Currently, research that supports implementing PBIS is gaining more credibility as more schools are using the strategies with some evidence of social and academic success (Horner & Sugai, 2010).

A number of authors contend that a building leader's belief in and prioritization of restraint and seclusion reduction efforts are critical to reducing the number of restraints in a school setting. These leadership attributes include establishing a mission or value to reduce the number of restraints, identifying goals and principles, attending to those goals, committing the necessary resources, establishing and gaining consensus, having review procedures, and having a systematic approach regarding mental health strategies (Gaskin et al., 2007; Miller, 2006; Ryan et al., 2007).

The creation of modification of the school building also has an effect on student behavior and staff response (Gaskin et al., 2007). These efforts can be done on a small scale, such as painting rooms in calming colors or reorganizing the classroom furniture to reduce clutter and eliminate harmful materials, to larger projects like installing sensory

rooms for autistic students. Whether on a small or large scale, the basic goal of the physical environment should take into account the needs of all students and staff.

Summary

In reviewing the definition of a physical restraint and how it is employed in public schools today, the history of restraints, how IDEA moved restraints into the school arena, the justifications for and against restraint, the lack of the national statutes and school leader qualities related to restraint, five main conclusions may be derived. First, although it is unclear as to what extent, the physical restraint of students in school settings is occurring on a regular basis. Second, the use of restraint in American society has been persistent for centuries, first in institutions and now in schools. Third, there is a lack of consensus on what constitutes the permissible use of restraint. Some parties are vocal opponents of it in any form, others are ardent supporters, and many believe it is tool which must be wielded only at the appropriate time. Fourth, there are no clear federal guidelines on the appropriate use of restraint in American schools. Although Arne Duncan and the Department of Education have ordered states to investigate and implement their own policies on restraint and seclusion, these efforts have yielded extremely divergent policies and procedures to the use of restraint in a public school setting. Fifth, a school administrator's attitude towards physical restraint and the efficacy of physical restraint in public schools are key factors in determining the amount of restraints in school.

Chapter 3

Research Design

The purpose of a physical restraint is to control the behavior of a student. It can involve physically holding a person immobile against his or her will to using chemical or mechanical devices to control a person. Over the last several years, print and television media have brought to the attention of the public numerous incidents of death and injury as a result of physical restraint in public schools. The risks associated with restraints range from injuries to students or staff from kicks, punches, bites, or falls to psychological trauma from being involved in involuntary restriction of movement of students to asphyxia, aspiration, and blunt trauma to the head or chest (Couvillon et al., 2010).

The current investigation is a quantitative survey research project examining the relationship between the reported frequency and behaviors of restraints and school administrators' attitudes towards restraint. This study was a quantitative survey designed using Statistical Package for the Social Sciences, Version 20 (SPSS-20) to explore any correlation of those factors. This study employed a survey to gather data from school principals in western Pennsylvania and eastern Ohio. Surveys provide numeric description of "trends, attitudes, or opinions of a population" and are frequently used to gather quantitative data (Creswell, 2003, p. 144). Surveys are widely used as they are inexpensive and useful in collecting large amounts of data in short periods of time (Creswell, 2003). While multiple choice questions do not allow participants to expand or react to certain questions, open-ended or free response questions do.

Two major benefits of utilizing an on-line survey are the scalability and the data collection function. Unlike telephone or postal mail surveys, on-line surveys can reach thousands of people in the same time. The survey employed in this study was sent to 755 participants simultaneously. The scalability also assists with the low cost feature of an on-line survey (Granello & Wheaton, 1988). The second feature that is beneficial is the data collection function. Survey Monkey is able to collect all of the responses and download them into a usable format such as an Excel worksheet, which can be directly imported into SPSS-20. A postal mail format of this length of survey would take a significant amount of time to enter into the system by hand (Granello & Wheaton, 2011).

The survey used in this study is based on an instrument created by Fogt (2005) in a study exploring leader behaviors and physical restraints of students with behavior disorders in approved private schools. Dr. Fogt's survey sampled elementary principals in residential and day treatment school programs (approved private schools) for students with emotional and behavior disorders. Fogt's *Administrative Activities and Behavior Interventions for Students with Behavior Disorders* includes 47 items regarding seclusion and restraint behaviors. No psychometric data is currently provided (Fogt, 2005). The study utilized parts of the Instructional Leadership Inventory ([ILI], Maehr & Ames, 1988) and a survey designed by Dr. Fogt. *The Instructional Leadership Inventory* developed by Alig-Meilcarek (2003) is based on a 5-point Likert-type scale (1=strongly agree, 5= strongly disagree). Three factors were identified from the results of the exploratory factor analysis of the original version of the inventory. The internal consistency coefficient of the inventory for the total of the items was .95 and for each factor scale, the range was from $r = .81$ to $r = .88$. The ILI measured instructional

leadership practices associated with improving student achievement. Dr. Fogt's designed survey assesses school leader attitudes toward restraint and examines the extent to which physical restraint is used in a residential or day treatment program serving students with emotional or behavioral disorders in grades one to six. The current investigation uses portions of the two surveys to target public school administrators in western Pennsylvania and eastern Ohio. A full copy of the survey is provided in Appendix 1.

Participants, Population, and Sampling Section

The subjects consisted of a stratified random sample of public school principals and assistant principals in western Pennsylvania and eastern Ohio. The sample was selected from the Pennsylvania and Ohio Department of Educational Directories. Once school leaders were identified, their individual contact information was confirmed via their school district website. If the contact could not be confirmed, the researcher moved on to the next listing. Once a listing of 755 principals and assistant principals was identified, the search was complete.

Data Collection Procedures

Prior to the administration of the questionnaire for the participants, the researcher received approval from the Youngstown State University's Institutional Review Board, after having submitted an application along with the survey and consent letter.

A pilot of the survey was conducted with 15 participants. Each participant was given a hard copy of the survey. They were asked to complete the survey taking into consideration the following questions:

- How long did it take you to complete the survey?
- Were there any questions that were confusing or ambiguous?
- What do you think were the overarching issues that the survey was trying to glean?

Of the 15 surveys, the average time for completion was eight minutes. All participants reported no confusing or ambiguous questions and all believed the survey was geared towards ascertaining the principal's role in the use of physical restraint in public schools.

From the list of 755 principals and assistant principals, an email listing was created. Each potential participant was sent an invitation to participate in the study via email with a code for a Survey Monkey electronic survey. The potential participants were asked to complete the survey by entering the code which took them directly to the Survey Monkey website. The researcher sent a follow-up email one week after the initial mailing to any potential participants who had not responded to the survey. After each additional week, the researcher sent another invitation to potential participants who had not responded. After one more additional week, the researcher made personal phone calls and email inquiries to those potential participants who had not responded resulting in a final response of 202 respondents, a 26.75% response.

Data Analysis

After the completion of the data collection, all data were imported into SPSS-20 for further descriptive and inferential analyses. Data analysis was conducted in an effort

to discover relationships between variables. This analysis utilized factor analysis and regression analysis, as the data permitted.

Significance

It was expected that the study would make three contributions to the areas of frequency of restraints, the student behaviors that lead to those restraints, and the instructional leadership behaviors towards restraint. First, the study provided specific information about the frequency of restraints utilized in public schools in western Pennsylvania and eastern Ohio. There is currently little published data about the frequency of restraints in school. While there are four states that publish restraint frequency, there are no national data and limited local data.

Second, the study showed the behaviors of the students that lead to the restraint. Because of the lack of national regulations, each state and each locality have widely different standards of when and why restraint practices should be utilized. Student behaviors in one school district may lead to a restraint; the same student behavior in another district may result in different outcomes.

Third, the study highlighted the instructional leadership behaviors of the school administrator to determine if there is a correlation between leadership behaviors and the frequency and student behavior that lead to physical restraints.

Chapter IV

Data Analysis

The survey results from all the respondents were collected by the on-line survey and questionnaire tool, Survey Monkey. Once the data collections were completed, the results were transferred into a Microsoft Excel spreadsheet and then imported and analyzed using SPSS Version 20.

School leaders ($n=202$) who responded were from western Pennsylvania and eastern Ohio. There was not an equal representation from each state. Fifty-two (26%) of the respondents were from Ohio and 150 (74%) were from Pennsylvania. Pennsylvania has significantly more school systems in the western part of the state than Ohio has in the eastern counties.

Demographics

Respondent descriptive data were aggregated from the responses. Demographic variables were charted and analyzed, they include: gender, age, ethnicity, years of experience, school size, educational certificates held, school type, school size, and number of students who receive Special Education services, types of trainings offered, training time spent on physical restraints, and de-escalation and conditions under which a physical restraint would be utilized. A copy of the survey responses is included in Appendix 1.

The various demographic factors requested in the survey were examined in an effort to understand the participants included in the sample and to determine if the

demographic data were representative of nation-wide statistical data for school leaders. The respondents of each survey were asked to indicate their gender. Table 1 provides a summary of the responses by gender.

Table 1

Gender

<i>Gender</i>	<i>f</i>	<i>%</i>
Male	134	66
Female	67	33
Missing	1	.01

As indicated in Table 1, the gender comparison is similar between males and female school leaders. In contrast, according to the U.S Department of Education in a recent survey from the National Center for Education Statistics, 59% of Pennsylvania public school principals and assistant principals are male; 55% of Ohio school leaders are male. Females were underrepresented in this study.

Next, respondents were asked to give their age by selecting from ranges outlined in five choices. Table 2 represents the ages of the respondents.

Table 2

<i>Age</i>	<i>f</i>	<i>%</i>
20-29	2	1
30-39	52	26
40-49	84	42
50-59	54	27
60+	10	5

The data in Table 2 reveal that the median age range was 40-49. This demonstrates that the sample of participants in the current study is fairly representative of the age of all public school administrators nationwide. In a 2003 research study supported by the *Wallace-Reader's Digest Fund* indicated that the average age for administrators nationwide was 49.3.

Table 3 summarized the ethnicity of the participants.

Table 3

Ethnicity

<i>Ethnicity</i>	<i>f</i>	<i>%</i>
Asian or Pacific Islander	2	1
Black/Non-Latino	6	3
Hispanic	1	.5
Native American	0	0
White/Non-Latino	191	95
Missing	2	1

In this data set, 95% of the survey participants are White, which compares favorably to 89% at the national level as reported in the 2003 Wallace Foundation research study. With few non-White respondents, this category did not lend itself to further analysis.

Table 4 summarizes the administrative position of the participants.

Table 4

Position

<i>Position</i>	<i>f</i>	<i>%</i>
Principal	151	76
Director	7	4
Assistant Principal	39	19
District Level Supervisor	5	2.5

In order to become an administrator in the states of Pennsylvania and Ohio, a person must have a minimum of a Bachelor's Degree and at least 30 hours of post graduate work for licensure. Several respondents also served in district roles, and their responses are tabulated in the District Level Supervisor role.

Table 5 summarizes the years of experience for the respondents.

Table 5

Years of Experience

<i>Years of Experience</i>	<i>f</i>	<i>%</i>
1-5	43	21
6-10	74	27
11-15	45	21
16-20	20	10
More than 20	18	9

The data in Table 5 reveal that the median years of participants' service in current positions are 6-10 years. While there is a sizable group (n=43, 21%) of respondents with less the five years of experience, the majority of the school leaders have six or more years of experience (n=159, 79%).

Table 6 summarizes the educational certificates held by the respondents.

Table 6

Educational Certificates

<i>Educational Certificates</i>	<i>f</i>	<i>%</i>
Administrative	200	99
Special Education	32	16
Elementary	74	36
Secondary	67	33
Elementary and Secondary	13	7
Other	8	4
Missing	2	1

The data in Table 6 reveal that the majority of school leaders hold certificates in administration and supervision. As a prerequisite to obtaining licensure as a principal, respondents must demonstrate five years of experience in the classroom or school as a teacher, guidance counselor, or school psychologist. There is nearly an equal amount of respondents who hold secondary teaching certificates as elementary certificates. Respondents who hold certificates in special education, guidance, and school psychology are certified in grades K-12. Some respondents held certificates as a reading specialist, provisional or emergency certificate, or a Superintendent's Letter of Eligibility.

Table 7 summarizes the school type.

Table 7

School Type

<i>School Type</i>	<i>f</i>	<i>%</i>
Elementary	77	41
Middle	37	19
Secondary	73	38
Vocational	3	1.5
K-12	12	5

The data in Table 7 reveal 75% of all participants work in either the elementary or secondary level. Nineteen percent work at the middle school level.

Table 8 examines school size.

Table 8

School Size

<i>School Size</i>	<i>f</i>	<i>%</i>
1-200	10	5
201-500	89	45
501-800	53	27
801-1000	20	10
1001-1250	9	4
1251+	19	9
Missing	2	1

The data in Table 8 reveal that the largest group of participants work within a school setting that serves between 201 and 500 students.

Table 9 summarizes how many students receive Special Education services.

Table 9

Special Education Students Served

<i>Special Education Students</i>	<i>f</i>	<i>%</i>
0-20	18	9
21-40	48	24
41-60	36	18
61-80	27	13
81-100	29	14
101+	43	21
Missing	1	1

The data in Table 9 reveal a wide distribution of special education students served. This suggests that school size is not necessarily indicative of the number of students who receive special education services.

Table 10 summarizes the number of physical restraints per month in the participants' schools.

Table 10

Average Number of Physical Restraints Per Month

<i>Number of Restraints</i>	<i>f</i>	<i>%</i>
0	96	48
Less than 1	69	34
1-3 per month	27	13
4-10	7	3.5
11-30	2	0
More than 30	0	0

The data in Table 10 reveal that nearly half of the participants do not utilize restraints in their school setting, and that 82% of all participants use less than one restraint per month.

Table 11 summarizes the type of physical restraint training that is offered to staff members.

Table 11

Type of Physical Restraint Training

<i>Training</i>	<i>f</i>	<i>%</i>
None	72	36
CPI	101	58
Devereux	1	.5
PART	1	.5
CPI and Devereux	1	.5
TCI	2	1
QBS	6	4
Other	18	11

Over half of all respondents utilize the Crisis Prevention and Intervention training (CPI). CPI is a program offered by Crisis Prevention Institute. It consists of an eight to 16-hour course focusing on both crisis de-escalation techniques and restraint procedures. Devereux, Professional Assault Crisis Training (PART), Therapeutic Crisis Intervention (TCI), and Quality Behavior Solutions (QBS) have limited numbers of participants. Of the 18 respondents in the other column, seven receive trainings from companies not listed and 11 have training in something but the respondents did not know the name of the company providing the training.

Table 12 summarizes the number of hours of physical restraint training required for school personnel.

Table 12

Number of Hours of Physical Restraint Training Required

<i>Restraint Training Hours</i>	<i>f</i>	<i>%</i>
None	66	33
Less than 1	22	11
1-4	41	21
5-8	42	21
9-12	5	2.5
12+	4	2
Unknown	22	11

The data in Table 12 show one third (n=66, 33%) of all schools spend no time on training for physical restraints. Another third of all respondents (n=63, 32%) report four hours or less of training time on the use of physical restraints in public schools.

Table 13 summarizes the amount of time spent on de-escalation techniques as opposed to restraint techniques.

Table 13

Percent Of Training Time Spent On De-Escalation Techniques As Opposed To Physical Restraint Techniques

<i>Percent training time on de-escalation techniques</i>	<i>f</i>	<i>%</i>
0-19	57	28
20-39	25	12
40-59	33	16
60-79	29	14
80-100	18	9
Unsure	40	20

The data in Table 13 illustrate a wide range of time spent on de-escalation techniques. While 20% of all respondents are unsure of how much time was actually spent on de-escalating potential crisis situations, there is a wide range of time spent on de-escalation training.

Table 14 summarizes data regarding the types of physical restraints used by school staff.

Table 14

Type of Physical Restraints Employed by School Staff

<i>Type of Physical Restraint</i>	<i>f</i>	<i>%</i>
None	108	53
Basket Hold	64	32
Mechanical Restraint	4	2
Prone Restraint	9	4
Basket Hold and Mechanical Restraint	2	1
Basket Hold and Prone Restraint	4	2
Basket Hold, Mechanical Restraint, and Prone Restraint	2	1
Unsure	9	4

The data in Table 14 illustrate that over half of the personnel in responding districts do not utilize restraints. Of the schools that utilize restraint, the majority utilize a basket hold technique.

Table 15 summarizes the conditions under which physical restraints occur in public schools.

Table 15

Conditions under Which Physical Restraints Are Utilized at School

<i>Conditions</i>	<i>f</i>	<i>%</i>
Leaving assigned area	28	14
Physical Aggression	162	80
Threats	12	6
Property Destruction	16	8
Non Advocated	15	7.5

The data in Table 15 indicate that while 80% (n=162) of all respondents would utilize a physical restraint in the case of Physical Aggression (aggression towards staff, a peer or self), a significant number of respondents would utilize restraints in other situations. Fourteen percent (n=28) of all respondents would utilize a restraint if a student left an assigned area (14 for leaving an assigned area but staying on school grounds, 14 for leaving the school building, and 8 for leaving school grounds). Twelve respondents (6%) indicate that they would utilize a physical restraint for a threat, and 16 for property destruction. Fifteen respondents (8%) would utilize a physical restraint for other reasons: Three respondents (2%) for refusal to follow a teacher's direction, 10 (5%) for non-compliance, two (1%) for horseplay, and four (2%) for verbal aggression.

Qualitative responses regarding the respondents' feelings about the use of physical restraints in public schools were analyzed and categorized. One hundred thirty five (67%) of the respondents answered this question. Responses were divided into six

categories: never used, only utilized for safety measures, utilized but not specified, no feelings toward the use of physical restraint, need for more training on de-escalation, and only used to break up a fight.

Table 16 summarizes the results.

Table 16

Respondent Feelings toward the Use of Physical Restraint in School

<i>Respondent Feeling</i>	<i>f</i>	<i>%</i>
Never utilized	3	2
Utilized for safety only	84	62
Utilized but not specified	16	12
No feelings toward	2	1
Need for more de-escalation training	15	11
Only to break up a fight	4	3
Other	11	5

Of the 135 responses, four are deemed unique. One school leader stated, “Physical restraint has its purpose for students who cannot control their emotions. It should be used so students do not harm themselves or others. Personally, I think we should bring back the paddle!”

Other school leaders stated,

“It is only used when autistic students may harm themselves or others around them. Otherwise, PR is not used on the regular student population.”

“I believe that physical restraint should only be used if a student will not first comply with verbal redirection or if a fight is taking place.”

“Use as needed until police arrives [*sic*].”

Coupled with the results listed in Table 16, these widely divergent responses indicate a vast range of *when* and *why* physical restraints are utilized in public schools. Some school leaders never use them, others for non-compliance, some for Autistic students, many for safety reasons, and others to control student behavior until the police arrive.

Preliminary Analysis

A number of preliminary analyses were conducted to understand the study objectives.

- What is the frequency of physical restraint in school districts in western Pennsylvania and eastern Ohio?
- What specific behaviors led to the physical restraint?
- What is the relationship between the application of a physical restraint and the school administrator’s attitude toward physical restraint and the efficacy of physical restraint in public school?

In order to examine the relationship between the research objectives and the data gathered, certain questions from the survey were tested to find the reliability between the

questions and the responses. Items 20 through 28 were examined for potential factor building. From these nine questions, three factors developed. Scaling analysis revealed that the following factors would be supported from the current responses.

Factor One: Safety

20. The use of Physical Restraint is needed to keep our school safe and orderly.

21. The use of Physical Restraint increases safety in our school.

Questions 20 and 21 indicate the school administrator's personal feelings regarding the use of a physical restraint as a means of keeping schools and students safe.

Factor Two: Staff Attitude

23. Staff members are adequately trained in the use of physical restraint.

24. Staff members know how to recognize potentially violent situations.

25. Staff members know how to de-escalate potentially violent situations and employ least restrictive measures prior to resorting to physical restraint.

Questions 23 through 25 indicate the school administrator's perception of the staff's use of a physical restraint in a school setting.

Factor Three: Efficacy

26. There is sufficient research supporting the use of Physical Restraint to decrease violent behavior in children.

27. Physical Restraint decreases violent behavior of students in my school.

Questions 26 and 27 indicate the efficacy of the use of a physical restraint. Cronbach's alpha reliability estimates indicate that responses from questions 22 and 28 are weak and non-significant, $p > .05$. Reliability analysis for the three created factors demonstrates strong significant levels of reliability (Tabachnick & Fidell, 2009). Question 22 and question 28 (physical restraint tends to be overused in my school) were also analyzed in order to assess possible relationships with reported frequency of physical restraint. These two items reveal small, non-significant correlations with the items in the other factors and with the dependent variable. The reliability estimates for these two items are found to be small and non-significant indicating that participant responses to these items were not consistent.

22. Physical restraint constitutes punishment.

28. Physical Restraint tends to be overused in my school.

Table 17 summarizes the reliability estimates for the constructed factors.

Table 17

Reliability of Constructed Factors

Reliability	Cronbach's Alpha	N of items
Questions 20, 21	.912	2
Questions 23, 24, 25	.747	3
Questions 26, 27	.752	2

Question 15 was broken down into advocated and non-advocated conditions under which a physical restraint is used in the school. Respondents were asked to

describe when a restraint would occur in the school setting. While all of the restraint and de-escalation trainings advocate the use of a physical restraint in cases involving some sort of physical aggression, and some advocate in the case of leaving assigned areas or property destruction; none of the training methodologies advocate a restraint on the basis of refusal to complete academic tasks, refusal to follow teacher directions, non-compliance, horseplay, or verbal aggression. Responses were factored using either an advocated or non-advocated approach. The frequency of each resulting factor is summarized in Table 18.

Table 18

Frequency

Factor	<i>f</i>	%
Leaving	29	14
Physical Aggression	162	80
Physical Threat	13	6
Property Destruction	17	8
Non Advocated	16	8

An Advocated Score was computed from each participant's responses. This score was based on the sum of advocated reasons for physical restraint, thus the respondent identifying more reasons to advocate physical restraint had a higher advocated score.

Finally, item 10 was identified as the most appropriate dependent variable for the current investigation. This item specifically asked respondents to indicate the frequency

of physical restraint applied in their school. Participant responses were re-categorized into four levels of responses due to the frequency of responses at each level. The “four or more” level was constructed to include participants indicating either four through 10 or 11-30 physical restraints a month. The resulting response levels were: None, less than one a month, one to three a month, and four or more a month. The frequency of responses is summarized in Table 19.

Table 19

Frequency of Responses

Frequency	<i>f</i>	%
0	96	48
Less than 1	69	34
1 to 3	27	13
4 or more	9	4

Assumptions

In considering assumptions for this study, independence must be established. Field (2009) stated, “In some cases it means that data from different participants are independent, which means that the behavior of one participant does not influence the behavior of another” (p. 133). The participants in this study were contacted individually

via email and were not made aware of the other participants. Interference was highly unlikely since the survey was delivered electronically and individually.

Second, interval data are assumed for parametric tests. The response choices to rate each of the 29 questions met this assumption as each increment from one selection to the next has equal value on each instrument (Tabachnick & Fidell, 2009). Additionally, all of the responses were summed to obtain a score for each construct resulting in interval data for statistical analysis.

The third assumption relates to zero-order correlations. Zero-order correlations demonstrate how the variables are related to the dependent variables. The safety, staff attitude, efficacy, and advocated factors were found to be significantly correlated to the dependent variable, frequency of physical restraint, and less correlated to each other, with the exception of the Efficacy factor. The Pearson Correlations are reported in Table 20.

Table 20

Pearson Correlations

Variable	2	3	4	5	6
Frequency of Physical Restraint (1)	0.328*	0.157*	0.158*	0.383*	0.21*
Safety Factor (2)	-	0.084	0.333*	0.209	0.066
Staff Attitude Factor (3)	-	-	0.163*	0.089	0.041
Efficacy Factor (4)	-	-	-	0.059	0.009
Advocated Score (5)	-	-	-	-	0.034
Gender (6)	-	-	-	-	-

The fourth assumption relates to meeting the requirement of at least 20 participants for each independent variable in the model if the intent of the research is to examine the data with the use of a regression model. This assumption was satisfied with a sample size of $n = 202$.

Based on the results of the zero-order correlations and the assumptions tests, which were found to be tenable, it was determined that a sequential multinomial logistical regression was the most appropriate analysis for addressing the research questions. A sequential multinomial logistical regression can be used to determine the existence of a relationship with multiple independent variables simultaneously when the dependent

variable has multiple levels but is not a continuous measure to predict membership of two or more dependent variable levels (Tabachnick & Fidell, 2009).

Sequential Multinomial Logistical Regression

A multinomial logistic regression analysis was performed in SPSS in order to assess the reported frequency of physical restraint based on four levels of response (none, less than one, one to three, and four or greater) in relation to the four created factors (safety, staff attitude, efficacy, and advocated responses). Gender was included as a demographic variable in the analysis. Algorithmic imputation was used to impute missing responses for three of the factors: safety, staff attitude, and efficacy for approximately 1% of the cases.

Analysis reveals that the proposed multinomial logistic model supports the presence of a relationship between the dependent variable and combination of independent variables based on the statistical significance of the final model chi-square, $\chi^2(15) = 77.89, p < .001$

In this analysis, the probability of the model chi-square (77.89) was $p < .001$, less than the level of significance of 0.05. A null hypothesis that there was no difference between the model without independent variables and the model with independent variables was rejected. The existence of a relationship between the independent variables and the dependent variable was supported (Field, 2009). Additionally, goodness of fit statistics demonstrate that this model is tenable, Pearson's $\chi^2 (480) = 442.637, p = .888$. The model results are summarized in Table 21.

Table 21

Likelihood Ratio Tests of Model One

	Value	df	Asymp. Sig. (2- sided)
Safety	13.131	3	.004
Staff Attitude	6.571	3	.087
Efficacy	4.362	3	.225
Advocated Score	25.129	3	.000
Gender	12.011	3	.007

The first factor to be found significant was the school administrator's feelings about the use of a physical restraint to keep schools and students safe, questions 20 and 21, ($p < .05$). The majority of respondents either agreed or strongly agreed that restraint is utilized to keep schools safe and orderly ($n=111$). However, a sizable minority ($n=54$) disagreed.

The second factor found to be significant was the school administrator's perception of the staff's use of physical restraint in the school setting, questions 23 through 25, ($p < .1$). The majority of school administrators either strongly agrees or agrees that their staff is adequately trained to utilize a physical restraint, recognize potentially violent situations, and know how to de-escalate potentially violent situations using least restrictive measures.

The third factor, efficacy, did not significantly present, and should be consider for deletion from the model in an effort to see if removal significantly improves the model. Utilization of zero or less than one restraint per month resulted with 77.4% of all respondents; 18.5% of respondents utilized a physical restraint one to three times a month, and 4% of all respondents used a physical restraint more than four times a month. This data, when correlated with other variables, did not present as significant. While the efficacy factor is correlated with the dependent variable, the weakness of this factor in the model may be attributed to the distribution of efficacy responses across the different levels of the dependent variable. The failure might also be attributed to the correlation of the efficacy factor with other independent variables.

The fourth factor found to be significant was the advocated use of physical restraint ($p < .001$). As mentioned above, this score indicated how many reasons for the use of physical restraint were endorsed by the respondent. The higher the score, the more reasons endorsed. This significant result reflects the strong correlation, $r = .383$, found between the dependent variable and the Advocacy score.

The final variable analyzed was gender. Gender was recorded as a dummy variable, a person was one gender, or was not that gender. These results indicate that there is a significant relationship between the respondents' indicated gender and their response regarding the frequency of the utilization of physical restraint in public schools. Significantly, more males than females do not utilize a physical restraint for any reason in their school, 55% to 30%. Conversely, 3% of male school administrators utilize a physical restraint four or more times in a month, compared to 8% of female school leaders.

Overall, Model 1 demonstrated a good fit, Pearson's $\chi^2(480)$ equals 442.64, $p = .888$, and the model demonstrated good utility based on Nagelkerke's $R^2 = .362$. The log likelihood ratio test indicates all variables are related to the frequency of physical restraint with the exception of Efficacy. This data may be found in Appendix 1. A second model was examined, which excluded the non-significant variable of Efficacy to see if an improvement on the model occurred with the deletion of the variable. Model 2 resulted in a minimal reduction in model fit; the remaining variables are all significant contributors to the model. These data are presented in Appendix 1.

Analysis of the second model reveals that the reduced multinomial logistic model supports the presence of a relationship between the dependent variable and combination of independent variables based on the statistical significance of the final model chi-square, $\chi^2(12) = 72.16$, $p < .001$.

In this analysis, the probability of the model chi-square (72.16) was $p < .001$, less than the level of significance of 0.05. A null hypothesis that there was no difference between the model without independent variables and the model with independent variables was rejected. The existence of a relationship between the independent variables and the dependent variable was supported (Field, 2009). Additionally, goodness of fit statistics demonstrate that this model is tenable, Pearson's $\chi^2(348) = 315.54$, $p = .893$. The second model results are summarized in Table 22.

Table 22

Likelihood Ratio Tests of Model Two

	Value	df	Asymp. Sig. (2- sided)
Safety	16.715	3	.001
Staff Attitude	7.185	3	.046
Advocated Score	23.385	3	.000
Gender	12.178	3	.007

According to Tabachnick and Fidell (2009), the pseudo R-square value demonstrates the strength of the model and the model utility in explaining a potential relationship. For Model 1, the Nagelkerke Pseudo R-Square equals .362; for Model 2 the score was .338. This accounts for approximately 36% of the variability between the factors. The variability from Model 1 to Model 2 is reduced by less than 2%. The first model is slightly stronger even with the presence of efficacy factor that did not significantly contribute to the model. The differences in the models were assessed for significance after transforming the correlations into z-scores using Fisher's Z transformation. For any Pearson's r -value, the Fisher r -to- z transformation is calculated according to the formula:

$$z_r = (1/2)[\log_e(1 + \rho) - \log_e(1 - \rho)], \quad \text{where } \rho = \text{difference}(r_2 - r_1)$$

Divided by

$$SE_{z_r} = 1 / \sqrt{n - 3}$$

(Myers & Well, 2003, p. 492).

In order to compute the z score for the difference between two correlations, the differences between the two transformed correlations were divided by the computed standard error. The resulting analysis finds the z value to be larger than 2.0, indicating that the model change from Model 1 to Model 2 is non-significant (Chen & Popovich, 2002). The full output of the two model analysis is provided in Appendix 1.

As seen in Table 19, the Model Summary indicates a Nagelkerke R-Square $R^2 = .362$. This indicates that a significant relationship of 36.2% exists between the predictors and the dependent variable. The full output of the two model analysis is provided in Appendix 1.

Summary

A detailed review of the demographics revealed that 202 school administrators from western Pennsylvania and eastern Ohio were represented in this study. Demographic variables of gender, age, ethnicity, years of experience, school size, educational certificates held, school type, school size, and number of students who receive Special Education services, types of trainings offered, training time spent on physical restraints, and de-escalation and conditions under which a physical restraint would be utilized were charted and analyzed.

In examining the assumptions for this study, independence between the participants was established. Interval data were assumed for parametric tests as each of the 29 questions on the instrument had equal value. The assumption of meeting the requirement of at least 20 participants for each independent variable in the model was met with a sample size of 202 ($n = 202$).

The initial zero-order correlations revealed factors significantly related to the school administrators' perceptions of safety, staff attitudes, efficacy, and advocated conditions to perform a physical restraint. As these areas were related to the original hypothesis, the examiner determined a sequential multinomial logistical regression was the most appropriate analysis. The first model conducted portrayed a good fit with school administrators' perceptions of safety, staff attitude, and efficacy, and advocated conditions to perform a physical restraint as good predictors of the frequency of physical restraints occurring. This logistical regression model improves the prediction of gender 36.2% above what would be predicted by chance. The second model conducted also portrayed a good fit with the school administrators' perceptions of safety, staff attitude, and advocated conditions to perform a physical restraint as good predictors of the frequency of physical restraints occurring. The difference between the two models were not significant, therefore, Model 1 was used as the basis for analysis.

Chapter V

The purpose of this study is to ascertain the frequency of physical restraints used in public schools, the reasons those restraints are occurring, and school administrators' attitudes or beliefs regarding physical restraint. This study has three objectives:

1. What is the frequency of physical restraint in school districts in western Pennsylvania and eastern Ohio?
2. What specific behaviors lead to the physical restraint?
3. What is the relationship between the application of a physical restraint and the school administrator's attitude towards physical restraint and the efficacy of physical restraint in public schools?

The first area explored in this study was the frequency of physical restraint in public school districts in western Pennsylvania and eastern Ohio. A sizable number of school administrators surveyed, 46.7% , reported zero incidents of restraint in 2012-2013 school year; 35.2% of respondents reported less than one physical restraint utilized per month. A small but significant number of school administrators, 14.1%, reported one to three physical restraints and 4% reported four or more restraints utilized per month. For the population sampled, there were significant differences in the frequency of physical restraints employed.

The second area explored were the specific behaviors that lead to the use of a physical restraint in a public school. For purposes of the analysis, specific behaviors were factored together and a wide range of behaviors that lead to a physical restraint occurring were combined. Some of these reasons are universally endorsed by all training protocols as acceptable for utilizing the restraint. There was a wide range of responses

that were both not advocated and prohibited by not only the training protocols, but also the mandates from Pennsylvania and Ohio Departments of Education. Table 23 summarizes these behaviors.

Table 23

Behaviors

Behavior	Responses
Leaving assigned area, but remaining in building	14
Leaving school building	14
Leaving school grounds	8
Physical aggression towards other students	149
Physical aggression towards staff	148
Physical aggression towards self	112
Physical threats	13
Property Destruction	16
Refusal to comply with academic tasks	3
Refusal to follow teacher directions	3
Non Compliance	10
Horseplay	2
Verbal Aggression	4

This study continues to support the research that physical restraints continue to be utilized in public schools contrary to local and state mandates. While all of the training protocols advocate the use of a physical restraint to deal with potentially violent situations such as physical aggression and some advocate for potentially dangerous situations like property destruction or leaving assigned areas, no training protocol exposes the use of a physical restraint for non-compliance, refusing to complete academic work, or horseplay.

The third area explored was the relationship between the application of a physical restraint and the school administrator's attitude towards physical restraint and the

efficacy of physical restraint in public schools. This study found a significant relationship between the school administrator's attitudes toward restraint and the frequency of physical restraint.

Discussions and Implications

The use of physical restraint with public school children continues to generate concern and stimulate controversy. Little research exists about the prevalence or use of physical restraint in public schools. The purpose of this study is to ascertain the frequency of physical restraints used in public schools, the reasons those restraints are occurring, and school administrators' attitudes or beliefs regarding physical restraint.

This study showed a strong relationship between the frequency of physical restraint and the school administrator's attitude toward safety, staff attitude, efficacy and gender. While a large percentage of respondents reported zero or less than one restraint, a sizable number of respondents averaged three or more physical restraints a month.

School principals are accountable for a myriad of activities and responsibilities. They set the tone for learning, provide leadership, motivate staff and students, set curricular standards, prepare budgets, are familiar with all district, state and federal requirements, hire and evaluate staff, and create a positive school environment that maintains an effective discipline plan and creates a safe environment for students and staff. If one of the paramount duties of a school administrator is to create a safe environment for students and staff, why is the use of a physical restraint utilized in such an inconsistent and potentially dangerous manner?

If there is such a strong correlation between school administrator and staff attitudes towards safety and restraint, why is there such a discrepancy in how and why physical restraints are utilized in public schools?

After an extensive search, there is no known research in regard to school administrators' attitudes associated with physical restraint in public schools. It is arguable that school leaders who view physical restraints as necessary to a positive and safe school culture are more likely to adopt policies and procedures that encourage its use. Administrators finding restraints unnecessary are more likely to emphasize preventative programming and other positive behavior supports (Fogt, 2005).

For a variety of different reasons, the use of physical restraint in public schools has increased dramatically (Ryan & Peterson, 2004). Schools, school systems, and school employees are finding themselves dealing with students who present behaviors that impose significant risks on themselves, the staff, and the system. Over the last several years, print and television media have brought to the attention of the public numerous incidents of death and injury as a result of physical restraint in public schools (Freeman & Sugai, 2014). The risks associated with restraints range from injuries to students or staff from kicks, punches, bites, falls, psychological trauma from being involved in involuntary restriction of movement of students to asphyxia, aspiration, and blunt trauma to the head or chest (Couvillon et al., 2010). This study demonstrates a significant correlation between school administrators' attitudes toward restraint and the frequency of physical restraint in public schools.

Why are some school leaders showing very little use of physical restraint, while others are showing significant utilization of physical restraint to control student behavior?

School administrators come from a wide variety of different backgrounds, teaching experiences, and leadership programs. Is the school administrator's background important in establishing their attitudes toward physical restraint? With more education, would school administrators who have higher incidents of physical restraint opt for other measures to control student behavior?

Can this discrepancy be explained by school size, number of special education students served, socio economic status, or school location?

There is a plethora of research supporting African-American males and special education students are suspended or disciplined at much higher rates than any other subgroup in a school (Mendez & Knoff, 2003). Race, gender, school level, and the amount of special education students served within the district all have strong relationships with suspension rates. Although this study did not address the specific demographics in regards to restraint, they should not be ignored. School leaders who wish to reduce the amount of restraint at their schools are encouraged to adopt policies and procedures to understand why certain students are being restrained, what behaviors lead to that restraint, and how to either remove the trigger or replace the behavior to reduce the amount of restraints occurring in a public school. More professional development or training focusing specifically on de-escalation may help reduce the number of physical restraints in public schools.

Do administrators use or believe in physical restraints because they do not know of anything else that works, and they see it as the only alternative to decrease potentially dangerous situations?

The documented use of physical restraints started in France in the 18th century. Although from their initial usage, it has been a controversial procedure (Ryan, 2004), restraint continues to be utilized by law enforcement, health care providers, and schools. According to Masters (2002), health care workers in the United States originally viewed physical restraint as a form of therapeutic treatment and adopted it as an accepted practice for dealing with violent patients in order to keep the patient and the staff safe. This view of using physical restraints to prevent people from harming themselves or others continues today.

Proponents of physical restraint in public schools contend that it is a practice necessary to maintain or ensure the safety of all students (Stewart, 2010). Restraint is seen as a means to prevent harm to a person (including self-injurious students), to prevent property damage, or to reduce disruption in a school environment (Stewart, 2010). Proponents contend that there is no universal alternative that works and, that when used properly and when warranted, the effective use of physical restraint keeps schools safe and orderly.

A key component to school leadership is establishing the culture of the school. The leaders' attitudes towards safety and restraint in school in many ways shape the culture regarding student behavior and staff responses to student behavior. In other words, principals who utilize restraint procedures are more likely to work in a building where there are more restraints. Conversely, principals who do not utilize other types of behavior modifications are more likely to work in a school with fewer restraints. Currently, research that supports implementing PBIS is gaining more credibility as more

schools are using the strategies with some evidence of social and academic success (Horner & Sugai, 2010).

Although the implementation of a Positive Behavior Support (PBS) or Positive Behavioral Intervention and Supports (PBIS) programs have been effective in reducing the amount of problem behaviors in schools, many school systems do not utilize it and there is the belief among certain professionals that (a) PBS is ineffective in dealing with violent behaviors, and (b) it should not be the function of the school to reward students for acting as they should act anyway.

What are the legal ramifications to utilizing a physical restraint in public schools?

In 2009, the Government Accountability Office (GAO) documented the use of seclusion and restraint upon hundreds of school children, resulting in death, injury, and trauma. Stories included a 7-year-old girl dying after being held face down by staff, kindergarteners tied to chairs with duct tape and suffering broken arms and bloody noses, and a young teen who hung himself while unattended in a seclusion room. Most incidents involved children with disabilities (Butler, 2012). In 2009, the National Disability Rights Network (NDRN) catalogued the use of abusive interventions against children in 35 states. The Council of Parent Attorneys and Advocates (COPAA) documented 185 episodes in which aversive techniques were used, often on young children. The Council for Exceptional Children's Council for Children with Behavioral Disorders has described the "wide variety of injuries and deaths [that] have occurred while students are in seclusion environments including suicide, electrocution, and self-injury due to cutting, pounding, and head banging" and the "widespread" use of restraint in educational and

other environments (The Council for Children with Behavioral Disorders, 2009). Staff have also been injured and traumatized by these practices.

The number of lawsuits involving restraint practices has grown exponentially over the past 30 years. These lawsuits, whether valid or not, require school systems to pay huge legal fees and expend the time and resources needed to defend them. Federal law even allows a process for the attorneys of the parent to recover their legal fees from the school district (Stewart, 2010).

On December 18, 2013, the Antioch School Board in California approved an \$8,000,000 settlement because one of their teachers improperly restrained and abused eight kindergarten students (Gafni, 2013). Allegations against the teacher include:

- Driving her knee into a child's back as she performed a prone restraint on the ground;
- Pinching a seven year old autistic child's nipple to get him to follow directions; and
- Using the back of her hand to hit a child in the mouth.

This settlement is the most expensive case involving a school system in public education history. Over the last 40 years, the number of cases involving abuse, physical or mental injury, or death continues to grow. School systems that utilize physical restraints not only expose students to the risk of possible injury, but open themselves to the possibility of litigation.

Limitations

As with all research topics, this study possesses limitations. One notable limitation is the self-report nature of the study. Survey research is always vulnerable to how respondents read and process the questions. This study examined the frequency of physical restraint, the behaviors that lead to the restraint, school administrators' attitudes towards physical restraint, and the efficacy of the physical restraint in public schools. There is the possibility with self-report survey data that the responses given do not reflect the school's "true" practices about physical restraint.

Another limitation may be sample size. Although this study achieved a 26.8% return rate which is considered an adequate sample size for an on-line survey, there were 553 school administrators who did not participate in the study. There is the possibility that the respondents who participated in the survey are not representative of the school districts in western Pennsylvania and eastern Ohio.

A final limitation is the instrumentation used to collect the data. Although the survey instrument is based on tools used in other research, it did not undergo rigorous testing of its psychometric properties.

Recommendations for Practice

The findings of this study emphasize some areas that may help school leaders create safer environments. Some implications for improving practice include:

- School leaders should re-examine their policies and ensure that physical restraints should be employed as an emergency procedure to ensure the safety of students and staff only;

- School leaders should collect and analyze data to identify patterns and develop interventions to reduce the need to use a physical restraint;
- Given the number of students and staff injured in restraint procedures, school leaders should ensure that all staff who may become involved in a restraint injury, participate in a certified training program;
- School leaders should re-examine their training program and staff development to include prevention, intervention, counter aggression, de-escalation, and principles of applied behavior analysis to identify the function of student behavior and determine replacement behaviors and coping skills of students to reduce the amount of restraints performed in a public school; and
- School leaders should examine the role of systematically and consistently debriefing the staff and student after the restraint has occurred. Teaching the student replacement behaviors or teaching staff how to avoid escalating the student behavior may reduce the amount of restraints performed in a public school.

Future Research

The nature of this study provides some answers of the frequency of physical restraint, the behaviors that lead to the restraint, and the school leaders' attitudes toward the use of physical restraint, but poses many more questions. The results obtained in this study open many avenues for further research in the use of physical restraint in public schools. Some recommendations to guide future research resulting from the data in this study include:

- Frequency of physical restraint;
- Staff attitudes related to the use of physical restraint;
- Role of school demographics in the utilization of a physical restraint;
- Replicating the current investigation across various geographic regions.

Pennsylvania is, and, Ohio is becoming two of the more conservative states in regards to the utilization of physical restraint. Even with these state mandates, there is a wide range of why and when physical restraints are occurring. Is this true in other geographic regions around the country?

Summary

The use of physical restraint in public schools continues to generate concern and stimulate controversy, polarizing the educational community. Although physical restraint practices are widely discussed, there is little research conducted in public school settings. This study answered several important questions regarding the use physical restraint in public schools. First, it supports the paucity of existing research that the use of physical restraints is occurring with some frequency in public schools.

Second, it demonstrates the specific behaviors that lead to the physical restraint. These behaviors range from aggressive behaviors to non-compliance. This wide range of behaviors that lead to the restraint illustrate the lack of national standards in regards to restraint in public school, the widely divergent state and local standards, and illustrates an even wider gap on the faithful implementation of those standards across school districts.

Finally, the study shows a strong correlation between school leaders' attitudes toward physical restraint and the amount of physical restraints that occur. The sequential

multinomial logistical regression analysis shows the school administrators' perceptions of safety, staff attitude, and efficacy, and advocated conditions to perform a physical restraint, as good predictors of the frequency of physical restraints occurring.

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Appendix 1

Survey Instrument

1. What is your gender?
 - a. Male
 - b. Female
2. What is your age?
 - a. 20-29
 - b. 30-39
 - c. 40-49
 - d. 50-59
 - e. 60 +
3. What do you consider yourself to be?
 - a. Asian or Pacific Islander
 - b. Black or African American
 - c. Latino or Hispanic
 - d. Native American
 - e. White, not of Hispanic origin
4. What is your title?
 - a. Principal
 - b. Director
 - c. Assistant Principal
 - d. Other (Please specify) _____
5. How many years (including the current year) of experience do you have as an administrator?
 - a. 1 to 5
 - b. 6 to 10
 - c. 11 to 15
 - d. 16 to 20
 - e. More than 20 years
6. Which educational certifications do you currently hold? (Please check all that apply)
 - a. None
 - b. Principal, Administrator, or Supervisor
 - c. Special education teacher
 - d. Elementary education teacher
 - e. Secondary education teacher
 - f. School psychologist
 - g. Guidance counselor

- h. Emergency certificate
 - i. Other (Please specify) _____
7. Which best describes your school type?
- a. Elementary
 - b. Middle/Intermediate
 - c. Secondary
 - d. Vocational
 - e. Other (Please specify) _____
8. How many students does your school serve?
- a. 1-200
 - b. 201-500
 - c. 501-800
 - d. 801-1000
 - e. 1001-1250
 - f. 1251 +
9. How many students receive special education services?
- a. 0 – 20
 - b. 21-40
 - c. 41-60
 - d. 61-80
 - e. 81-100
 - f. 101+

Directions – Please respond to each item below based on information from the 2012-2013 school year.

For the purpose of responding to the following items, physical restraint is defined as an emergency response procedure by one or more staff that directly restricts a student's movements by applying force or restraint to his or her limbs, head or body as a means of regaining behavior control, and establishing and maintaining safety for the out of control student and other persons in close proximity.

10. Which best describes the average number of physical restraints that occur in your school?
- a. None
 - b. Less than 1 a month
 - c. 1-3 per month
 - d. 4-10 per month
 - e. 11-30 per month
 - f. More than 30 a month

11. Which best describes the type of physical restraint training that is offered to your staff?
(Please check all that apply)
- a. None
 - b. CPI
 - c. Devereux
 - d. Mandt
 - e. PART
 - f. TCI
 - g. QBS Safety Care
 - h. Other (Please specify)
12. Which best describes the number of hours of physical restraint training that is required annually for your staff?
- a. None
 - b. Less than 1 hour
 - c. 1-4 hours
 - d. 5-8 hours
 - e. 9-12 hours
 - f. More than 12 hours
 - g. Unknown
13. How much of the training is spent on de-escalation techniques as opposed to the physical restraint techniques?
- a. No Training
 - b. 20%-39%
 - c. 40%-59%
 - d. 60%-79%
 - e. 80%-100%
 - f. Unsure
14. Which best describes the types of physical restraints used by your staff? (please check all that apply)
- a. None
 - b. Basket holds
 - c. Mechanical restraints
 - d. Prone restraints
 - e. Other (please specify)
15. Which best describes the conditions under which physical restraints are used at your school? (Please check all that apply)
- a. Leaving assigned area, but remaining in building
 - b. Leaving school building
 - c. Leaving school grounds
 - d. Physical aggression towards other students
 - e. Physical aggression towards staff
 - f. Physical aggression towards self

- g. Physical threats
 - h. Property destruction
 - i. Refusal to complete academic tasks
 - j. Refusal to follow teacher directions
 - k. Non compliance
 - l. Horseplay
 - m. Verbal aggression
 - n. Other (please specify)
16. Which best describes your school's policies and procedures governing the use of physical restraint in your school? (please check one)
- a. No written policy exists
 - b. Written policy available upon staff request
 - c. Written policy disseminated to all staff
17. Which best describes how physical restraint episodes are recorded by your staff?
- a. No record keeping system in place
 - b. Informal notes kept by staff
 - c. Standard form used by all staff
 - d. Verbal reporting
 - e. Other (please specify)
18. Which best describes how often students are injured as a result of physical restraint use?
- a. Never
 - b. Seldom
 - c. Usually
 - d. Always
19. Which best describes how often staff are injured as a result of a physical restraining a student?
- a. Never
 - b. Seldom
 - c. Usually
 - d. Always

Directions – Please respond to each item below based on your beliefs/feelings about the use of physical restraints in schools.

20. The use of Physical Restraint is needed to keep our school safe and orderly.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree

- e. Unsure/Do not know
21. The use of Physical Restraint increases safety in our school.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. Unsure/Do not know
22. Physical restraint constitutes punishment.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. Unsure/Do not know
23. Staff members are adequately trained in the use of physical restraint.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. Unsure/Do not know
24. Staff members know how to recognize potentially violent situations.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. Unsure/Do not know
25. Staff members know how to de-escalate potentially violent situations and employ least restrictive measures prior to resorting to physical restraint.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. Unsure/Do not know
26. There is sufficient research supporting the use of Physical Restraint to decrease violent behavior in children.
- a. Strongly agree
 - b. Agree
 - c. Disagree
 - d. Strongly disagree
 - e. Unsure/Do not know
27. Physical Restraint decreases violent behavior of students in my school.
- a. Strongly agree
 - b. Agree

- c. Disagree
- d. Strongly disagree
- e. Unsure/Do not know

28. Physical Restraint tends to be overused in my school.

- a. Strongly agree
- b. Agree
- c. Disagree
- d. Strongly disagree
- e. Unsure/Do not know

29. What is your feeling about the use of Physical Restraint in Public Schools? (open ended response)

Appendix 2

Youngstown State University
Informed Consent Form

Dear School Leader:

I am a graduate student in the Beeghly College of Education at Youngstown State University; we are conducting a study to determine instructional leadership behaviors and the frequency of physical restraint and the student behaviors that led to the physical restraint. In this study, you will be asked to complete an online survey. Your participation should take approximately ten to fifteen minutes.

There are no risks to you.

All information will be handled in a strictly confidential manner, so that no one will be able to identify you when the results are reported. We have configured the software that collects your survey to not collect any information about where you send the completed survey from, therefore, once you submit your survey you will not be able to withdraw your responses because we will not be able to identify which survey is yours. Your participation in this study is totally voluntary.

Please feel free to contact Richard Dowell at [REDACTED] if you have any questions about the study. For other questions, contact either Dr. Karen Larwin at khlarwin@ysu.edu or the Director of Grants and Sponsored Programs at YSU at 330-941-2377.

I understand the study described above and have been given a copy of the description as outlined above. I am 18 years of age or older and I agree to participate.

By completing and returning the survey, you are consenting to participate in our research.

Appendix 3

Nominal Regression – Model One

[DataSet2] G:\YSU\dissertations\Rich Dowell\Rich3.sav

Model Fitting Information

Model	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	410.425			
Final	332.531	77.894	15	.000

Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	442.637	480	.888
Deviance	303.159	480	1.000

Pseudo R-Square

Cox and Snell	.324
Nagelkerke	.362
McFadden	.173

Likelihood Ratio Tests

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	332.531 ^a	.000	0	.
Attitude1_1	345.663	13.131	3	.004
Attitude2_1	339.102	6.571	3	.087
Efficacy1_1	336.894	4.362	3	.225
Advocated_Score	357.660	25.129	3	.000
Gender_Male	344.543	12.011	3	.007

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

a. This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom.

Parameter Estimates

FreqPhyRest ^a	B	Std. Error	Wald	df	Sig.	Exp(B)
.00 Intercept	8.344	3.175	6.908	1	.009	
Attitude1_1	-1.378	.632	4.750	1	.029	.252
Attitude2_1	-.005	.695	.000	1	.995	.995
Efficacy1_1	.452	.769	.345	1	.557	1.572
Advocated_Score	-1.850	.570	10.538	1	.001	.157
[Gender_Male=.00]	-2.011	.848	5.617	1	.018	.134
[Gender_Male=1.00]	0 ^b	.	.	0	.	.
1.00 Intercept	1.533	3.132	.240	1	.625	
Attitude1_1	-.734	.622	1.394	1	.238	.480
Attitude2_1	.775	.680	1.298	1	.255	2.171
Efficacy1_1	.972	.753	1.666	1	.197	2.644
Advocated_Score	-.867	.536	2.620	1	.106	.420
[Gender_Male=.00]	-.859	.818	1.102	1	.294	.424
[Gender_Male=1.00]	0 ^b	.	.	0	.	.
2.00 Intercept	-.275	3.337	.007	1	.934	
Attitude1_1	-.505	.655	.594	1	.441	.603
Attitude2_1	.734	.734	1.000	1	.317	2.084
Efficacy1_1	.857	.790	1.177	1	.278	2.356
Advocated_Score	-.370	.563	.434	1	.510	.690
[Gender_Male=.00]	-.969	.867	1.249	1	.264	.380

[Gender_Male=1.00]	0 ^b	.	.	0	.	.
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a. The reference category is: 3.00.

b. This parameter is set to zero because it is redundant.

Parameter Estimates

FreqPhyRest ^a		95% Confidence Interval for Exp(B)	
		Lower Bound	Upper Bound
.00	Intercept		
	Attitude1_1	.073	.870
	Attitude2_1	.255	3.888
	Efficacy1_1	.348	7.097
	Advocated_Score	.051	.481
	[Gender_Male=.00]	.025	.706
	[Gender_Male=1.00]	.	.
1.00	Intercept		
	Attitude1_1	.142	1.623
	Attitude2_1	.572	8.238
	Efficacy1_1	.604	11.575
	Advocated_Score	.147	1.201
	[Gender_Male=.00]	.085	2.106
	[Gender_Male=1.00]	.	.
2.00	Intercept		
	Attitude1_1	.167	2.180

Attitude2_1	.494	8.788
Efficacy1_1	.501	11.081
Advocated_Score	.229	2.079
[Gender_Male=.00]	.069	2.075
[Gender_Male=1.00]	.	.

a. The reference category is: 3.00.

Nominal Regression Model Two

[DataSet2] G:\YSU\dissertations\Rich Dowell\Rich3.sav

Model Fitting Information

Model	Model Fitting Criteria	Likelihood Ratio Tests			
		-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	348.027				
Final	275.861	72.166	12	.000	

Goodness-of-Fit

	Chi-Square	df	Sig.
Pearson	315.544	348	.893
Deviance	224.094	348	1.000

Pseudo R-Square

Cox and Snell	.303
Nagelkerke	.338
McFadden	.160

Likelihood Ratio Tests

Effect	Model Fitting Criteria	Likelihood Ratio Tests		
	-2 Log Likelihood of Reduced Model	Chi-Square	df	Sig.
Intercept	275.861 ^a	.000	0	.
Attitude1_1	292.576	16.715	3	.001
Attitude2_1	283.046	7.185	3	.046
Advocated_Score	299.246	23.385	3	.000
Gender_Male	288.039	12.178	3	.007

The chi-square statistic is the difference in -2 log-likelihoods between the final model and a reduced model. The reduced model is formed by omitting an effect from the final model. The null hypothesis is that all parameters of that effect are 0.

a. This reduced model is equivalent to the final model because omitting the effect does not increase the degrees of freedom.

Parameter Estimates

FreqPhyRest ^a	B	Std. Error	Wald	df	Sig.	Exp(B)
.00 Intercept	8.648	2.942	8.641	1	.003	
Attitude1_1	-1.185	.566	4.380	1	.036	.306
Attitude2_1	-.008	.677	.000	1	.990	.992
Advocated_Score	-1.710	.554	9.538	1	.002	.181
[Gender_Male=.00]	-2.014	.833	5.842	1	.016	.133
[Gender_Male=1.00]	0 ^b	.	.	0	.	.
1.00 Intercept	2.841	2.905	.957	1	.328	
Attitude1_1	-.442	.555	.635	1	.426	.642
Attitude2_1	.775	.661	1.374	1	.241	2.170
Advocated_Score	-.792	.521	2.310	1	.129	.453
[Gender_Male=.00]	-.882	.803	1.206	1	.272	.414

[Gender_Male=1.00]	0 ^b	.	.	0	.	.
2.00 Intercept	.864	3.108	.077	1	.781	
Attitude1_1	-.237	.590	.161	1	.689	.789
Attitude2_1	.715	.716	.996	1	.318	2.044
Advocated_Score	-.293	.549	.285	1	.594	.746
[Gender_Male=.00]	-.984	.853	1.330	1	.249	.374
[Gender_Male=1.00]	0 ^b	.	.	0	.	.

a. The reference category is: 3.00.

b. This parameter is set to zero because it is redundant.

Parameter Estimates

FreqPhyRest ^a	95% Confidence Interval for Exp(B)	
	Lower Bound	Upper Bound
.00 Intercept		
Attitude1_1	.101	.928
Attitude2_1	-.263	3.738
Advocated_Score	.061	.535
[Gender_Male=.00]	.026	.683
[Gender_Male=1.00]	.	.
1.00 Intercept		
Attitude1_1	-.216	1.908
Attitude2_1	.594	7.924
Advocated_Score	.163	1.258

	[Gender_Male=.00]	.086	1.998
	[Gender_Male=1.00]	.	.
2.00	Intercept		
	Attitude1_1	.248	2.509
	Attitude2_1	.502	8.318
	Advocated_Score	.254	2.188
	[Gender_Male=.00]	.070	1.990
	[Gender_Male=1.00]	.	.

a. The reference category is: 3.00.

July 23, 2014

Dr. Karen Larwin, Principal Investigator
Mr. Richard Dowell, Co-investigator
Department of Educational Foundations, Research, Technology and Leadership
UNIVERSITY

RE: HSRC Protocol Number: 009-2014
Title: School Administrator Impact on Physical Restraints in Public Schools

Dear Dr. Larwin and Mr. Dowell:

The Institutional Review Board has reviewed the abovementioned protocol and determined that it is exempt from full committee review based on a DHHS Category 3 exemption.

Any changes in your research activity should be promptly reported to the Institutional Review Board and may not be initiated without IRB approval except where necessary to eliminate hazard to human subjects. Any unanticipated problems involving risks to subjects should also be promptly reported to the IRB.

The IRB would like to extend its best wishes to you in the conduct of this study.

Sincerely,

Cathy Bieber Parrott
Chair, YSU Institutional Review Board

CBP/cc

c: Mr. Joseph Edwards, Chair
Department of Educational Foundations, Research, Technology & Leadership

