Quiet Room Exploration:

The Level of Protection Granted to Illinois Students in **Seclusion Setting Based on Development Patterns**

Word Count: 4,611

Venya Joshi

Abstract

The Chicago Tribune and ProPublica played a major role in revealing the maltreatment that occurs in Illinois quiet rooms—a method of seclusion used for disciplining students. Within the spectrum of recent quiet room developments, the demographics of seclusion incidents have been left unexplored. In order to determine a potential trend, correlation, or explanation of these demographics, this research paper focuses on county population, ultimately posing a question: are Illinois students subjected to seclusion restraints disproportionately based on the development patterns their educational facilities are located in and if so, are students from different development patterns ensured the same level of protection in seclusion settings? The results of this study have determined that rural/nonmetropolitan students experience a high level of seclusion incidents with lower levels of protection in comparison to more densely populated Illinois counties.

Keywords: Quiet Room, Seclusion Frequency, Seclusion Incidents, Human Development Patterns, Metropolitan, Non-metropolitan

Quiet Room Exploration: The Level of Protection Granted to Illinois Students in Seclusion Setting Based on Development Patterns

Illinois education regulation has recently been denounced after an article exposed maltreatment that often goes unnoticed in seclusion protocol. Seclusion is categorized as a method of restraint in regards to de-escalating a situation by requiring an individual to enter a room or free space by themselves without direct physical access to another human; however, when pertaining to educational facilities, reporters, researchers, and investigators believe it is authoritative exploitation, as faculty often undermine proper restraint training. Abuse of power, in an institution children, are legally obliged to attend, is most visible in Illinois usage of quiet rooms. quiet rooms¹ aim to enclose students into a room to limit their interactions with staff and peers in case they pose an imminent threat. Students are typically locked within the 4x4 rooms with a staff member outside logging the events that occur within the room. The question of whether or not student rooms are effective is still unanswered, but students often leave these settings with emotional or physical trauma. The trauma these students endure is typically due to seclusion incidents—when the reprimanding force does not abide by regulations set for incidents when seclusion is mandatory.

Because this is an unexplored field of study in Illinois, the factors behind deeming isolation room usage as acceptable are unknown, allowing this study to explore specifically geographic and demographic factors. Development patterns prove to correlate with several psychological phenomena, and this study aims to determine if it does the same with these quiet rooms.

¹ Also referred to as "seclusion rooms," "reflective rooms," or "timeout rooms" throughout this study

Literature Review

In order to establish the presence of an academic conversation, I will objectively review published literature that has introduced a backdrop for quiet rooms and seclusion practice relevance. The scope of this literature review will be limited to published news articles and journal entries addressing the conditions of the students who have encountered a quiet room—which will be concentrated on students who have experienced quiet rooms from primary and middle schools. The literature will not be restricted to any parameters, as the topic of seclusion rooms in Illinois, parallel several other restraint techniques.

ProPublica collaborated with the Chicago Tribune to undergo an investigative expose on Illinois quiet rooms in an article titled "Children are Being Locked Away, Alone and Terrified, in Schools Across Illinois." The article was written by Jennifer Smith Richards, Jodi S. Cohen, and Lakeidra Chavis. They are data reporters for both publication websites and are often accredited to have initiated interest in seclusion and quiet room usage in Illinois. Their publication is said to have been the data used by J.B. Pritzker to look into the legality and strengthen the requirements for seclusion room usage. In accordance with the Illinois Freedom of Information Act, the authors requested reports narrating the incidents of both seclusionary and physical restrain incidents, documentation of reflective room usage, proof of faculty training manuals, and listed comments notifying parents of their children's circumstances from 2017-2018 (Cohen) allowing them to evaluate how many seclusion room uses were not abiding by the law. They found an alarming number of cases using abusive practices and included them in their article. This article provides data on seclusion room incidents which I implemented in my method section and similarly examined maltreatment. This article, however, did not examine any

specific geographic or demographic attributes that potentially lead to higher levels of non-room required uses being tolerated, which this study examines. It will corroborate the factors that play into seclusion room saturation besides disability.

"Restraint & Seclusion in California Schools" looked into both seclusion and restraint in the state of California. I plan to look into seclusion practices in various parts of Illinois. The demographic examined in this particular study was whether publicly or privately funded tuition amounted to different levels of compliance to seclusion protocol and protection. The Protection and Advocacy Incorporation was established in 1978. Federal laws have funded the organization after revealing the abusive practices institutions in New York demonstrated towards individuals with developmental disorders and disabilities; its name has since been changed to Disability Rights California and regularly examines primary accounts, victim and witness interviews, and analysis questioning legalities" (Morrison). In their research investigation, they have most notably been regarded for disclosing educational facilities' failure to abide by regulations set federally and mandated by states, in this instance California. Disability Rights California also exposed potential leeway in existing laws and proposing an alternate protocol to help close these gaps. Even with reform initiatives in place, they have determined that non-compliant seclusion room practices are abusive, neglectful, and overall an atrocity for students to have to experience. This specific study examined the difference in seclusion room practices for public-funded schools and private schools. They sufficiently determined that there was no trend or correlation between the extent of protections and maltreatments, as they used a content analysis research method which allowed them to convert qualitative data into quantitative. The paper received recordings, logs, and interviews from school personnel as well as students, and using these

primary accounts, they marked off which laws and requirements were not meant when implementing the seclusion research. They used direct quotations in order to validate their findings and scored each of the 8 quiet room experiences they received from the schools in California. The method this study used to determine the level of protection students in California were granted in seclusion settings parallels the methods this Illinois research study is planning on using for its qualitative portion.

According to "A Tragic Void: Georgia's Failure to Regulate Restraint & Seclusion in Schools," reflection rooms are effective and essential in theory, but in execution, they often fail to accomplish pacifying as intended (Goodmark). The article states that if students are put under immense stress such as in seclusion, it can cause adverse effects on the students' mental health. Through its meta-analysis of prior cases—particularly in Georgia quiet rooms, Goodmark determined that seclusion "can be dangerous to both the child restrained and those using the restraints, involving physical struggling that affects the ability to breathe. In schools, a failure to regulate seclusion has fostered improper and abusive use of seclusion settings." The ex-post facto illustrates that when regulation is not upheld as expected, the number of cases of seclusion incidents that cause students harm, both emotionally and physically, drastically increases. This study examines the scale of mental and emotional repercussions of quiet room maltreatment, however, it does not look at the frequency or saturation of this damage occurring. By looking at both the external logistics of harmful practices as well as examining the internal protective measures, my paper will provide an anchor, allowing studies such as Goodmark's study to remain applicable in a larger context rather than limited to Georgia. The results of his study indicate that students do experience incredibly traumatizing and regressing effects due to the

maltreatment, and this has been similarly proven in Illinois to The Chicago Tribune and ProPublica's article, so my study will prove the prevalence of this issue as it relates to an entire state.

The repercussions of quiet rooms and forced restraint were examined by the Government Accountability Office (U.S. Government Publishing Office), an independent, nonpartisan agency that works for Congress, in "SECLUSIONS AND RESTRAINTS: Selected Cases of Death and Abuse at Public and Private Schools and Treatment Centers." Through their extensive research, GAO found more than 400 cases of alleged abuse and death when abusive seclusion practices—the use of seclusion with no monitoring, extended periods of seclusion, disregard of self-harming within the confines, etc.—where implemented in schools and treatment centers. By comparing schools to treatment centers, they were able to uncover that seclusion tactics that are often advertised as therapeutic or reformatory typically cultivate the opposite response, emotionally traumatizing children in the process. They also determined that embedding punishment and negative reinforcement in the fabrications of institutionalized teaching often introduce the school to prison pipeline early on in a student's life. This study focused primarily on the aftermath of the seclusion incidents, providing a gap for my research paper to determine the phenomenon while the incident is occurring. I will also be targeting demographics, so I will similarly be comparing two or more settings.

Method

This study utilized a mixed-method research design consisting of a quantitative archival correlational research study and qualitative content analysis.

Quantitative Archival Correlational Study

Archival research focuses on analyzing previously published or recorded data to reveal new interpretations. Correlational research examines objective measures with statistical analyses. This approach allows for generalizations of particular phenomenons. An archival correlational study is best suited for this study as it will allow an examination of the correlational trend between explanatory and independent factors, both of which have been certified through databases and official sources. Specifically, this study is looking to discern a relationship between quiet room saturation and human development patterns (urban, suburban, and rural counties), as well as a relationship between quiet room saturation.

The Chicago Tribune and ProPublica's article titled "Children are Being Locked Away, Alone, and Terrified, in Schools Across Illinois" offers a database of structured information relating to quiet room maltreatment. The information, certified by the U.S. Department of Education Civil Rights Data Collection, is limited from 2015 to 2018. Thus, the parameters I will set for both correlations will be limited to Illinois district data from 2015 to 2018.

For the sake of understanding the correlation between Quiet Room incidents and human development with enough data from Illinois, the study will only categorize districts into 3 developed environments: urban, suburban, and rural. The study will omit the subcategories of the suburbs. In order to differentiate human settlement environments, the study will use the population of the most saturated and least saturated Illinois county in 2017 as defined by the United States Census Bureau's predictive measures. This will allow me to divide the populations into three rational plots based on the quantity of each population county saturation: the least

populous range will be rural, the most populous range will be urban, and the remaining range will cover suburban areas. Because the United States Department of Agriculture does not identify suburbs as a residential area, I will be unable to use their definitions of developed environments. The counties I will be examining range from populations from 4,009 to 5,223,719 according to "Annual Estimates of the Resident Population: April 1, 2010, to July 1, 2018" dictated by the U.S. Census Bureau. The shift in population from 2015 to 2018 has been relatively minuscule, and thus will not affect the results of this correlational study. I define a rural county as a county with a population of fewer than 100,000 individuals. The definition of suburban will be a county ranging from 100,000 to 300,000 constituents. The definition of urban will be a county with a population of greater than 300,000. The population will be used to define development patterns, as the CDC and Pew Research use population to differentiate the urbanization levels as well (Parker).

I will be looking at seclusion incidents in quiet rooms—which are uses of seclusion rooms in scenarios that are deemed inappropriate or standards for seclusion have not been met—per county—cited from "quiet rooms"—proportionately, so I will use the following equation for each district: total seclusion incidents divided by total district enrollment (TSI/TDE). This will provide an accurate frequency of seclusion room incidents to the population, which will allow comparisons on a macro level. I will create a frequency scatter plot, with the explanatory variable being defined as "Population Of County" with the unit being "# of Constituents" and the response variable being "Frequency of Seclusion Incidents." I will calculate the regression line and calculate the correlation coefficient—r. I will define the correlation coefficient as paralleling the definitions set by the U.S. National Library of Medicine

and the National Institute of Health for the field of psychology. Haldun Akoglu states that "Pearson's r is calculated by a parametric test which needs normally distributed continuous variables and is the most commonly reported correlation coefficient" (Akoglu), thus using Pearson's r would be the most efficient method for the psychological-demographic study. The following table defines the strength of the values of the correlation coefficient.

Correlation Coefficient (r)	Strength
+1 or -1	Perfect
+0.70 to +0.99 or -0.70 to -0.99	Strong
+0.40 to +0.69 or -0.40 to -0.69	Moderate
+0.01 to +0.39 or -0.01 to -0.39	Weak
0	Zero

Each correlation coefficient, r, will be truncated at the hundredth of the extended number regardless of the thousandth position (E.g.639272 will be truncated to .63) to align with the values given to the hundredth within the table. Creating the regression analysis will allow me to easily divide the graph into urban, suburban, and rural populations, and define that a positive or negative regression proves correlation.

Qualitative Framework Analysis

In order to increase the complexity of the research pertaining to quiet rooms, I will also evaluate the discrepancies, or lack thereof, between seclusion restraint treatment in different

development patterns. This will allow me to exam human development patterns and seclusion room usage on a macroscopic level through previously validated qualitative and quantitative measures.

Following the archival correlational study, I will be implementing my framework analysis study. There are strict guidelines limiting the use of restraint and seclusion to extreme situations where there is an imminent risk of serious physical harm to an individual and only for the duration and to the extent necessary to protect the individual. Only staff who are currently and regularly trained in restraint techniques may apply them. Every restraint or seclusion event prompts rigorous scrutiny of events leading up to the incident, and details are collected, reported, and reviewed in the aggregate to identify trends and opportunities to avoid its use. Schools must be held to these same standards. This study will be using the Chicago Tribune and ProPublica's records along with log records of first-hand accounts from 2 cases from a school in a metropolitan (urban/suburban) district, and 2 cases from a school in a non-metropolitan (rural/suburban) district, as the cities within counties, have been defined by Illinois Department of Public Health as metropolitan or non-metropolitan rather than rural, suburban, and urban (Illinois Department of Public Health).

I will be analyzing each log in three different sections: Documentation and Evaluation (D&E), Requirement for Seclusion Room (REQS), and Time Limit. The D&E section will evaluate whether the faculty had recorded all aspects of the incident as required by SECTION 1.285 REQUIREMENTS FOR THE USE OF ISOLATED TIME OUT, TIME OUT, AND PHYSICAL RESTRAINT. The 12 attributes of D&E require staff and/or faculty to have recorded the

- "A) the student's name;
- B) the date of the incident;
- C) the beginning and ending times of the incident;
- D) a description of any relevant events leading up to the incident;
- E) a description of any interventions used prior to the implementation of isolated time out, time out, or physical restraint;
- F) a description of the incident or student behavior that resulted in isolated time out, time out, or physical restraint, including the specific imminent danger of serious physical harm to the student or others;
- G) for isolated time out, a description of the rationale of why the needs of the student cannot be met by a lesser restrictive intervention and why an adult could not be present in the time out room;
- H) a log of the student's behavior in isolated time out, time out, or during physical restraint, including a description of the restraint techniques used and any other interaction between the student and staff;
- I) a description of any injuries (whether to students, staff, or others) or property damage;
- J) a description of any planned approach to dealing with the student's behavior in the future, including any de-escalation methods or procedures that may be used to avoid the use of isolated time out, time out, or physical restraint;
- K) a list of the school personnel who participated in the implementation, monitoring, and supervision of isolated time out, time out, or physical restraint" (Title 23).

The D&E section will be scored out of 10. One point will be given to each present attribute, disregarding the student's name as it will likely be redacted from all district logs. If there is at least partial recognition of a single requirement, .5 points will be given, no matter the portion of information recorded. The final score will be recorded as the D&E subscore. In order for an attribute to be considered present, it must explicitly state what the requirement is requesting. I must be able to corroborate it with verbatim and unedited portion of the log.

The second constituent of the qualitative analysis is REQS or requirements for secluded timeouts, This will determine if the use of a quiet room in a particular log instance was valid.

The following two questions will determine validity:

- "1.) Did the use of the seclusion room prevent a student from completing an act that would result in potential physical harm to himself, herself, or another or damage to property; or
- 2.) Was a seclusion room used to remove a disruptive student who is unwilling to leave the area voluntarily?" (Title 23).

This section will also use a similar point system. If one of the two requirements are fulfilled, the log will be granted 10 points—the justification is of equal importance as the documentation—however, if a requirement is only partially met, no partial credit will be granted, as the questions will have binary responses. The answer to each of these questions can be implicitly stated in each log, however, along with a subjective analysis, I must provide at least one portion of data listed in the log verbatim and unedited.

The final category of the framework analysis is Time Limit. This section verifies whether the student was kept in isolation for a safe period of time or not.

"A student shall not be kept in isolated time out for longer than is therapeutically necessary, which shall not be for more than 30 minutes after he or she ceases presenting the specific behavior for which isolated time out was imposed or any other behavior for which it would be an appropriate intervention" (Section 1.285)

The Time Limit will be given 10 points—holding the same weight as listed as the third constituent, implying equal relevance, in the Illinois law—if the condition is met. No partial credit will be given. The statement of time must be explicit and only supported by a portion of evidence listed verbatim and unedited from the log.

If any log does not contain the data or for REQS or Time Limit is only partially listed, the log will receive zero points for that specific attribute. I will then take the sum of the three subsections as the final score for the non-metropolitan and metropolitan schools. A score of less than 25 will automatically indicate abusive maltreatment, as it is lacking a majority of the protocol. The conversion of a framework analysis to a quantitative measure will allow me to objectively determine the extent of protective measures taken in combination with isolation room usage. I will then compare the specific instances of noncompliance in each of the districts by determining which point is most commonly missed between the culmination of logs.

Due to the current COVID-19 outbreak during this research study, Illinois was under stay-at-home orders as mandated by J.B. Pritzker. Due to this interruption, many schools and districts were unable to access copies of their seclusion log recordings, restricting this study's access to primary sourced data. Non-metropolitan districts were unable to deliver any logs, while metropolitan schools delivered a limited amount. The lack of data received will require that the method to only examine 1 secondary source log provided by the Chicago Tribune for

representatives of non-metropolitan school districts, and abide by the original method for metropolitan school districts.

Results

Quantitative Results:

Figure 1
Scatterplot of County Population x Seclusion Room Incident Frequency

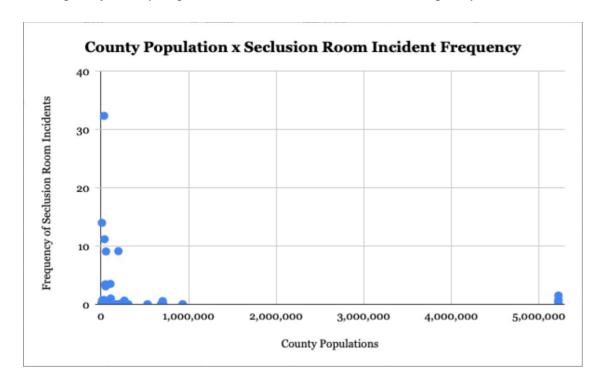
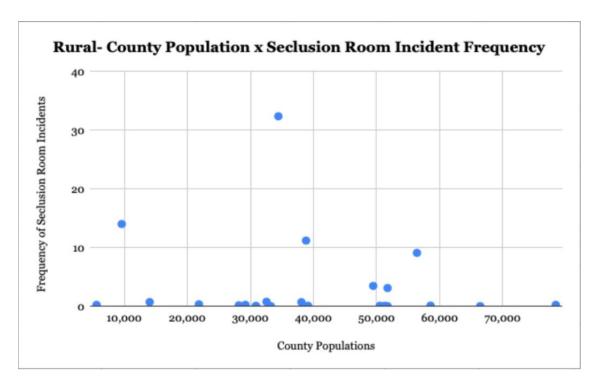


Figure 2



Scatterplot of Rural-County Population x Seclusion Room Incident Frequency

Figure 3

Scatterplot of Suburban- County Population x Seclusion Room Incident Frequency

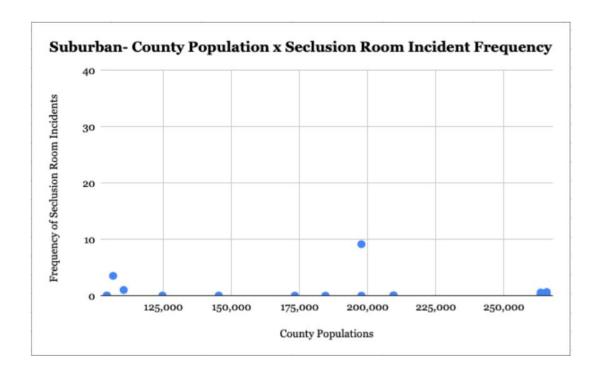
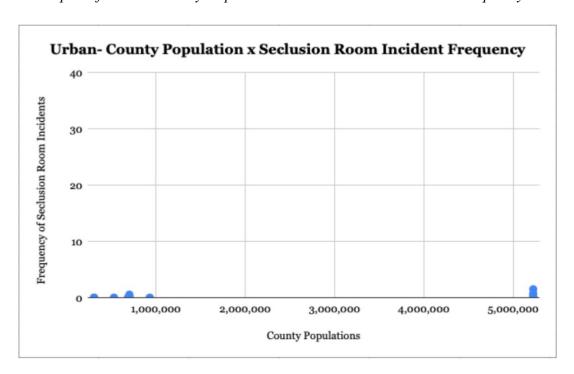


Figure 4

Scatterplot of Urban- County Population x Seclusion Room Incident Frequency



The trend seen by population overall was that populations less than 100,000 rural environments tend to have a higher frequency of seclusion room incidents than those of suburban or urban environments. If divided into the previously defined human development patterns, the rural, suburban, and urban plots show no trends within their own population increase. The correlation coefficients for the four scatter plots above were determined: **Figure 1** is -0.13, **Figure 2** is -0.18, **Figure 3** is -0.12, **Figure 4** is 0.26. All values were truncated to the nearest hundredth.

Qualitative Results:

Figure 5

Illustration of the framework analysis method for a school district in a metropolitan Illinois county.

Metropolitan:

"xx² had a guest teacher in her room on Friday. The guest teacher wrote a note to the teacher regarding xx beahvior. When asked about her behavior, xx did not take responsibility and refused to join the class. The classroom teacher implemented a timeout breaak in the classroom for xx xx continued to escalate and refused to do work. xx began running around the room and was reinforced with two choices to walk to the office on her own or have us help her. xx slapped Ms. B hand and slammed the door on both Ms. B and Ms. W. xx then began running around the hallway. She went to the calmroom which was not a choice as this is preffered for xx and she refused to leave. xx choose to hit Ms. W's foot with an overhand fist then began running in the hallway. Ms. B and Ms. W implemented a standing hold on xx after

² Personal Information has been redacted and a pseudonym is used in place.

she was running and kicking things. xx was transported to the main offive where a timer was set. xx began hitting and punching B and W, the door was closed to the office until xx had a sae body (seclusion time 3 min) xx returned to class at 10:30am."

Documentation and Evaluation-

1 the date of the incident; 10/22/18

1 the beginning and ending times of the incident; 9:40-10:30 AM

I a description of any relevant events leading up to the incident; "guest teacher wrote a note to the teacher regarding xx behavior...xx did not take responsibility" for "behavior" and "began running around the room."

1 a description of any interventions used prior to the implementation of time out or physical restraint; "classroom teacher implemented a timeout breaak in the classroom for xx"

I a description of the incident and/or student behavior that resulted in a time out or physical restraint; The situation eventually led up to "xx slapping Ms. B hand and slammed the door on both Ms. B and Ms. W....xx choose to hit Ms. W's foot with an overhand fist then began running in the hallway. Ms. B and Ms. W implemented a standing hold on xx after she was running and kicking things. xx was transported to the main offive where a timer was set. xx began hitting and punching B and W"

I for isolated time out, a description of the rationale of why the needs of the student cannot be met by a lesser restrictive intervention and why an adult could not be present in the time out room; "She went to the calmroom which was not a choice as this is preffered for xx and she refused to leave."

0 a log of the student's behavior in time out or during physical restraint, including a description of the restraint techniques used and any other interaction between the student and staff; N/A

1 a description of any injuries (whether to students, staff, or others) or property Damage; "Teachers Injured"

0 a description of any planned approach to dealing with the student's behavior in the future; N/A

.5 a list of the school personnel who participated in the implementation, monitoring, and supervision of time out or physical restraint; "B/W" were implementing, but monitoring and supervision were not mentioned.

Total Documentation and Evaluation Score: 7.5/10

Requirements for Seclusion Room-

1.) Did the use of the seclusion room prevent a student from completing an act that would result in potential physical harm to himself, herself, or another or damage to property; or

QUIET ROOM EXPLORATION

2.) Was a seclusion room used to remove a disruptive student who is unwilling to leave the

21

area voluntarily?

Yes, the student was described as "hitting and punching B and W," which is classified as an

act of abuse and "potential physical harm to...another..." Because the criteria for situation 1

was met in, the use of a seclusion room in this instance was valid.

Total REQS Score: 10/10

Time Limit-

A student shall not be kept in isolated time out for longer than is therapeutically necessary,

which shall not be for more than 30 minutes after he or she ceases presenting the specific

behavior for which isolated time out was imposed or any other behavior for which it would be

an appropriate intervention.

"xx" was kept in an isolated timeout for "3 mins" then "returned to class," thus the seclusion

lasted less than 30 minutes. The student ceased behavior and meets the time limit criteria for

effective seclusion room usage.

Time Limit Score: 10/10

Total Score: 27.5/30

The metropolitan school district earned a 7.5 in D&E, a 10 in Log Analysis, and a 10 in

Time Limit, yielding a total score of 27.5.

Figure 6

Illustration of the framework analysis method for a school district in a non-metropolitan Illinois county.

Non-metropolitan:

"By 8:35 a.m. on Dec. 19, 2017, all five of the timeout "booths" at Bridges Learning Center near Centralia were already full. School had been in session for five minutes.

Two boys were being held because they hadn't finished classwork...Staff told him he'd be back again "to serve 15 minutes every morning due to his irrational behavior."

None of those reasons for seclusion is permitted under Illinois law.

Yet, over the course of that one day, the rooms stayed busy, with two turning over like tables in a restaurant, emptying and refilling four times. The other three were occupied for longer periods, as long as five hours for the boy who hung off the basketball rim. In all, Bridges staff isolated students 20 times.

Seclusion is supposed to be rare, the last resort. But at Bridges, part of the Kaskaskia Special Education District in southern Illinois, and at many other schools, it is often the default response.

Bridges used seclusion 1,288 times in the 15 months of school that reporters examined. The school has about 65 students.

According to the Tribune/ProPublica Illinois analysis of Bridges records, 72% of the seclusions were not prompted by a safety issue, as the law requires.

"There were kids there every day," said [REDACTED], who worked as a paraprofessional at Bridges for part of the 2018-19 school year. "I didn't think that was the best practice. I don't know what the best practices are, though."

[REDACTED], who heads the Kaskaskia Special Education District, did not respond to requests for comment about the district's practices" (Cohen).

*indicates redacted student info

Documentation and Evaluation-

1 the student's name; Redacted but listed

1 the date of the incident; "Dec. 19, 2017"

1 the beginning and ending times of the incident; Redacted

1 a description of any relevant events leading up to the incident; "Two boys were being held because they hadn't finished classwork."

0 a description of any interventions used prior to the implementation of time out or physical restraint; N/A

1 a description of the incident and/or student behavior that resulted in time out or physical restraint; "Two boys were being held because they hadn't finished classwork."

1 a log of the student's behavior in time out or during physical restraint, including a description of the restraint techniques used and any other interaction between the student and staff; Redacted

0 a description of any injuries (whether to students, staff, or others) or property Damage; N/A

0 a description of any planned approach to dealing with the student's behavior in the future; N/A

0 a list of the school personnel who participated in the implementation, monitoring, and supervision of time out or physical restraint; N/A

QUIET ROOM EXPLORATION

24

Total Documentation and Evaluation Score: 5.5/10

Requirements for Seclusion Room-

1.) Did the use of the seclusion room prevent a student from completing an act that would

result in potential physical harm to himself, herself, or another or damage to property;

or

2.) Was a seclusion room used to remove a disruptive student who is unwilling to leave the

area voluntarily?

No; completion of classwork does not fill out any criteria for seclusion room/time out usage.

Total REQS Score: 0/10

Time Limit-

A student shall not be kept in isolated time out for longer than is therapeutically necessary,

which shall not be for more than 30 minutes after he or she ceases presenting the specific

behavior for which isolated time out was imposed or any other behavior for which it would be

an appropriate intervention.

"15 minutes every morning"

Time Limit Score: 10/10

Total Score: 15.5/30

The non-metropolitan school district earned a 5.5 n D&E, a 0 in Log Analysis, and a 10

in Time Limit, yielding a total score of 15.5.

Discussion

The purpose of this study was to explore the relationship between human development patterns (population) and seclusion incidents in the elementary and middle school settings in Illinois. Previous research is very limited in this regard and this study aimed to further expand the existing research base.

The quantitative archival research method's primary focus was to examine the correlation between seclusion room incident frequency among urbanization levels (population). The information determined from the correlation coefficient determined that the highest statistical relationship identified within **Figure 4**—looking directly at the urban populations in combination with seclusion room incidents—as the absolute value of the correlation coefficient, 0.26, is greater than the absolute value of the correlation coefficients for Figures 1, 2, and 3. According to **Figure 1**, the correlation for the entire population is weak and negative, -.13; this would disprove the validity of the negative correlation, as ultimately we cannot determine a trend due to its proximity to 0 correlation. In fact, every figure has a correlation between -.39 and .39, proving a weak correlation. Therefore, the urbanization level of a county has an extremely weak effect on the frequency seclusion incidents. Because of the nuance of a correlation so weak, it can also rightfully be assumed that the variables have no relationship. Seclusion incidents are identified as a form of maltreatment where a student is wrongly subjected to a seclusion room; this study proves that population demographics do not have an effect on the amount of wrongful seclusion room uses and, thus, may be due to another demographic or truly be scenario-based.

The qualitative content analysis study's primary focus was to reveal the level of treatment and protections students receive when subject to seclusion rooms in different development patterns. The study revealed that school districts within metropolitan counties indicated higher

levels of protections and abided by Illinois state seclusion laws by about 77% more than school districts in non-metropolitan counties, however, neither scored every required point as defined by the law and thus, must be continuously improved and proctored.

In the metropolitan cases analyzed, the documentation typically lacked any mention of alternative methods of de-escalation, preventative measures. This can often lead to continual use of seclusion forcing a student to process their actions on their own, which most children are incapable of doing. Students who are not responsive to negative reinforcement may find himself/herself/themself constantly being reprimanded in a seclusion room without an understanding of the flaws in their behaviors. Ultimately, this portion of the study proves that staff and faculty must be properly trained in not only the use of seclusion room restraint, but also steps to prevent or de-escalate harmful situations, or if the action has already taken place respond to the situation with the all parties, the student and peers, best interest in mind, which can be done if the student responds more effectively to positive reinforcement.

In non-metropolitan districts, the schools collectively failed to abide by all the laws. State education officials receive federal data involving seclusion room incidents, yet rarely regulate the use of these seclusion rooms. Educational facilities using seclusion rooms must continually be monitored and schools must set up faculty training and let students know ahead of time when a seclusion restraint will be used. These violations of the Illinois state law, will negatively affect a student's behavioral patterns, emotional and psychological sanity, and create an unsafe learning environment. Students who live in non-metropolitan districts are provided few to no levels of protection, and as seen in metropolitan results, this may be limited to these rural and suburban areas.

Both the correlational study as well as the analysis of logs have proven that rural and nonmetropolitan counties show the highest levels of maltreatment and seclusion room incidents in comparison to suburban/urban and non-metropolitan counties accordingly. There must be a reformation in the training of faculty to use quiet rooms as a last resort and only when truly appropriate, while prioritizing their student's safety and mental health.

Limitations and Implications

The method in this paper was completed from February, 2020 to May, 2020; The COVID-19 outbreak had also reached alarming levels during this time-frame and Governor J.B. Pritzker issued a stay-at-home order, quarantining Illinois constituents to their residences. The requests for quiet room logs in this study were often denied due to the closure of Illinois educational institutions, restricting the number of archives available and, therefore, this study was not limited to primary accounts. The non-metropolitan case, in specific, lacked almost all required documentation, which may be due to redaction or simply due to the log being published, ultimately not allowing for a sufficient sample of logs.

In addition, the data collected in the quiet room database acknowledged that "There are known flaws with the self-reported federal data; for example, some districts reported having more students with disabilities than total students. Some districts that previously used seclusion have stopped. Although reporters' public-records requests sought detailed incident reports, some districts provided only the total number of incidents. Nine districts declined to provide records" (Cohen).

This makes the quantitative portion of the method inherently flawed, however, as all the data points likely have the same skew, entirely accurate information would yield a similar or identical result.

A third limitation of this study is that numerous data had to be removed due to being incomplete. Because schools and agencies were not required by law to report data from 2009-2012, no criteria were in place for what did and did not have to be reported. As a result, many incomplete records existed regarding demographic variables that could not be analyzed.

Additionally, the variation within the demographics would surely have influenced the predictive relationships that were uncovered.

Future Studies

The scope of this study covered quiet rooms in Illinois, hence future studies could parallel this method in different states that are implementing seclusion rooms as a method of discipline. In addition, researchers would be able to examine the emotional benefits or hindrances that quiet rooms bring upon specifically in metropolitan and non-metropolitan districts. Because school setting seclusion room usage is a young field, a variety of demographics are still available to examine, such as whether children with disabilities are more prone to receiving seclusion room treatments in special education facilities or public schools without accommodations. In addition, researchers can focus on the training staff and faculty receive on the implementation of seclusion and physical restraint, and whether or not the process is inherently flawed, leading to a flawed system of seclusion rooms.

References

- Akoglu, H. (2018, August 7). User's guide to correlation coefficients. Retrieved from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6107969/
- Cohen, J. S., Richards, J. S., & Chavis, L. (2019, November 19). Children are Being Locked

 Away, Alone and Terrified, in Schools Across Illinois. Often, it's against the law.

 Retrieved from https://features.propublica.org/illinois-seclusion-rooms/
 school-students-put-in-isolated-timeouts/
- Goodmark, C. (2009). A TRAGIC VOID: GEORGIA'S FAILURE TO REGULATE

 RESTRAINT & SECLUSION IN SCHOOLS. *John Marshall Law Journal*, 3(2).
- Illinois Department of Public Health, Illinois State Cancer Registry, (2013, November). public data set v21, 1986-2011.
- Morrison, L., Moore, C., Lew, P., & Jauregui, R. (2007). *Restraint & Seclusion in California Schools: A Failing Grade*. (E. Katayama, Ed.). Disability Rights California- California's Protection and Advocacy System.
- Office, U. S. G. A. (2015, June 11). Mental Health: Better Documentation Needed to Oversee

 Substance Abuse and Mental Health Services Administration Grantees. Retrieved from
 https://www.gao.gov/products/GAO-15-405
- Parker, K., Horowitz, J. M., Brown, A., Fry, R., Cohn, D. V., & Igielnik, R. (2019, December 31). Similarities and differences between urban, suburban and rural communities in America. Retrieved from https://www.pewsocialtrends.org/2018/05/22/what-unites -and-divides-urban-suburban-and-rural-communities/
- Selected Cases of Death and Abuse at Public and Private Schools and Treatment Centers.

(2009).

- Title 23, Section 1.285. Amended at 44 Ill. Reg. 6377, effective April 9, 2020)
- U.S. Government Publishing Office. (2015). Beyond seclusion and restraint: creating positive learning environments for all students: hearing of the Committee on Health, Education, Labor, and Pensions, United States Senate, One Hundred Twelfth Congress, second session ... July 12, 2012. Washington.