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Literacy in Juvenile Detention: Discovering the Connection Between Low Reading Scores and Detention

BE ACCEPTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR

DEPARTMENTAL HONORS IN EDUCATION

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Discovering the Connection Between Low Reading Scores and Detention

A Thesis

Presented to the Faculty

of

Greenville University

Submitted in partial fulfillment

of the requirements

for

Departmental Honors in Education

by

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2019

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Chapter One: An Introduction

Background

Reading instruction often begins as soon as students are ushered into the classroom on their first day of kindergarten. Letter identification, phonemic awareness, sight word recognition, fluency, and comprehension are taught with great emphasis throughout elementary school to ensure that students gain the necessary skills to become a successful reader and eventually transfer from the learning to read stage to the read to learn stage. Unfortunately, as noted by Allington (2011), there are many students who come into kindergarten with large reading deficits who then need specialized interventions in order to become successful. The whole class instruction is simply not enough to bridge this gap and put the students on the path to success. Allington (2011) suggests that schools could identify struggling readers as early as the second day of kindergarten by merely testing and determining which students can identify letters by their name, and which students cannot. Unfortunately, this screening often doesn't happen, or if it does, the data is neither used nor are students given immediate interventions to bring them back up to their peers' level. Instead, Allington (2011) shows that most schools don't begin offering corrective reading services until students enter first grade.

Furthermore, reading intervention programs are often only made available to students in elementary level grades because those students are still in their learning to read stage. The hope is that all students who are struggling to learn to read will receive the support necessary in grades 1st through 3rd to read at grade level by 4th grade when they are expected to access academic content in this modality thus shifting into the read to learn

stage. This brings up a host of problems. First, it assumes that all schools have the necessary resources to provide robust corrective reading programs that are targeted and individualized enough to remediate every student in two school years. This is often not the case, which ushers in another problem. By assuming that all struggling readers have had their skill remediated by 4th grade we fail to provide adequate resources to the students who are still not reading at grade level at that time. These students may or may not qualify for special education services, but they are still expected to use read to learn skills to access content area specific information and apply the knowledge gained in various assessments. Because of this many public-school systems overlook a sizeable population who would benefit from access to corrective reading services and instead assume that the students will be able to perform adequately on these academic tasks despite the reading level required. This lack of services beyond 4th grade creates a population of students who feel not only a deep sense of failure to learn to read but also frustration within other academic areas as well because they cannot access the written content. By creating a system that does not adequately remediate struggling readers and instead throws them into a literacy rich, content area specific school system we fail our struggling readers.

This lack of resources creates a system that intentionally allows struggling readers to progress through grade levels without receiving proper intervention. Without interventions students are set up for a long difficult journey of reading and academic struggle. Aside from the academic consequences, there is a strong correlation between low reading scores and juvenile delinquency according to many researchers (Teach for America, 2016; Allington, 2011, 2013; Tannis, 2014; Literacy Center, 2018; DuVernay, 2016). This correlation means that schools could possibly identify students more at risk for juvenile delinquent behavior simply by identifying struggling readers (DuVernay, 2016). If the data is present and the corrective reading services are available why are schools choosing not to use them? Because of this link, it is imperative that schools have effective corrective reading programs in place to not only boost students' reading scores but also possibly curb the rates of juvenile delinquency.

Purpose/Statement of Problem

The purpose of this study is to determine if there is indeed a link between low literacy and juvenile detention rates. Additionally, if there is a link between these two factors does low literacy cause juvenile delinquency or do they simply coexist? By studying the phenomena of causation versus correlation this study will also dive into the urban myth that prisons may use literacy scores to estimate the number of beds needed or where to build a new facility.

Significance of Study

The United States has one of the highest prison rates in the world and it largely accepted that a funnel exists that escorts students from the classroom to juvenile detention or prison. These trends are extremely alarming to professionals both in the field of education and law enforcement and therefore a multitude of studies have already and are currently taking place to better understand this problem. This study is significant because it synthesizes the recent research regarding a link between student's literacy attainment and juvenile delinquency. By better understanding how these two ideas are related professionals in both fields can more effectively engage with at risk youth and lead them toward a more successful future.

Research Questions

- Is there a link between low literacy and juvenile detention rates?
- Is low literacy causation of juvenile delinquency or simply correlation?
- Do prisons use literacy scores to estimate the necessary bed count or determine where a new facility should be built?

Definition of Terms

Anti-Social Behavior. refers to actions that violate social norms in ways that reflect disregard for others or that reflect the violation of others' rights.

Developmental Delay (DD). A disability that refers the condition of a child being less developed mentally or physically than is normal for its age. Accounts for1 of 13 eligibility categories defined in IDEA.

Emotional/Behavioral Disorder (EBD). A disability characterized by excesses, deficits or disturbances of behavior. The child's difficulty is emotionally based and cannot be adequately explained by intellectual, cultural, sensory general health factors, or other additional exclusionary factors. Accounts for 1 of 13 eligibility categories defined in IDEA.

Expressive Language Skills. A person's ability to express wants and needs.

Individuals with Disabilities Education Act (IDEA). Legislation that requires schools to provide special education and related services to eligible students. Students must have a disability that is covered under the 13 categories and it must adversely affect their education. Individual Education Plan (IEP). Refers to a plan or program developed to ensure that a child who has a disability identified under the law and is attending an elementary or secondary educational institution receives specialized instruction and related services.

Intellectual Disability (ID). A disability that is characterized by significant limitations in both intellectual functioning and in adaptive behavior, which covers many everyday social and practical skills. Noted as 1 of 13 eligibility categories defined in IDEA. Juvenile Delinquency. Refers to the habitual committing of criminal acts or offenses by a young person, especially one below the age at which ordinary criminal prosecution is possible.

Juvenile Detention. A facility that functions as a secure prison or jail for people under the age of majority, often termed juvenile delinquents, to which they have been sentenced and committed for a period of time or detained on a short-term basis while awaiting court hearings and/or placement in such a facility or in other long-term care facilities and programs.

Learning Disability (LD). A condition giving rise to difficulties in acquiring knowledge and skills to the level expected of those of the same age, especially when not associated with a physical disability. Accounts for one 1 of 13 eligibility categories defined in IDEA.

Receptive Verbal Skills. A person's ability to demonstrate one's understanding of a word's meaning without having to describe it.

Response to Intervention (RTI). A multi-tier approach where the function is to provide early identification and support of students with learning and behavior needs.

Special Education (Sped). A form of learning provided to students with exceptional needs.

Chapter Two: Literature Review

History of Special Education

The modern history of special education began with the passage of public law 94-142 in 1975, originally called the Education for the Handicapped Act (EHA). Eventually this monumental law would come to be known as the Individuals with Disabilities Education Act (IDEA) which continues to impact almost every aspect of special education. The original law mandated that services be provided to students with disabilities from ages 3 to 21 years (U.S. Department of Education, 2007). Over the years, IDEA has continued to be modified and extended through various amendments and it now ensures that all students from birth to age 21, regardless of their disability, are entitled to a free appropriate education in their least restrictive environment (U.S Department of Education, 2007). This creates a system of equity and accountability within the public school system that protects the rights of our most vulnerable students.

To qualify for special education services a student must have a documented disability that falls into one of the thirteen categories outlined by IDEA, additionally it must negatively impact their educational experience. The caveat regarding a negative impact on a student's educational experience is important because it protects students who may have a documented disability, such as a physical disability, but may not need specialized educational services. These students can continue in the regular education setting without unnecessary services. The 13 eligibility categories outlined by IDEA include specific learning disability, other health impairment, autism spectrum disorder, emotional disturbance, speech or language impairment, visual impairment including blindness, deafness, hearing impairment, deaf-blindness, orthopedic impairment, intellectual disability, traumatic brain injury, and multiple disabilities (U.S Department of Education, 2007). Once students have been tested and have an identified disability in one of 13 categories that adversely affects their education they are eligible for an individualized education plan (IEP) and access to special education services. This ensures students an equitable educational experience while in public schooling. However, when students are placed an alternative education setting they may not be assured the same protection or services. Juvenile Offender Demographics Nationally and in Illinois

According to Tannis (2014), approximately 1.5 million juvenile cases are heard in juvenile justice courts across the United States each year and approximately 130,000 youth are incarcerated with the United States annually. These youths typically range in age from 10 years old to 18 years old, although there are some juveniles that are held in adult facilities as well as treatment centers for drug use or mental health. Within residential facilities, the vast majority of juveniles, about 95%, are housed for delinquency, with the other 5% for status offenses (Mueller, 2017). Status offenses can be defined as behaviors that are considered illegal for minors but not adults, such behaviors include running away, truancy, and incorrigibility. Of the students in Illinois who are not held due to status offenses and instead criminal or delinquency offenses, 25% are in for violent crimes, 19% for progressing crimes, 11% for disturbance to public order, 7% for drug related crimes, and only 1% for criminal homicide (Mueller, 2017). Over 90% of the offenders were under the Juvenile Court's jurisdiction and around 6% were under the criminal court sentences jurisdiction (Mueller, 2017).

Because this study will largely focus on low literacy within Illinois and their juvenile offenders, it is important to have an understanding about the students in detention centers across the state. In the 2017 fiscal year, the state of Illinois held on average 384 youth each day in five secure facilities across the state including Chicago, Harrisburg, Pere Marquette, St. Charles, and Warrenville (Mueller, 2017). There has been a steady decline of the juvenile justice population, both nationally and in Illinois since the year 2000 and this trend has continued through 2017 as the population decreased 29% from just a year prior (Mueller, 2017). It is believed, as reported in the Illinois Juvenile Justice Annual Report, that this decrease is partly due to the public school system working to rehabilitate students before the student goes through the juvenile justice system. This means that the students housed in these facilities are now the most at risk students, who have committed offenses that warrant an alternative school placement beyond what the traditional public school can provide. Of the youth inside the five Illinois facilities 96.4% of the youth were males, whereas females only accounted for 3.6% of the population (Mueller, 2017). The average age was 17 years old with 46% of juveniles under 16 and 54% aged 17-20 years. When looking at race and ethnicity, 20.3% of the students were white, 68.6% black, 9.6% Hispanic, 1.3% biracial, and 0.3% Asian (Mueller, 2017). This is in stark contrast to the demographics of Illinois as a whole where residents are 77% white, 14.6% black, 17.3% Hispanic or Latino, 2% biracial, and 5.7% Asian (United States Census Bureau). Most of the juveniles, 62.1%, were housed in facilities in either Cook county, collar counties, or northern Illinois. Whereas, southern, central, and Metro East facilities only accounted for 37.9% of the students (Mueller, 2017). During the 2017 fiscal year, youth typically spent a little over 6 months or 191 days in the facility before

entering aftercare (Mueller, 2017). Because the students are only in the facility for a short period of time it is imperative that they receive targeted and intensive academic interventions and the teachers are fully equipped to differentiate the curriculum for the consistently changing student population.

While housed in the five juvenile detention facilities across Illinois, students are making great strides towards education accomplishments that will allow them to reintegrate effectively back into society. In 2017, across the 5 facilities 37 students earned 8th grade diplomas, 73 students earned high school diplomas, and 64 students earned general equivalency degrees (Mueller, 2017). That is a total of 175 degrees completed this past year alone! Additionally, while in the facilities students receive basic medical care, educational services, food, recreation, housing, case management, as well as mental health and substance abuse programs if necessary (Mueller, 2017). Over 60% of the students received some sort of mental health services over the course of 2017. According to the annual report,

"Mental health treatment includes, individual, group, and family counseling services, along with groups to address trauma, anger management, and structured skill building. For youth with significant mental health needs, or youth in need of juvenile sex offender treatment, Illinois Department of Juvenile Justice (IDJJ) operates specialized therapeutic treatment units." (Mueller, 2017, p.6).

Additionally, with the help of over 50 community partnerships throughout the state, the annual report states youth in justice facilities also have access to religious services, tutoring, literacy programs, and other recreation options.

It is through these services, that IDJJ facilities are hoping youth will be holistically rehabilitated and will be able to transition back into society and become successful adults. Unfortunately, this is not happening at the rates the state would like to see. Recidivism, or the tendency of a convicted criminal to reoffend, is often the measure state facilities use to evaluate the effectiveness of their programs. The annual report clarifies that the rate of recidivism is measured by the percentage of individuals who return to a juvenile justice facility within three years of being released (Mueller, 2017). Because of this three-year gap, the only data that can be provided at this time is of the students who were released in 2014. Of the students that were released in 2014, 57.8% returned within 3 years, thus matching the recidivism definition and negatively impacting the state's view on their performance and effectiveness (Mueller, 2017). As stated earlier, the report does make an effort to note that Illinois has worked intentionally in recent years to reduce the incarceration rate of low risk youth. Therefore, the report claims that the youth that come into the facility are more high risk and are the ones most likely to reoffend. However, this high rate of recidivism makes it clear that the programs offered may not be as effective for this high risk population. Perhaps a better understanding of the connection between illiteracy and juvenile detention as well as an understanding of the educational services offered will provide a clearer picture as to why these students come to the facility and what interventions will be most effective.

Juvenile Detention Education Overview

While housed in the juvenile detention center, young people are still expected to attend school, although it may look very different than their home district. In many facilities, students only receive instruction for half a day and spend the other half of the day receiving other services such as counseling (Tannis, 2014). In the 2017 report of Illinois Juvenile Justice facilities, it is mentioned that the five facilities in the state have now moved to an all-day school schedule and are expanding opportunities for vocational and special education (Mueller, 2017). Opportunities for vocational and special education are of immense importance because many of the students housed in detention facilities often struggle to adjust back into the regular school system or adult society. By offering students an opportunity to learn a specific set of employable skills, catch up in course work, or even earn a diploma, detention facilities are increasing the chances of students adequately adjusting once released. To continue, depending on the state and individual facilities, school may be in session in a traditional or year-round format. If a facility chooses to use a traditional schedule, they will often offer a few courses over the summer break to help students catch up and have access to extended school year services. Inside the facility, school functions very differently than a traditional public school; classrooms are often much smaller in both size and student population, as most classes will not have more than 10 students (Tannis, 2014). Additionally, school in a juvenile detention setting takes on many differences due to the strict safety codes that must be followed. This means that students must adjust to armed guards being present in classrooms and hallways, as well as only receiving the materials they need once they are inside the classroom. Students come to class with nothing in a backpack, in their hands, or on their person and are led through the halls and into the classroom by a juvenile justice employee (Tannis, 2014). Students are supplied with pencils, paper, and all other necessary materials once inside the classroom but all supplies must be returned and accounted for before the students may leave (Tannis, 2014). Even the smallest item, such as an eraser, would be considered

contraband and therefore must be inventoried by the teacher and juvenile justice employees before the students are dismissed. This often creates frustration for both students and staff because the students can only complete academic work inside of the classroom, there are limited materials available, and valuable instruction time is wasted counting materials (Tannis, 2014). These problems are often elevated by the tardiness of students and juvenile justice employees getting to class (Tannis, 2014). Nevertheless, the faculty and staff must abide by these rules and procedures to ensure a safe environment inside the facility.

Within the state of Illinois, the five juvenile justice facilities continue to face difficulties regarding the unique nature of their school district. Some key differences are that the school board is appointed, and while all teachers are certified and licensed, they must also follow the same Personnel Code as the other staff members in the facility (Mueller, 2017). It is often a struggle to find and hire capable and effective teachers because of the high-risk population, year-round schooling schedule, and a lower starting salary than surrounding districts (Tannis, 2014). This presents problems in areas such special education specifically, because the school is required to provide students with all necessary services, but it is often difficult to hire enough service providers. In fact, according to Tannis (2014), "Only 46% of youth with IEPs prior to their adjudication reported that they were still receiving their special education services while incarcerated (p. 180)." This of course creates immense problems as some of our most vulnerable students are not receiving the services that they are legally entitled to and therefore, continuing to fall further behind in academics. Some exciting improvements that have occurred over the last year in the state of Illinois are several technology upgrades as well as all facilities becoming certified

College Board testing sites so that students housed in the facilities can take college entrance exams (Mueller, 2017). While these changes may seem like small dents in a much larger problem these improvements can give students, families, and taxpayers hope that the juvenile justice system in Illinois is in fact improving and attempting to rehabilitate our students.

The Importance of Literacy

There has been a long history of research regarding the link between low literacy rates and juvenile detention. In fact, many people have come to believe that prisons use 3rd grade reading scores to estimate the number of beds they will need in the future, a question we will explore later. Incredibly, according to The Literacy Center (2018), it is estimated that as many as 44 million or 23% of United States adults are currently lacking basic reading skills beyond a fourth-grade level and are therefore considered functionally illiterate. This lack of skills has a profound impact on their lives because, according to The Literacy Center (2018), people who are functionally illiterate often are forced to settle for low paying jobs, struggle to utilize medical services, are less likely to vote, and their children struggle more in school than their peers with literate parents. Additionally, 75% of adults incarcerated in state prisons lack high school diploma or have low literacy skills and 85% of all juveniles in court system are functionally illiterate (Write Express Literacy Corporation, 2018). Functionally illiterate can be defined as the inability to read above a fourth-grade level. Fourth grade may seem like an odd delineation to determine if someone is illiterate, but this specific grade is used because a dramatic shift in reading instruction takes place while students are in this stage of schooling. Prior to fourth grade, students are simply learning to read by working on phonemic awareness, decoding, and

fluency. Once children reach fourth grade and beyond students are reading to learn; meaning, they are no longer receiving instruction focused on the mechanics of reading but rather are using the reading skills they possess to gather information from various texts both fiction and nonfiction. Even the United States Department of Justice has conceded that there is indeed a link between academic failure and delinquency, violence and crime (Write Express, 2018). If a student is functionally illiterate in fourth grade they will likely never catch up to their on-grade level peers because reading instruction will no longer be offered in the general education classroom. This creates a gap in achievement, which is often what is blamed for their involvement with delinquency, violence, and crime. For this reason, regular education schools and juvenile detention centers alike must take literacy education very seriously. If administration and teachers choose to ignore these warning signs, they will intentionally be creating a prison population.

Best Practice in Literacy Instruction

According to Richard Allington (2013), we could identify struggling readers on the second day of kindergarten just by testing students on their letter name knowledge. Allington asserts that many schools do in fact screen their incoming kindergarten students in this way but simply don't use the data for intervention or instruction. In doing so, the school district is allowing students to begin their academic career at a deficit and then not have that weakness addressed until the next grade level. Students are allowed to struggle for an entire year with no interventions even when the data is present, and interventions could be put into place quickly and cost effectively (Allington, 2013). Unfortunately, even if schools intervened in the first year of schooling, many kindergarten teachers lack teaching reading expertise and are not adequately prepared to put needed rigorous interventions in place.

Often times, entrepreneurial companies play a much stronger role in what programs schools put into place rather than research (Allington, 2011). This is unfortunate because this leads to students not receiving effective interventions and participating in activities proven not to work such as sounding out nonsense words. This activity, while popular, has no research to prove its effectiveness and could possibly according to Allington (2013, p.521), "undermine their use of cross-checking and other self-regulating strategies when they finally move on to actual texts." This claim is also supported by Pressley and his work with students using metacognition while reading. According to Pressley (2002),

"In summary, as good readers go through a text, they are active. They relate ideas in text to their prior knowledge, construct images, and generate summaries. They do a lot of monitoring, with their awareness during reading affecting how they process the text. Such here-and-now metacognition in the form of awareness is always being generated as the good reader reads, with such awareness going far in determining the nature of the reader's activity" (p. 296).

Despite the research that encourages teachers to steer clear of interventions such as decoding nonsense words and others, and instead use practices such as fostering metacognition, these unfounded practices are still widely used and believed to be effective. Allington believes this is because it takes about 50 years for researched best practice to make its way into classrooms. He continually preaches this belief to his students and claims that it is of the utmost importance to have teachers who are continually educated in new research and best practices.

Allington (2013) gives several directives about best practices and interventions that are not only researched based but are also easy to implement. According to Allington it is imperative that every primary grade teacher knows how to teach various decoding strategies effectively because no single strategy will work for every student. This is important because it not only allows children multiple ways to access the content but it also teaches them the value to problem solving and diversity of ideas. This becomes important especially in independent reading because students will have the tools to decode unknown words and the stamina to persevere until they are successful (Allington, 2013). Additionally, struggling readers are often given texts that are simply too difficult for them to read. This is because two of every three students in US schools have reading proficiencies below the level needed to adequately do grade level work (Rampey, Dion & Donahue 2009). Adams (1990) states that "The most important activity for developing literacy is that of inducing students to read independently. Yet, when a text is difficult for children, they comprehend little, learn little, and tire quickly" (p. 295). Therefore, it becomes imperative that students are given texts that are at their current ability level. This will allow them to not only be able to decode most if not all of the words in the text but will also lead to better comprehension and an increase in confidence.

Once we give struggling readers the correct level of text it then becomes important that struggling readers are assigned more reading and less worksheets. All too often reading interventions take the form of isolated skill practice using worksheets instead of sustained reading practice (Allington, 2011). By filling struggling readers days with tasks that require little reading we are only creating more of a deficit. If money is a concern Allington suggests that eliminating test prep, paraprofessionals from instructional roles, and expenditures for computer-based reading programs are easy ways that school districts can not only save money but also make time for more effective interventions. These unnecessary and ineffective methods waste money, time, and students' energy and it is important to refocus that energy onto effective strategies (Allington, 2011). While finding the most effective intervention and instructional plans are important in a regular public school it becomes crucial for our students in juvenile detention settings.

Chapter Three: Methodology

Introduction

Much research has been done to understand what factors lead a juvenile to commit acts of antisocial or delinquent behavior. Many of these studies have found a host of factors that seem to increase the likelihood of undesirable behaviors and many have pointed to reading as being chief of them. This study hopes to utilize literary sources and studies completed by professionals in the fields of education and juvenile justice to answer a set of research questions regarding literacy and juvenile detention rates.

Research Methodology

The research method that will be employed for this particular research project will be a literary analysis. This differs greatly from other methodologies in that the subject at hand, juveniles in detention centers, will not be directly studied or observed. This is due in part to the researcher's novice and the difficulty in obtaining permission to observe and study minors in detention centers. This method will allow the researcher to use this study as background information to put toward future work as outlined in the "suggestions for future research" section. By using a literary analysis, or a no contact method, I will be allowed to analyze and synthesize sources from well-respected and peer reviewed scientific studies regarding literacy and juvenile detention. These studies contain a wealth of knowledge that when tapped into and interpreted can provide answers to the research questions.

Research Design

Data answering the research questions will be gathered from academic. Once data has been gathered and analyzed it will be sorted into two different categories of sources,

reference sources and representative sources (Lin, 2009). Reference sources will refer to those articles and studies that serve their purpose as a starting point or a reference and are likely used in the literature review or to flesh out the discussion while making conclusions or articulating findings. These sources do not provide crucial information in answering the research questions, but rather help us to gain background knowledge in order to better understand representative sources. Representative sources will be used as data that will be analyzed for answers to the research questions presented. These sources will likely be used as findings as they are more representative of the problems being studied. These sources will be peer reviewed studies completed by well-respected individuals in the field of education or juvenile detention. These sources will directly work toward answering the research questions and provide key insights through the data collected (Lin, 2009). It will be imperative that several representative sources from different perspectives are gathered to ensure that the research questions are answered thoroughly and correctly. Sources of data will be acquired through analyzing articles written and data collected by researchers within the fields of education and juvenile detention.

Data will first be sorted into one of two categories, those being representative or reference sources. Studies and articles sorted into the representative category will be sources that directly contribute to answering the heart of the stated research questions (Lin, 2009). These sources will provide both evidence and conclusions that will give key insight into discovering the answers to the research questions. Reference sources on the other hand, while useful and valuable, are studies and sources that do not represent the necessary data to answer the research questions (Lin, 2009). These sources will help to flesh out the evidence presented in the representative sources and fully explain the con-

clusions found at the end of this analysis, but will not be major contributors toward those crafting those conclusions.

As a source is read it will be annotated using four different colors of highlighter, one color for each research question and one color for extra information deemed to be of importance. Once an article has been highlighted and annotated the key information will be evaluated to decide if it falls into the reference or representative category. The highlighted pieces of information will be sorted by color to keep information from various sources sorted into the question they best help to answer. Once sufficient sources have been highlighted and annotated, the data that has been collected will be reviewed and conclusions will be drawn to best answer the research questions that have been presented. Expected Findings

It is my expectation that findings will support a direct link between students presenting a low level of literacy and being involved in the juvenile detention system. While I do not expect low literacy to be the only causation of delinquent behavior, I do anticipate it to be among the causes and not simply correlation. I come to this assumption because low literacy greatly affects academic performance and level and dedication to education is often noted as a predictor of delinquent or criminal behavior. For this reason, it would be easy for one to conclude that with a lack of literacy skills a student would struggle greatly academically and put them at a higher risk for engaging in delinquent behaviors. Finally, I have mixed expectations regarding the question of whether prisons use third and fourth grade literacy scores to estimate the necessary number of future inmates or decide where to build a new facility. I have often heard educational professionals and politicians claim that this is the case but have never heard or seen any hard evidence pointing to truth in this claim. This lack of evidence accompanying the claim is cause for concern because I would expect to see a table containing local reading scores and the correlation of future inmates the scores represent. For this reason, I am not anticipating this claim to be true, although it may be in small pockets of the country or for particular prisons, potentially for profit prisons.

Ethical Issues

Through a literary analysis methodology, no human subjects will be used in this study, thus few ethical issues will be present. It will be important, however, to ensure that the sources used in this analysis were conducted and written in an ethical fashion and are free from blatant or destructive biases. Literary sources used in this study will analyzed for the author's credibility and their ethical practices to ensure that the most accurate information is conveyed. Sources that have not been peer reviewed or are considered not valid or ethical by the education research community will not be used.

Chapter 4: Findings

Introduction

The purpose of this study is to determine if there is indeed a link between low literacy and juvenile detention rates. Additionally, if there is a link between these two factors does low literacy cause juvenile delinquency, or do they simply coexist? By studying the phenomena of causation versus correlation this study will also dive into the idea that prisons may use literacy scores to estimate the number of beds needed in the future or where to build a new facility. The overarching goal of this study is to gain an understanding of how literacy interacts with juvenile delinquent behavior to lay a ground work for future studies that may determine how educators can deter delinquent behavior through literacy instruction.

Is there a link between low literacy and juvenile detention rates?

It is widely accepted throughout the education and juvenile justice fields that there is some link or relationship between low literacy and juvenile detention. Many studies identify students within juvenile detention centers are functionally illiterate or qualify for a learning disability under the category of language, but does this does not imply that low literacy puts a student at a higher risk for juvenile delinquency. The following studies were chosen as representative research that identifies if a link does in fact exist between low literacy and juvenile delinquency.

A study conducted in 2014 by Lansing, Washburn, Abram, Thomas, Welty, and Teplin, PhD (Lansing, A. E. et al.) identified that, "delinquent youth have substantially poorer cognitive functioning compared with the general population" (p. 25). In this study 1,829 participants were randomly sampled from students housed in the Cook County Juvenile Temporary Detention Center in Chicago, Illinois. These students were given three different cognitive measures including the Peabody Picture Vocabulary Test-Revised, Wide Range Achievement Test 3rd Edition (oral reading and arithmetic subtests), and Kaufman Brief Intelligence Test (Lansing et al., 2014). These tests were chosen and administered in order to gain insight into skill sets such as language comprehension outside of expressive language, word pronunciation, math computation, vocabulary, verbal intelligence, and matrices. An intelligence quotient was also obtained through the tests administered. According to the study, "On nearly every measure of cognitive functioning- including overall intellectual ability, receptive verbal skills, and basic academic achievement- our participants scored below average" (Lansing et al., 2014, p. 25). This finding holds significance because it demonstrates that the students currently housed in juvenile correctional centers are functioning at a lower cognitive level than that of their non-incarnated peers. Additionally, special attention must be given to the receptive and expressive verbal skills of students in detention because in Lansing's study it was found that the incarcerated students' greatest deficits were in the category of receptive verbal skills, a key component of literacy. Receptive verbal skills refer to the "ability to demonstrate one's understanding of a word's meaning without having to describe it" (Lansing et al., 2014, p. 25). Receptive verbal skills are vital for literacy because an impairment in this area would reduce a student's ability to recognize the meaning of words presented orally and therefore likely hinder listening comprehension skills. Because students typically show a higher level of listening comprehension over reading comprehension it could be concluded that if a student's listening comprehension is suffering their reading comprehension is suffering as well. These comprehension difficulties can play a major role in building and

attaining literacy skills or the lack thereof. It is also noteworthy that while Lansing et al. (2014) findings were consistent with prior research (Rosso et al., 1984) the magnitude of the deficit in verbal skills was far greater. Lansing and team found that nearly 25% of participants were identified as having a "major impairment" in receptive verbal skills as measured by the PPVT-R with a score less than or equal to 60. These participants scored comparable to populations with "developmental receptive language disorders and learning disabilities as well as those with profound developmental global cognitive impairment" (Lansing et al, 2014, p.25). This finding is important because it illustrates that a large population of students that are incarcerated, regardless of gender or race, are functioning at an extremely low level linguistically. This low level of literacy and language has profound impacts not only on the students academically, but social as well, and demonstrates a distinct correlation between literacy and juvenile detention.

If incarcerated students are performing at a level that is indicative of a learning disability, particularly in language, one of three theories as identified by Malmgren, Abbott, and Hawkins (1999), may be used to explain this link and therefore further justify a link between low literacy and juvenile detention. The first of three theories is known as school failure which states, "youth with LD (learning disabilities) experience academic failure, which in turn leads to the development of a negative self-image; these youth are then more prone to dropping out of school, thereby increasing their opportunities to interact with delinquent peers and commit delinquent acts" (Malmgren et al., 1999, p.194). This theory illustrates the idea that a learning disability causes the delinquent behavior because of a lack of school success that drives them toward engaging in delinquent behavior to fill that void. The second theory, the susceptibility hypothesis, states, "the difference in rates

of delinquency for youth with and without LD is due to the neurological and intellectual difficulties (e.g., impulsivity, hyperactivity) associated with LD- these cognitive impairments are thought to make youth with LD more susceptible to committing acts of delinquency" (Malmgren et al., 1999 p.194). This theory differs from the first in that it does not see the delinquent behavior as a choice, but rather a negative expression of the disability itself. By claiming students with an learning disability are more susceptible to acts of delinquency the theory suggests that without academic and social intervention students will likely fall into this path because of the nature of their disability. Finally, the third theory from Malmgren et al. (1999), is known as the differential treatment hypothesis which states, "youth with LD engage in the same kinds of delinquent acts and at the same rates as nondisabled youth but are more likely to be arrested and/or adjudicated" (Malmgren et al., 1999 p.194). This theory combats the second theory by suggesting that all students have the same likelihood to engage in some sort of delinquent acts but those with a learning disability are more likely to be incarcerated. This could be due in part to their lack of ability to express themselves and explain their actions. While each of these theories demonstrates different perspectives regarding potential causes of juvenile delinquency, they all agree that literacy plays a role in the way juveniles interact with their environment and lead them toward a path of success or delinquency.

In the study conducted by Malmgren, Abbott, and Hawkins (1999), participants were selected from students already participating in Seattle Social Development Project's longitudinal study. This means that students both in an out of the juvenile justice system were included in the study and were evaluated by interview questionnaires administered annually from 5th grade through graduation. These questionnaires gathered information on a variety of topics, but only data regarding juvenile delinquency was analyzed for this particular study. The researchers then complied this data and searched for any possible correlations between questions and groups of students. The results of the study stated,

"LD status was significantly correlated only with being male. LD status was also significantly correlated with four of the seven delinquency measures...Results at the zero order correlations are consistent with others' findings of a statistically significant link between LD and juvenile delinquency" (Malmgren, K et al., 1999 p.197).

While it was not stated what category of learning disability students were placed in, we can see that a link between academic difficulty and juvenile delinquency does exist. There can be some debate using the three theories from Malmgren, K. et al's work around the idea of which comes first, delinquency or academic struggle? This leads us to question if literacy or learning disabilities are a root cause of delinquency or simply a correlation?

Is low literacy causation of juvenile delinquency or simply correlation?

To answer this question is to enter into a debate that has been going on for several decades without a clear winner. As discussed in the section previous, there seems to be a definitive link between reading difficulties and delinquent behavior, but it is difficult to identify which came first. Do struggling readers resort to delinquent behavior out of feelings of frustration and defeat within the school setting or do juvenile delinquents struggle to read because they are preoccupied with other activities? There seems to be compelling arguments for both sides of the coin, likely because the answer can vary between cases. It is also important to note that a host of additional factors likely play a role in a child's delinquent behavior. These influences, such as age, family structure, disabilities, and others,

are a part of a child's worldview that influence they're choices and behavior. For this reason, it cannot be said that literacy is always causation of delinquent behavior; however, it is important to know and understand the other influences and how they interact with literacy to create an environment where delinquent behavior becomes desirable and achievable.

The first factor that must be considered is the age of the offender and the age they began offending. Studies have shown that criminal activity often begins during preadolescence or early adolescence, reaches a peak during late adolescence and then decreases dramatically through young adulthood (Farrington, 1986a; National Research Council, 1986). While the decrease in delinquency doesn't happen for everyone, it is common to see a decrease occur during young adulthood because other positive factors such as remediation, post-secondary education, full time employment, or marriage can be obtained at this time. These positive influences are often enough for those who engaged in juvenile delinquency to transition into more healthy behavior patterns. Unfortunately, for those who lack these positive support systems, removing themselves from a life of criminal activity can be very difficult. The age in which a child begins engaging in delinquent activity can be an important indicator as some studies have suggested that earlier onset of antisocial behavior is a predictor of those behavior persisting, or not decreasing through young adulthood (Moffitt, 1993). While there have been other studies that refute this claim (e.g. Farrington & Hawkins, 1991) it is important to note that the those who don't persist in delinquent behavior likely have positive supports in place. It is possible to conclude that a child who begins engaging in delinquent behavior at a young age lacks those positive supports and therefore will likely not attain those supports throughout adolescence and will continue to persist in the behaviors. Whereas, a child who begins delinquent behavior later in adolescence may have some positive supports already in place and will be able to rely on them or build more of them in order to transition out of criminal activity during young adulthood. Both schools of thought likely have merit, so therefore, it is not possible to say that age is the only defining factor in persistent delinquent behavior. Like literacy, it plays into a large environmental system that works together to influence a child's behavior both negatively and positively.

Another set of factors that must be considered in connection to literacy and delinquent behavior is prenatal and perinatal histories. Prenatal and perinatal histories that include lead exposure, alcohol exposure, stress, environmental toxins, and dysfunctional family units have been shown to place children at an increase risk for criminal or antisocial behavior (Institute of Medicine, 2001). Children with histories including these conditions often report higher incidences of hyperactivity, attention difficulties, impulsiveness, and various other disabilities that then put a child more at risk for engaging in delinquent behavior (DiPietro et al., 1996). It is important to note that prenatal and perinatal histories fall into a grey area when determining if they are a static or dynamic factor for behavior. It is often accepted that medical conditions and disabilities are considered static factors because they cannot often be changed, however; for many children symptoms such as hyperactivity, attention difficulties, and impulsiveness can be remedied through counseling, medication, and other avenues to learn coping skills. Therefore, children with prenatal and perinatal histories are often seen as having a higher risk for juvenile delinquent behavior because of the conditions these histories may present, but they can be influenced through positive programming as often these conditions can be dynamic.

Finally, a host of social and community factors, often seen as dynamic factors, can influence a child toward or away from delinquent behavior. Some of these factors include, but are not limited to, family structure, family interaction, social setting, neighborhood influences, peer interaction, grade retention, school suspension or expulsion, and school tracking (Institute of Medicine, 2001). It is important to remember that for each child these factors will look, interact, and influence them in different ways. For example, according to the Institute of Medicine, "It may not be the family structure itself that increases the risk of delinquency, but rather some other factor that explains why that structure is present. Alternatively, a certain family structure may increase the risk of delinquency, but only as one more stressor in a series; it may be the number rather than specific nature of the stressors that is harmful" (2001, pg. 75). It is not possible to use these factors as a checklist to determine if a child will find themselves in a juvenile detention center at some point in their life. Rather, we can use these factors as road map to determine which of our students may be at risk, and connect them with the appropriate scaffold, program, or positive intervention.

Often when one thinks about family structures that can influence a child toward delinquency the first thing that comes to mind is parental separation or divorce. While there are many studies that have shown there is a link between parental separation and juvenile delinquency (Farrington & Loeber, 1999, Wells & Rankin, 1991), there is also discrepancy around the meaning of that association. This discrepancy occurs due to the longitudinal studies that have shown that disorderly conduct occurs at its peak before parents' divorce, rather than after as some may assume (Block et al., 1986; Cherlin et al., 1991). This means that one cannot point to parental separation and divorce as a cause of

delinquent behavior, because it is likely that after parents have separated a child will go back to normal or positive behavior patterns. These longitudinal studies suggest that a child experiences more stress leading up to a parental separation or divorce compared to the stress during and after the separation. This heightened stress causes the child to seek attention and control or vocalize worry through negative behavior or delinquency. While it is not always the case, typically once a new normal has been established through the separation the child often returns to positive behavior. Longitudinal studies have also shown that children of single parent homes or of young mothers are also at an increased risk for delinquent behavior, but these studies have also noted that these factors cannot be considered causation (Johnson, 1987; Conseur et al., 1997). In the case of single parent or young mother households it is important to recognize that other compounding factors such as socioeconomic status, parental education, and level of supervision also play a role in influencing the child's behavior.

Another factor that can influence a child toward juvenile delinquency is the social setting they are being raised in. According to the Sampson (as cited in the Institute of Medicine)

"Where a family lives affects the nature of opportunities that will be available to its members...Lack of socially acceptable opportunities leads to frustration and a search for alternative means to success. Community-based statistics show high correlations among joblessness, household disruption, housing density, infant deaths, poverty, and crime" (2001, pp. 79-80).

If a child is raised in area where youth feel they have no other positive opportunities, they are likely to turn toward negative behaviors in an attempt to achieve the same outcomes.

For example, a student may have a desire for nice things, a car, shoes, phone, etcetera, but there are no employment opportunities or transportation available to make this possible. A student may turn toward criminal behavior to achieve the same outcome, obtaining these expensive items, rather than using a positive outlet such as a job. Using this framework of social setting, we can see how it can be difficult to differentiate if literacy correlates or causes delinquent behavior. Perhaps if the child could read well, they would be able seek out opportunities to meet their needs and wants in a positive way. On the other hand, it could be true that a student never bothered to learn how to read because they were already involved in negative behaviors that were achieving positive outcomes and therefore, they saw no need in learning how to read.

Similar to social setting, peer influences are also shown to play a major role in a child engaging in delinquent activity. Once a social setting has been primed to cause students to search out success through criminal or antisocial behavior, it can be become very easy for students to join others engaging in negative behaviors. Hoge, Andrews, and Leschied, (1994) explains it this way,

"Factors such as peer delinquent behavior, peer approval of deviant behavior, attachment or allegiance to peers, time spent with peers, and peer pressure for deviance have all been associated with adolescent antisocial behavior...In other words, the effects of deviant peers on delinquency are heightened if adolescents believe that their peers approve of delinquency, if they are attached to those peers, if they spend much time with them, and if they perceive pressure from those peers to engage in delinquent acts" (p. 550). Of course, a peer structure like this can't be possible without a social setting that doesn't allow for success through positive actions, and the necessity for peer approval can be
heightened by family structure or interaction. All of these factors can come together to cause a child to assume that reading is no longer a necessary skill because they are experiencing some level of success and acceptance through this alternative social structure.

Students are also impacted by educational factors including grade retention, suspension/expulsion, and school tracking. Each of these factors plays into a student's success or failure, either self-perceived or actual, of education attainment. Grade retention refers to students not being permitted to moving on to the next grade level with their peers, commonly known as being "held back" or "repeating a grade". This practice was widely used throughout the 1990's, but the Institute of Medicine (2001), points out that research now suggests that tutoring or summer school are more successful options. This is likely due to the specialized attention that can be paid to students attending summer school or a tutoring program. This attention can help students identify the root misconception of their academic struggle and remedy the problem quickly. This differs greatly from the format that often accompanies grade repetition. Students who repeat a grade are not guaranteed to receive special education services or additional assistance in the form of tutoring. This coupled with the deflation of self esteem from being separated from their peers can create a sense of hopelessness among students who repeat grades. This sense of academic failure is often noted as a factor in juvenile delinquency.

Suspension and expulsion have long been debated practices surrounding students who are behaviorally involved and potentially engaging in delinquent behavior. Many within the education system, and even the general public, view suspension or expulsion as prerequisites for delinquent behavior. Many critics claim that practices of school exclusion, such as suspension and exclusion, are unjust because critics claim older students

who receive these punishments are acting out of academic struggle. The Institute of Medicine (2001) puts it this way "Unlike grade retention, which is a school policy primarily for young children in the early elementary grades who display academic problems, suspension and expulsion are mainly directed toward older (secondary school) students whose school difficulties manifest themselves as behavioral problems." This assertion moves us closer to understanding how these dynamic factors are all interrelated and cause a student to engage in delinquent behavior. If it is true that a student engages in undesirable behavior because they are experiencing academic struggle or failure, then it is reasonable to conclude that literacy plays a large role in the behavior of our students. If a student has strong literacy skills, they are less likely to experience academic failure, and therefore less likely to engage in antisocial behavior. This does not mean that all students who are academically successful will not be behaviorally involved, because as we have seen there are various other factors that can influence a person toward antisocial behavior. That being said, the correlation between these two factors likely influence many of the children in juvenile detention centers today. Critics of school exclusion also note that by removing a student from the educational environment creates a cycle of negative behaviors and consequences that far outweigh the benefits. "Some of the consequences cited include loss of self-respect, increased chances of coming into contact with a delinquent subculture, the vicious cyclical effects of being unable to catch up with schoolwork, and the stigma associated with suspension once the target child returns to school" (Williams, 1989). These negative consequences far outweigh the perceived benefits of school exclusion, namely the decrease of negative behavior directly after returning from exclusion. By exposing our students to delinquent sub culture and creating an achievement gap academically we are giving them reason to abandon literacy progress or struggle to make any because of the missing work.

Finally, school tracking has been noted to influence a child's potential for antisocial behavior. School tracking can be defined as, "Academic tracking, also known as "ability grouping" or "streaming," describes teaching practices whereby students who seem to be similar in ability are grouped together for instruction. The idea is to reduce the range of individual differences in class groups in order to simplify the task of teaching" (Institute of Medicine, 2001). The largest critique of school tracking is the emotional toll it can take on students who are placed in a lower ability track. When students realize that they are seen as less than capable by their teachers and administration they take on a posture of helplessness and hopelessness. These negative emotions have been shown to contribute to disinterest in academics, truancy, delinquency, and dropping out of school all together (Berends, 1995). Critics of school tracking often advocate for high expectations for all students, especially those with disabilities, in order to level the playing field and not create cultures of learned helplessness. In doing so, students are made known that they are valued and the school believes in their success.

Do prisons use literacy scores to estimate the necessary future bed count or determine where a new facility should be built?

I chose to pose this question because I had long heard politicians and professors alike make this statement and seen buzz about the practice on social media. Powerful figures such as Hillary Clinton, Colin Powell, Rev. Al Sharpton, Alexandria Literacy Foundation, several local politicians, and many opinion editorials in The New York Times and Washington Post have used the narrative a failing school system funneling third graders into the nasty profiting prions (Glod, M., & Helderman, R. S.). I assumed, naively, that it must be true that prisons use third or fourth grade reading scores to estimate how many beds they will need in the near future. Regardless of where you stand on the corruption of for-profit prions debate, many were appalled by the lack of compassion and the inhumane nature that this practice would be conducted in. What implications would this have on education if we knowingly place children in routes to predetermined futures? Thankfully, currently there is no credible documentation that this practice is happening. In fact, many prisons including those in Tennessee, Florida, California, and Virginia have released statements, in response to political figures using this narrative, stating explicitly that they do not use any reading scores to estimate how many future inmates they will have (Sanders, 2013). Rather these correctional facilities claim they typically analyze local and national crime rates, trends, and population data to determine if there will be an influx of inmates in the future and how to best prepare for future populations.

Katie Sanders, the managing editor of fact checking agency Politifact, heard Kathleen Ford, a St. Petersburg Mayoral candidate in 2013, speak of this this often-told harrowing story. Ford exclaimed about the unjust actions of prisons across Florida and their inhumanity in predicting their future number of inmates by checking local elementary reading scores. She used this talking point to advocate for part of her platform, early childhood education reform, stating "And I think waiting until kids are ready for kindergarten to begin to intervene is too late" (Sanders, K. 2013). While the sentiment behind the statement were likely pure and necessary, Sanders found that this story has both been used and been debunked by sources such as the New York Times and the Washington Post many times causing much confusion. Sanders took her investigation further, however; interviewing the former director of the National Center on Education, Disability, and Juvenile Justice, Peter Leone, and two of the largest private prison operators in the country, Corrections Corporation of America and Management and Training Corporation. All interviewees denied Ford's claim and added that they have been battling this false story for years. According to Leone, "It is an urban legend that politicians like to trot out to claim that either the schools are failing or that we are not tough enough on crime" (Sanders, K. 2013). Leone didn't dispute that reading plays a large role in student success and is a potential factor for antisocial behavior, but assured Ford and others that the prison system is not concerned about test scores of children who won't likely be in the system for many years.

The Washington Post also responded to a similar claim made in a television advertisement by a politician running for office in Virginia, Terry McAuliffe. In an effort to advocate for his plan to expand preschool opportunities for children in Virginia his ad stated, "Did you know we use the failure rates of third-graders to help predict how many prison spots Virginia will need in 15 years?" (Glod & Helderman, 2009, p.1). Peter E. Leone, The Director of the National Center on Education, Disability and Juvenile Justice at the University of Maryland, was again consulted regarding this issue. He asserted that while his department is often cited as the source of claim, and it may be, it doesn't dismiss the fact that the claim, while catchy, "is totally bogus" (Glod, & Helderman, 2009). He lamented that he and his office have consistently field calls over the years in an effort to debunk this myth. Some state offices, such as California, are working diligently to perennially release statements that dismiss these claims and provide citizens with factual data regarding prison and juvenile justice planning. Barry R. Green, the Director of the Juvenile Justice Department in Virginia claimed that, "When officials draw up six-year plans for how much prison space the state will need, they rely on factors that include arrest and conviction trends, but not test scores or any other education data" (Glod, & Helderman, 2009). While Green, Leone, and others don't deny that a poor start in school, especially within the subject of reading, can leave a child vulnerable to being caught up in social ills that lead to crime, it is far easier for prions to use more immediate data such as crime rates and trends to plan for housing rather than long term projections that reading scores provide. This is not to say that reading scores may provide an accurate data set, but rather prisons rely on data that will shape their facilities within the next 5-10 years not longer.

I reached out to the Department of Juvenile Justice in Illinois, the Illinois State Board of Education, as well as several prisons in Illinois including the Federal Correction Institution in Greenville, Il. None of these agencies responded to my request for comment on this issue and did not have projection data or procedures for determining future inmate levels open for public viewing online. Therefore, it cannot be fully known if Illinois uses 3rd or 4th grade reading scores to plan for future numbers of inmates, however; based on the national standard it would be highly likely that they opt to use current crime rates and trends instead of educational data.

Chapter 5: Conclusions and Implications

Conclusions

When I began the journey of this study I knew I was embarking on a hunt for the truth, whether it aligned with my expected findings or not; however, I did not know that I was embarking on journey that would lead me to understand that answering research questions is often not a matter of right or wrong, but rather a matter of complexity and intersectionality. As we have seen, to answer these questions regarding the link between literacy and juvenile delinquency is to enter in to a discussion much larger than just delinquency and literacy alone, but to consider other environmental, personal, and educational factors that lead a child to detention. There is no room for simple concise answers or easily found conclusions. What we find is a host of factors that influence each other to cause a person to make positive or negative choices.

Research clearly shows a link between low literacy and juvenile detention. This has been widely accepted by both the field of education and juvenile justice. Where things become tricky is determining how much of a role illiteracy plays into detention and if literacy can be pinpointed as a causation factor and not merely correlation. These issues become complex because we are dealing with humans who are each unique and have their own reasonings for why they engage in antisocial behavior. Nevertheless, trends can be noted that can help us shed some light on these questions.

As mentioned in the findings sections there are both static and dynamic factors that can affect a person's behavior. Static factors are those that do not change over time, such as race or ethnicity, and dynamic factors are those that do change over time, such as literacy and age. There are a host of factors that can influence a child to engage in delin-

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quent behavior, but research did not show that one factor was more effective than another. This means that we cannot rank these factors to determine which ones are the most worrisome and we cannot directly blame literacy for all delinquent activity. Instead, we must view these factors as aspects of a student's life that drive them toward negative behaviors through working together and creating a sense of hopelessness. The quantity of factors is far more important than the type of factors a student exhibit. Because of this it is still vitally important that we ensure all of our students are functionally literate and we have a strong literacy program in place for students already placed in a detention facility.

There will likely be many factors in a student's life that put them at risk for delinquent behavior that we as teachers cannot change. We can encourage positive behavior through school culture and classroom rules, but we will have very little to no power over their static factors and home life dynamic factors. Because of this we must be sure to take special care of factors such as literacy, school tracking, grade retention, and school exclusion. While school tracking, grade retention, and school exclusion are likely administrative decisions, teachers can have a great level of positive influence on the factor of literacy. If it is true that it is the quantity of factors that is most impactful on a student's likelihood to be placed in a detention facility, then teachers should be taking a special interest in the one factor off their scale. By encouraging all students to become literate we can take one factor off their scale. That may be the one factor that tips their scale toward a positive productive life. Unfortunately, teachers will likely never know if that is the case because it would not be possible to identify one sole causation factor. Instead, educators must make a commitment to teaching robust literacy lessons in order to keep our students from becoming functionally illiterate and adding to their existing plate of factors.

Limitations of the Study

This study was largely limited by the method chosen to conduct the study. Because the study was conducted using a literary analysis approach it had to rely on the work accomplished by others already in the field. This meant that the study couldn't be as specific as originally intended because original research couldn't be done. It was often found that data regarding students in juvenile detention centers and their academic performance was difficult to come by because the students in detention centers are typically a transient population. This occurs because the students are consistently moving in and out of facilities as their needs and sentences change. Many students are not in the same facility for over a year making data collection and longitudinal studies extremely difficult (Tannis, 2014). Because of the ever-changing student population, it is difficult to find data that can fully capture academic progress in juvenile detention centers. This meant that while research can point to a correlation between low reading scores and juvenile detention rates, it is difficult to capture how reading intervention can impact a student once they are already incarcerated. A thorough longitudinal study would likely need to be conducted in order to grasp this situation but would be challenging due to the movement of students.

Suggestions for Future Research

Due to the limitations of the research because of the consistently changing student populations within juvenile detention centers this work would be best carried out by someone actively working within the juvenile justice field. Therefore, I look forward to the opportunity to continuing this research as a teacher and school psychologist working in the juvenile justice system. This insight into the inner workings of detention centers, as well as access to and relationships with students and families that could be involved in a future study, will allow me to conduct specific research and use the population currently enrolled to better understand how literacy influences antisocial and criminal behavior.

Once I have experience working within the juvenile justice system, I look forward to continuing my research regarding literacy and criminal behavior. Future research will likely include identifying best practice for literacy instruction for students in juvenile detention centers, as well as adults in correctional facilities. Questions that would need to be addressed regarding best practice may include: What programs are currently being used with success? Should those instructing literacy courses use a phonics or whole language approach? Should the type of instruction change based on an inmates age or can we use instruction techniques much like the ones used in elementary classrooms across the country? Additionally, based on the completion of this literary analysis and its findings some future questions to be studied may include: What unique factors does incarceration present that impact literacy instruction? How can literacy instruction be used to decrease recidivism rates and assist inmates in positively reintegrating back in "normal" society? What other common factors lead children toward antisocial and criminal behavior and how do they interact with literacy as a factor? And can literacy instruction be infused with other social emotional instruction to help inmates overcome multiple contributors to their criminal behavior?

Through this future research it is my hope to develop a comprehensive reading program for juvenile detention centers that will assist students in gaining necessary

literacy and social-emotional skills to find success within society upon program completion. I truly believe that the function of our juvenile detention centers should be rehabilitating youth and equipping them with the necessary educational and social emotional tools to function positively within society. While success may look different for every child that exits a detention facility, I believe that a literacy program that addresses both their educational and emotional needs will engage their minds and allow them to communicate in a positive and constructive way. These skills of literacy and interpersonal relationships will be key in whatever field of work or education they choose to pursue. By addressing as many factors as we can through a comprehensive curriculum, we can reduce the rates of recidivism and lead our students to a life of self-defined success.

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