Language: Critical Components in Readers with Criminal Referral History

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Abstract
Low levels of reading performance are associated with delinquency. However, few studies have investigated the relationship of early involvement in the justice system and reading problems to continued delinquency. This study examined youth at various stages of involvement in the justice system and reading abilities. Specifically, this study examined the relationship between four reading components (e.g., literal comprehension, inference, main idea, and language) and the demographic variables of age, ethnicity, number of times previously detained, number of days detained, and number of prior referrals. Language was significantly correlated to increased referral history. The relationship suggests that youth with lower language scores would experience higher number of referrals to the juvenile justice system.
Language: Critical Components in Readers with Criminal Referral History

Reading is the “single most important skill” that helps youth succeed in life academically, socially, and vocationally (Leone, Krezmien, Mason, & Meisel, 2005, p.239). When students do not become proficient readers in elementary school, they are at risk for problem behaviors as well as future delinquency. Life activities such as reading signs, shopping, playing games, and texting all require basic reading competency. As youth get older it can be more difficult to detect reading skill deficits unless youth are continuously assessed. Older students often use adaptive skills to get by socially and teachers expect older youth know how to read.

Research consistently shows that incarcerated youth are several years behind non-incarcerated youth in reading achievement (Jerse & Fakouri, 1978; Brunner, 1993; Johnson, 1999; Foley, 2001). Often youth can read enough to avoid being labeled as a non reader but not enough to be proficient at grade level. In a longitudinal study, VanderStaay (2006) found that behavior and reading problems constitute major risk factors for continued involvement in delinquency. Within youth in the juvenile justice system, the overrepresentation of readers below grade levels need exploring and a deconstruction of their relationship.

Extensive research with EBD (emotional behavior disorder), language deficits, and reading is a prevalent area with correlations among them and school problem behaviors (Benner, Nelson, & Epstein, 2002). Youth in the justice system have higher prevalence of EBD than is found in the public school population diagnosis of EBD at 47.7% (Quinn, Rutherford, Leone, Osher, & Poirier, 2005). Recently Benner and his colleagues systematically reviewed the research specific to EBD and language skill deficits. In their review of 18 studies, they found almost three quarters of youth formally identified with EBD had significant language problems. Their findings suggested four principles relevant to youth with EBD. First youth are at high risk
for antisocial behavior when they have language deficits. Social communication is accomplished through common systems of language and when there are problems with language in any form written or spoken there is less social interaction. With reading problems comes social isolation as they are lacking one of the acceptable forms of communication in society (Linares-Orama, 2005). This can lead to isolation with some youth but not all youth deal with social isolation the same some turn inward others act out.

Second, these youth have high rates of behavior problems and these receptive language deficits often go undetected. Receptive language problems, as compared with expressive language, refer to understanding the language that is being presented. Never the less, this can cause frustration and anxiety not being able to take in information through reading. There are pieces missing in everyday communication when reading is a problem. Assignments in school may not be fully understood when a teacher is expecting the student to read, so verbal directions may not explain everything. Youth with language difficulties may feel they are getting all of the directions when they are not.

Third, because of a strong connection between EBD and language deficits, the relationship of antisocial behavior may increase over time. In general, we expect that youths’ ability to read increase as they pass through each grade. The individual with the reading deficit can find it harder to express that they are struggling academically; too often their frustration leads to antisocial behaviors and the avoidance of reading situations. VanderStaay reviewed longitudinal research within health science and criminology on relationships with reading among crime, delinquent, and antisocial behaviors and conclude that reading and the beginning, ongoing and escalation of antisocial behaviors are a “key public health concern” (pg 336). There are no
directional findings that reading problems causes inappropriate behaviors or vice versa but they are recursive. They add to each other and can compound if not corrected.

And fourth, language problems affect interpersonal relationships with peers, authority figures, family, as well as society in general. Studies show youth with limited skills in language functioning used more physical actions to solve interpersonal problems (Benner, et al. 2002). Teachers and authority figures give out written comments or commands and if not fully understood can lead to further problems because it is expected the youth can read and were given the directive. This can make it seem as they are being noncompliant but in the youths’ perspective the language was not conducive to them getting the message so they are prone to saying “I did not know”. From one perspective the written message was clearly stated by the authority figure but from the youth with a language problem it was not processed or understood. In this situation, youth felt they received the entire message but it was not fully communicated because the youth did not clearly understand the language of the reading and relied only on the oral commands. This can lead to acting out, frustration, or many other physical behaviors to communicate they really did not know. This can lead to further problems not associated with reading and can look as if the youth is being defiant and not that they can not understand the language because of a reading problem. Brunner did an extensive literature review of the research on academic failure and delinquency and found the link was “welded” to reading problems.

There is a significant relationship between youth with below grade level reading and recidivism. In an extensive review of the research Brunner (1993) asserts that there is ample evidence to show a link between recidivism and reading problems. An experimental study of a Juvenile Justice Literacy Program in Orange County, California used an increased focus on
reading instruction with incarcerated youth. They concluded if youth were involved in 50 or more hours of direct reading instruction; significant reading gains can be accomplished, recidivism could be decreased by 20%, and it is cost effective (for every dollar invested in reading saved the community $1.75 in reduced recidivism).

There is limited research in the field of delinquency and reading problems and more is needed. There has been an increase in reading levels from fourth to fifth grade over the last fifteen years but reading is still below the national average of those not in correctional facilities (Harris, Baltodano, Artils, & Rutherford, 2006). More research is needed to examine this link between reading and delinquency. To date, there have only been five published research articles of corrections and reading interventions reported in the literature (Hodges, Giuliani, & Porpotage, 1994; Campbell, Marsh, & Stickel, 1993, Malmgren & Leone, 2000; Drakeford, 2002; Harris, et al., 2006). Four of the five research interventions were conducted in juvenile corrections/long term facilities. Malmgren and Leone (2000) did a reading intervention in short term detention and concluded that low reading levels can significantly improve with an short intense intervention. They could not pinpoint the particular intervention component responsible for these gains but that significant improve can occur with an intense reading program in a short term facility.

Within the juvenile justice system, there are two types of lock up facilities, corrections and detention. Corrections/long terms facilities are where youth are locked up for extended periods of time for treatment and services. These are typically run by the state agencies and similar to a prison in the adult system. Detention/short term facilities are where youth are first involved with the justice system and waiting for a judge to impose short term treatment or consequence them for their criminal offenses. These are typically run by county agencies and
similar to jails in the adult system. McGlynn (2003) reported that, on average, youth had been
detained nine times at the detention level before being sentenced to corrections. Understanding
reading at the detention or early stage of justice involvement is the purpose of this research. With
early detection and intervention at this stage it is believed we can divert further involvement in
the justice system and increase engagement with their transition back to their schools or
To build such an intervention, the field needs to know more about the elements of poor reading
within the short-term incarcerated population.

The National Reading Panel (2000) identified the skills for reading achievement and
concluded that the critical components are phonemic awareness, phonics, fluency, vocabulary,
and text comprehension. Although many youth in the juvenile justice system are lacking these
skills, is there one skill that is more likely to be missing than others for youth in secure care? It
is hypothesized that the reading skill deficits are equally correlated within this population. It is
also assumed that overall skills are lacking in all reading areas. Within the current study the
facility used the available reading assessment that focused on four factors first literal
comprehension, how much can the youth recall, sequence or classify the facts from the reading.
This is a very basic level where the youth find the most obvious information on the surface
meaning of the reading. Second was inference, how much can the youth infer or logically
conclude about the reading. The youth goes beyond the writing and makes interpretations of
what is written. This is a deeper meaning then just comprehending they are connecting ideas
within the reading to make meaning to draw conclusion or make generalizations. The third factor
was main idea; can the youth recall and summarize the reading? The focus here on the youth
knowing what the author’s intent was for the whole reading. Taking all components and
explaining patterns and ideas that make the story complete. Lastly vocabulary/language is the term used in the assessment but we will only use language in defining this component as vocabulary is the words within the language. Language is the whole understand of the words, symbols, and rules of communication through reading. The language focus is that the youth understand the words and how they are specifically physically positioned to get the meaning. There are many other components to reading but these where assessed at the detention facility to encompass the youths reading levels.

Method

The setting for this study was in a secure urban detention facility in the Southwestern United States. Youth can only enter the facility if they have broken the law and have a referral. The police have to present the referral or warrant to get the youth detained. The youth then go through a screening to assess their risk to the community. If they are deemed a threat based on past history and current referral they stay detained. Forty percent of these youth were brought to detention with a new police referral for breaking the law. The other sixty percent had a referral at one time and have more court involvement that needs to be taken care of like a warrant for not coming to court. It could also be a violation of probation for example not completing with court ordered sanctions e.g. missing school, drug use, not completing work hours, etc. (MCDB, 2002) According to state statute the youth are seen by a Judge within 24 hours after being arrested for a determination if they should stay in detention. If it is decided they stay detained they typically stay 30 to 60 days depending on court processes. The average length of stay is 14 days but because about 30% leave within the first 48 hrs, the majority stays detained and attends school within the facility.
For many of these youth it is their first involvement with the justice system and the first place other than their home and community school they have strict rules and have to follow the organized daily activities. They are assessed within the first 3-5 days of being detained. The sample used in this study was a convenience sample of 47 juveniles among the 184 that were detained. It was intended to get a snapshot of as many as possible and these were the only assessment the teacher could get based on the number of youth assessed within the last week. There was no historical hard data or a database of past assessments on the youth but the information was only used to get them started on the computer program. This is consistent with research within correctional facilities that adequate reading assessments are lacking and a universal use of a standardized assessment make it problematic in study designs based on the difficulty in accessing these youth (Quinn, et al., 2005). The current descriptive study used data collected during intake from the detention center and the reading assessment to examine the relationship. The intake data is demographics and court documentation of current and past behaviors. This included age, ethnicity, number of times detained, number of days detained, number of prior referrals. The court data was combined with their performance on the reading assessment. Reading was measured by the youth taking a computer generated New Century Education (2006) academic assessment that rendered scores for reading levels in literal comprehension, inference, main idea, and vocabulary/language. The New Century is an integrated instructional system that has been used throughout the county for over forty years. The assessment is part of the bigger computer program that individualizes the instruction to the youths’ needs. This first assessment adapts in the number of questions and time based on the student’s levels to put them at an appropriate grade level to start. The reading curriculum is based on the state standard and used a balanced approach between phonics and whole language
philosophies. For over twelve years, this computer assessment has been the initial academic evaluation used to place youth in appropriate reading levels within the detention school. Collecting the reading scores and reviewing the juveniles’ demographic and delinquent history can see if there is correlation and help unpack the relationship between them.

Results

All of the subjects in the study were male and the ethnic representation included: 21 (45%) Anglo; 19 (39%) Hispanic; 5 (11%) African American; and 2 (4%) Native American. This distribution of ethnicity is typical for the detention facility. The mean age was 16.2. The number of times youth in the sample were detained ranged from 1 to 10. The number of referrals ranged from one to 18 and the average number of referrals to the juvenile court was 6.6.

The descriptive statistics in Table 2 show wide-ranging reading levels of the 47 youth in the sample. The overall average reading grade level was 5.3 (5.85 literal comprehension, 5.19 inference, 5.22 main idea, and 4.94 language). A partial correlation was performed with the variables controlling for the others. A Bivariate correlation checked the strength of the relationship between each variable. However, surprisingly no significant relationships were found between the number of times youth were detained, the length of their detainment and any of the reading components. There were also no correlations found between reading components and the youths’ age or ethnicity.

A multiple regression analysis was conducted to evaluate how well the reading components predicted referral history. The predictors were the four reading assessment scores, while the decisive factor (or dependent variable) was referral history. In Table 3, the linear combination of the four reading components is significant as related to referral history, $F(4, 42)$
= 2.64, \( p < .05 \). In a linear model, reading scores account for 12% of the unique variance in the number of referrals to the juvenile justice system. Upon examination of the correlation coefficient in Table 4 and the slopes of the different reading components in Figure 1, there is a significant relationship between language and referrals; that is youth who scored lower in language were more likely to have more referrals. There were no other significant relationships among the other reading components. There were also no significant relationships between the other justice factors and reading.

These youth in detention are at varied levels of delinquency and reading ranging from early delinquency to extensive histories and from extremely low reading levels to high reading levels (see Table 1 & 2). The youth in this study had been detained an average of 6.6 times. This is less than the average of 9 times detained as compared to the same geographic area research for those in state level corrections (McGlynn, 2003). The reading levels were similar to the national finding that, on average, youth in corrections are reading at the 5\(^{th}\) grade level (Leone et al., 2005, Harris, et al., 2006).

**Discussion**

This study found a relationship between youths’ prior history of referral to the juvenile justice system and language exist. A top recommendation of previous research on struggling adolescent readers emphasized the need of court involved youth to acquire new language skills in an effort to help them improve their reading (Leone et al., 2005). In this study, there was a negative relationship with all of the four reading components and referral history but language stands out and has a significant relationship with referrals. Exploring the three components of literal comprehension, inference, and main idea are negotiated across reading to come to an answer. For example there is a need to gather different aspects of the words they can read to get
an idea of the message the author is putting out. Whereas with language there is distinct definitions put out by the author for a particular word used or order that the youth seem to not be getting. With adaptive skills delinquent youth are able to combine different aspect through reading to comprehend more of the three reading components but when it comes to unpacking the specific of the language, the definitions of words and particular use, they struggle more. The significance of referral history is not clear and we can not make a leap from language issues with reading to a cause of delinquency and behavior problems but there is some correlation. In all reading components the youth were below grade level as compared to peers not incarcerated. The language difference could be in understanding the rules and structure of language in not getting the message clearly. Thus causing frustration with schools as reading is expected beyond elementary and can be a big part leading to isolation from productive peers and more antisocial behaviors. These youth grow up wanting to read but not grasping the language and adults are expecting they know how to read so a miscommunication exists

With youth that have both behavior and academic problems, it is unclear whether the behavior problems lead to academic deficits or if the academic deficits lead to the behavior problems (Williams & McGee, 1994). However, this study provides powerful evidence of the relationship between language, reading, and number of referrals to juvenile justice. The specific relationship between language within reading and referrals emphasizes the need to focus on language and vocabulary evaluations of youth with delinquent behaviors early. While the positive relationship between reading and vocabulary has been well documented, the fact that poor readers with limited language skills are over-represented in the juvenile justice system, suggests that early intervention efforts must be based on better understood relationships between language and behavior. Further, will improved reading skills reduce recidivism? With few
studies among juvenile justice youth and even fewer that look at analysis of what specifically works, there should be more studies that analyze programs to strengthen specific reading skills to the specific deficit areas (Harris et al., 2006). There is also a need to explore intense immersion in language instruction in detention and correctional facilities to possibly reduce future referrals.
References


Drakeford, W. (2002). The impact of an intensive program to increase the literacy skills of youth confined to juvenile corrections. *Journal of Correctional Education, 53,* 139-144.


### Table 1

**Descriptive Statistics of Detained Youth and Reading Levels (N=47)**

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>12.00</td>
<td>18.01</td>
<td>16.1840</td>
<td>1.4993</td>
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<tr>
<td>Times Detained</td>
<td>1</td>
<td>10</td>
<td>3.51</td>
<td>2.40</td>
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<tr>
<td>Days Detained</td>
<td>6</td>
<td>276</td>
<td>102.94</td>
<td>69.23</td>
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<tr>
<td>Referral History</td>
<td>1</td>
<td>18</td>
<td>6.60</td>
<td>4.41</td>
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</table>

### Table 2

**Reading Grade Equivalent Levels on the New Century for the sample of 47 detained youth**

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
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</thead>
<tbody>
<tr>
<td>Literal Comprehension</td>
<td>0</td>
<td>9</td>
<td>5.85</td>
<td>2.00</td>
</tr>
<tr>
<td>Inference</td>
<td>0</td>
<td>10</td>
<td>5.19</td>
<td>2.22</td>
</tr>
<tr>
<td>Main Idea</td>
<td>0</td>
<td>10</td>
<td>5.22</td>
<td>2.17</td>
</tr>
<tr>
<td>Vocabulary/ Language</td>
<td>0</td>
<td>8</td>
<td>4.94</td>
<td>1.32</td>
</tr>
</tbody>
</table>

### Table 3

**The Bivariate and Partial Correlation of the Predictors with Referrals**

<table>
<thead>
<tr>
<th>Reading Predictors</th>
<th>Correlation between predictors and referral history</th>
<th>Correlation between each predictor and referral history controlling for all other predictors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literal Comprehension</td>
<td>-.10</td>
<td>.21</td>
</tr>
<tr>
<td>Inference</td>
<td>-.11</td>
<td>.07</td>
</tr>
<tr>
<td>Main Idea</td>
<td>-.10</td>
<td>.04</td>
</tr>
<tr>
<td>Vocabulary/ Language</td>
<td>-.31*</td>
<td>-.44*</td>
</tr>
</tbody>
</table>

*p<.01*
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<tr>
<th></th>
<th>Referrals</th>
<th>Literal Comprehension</th>
<th>Inference</th>
<th>Main Idea</th>
</tr>
</thead>
<tbody>
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<td>Literal Comprehension</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inference</td>
<td>-.116</td>
<td>.864**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Idea</td>
<td>-.109</td>
<td>.840**</td>
<td>.860**</td>
<td></td>
</tr>
<tr>
<td>Vocabulary/Language</td>
<td>-.314*</td>
<td>.847**</td>
<td>.814**</td>
<td>.783**</td>
</tr>
</tbody>
</table>

*p< .05    ** p< .001
Figure 1

Scatter plot of referrals and reading components

- Literal comprehension
- Main idea
- Vocabulary/language