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. This study examined the relationship between youth at various early stages of involvement with criminal behaviors and reading abilities (specifically, literal comprehension, inference, main idea, and language). The demographic variables that included age, ethnicity, number of times previously detained, number of days detained, and number of prior referrals were correlated with performance on a test of reading achievement. Results showed that language was significantly correlated to increased referral history. The relationship suggests that youth with lower language scores experience higher number of referrals for breaking the law. Implications of this study discuss the need for interventions at early signs of behavior problems and intense language interventions at early signs of law breaking. The psychological and physical isolation of those not academically proficient in reading is discussed.
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 (Daal, Verhoeven, & Balkom, 2007, Harris, Baltodano, Artiles, & Rutherford, 2006, Rivera, Al-Otaiba, & Koorland, 2006, Leone, et al. 2005). 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). Federal legislation and policies are in place that mandate schools teach the most at risk youth with reading problems. In both Individuals with Disabilities Education Act (IDEA) and No Child Left Behind (NCLB), practitioners are required to implement research-based best practices [(614) (d) (1) (A) (iv)]. This emphasis is critical since it means that practitioners must locate the best and most effective practices for teaching reading, rather than rely on their own styles or knowledge that may or may not encompass practices that work with behavior problems.

In particular, the newly authorized special education law (IDEA 2004), moves the field of special education from a deficit oriented perspective in which children were allowed to fail either behaviorally or academically before they were identified for and placed in special education services. This deficit model has transitioned into a new, prevention oriented; early intervening approach to learning that is called Response to Intervention (RTI). RTI has the promise of offering help to at risk youth, and potentially, preventing some at risk students from moving into offender status [(614) (b) (6) (A-B)]. This is particularly true since the field now understands behavior and academic performance as interrelated and that at risk behavior emerges from poorly
developed academic and learning skills and vice versa. Reading is the hub of all learning in society at the basic level of learning to communicate in school or moving to the complex interactions of adolescents and the work force.

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. The components of teaching reading are simple to break down at the early stages of education as they are taught specific reading skills but as students grow older reading proficiencies and deficits become more complex and, as a result, harder to remediate. Youth that struggle with reading start to have behaviors that interfere with appropriate assessment of overall problems. Decades of research show that behavior problems are associated with reading problems (Daal, Verhoeven, & Balkom, 2007, Harris, Baltodano, Artiles, & Rutherford, 2006, Rivera, Al-Otaiba, & Koorland, 2006, Leone, et al. 2005). A recent study by Daal and associates found that phonology problems were associated with external behaviors specifically aggressive and delinquent behavior problems in five year olds (2007). If appropriate reading and language assessment and intervention are not implemented early, often behavior problems overshadow academic deficits.

School is both an academic and social setting and reading encompasses the student’s social and cultural understandings of the world especially when addressing the semantics or meaning of words compared to the social and cultural understanding of the school in the use of language to communicate. Frustrated readers are more likely to give up and seek alternative definitions of what school is for. School can become a focus for developing social, athletic, or anti-social networks that have more meaning and value to students who fail or struggle academically. For instance, if academic performance causes students to feel inadequate, one
reaction is to overcompensate socially. This can be accomplished through acting out or withdrawing. Delinquency becomes a different means of maintaining social status and successful relationships outside the expected norms. Students develop their identities through socialization with others. Some students who develop poor reader identities early on may choose to develop their social status by disassociating with academic success. Since their reading performance brings social stigma, they disengage from academic learning through reading. Students lack the foresight and understanding that failing to read will become a means of social isolation as they become adolescents and have opportunities to enter the work force or continue their education.

Students struggling academically get educational help if reading problems are recognized as well as the presenting behavior problems. In some systems, the learning disability (LD) category brings a set of services designed to improve students’ access to the general education content. In contrast, students who are identified as having emotional and/or behavior disorders (EBD) will likely receive a set of services designed to improve their behavioral outcomes with little attention and effort placed on building academic skills. From students’ perspectives, these labels identify them as being different, less capable, and less valued than other students.

Students often drop out to avoid the stigma of these labels, thus isolating them even more. By opposing schooling and the impact of schooling labels, students who drop out place themselves in direct opposition to the expected progression towards adulthood. Such resistance and opposition heightens their risk for internalizing and externalizing behaviors such as withdrawing, anxiety, depression, aggression, and delinquency (Daal, et al., 2007).

Extensive research with students with major behavior problems that stay in school show that EBD, language deficits, and reading is a prevalent area with correlations among them. 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. They also found four elements that were prevalent across all the studies: (a) students with language problems are at high risk for antisocial behavior; (b) students with language problems have high rates of behavior problems that often go undetected; (c) students’ antisocial behavior may increase over time; and (d) these characteristics affect interpersonal relationships with peers, authority figures, family, as well as society in general (Benner, Nelson, & Epstein, 2002). It becomes more difficult to detect reading skill deficits unless EBD or acting out youth are continuously academically assessed and interventions designed for this population.

In another study, researchers found that youth with limited skills in language functioning used more physical actions to solve interpersonal problems (Benner, et al. 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). Research consistently shows that incarcerated youth are several years behind non-incarcerated youth in reading achievement (Jerse, 1978; Brunner, 1993; Johnson, 1999; Foley, 2001). Close to 15 years of studies in juvenile justice continue to show averages that incarcerated 15/16 year old youth read at the fourth/fifth grade level (Brunner, 1993, Harris, Baltodano, Artiles, & Rutherford, 2006). In a longitudinal study, VanderStaay (2006) found that behavior and reading problems constitute major risk factors for continued involvement in delinquency. Also Brunner (1993) discusses 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). The overrepresentation of youth in the juvenile justice system with reading problems needs more in-depth exploring and a deconstructed of the relationship for better understand in designing interventions.

This study looks at youth that are past the early reading intervention stages (K-3) and have not been identified for special education services. I propose that youth are at a critical behavioral intervention stage when they are first incarcerated in local detention centers. This is another opportunity in the system to attend to the learning and language needs as well as the behavioral needs of youth who have not have received all of the supports they needed to be successful. These include youth who have behaviors that have escalated from school or family rule breaking of not following instructions or bothering others to a societal or law breaking cycle of physically acting out or violating others property. With early detection and intervention at this stage, some researchers suggest that we can divert further involvement in the justice system and increase engagement with their transition back to their schools or workforce (Brunner, 1993; Johnson, 1999; Foley, 2001, Leone et al., 2005, VanderStaay, 2006). To build such an intervention, we must know more about the specific reading and language skills that this set of youth bring to detention centers.

Method

Setting

The setting for this study was in a secure urban detention facility in the Southwestern United States. Within the juvenile justice system, there are two types of lock up facilities: corrections and detention. Corrections/long term facilities are where youth are locked up for extended periods of time for treatment and services. 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 consequences for their criminal offenses. McGlynn (2003) reported that, on average, youth had been detained nine times at the detention level before being sentenced to corrections. Youth have to break the law and the police have to present the referral or warrant to get the youth detained. Youth are then screen 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 70% stays detained and attends school within the facility.

Sample

This is a convenience sample of 47 juveniles among the 184 that were detained at this time. Research in correctional facilities is difficult to collect because the institutions focus is typically on controlling the behavior of the youth and reading assessments are limited with no universal academic standards of assessments. This make it problematic in study designs based on the difficulty in accessing these youth or having an educational focus (Quinn, et al., 2005). The descriptive data is collected during intake from the detention center staff and are both 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 were combined with student performance on the reading assessment.

Measurement

The academic assessment is *New Century Education* (2006), a computer generated assessment that rendered scores for reading levels in literal comprehension, inference, main idea, and vocabulary/language. The validity of the New Century assessment was compared to the Gates-MacGinitie Test of general reading achievement by the text manufacturers. The test manual reports that a mean grade equivalent was run with both and the difference was significant with a modest effect size \[ t (184) = 3.35, p = .001, d = .48 \] using a one-way repeated measure analysis of variance on 186 third and fourth graders. New Century gave a slightly higher mean average 3.6 to 3.24 and 4.47 to 4.12. The relationship was examined with a substantial linear association using Pearson Product \( r = .76 \) (\( p =< .001 \)) concluding, that it is likely a valid instrument is measuring general reading levels slightly inflated. F. J. Boster (personal communication to Jim Griffin, April 19, 2004). New Century is an integrated instructional system that has been used throughout the country for over forty years. The reading curriculum is based on the state standard and uses 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 in the detention school.

The assessment measures four elements of reading: literal comprehension, inference, main idea, and vocabulary/language. Items range in difficulty from lower grade levels to higher. At the initial stages of the test, the participant sees and hear questions that measure their overall reading abilities. For example they will hear a word and decide from a list of words what one it is. They will read passages and answer relative questions to the meaning. As the test increases in
difficulty the test monitors the answers to give a basic starting point for reading instruction. The information is recorded in the detention school records and no other academic assessments are given.

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 this detention facility. The mean age was 16.2. The number of times youth in the sample were detained ranged from their first time up to 10 with a mean of 3.51. The number of referrals ranged from their first one up to 18 with a mean of 6.6.

These youth in detention widely vary in their experience in the juvenile justice system from early delinquency to extensive criminal histories and from low reading levels to very high (see Table 1 & 2). The youth in this study had been detained an average of 3.51 times and have a mean of 6.6 referrals. This is less than the average of 9 times detained as compared to the same geographic area research for those further in the justice system and in state corrections (McGlynn, 2003).

The mean reading levels were similar to the national finding that, on average, youth in corrections are reading at the 5th grade level (Leone et al., 2005, Harris, et al., 2006). The overall average reading grade level was 5.3 (5.85 literal comprehension, 5.19 inference, 5.22 main idea, and 4.94 language). However, as the descriptive statistics in Table 2 show, there was great variance in the tested reading levels of the 47 youth in the sample from what to what. 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, no significant
relationships were found between age, ethnicity, the number of times youth were detained, the length of their detainment and any of the reading components.

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. 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 on language were likely to have more referrals. There were no significant relationships among the other reading components (literal comprehension, inference, or main idea) with referrals.

Limitations

The research design was a snapshot of a small sample of male youth detained at one time. The results of only one reading assessment were used in the analysis. The reading assessment provides an overall level of reading achievement and not a specific assessment of individual components like language. The referral history was not broken down between warrants for violations of probation (breaking court mandates) and police referrals (breaking the law) which would define more intense behaviors and can only be defined as not following rules.

Discussion

This study found a relationship between youths’ prior history of referral to the juvenile justice system and language but not significant among literal comprehension, inference, or main idea. All of the reading components had a downward slope however language was more
prominent and significantly correlated with referral history (see Figure 1). This reconfirms the relationship with language and behaviors in adolescents and that it is significant at early stages of criminal behaviors. This research is similar to phonology being related to early external behavior problems and that even over time, and escalating behavior problems the language problems are constant.

Third grade is “pivotal” in reading achievement if youth are at grade level they are most likely to succeed in upper grades with reading (Rivera, Al-Otaiba, Koorland, 2006). Reading and language start early within the youths cultural system in their home where there may be little to no reading, it change to a formal teaching of reading in the school, and when not fully obtained becomes a limited tool in their lives. With reading problems, comes social isolation as they are lacking one of the acceptable forms of communication in society (Linares-Orama, 2005). For these youth, reading may be seen as a school activity so as they socially mature, they are limited in their use of reading in learning. This can continue through the grades and increase the social and psychological isolation from the school as a main place for learning. When reading is limited or not used the world of youth remains contained in limited social understandings.

For the youth in the study who have reached the behavior level of having to be physically isolated there needs to be more focus on reading and language interventions. There is limited research in the field of incarcerated youth and reading interventions 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). There need to be more at the early stages of juvenile justice involvement in detention. 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 a short intense intervention. They could not pinpoint the particular intervention component responsible for these gains but that significant improvement can occur with an intense reading program in a short term facility.

Designing specific reading programs in the short term facilities are seen as an early intervention for long term facilities as engaging at-risk readers in school programs are seen as an early intervention for short term facilities and delinquent behaviors. 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) language being a prominent one from the study. There is a need to continue to explore intense immersion in language instruction in detention and correctional facilities to possibly reduce future referrals. A top recommendation of research in correctional facilities 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). There is also a significant relationship between youth incarcerated with below grade level reading and recidivism and Brunner (1993) asserts that there is ample evidence to show a link between recidivism and reading problems. Teaching language skills will not correct behavior problems as there are more ecological aspects to youth. More studies need to be done in exploring the connection especially at early stages as the research shows a connection with reading/ language deficits and behavior problems/ increased crime.
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>
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<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<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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<td>Referral History</td>
<td>1</td>
<td>18</td>
<td>6.60</td>
<td>4.41</td>
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### Table 2
*Reading Grade Equivalent Levels on the New Century Assessment for the sample of 47 detained youth*

<table>
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<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
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<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>
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### 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>
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<tr>
<td>Literal Comprehension</td>
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</tr>
<tr>
<td>Inference</td>
<td>-.11</td>
<td>.07</td>
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<tr>
<td>Main Idea</td>
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<td>.04</td>
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<tr>
<td>Vocabulary/ Language</td>
<td>-.31*</td>
<td>-.44*</td>
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*p<.01*
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<tr>
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<th>Inference</th>
<th>Main Idea</th>
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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