Detained and committed youth: Examining differences in achievement, mental health needs, and special education status

Michael P. Krezmien
*University of Massachusetts - Amherst*

Candace A. Mulcahy
*Binghamton University--SUNY, cmulcahy@binghamton.edu*

Peter E. Leone

Follow this and additional works at: https://orb.binghamton.edu/education_fac

Part of the *Education Commons*

Recommended Citation
Krezmien, Michael P.; Mulcahy, Candace A.; and Leone, Peter E., "Detained and committed youth: Examining differences in achievement, mental health needs, and special education status" (2008). *Teaching, Learning and Educational Leadership Faculty Scholarship*. 1.
https://orb.binghamton.edu/education_fac/1
Detained and Committed Youth: Examining Differences in Achievement, Mental Health Needs, and Special Education Status

Michael P. Krezmien
University of Massachusetts at Amherst

Candace A. Mulcahy
Binghamton University, SUNY

Peter E. Leone
University of Maryland

Abstract

Currently, there is limited research about the relationship between academic, mental health needs, and special education status among populations of incarcerated youth. Additionally, little is known about differences between special education and general education students, or about differences between detained and committed populations. This article reports the results of an investigation of the academic achievement, mental health history, and special education status of 555 detained and incarcerated boys in one mid-Atlantic state. Descriptive data and results from a logistic regression analysis are reported. We found that mean standard scores of participants on standardized achievement tests were one standard deviation below the population mean. We also found high rates of participants with disabilities, and high rates of participants reporting prior therapy and prior use of psychotropic medication. In addition, we found that student academic and mental health characteristics obtained through an intake screening protocol were predictive of special education status, but not of placement in detention or commitment settings. Finally, we found that African American students had a significantly higher risk of being committed than Caucasian students. Implications for future research and practice are discussed.

Special education service delivery rates in juvenile corrections settings are as high as seven times the rates in public school settings (Quinn, Rutherford, Leone, Osher, & Poirier, 2005). In addition, detained and committed youth experience higher rates of academic underperformance, school failure, and identification of mental health needs than their peers in the community (Cocozza, 1992; Cocozza &

Correspondence to Michael P. Krezmien, University of Massachusetts at Amherst, School of Education, Room173, Hills House South, Amherst, MA 01003; e-mail: krezmien@gmail.com.
Researchers have identified high rates of mental health needs among incarcerated youth (Cauffman, 2004; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002; Wasserman, Ko, & McReynolds, 2004), but they have not examined the academic abilities of these youth in the context of mental health needs and special education status.

Additionally, there is a dearth of research examining whether youth in detention facilities awaiting adjudication exhibit different characteristics from those placed in commitment facilities. Knowing more about the academic, mental health, and special education needs of youth in juvenile corrections facilities is critical to the planning, development, and delivery of effective special education and related services. Understanding differences between characteristics of youth in detention and commitment placements is also essential for allocation of resources for special education and related services to short-term and long-term facilities based upon documented needs.

Recently, investigators have used diagnostic instruments to identify specific psychiatric disorders among delinquent populations (Atkins et al., 1999; Cauffman, 2002; Duclos et al., 1998; Garland, Hough, McCabe, Yeh, Wood, & Aarons, 2001; Randall, Henggeler, Pickrel, & Brondino, 1999; Teplin et al., 2004). None of the studies however, determined if youth were eligible for services as disabled students under the Individuals with Disabilities Education Improvement Act of 2004 (IDEA, 2004) nor have they examined the relationship between mental health needs and academic achievement. The absence of information about special education eligibility is problematic because disability status under the IDEIA directly affects students’ access to mental health care and can provide a statutory entitlement to mental services for students in public schools and in juvenile corrections settings (20 U.S.C. 1401 et seq.).

**Current Knowledge about Detained and Committed Youth**

Several researchers have examined the mental health symptomology of juvenile detainees. Teplin and her colleagues (2002) used the Diagnostic Interview Schedule for Children (DISC) with a sample of more than 1800 youth aged 10 to 18 in juvenile detention in Cook County, Illinois, and reported that approximately two thirds of the males met diagnostic criteria for one or more psychiatric disorders. Similarly, Cauffman (2004) used the Massachusetts Youth Screening Instrument (MAYSI – 2) in 15 detention centers throughout Pennsylvania. She found high rates of mental health problems among the more than 18,000 youth assessed. Atkins and her colleagues (1999) found comparable levels of psychopathology (as measured by the DISC) among youth detained in South Carolina youth and youth re-
ceiving community-based mental health services. Wasserman et al. (2002) used the Voice DISC and found high levels of disruptive disorders, anxiety disorders, and mood disorders in a sample of 292 males in secure placements in New Jersey and Illinois.

Numerous investigations have documented the high rate of special education identification among incarcerated youth; a disproportionate number are identified as having emotional or behavioral disorders and learning disabilities (Bullock & McArthur, 1994; Lin- ares-Orama, 2005; Quinn, Rutherford, Leone, Osher, & Poirier, 2005; Rutherford & Nelson, 2005; Rutherford, Nelson, & Wolford, 1985). Few studies have examined academic performance of youth involved in the juvenile justice system (Brunner, 1993). Understanding academic performance of youth in corrections is important for two reasons. First, in order to be identified with a disability under the IDEIA, the impairment must have a demonstrable negative impact on academic achievement. Second, poor academic performance contributes to behavior problems which may lead to disciplinary exclusions, school failure, and drop out (Brunner, 1993; Krezmien et al., 2008; Leone, Krezmien, Mason, & Meisel, 2005). Adolescents with mental health needs who are no longer enrolled in school have diminished access to the services and supports available under the IDEIA and Section 504 of the Rehabilitation Act.

The recent studies of detained and committed youth have contributed to our understanding of the scope and magnitude of psychiatric disorders among youth in secure settings as well as the number of incarcerated special education students. However, there is still a paucity of research examining the relationship between individual student educational characteristics and the mental health needs of detained and incarcerated youth. Understanding the complex academic, special education, and mental health needs of incarcerated youth is critical for the development of comprehensive treatment programs, and may also inform effective transition planning, which could include re-entry to public schools.

Special Education in Juvenile Corrections Settings

Special education provides two distinct services in juvenile corrections settings. First, special educators provide highly specialized, individualized academic instruction and supports to promote academic growth in basic skills and content areas. Second, special education is a major vehicle for access to and delivery of behavioral and mental health services for incarcerated youth. The IDEIA provides a statutory entitlement to these services for eligible students in public schools and in juvenile corrections (20 U.S.C. 1401 et seq.).

Under the IDEIA, special educators work in conjunction with
related service providers to implement systematic behavioral support systems and to provide counseling, individual and group therapy, medication, and other associated services to promote mental health and appropriate social adjustment. Juvenile corrections service providers are charged with accurately identifying youth with special education or mental health needs, and must provide required services without delay to children with identified needs under the IDEIA of 2004 and Section 504 of the Rehabilitation Act of 1973.

Accurate identification of special needs youth in corrections settings is difficult because many incarcerated youth were not attending school at the time of arrest, and may have been out of school for long periods prior to incarceration (Leone, Krezmien, Mason, & Meisel, 2005). As a result, facilities may be unable to retrieve school transcripts, special education records, and related documents. Without accurate records obtained in a timely manner, facility personnel may be unable to identify the academic, behavioral, medical, or therapeutic needs of youth in custody. Additionally, there are students who have never been identified as having a disability, but who meet the criteria for special education eligibility under one or more of the 13 disability categories. Appropriate identification of these youth (commonly known as Child Find) is required under the IDEIA, and should provide access to additional direct and related services. Failure to identify special education students and students with mental health needs will cause a lapse in service for those who received services prior to incarceration, and may have serious and deleterious implications for all eligible youth held in custody. Furthermore, failure to identify students with disabilities violates the Child Find provision of the IDEA and may place an agency out of compliance with state and federal mandates and at risk for legal action.

**Intake Screening Measures**

Professionals at juvenile corrections facilities may improve the likelihood of accurately identifying students eligible for special education services for academic, behavioral, medical, and/or mental health needs by using comprehensive screening procedures during the intake process. An appropriate and useful screening protocol should include: (a) an interview that allows personnel to obtain information about a student's current and past educational, medical, and mental health status; and (b) a standardized, norm-referenced educational assessment battery. Information from the intake screening protocol can be used to identify academic and mental health needs and prior special education status. Additionally, the screening protocol can help to identify students who may require special education services. In
juvenile corrections facilities, staff should initiate Child Find screening procedures at intake because youth have varying, and often short lengths of stay (Snyder & Sickmund, 2006). Without prompt initiation of the Child Find procedures and subsequent referral to the special education system, youth may exit the facility without appropriate special education identification. This is particularly important in detention settings where short lengths of stay require timely referral procedures.

*Detention and Commitment Placements*

Although detention and commitment facilities differ in numerous ways, little is known about the existence of differences between detained and committed youth. We found no studies that examined differences in educational and mental health characteristics between detained and committed populations. Nonetheless, detention and commitment facilities generally differ with regard to the types and intensity of services available to incarcerated youth. The term “detention facility” typically refers to a temporary secure placement used for holding youth who have not yet been adjudicated delinquent or who are awaiting court-mandated placement in a long-term facility. On the other hand, a “commitment facility” is a long-term court-appointed secure placement for youth who have been adjudicated delinquent.

Because most youth in detention facilities are incarcerated for relatively short stays, facilities typically tailor instructional and mental health programming for a transient, highly variable population of students (Leone, et. al., 2005). Youth often leave these placements before educational records are obtained from their previous school. Youth in detention are held on average for only 15 days (Snyder & Sickmund, 2006). Instruction typically focuses on basic skill and career/vocational services (Nelson, Leone, & Rutherford, 2004). Detention facilities also typically offer limited mental health services, which may adversely affect a number of students with serious mental health problems.

In 2004 the U.S. House of Representatives Committee on Government Reform reported that one quarter of detention facilities reported no or poor quality mental health services, and over half reported inadequate levels of training to provide appropriate supports. In recent years, the United States Department of Justice has investigated numerous complaints about lack of mental health and other services for incarcerated youth. Findings from those investigations have revealed egregious violations in the area of mental health services in juvenile corrections facilities in 16 states (US Department of Justice, 2008). Problems identified ranged from inadequate screening, identi-
fication, and assessment to inappropriate case management, treatment planning, provision of therapy, and deficient psychotropic medication management. In many cases, the investigators noted insufficient or unqualified staff providing mental health services, while in other cases, no mental health staff existed at all (Acosta, 2004a, Acosta, 2004b; Boyd, 2003; Patrick, 1994; Pinzler, 1997; Schlozman, 2005).

In contrast, education programs in some commitment facilities, where lengths of stay average 105 days (Snyder & Sickmund, 2006), mirror public school programs. These facilities provide content area coursework coupled with individualized instruction for students who require special education services (Nelson, et al., 2004). Youth commitment facilities generally provide a greater array and more intensive mental health and behavioral services than detention facilities.

Greater and improved access to mental health services for these children may decrease the risk for repeated encounters with juvenile corrections and future involvement with the adult corrections system. In order to develop effective mental health care programs, researchers from the fields of psychiatry, psychology, criminal justice, and education must investigate the psychiatric and educational factors related to mental health status of incarcerated youth and the current systems of support available to them. Information about the prevalence of psychiatric disorders and behavioral needs of incarcerated youth is essential for the implementation of quality intake screenings and for the development of effective mental health treatment programs in detention and commitment facilities. Nevertheless, if facilities do not have information about the type and severity of youth educational and mental health needs, the quality of available services will be compromised.

Purpose

The purpose of this investigation was to determine if information obtained from detained and incarcerated youth at intake can predict (a) special education status and (b) placement in a detention or commitment setting. Considering that special education is a primary provider of behavioral and mental health treatments in detention and commitment settings, we believe that knowing the educational characteristics and mental health histories of incarcerated youth is critical for understanding youth needs and developing comprehensive treatment programs. We also believe that understanding differences in the characteristics of detained and committed youth will have important implications for the development and delivery of appropriate special education and related services to youth.
Method

We used descriptive and statistical procedures to understand achievement levels, mental health needs, and special education status of incarcerated youth. We employed the logistic regression model to explore the extent to which participant information obtained through the intake procedure predicted special education status and placement. Logistic regression answers the same questions as discriminant function analysis, but it can handle both categorical and continuous variables (Tabachnick & Fidell, 2001). Special education status was the criterion for the first logistic regression analysis, and general education was the reference group because it was the larger category. Math achievement, prior therapy, prior psychotropic medication use, placement (in detention or commitment setting), age, and race were entered as predictors. For Race as a predictor, African American was the reference category because it was the largest group. In the model, each of the other racial categories was compared to the African American category. Placement was the criterion variable for the second logistic regression analysis, and the committed students represented the reference group because they were the larger category. Math achievement, prior therapy, prior psychotropic medication use, special education status, age, and race were entered as predictors.

Sample

This study used data from an intake protocol conducted with 555 participants incarcerated in an all-male juvenile corrections facility located in the mid-Atlantic region of the United States. The facility housed participants who were detained ($N=187$), and participants who were committed ($N = 368$). Although the sample came from a single secure campus, the commitment program was the only state-operated commitment facility for the State, so the sample is to a large extent, representative of the entire state. In this state there are also a small number of youth committed to publicly and privately operated alternative settings. The detention program was one of several in the state. Data used in this investigation were collected by trained graduate research assistants and a trained diagnostician in the facility. Data were collected on all youth who entered the facility over a seven-month period. Each participant was assigned a random code to ensure confidentiality. For the logistic regression analyses, participants with missing data were excluded, resulting in a sample of 521 participants (350 committed and 171 detained).
Instruments

**Intake interview.** The intake interview was a researcher-constructed set of questions adapted from interview protocols currently used at intake at other state-level juvenile corrections facilities. The interview was conducted in conjunction with a battery of academic intake assessments, and was consistently conducted within one week of student entry to the facility. The interview included questions about school history (retention, drop-out, alternative placements, subjects, special education, etc.), mental health history, prior involvement with the juvenile justice system, history of disciplinary removal from school, job experience, future goals, primary language, etc. Only the questions regarding mental health history were included in this article. The graduate research assistants and the diagnostician were observed multiple times by the first and second authors to ensure that the assessments and interviews were conducted correctly.

**Reading and Math Achievement**

Students in the commitment programs were administered reading and math subtests of the Woodcock-Johnson III Test of Achievement (WJ-III). Students in the detention program were administered the math subtests of the WJ-III and the Gray Silent Reading Test (GSRT). The use of the GSRT for reading in detention rather than the WJ-III was a decision of the administrators of the participating facility because they believed the GSRT was easier to administer with the highly mobile detention program. As a result, only the math portion of the WJ-III was administered to both the detained and committed participants. Therefore, we used the reading and math measures in the descriptive analyses, but we only used math measures in our logistic regression analysis.

The WJ-III is a standardized, individually administered achievement test that was nationally normed using a representative sample that controlled for bias due to race and ethnicity for all ages (Cizek, 2004; Sandoval, 2004). Each WJ-III subtest administered has a reliability of .86 or higher (McGrew & Woodcock, 2001). The Gray Silent Reading Test (GSRT) is a standardized measure of reading comprehension. The instrument was normed on individuals ages 7-25, and controlled for bias due to race and ethnicity for ages included in this investigation. The test has a reliability of .85 and higher for internal consistency, test-retest, inter-rater, and alternative forms reliabilities (Keller, 2004). Composite standardized math scores from the WJ-III represented achievement in the logistic regression because it was administered in both settings.
Variables

Demographic variables. Information about age, special education status, and race was retrieved from existing facility administrative documents. For race, the state-level juvenile justice agency’s terminology and categorization was used. A participant was identified as a special education student only if: (a) the participating facility determined that the student had an active IEP that was received from a prior placement; or (b) if the facility obtained written verification from a prior placement that the student was receiving special education services although an IEP was unavailable. In all instances, a student’s disability category was obtained from the previous IEP or from the written verification from the prior placement.

Mental health. As part of the intake interview, students were asked if they had ever participated in group or individual therapy, and were asked to report the topics of discussion. Students were also asked if they were currently taking any medication and if so, what type. Only reports of psychotropic medications are reported here.

Results

Demographics

The mean age of students was 16.4 years (SD = 1.9), and was slightly lower in detention (Mean = 16.1, SD = 2.1) than in commitment (Mean = 16.5, SD = 1.9). Racial composition and special education status for detained and committed participants are reported in Table 1. Nearly 45% of the participants were enrolled in special education. Of this group, a majority were identified with an emotional or behavioral disorder (44%), with 26.4% identified with a learning disability, and 17% identified with an Other Health Impairment, a category that includes ADHD.

Mean standard scores for math and reading assessments are reported in Table 2. Mean scores were low for special education and general education groups in both settings, although mean scores for special education participants were lower. Mean scores were also low for students from each racial group; although African American participants had the lowest mean scores. The standard deviations for the total sample were similar to the standard deviations of the normative sample, although the mean standard scores for each measure were about one standard deviation below the mean for the normative sample. The mean age equivalent scores indicate that detained and committed students were about four years behind their same-aged peers in the general population in reading and math.
### Table 1
**Percentages of Participants in Special Education and in each Racial Group by Placement**

<table>
<thead>
<tr>
<th></th>
<th>Detention  (N = 187)</th>
<th>Commitment  (N = 368)</th>
<th>Total  (N = 555)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education</td>
<td>44.4%</td>
<td>44.8%</td>
<td>44.7%</td>
</tr>
<tr>
<td>African American</td>
<td>54.3%</td>
<td>65.8%</td>
<td>61.9%</td>
</tr>
<tr>
<td>Caucasian</td>
<td>37.1%</td>
<td>20.7%</td>
<td>26.2%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>4.3%</td>
<td>8.2%</td>
<td>6.9%</td>
</tr>
<tr>
<td>Mixed</td>
<td>3.2%</td>
<td>3.3%</td>
<td>3.2%</td>
</tr>
<tr>
<td>Other</td>
<td>1.1%</td>
<td>2.2%</td>
<td>1.8%</td>
</tr>
</tbody>
</table>

### Table 2
**Achievement Standardized Scores and Standard Deviations by Placement, Special Education Status, and Race**

<table>
<thead>
<tr>
<th></th>
<th>Detention  (N = 187)</th>
<th>Commitment  (N = 368)</th>
<th>Total  (N = 555)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Math - WJ-III</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
<td>Mean (SD)</td>
</tr>
<tr>
<td>General Education</td>
<td>88.6 (16.0)</td>
<td>86.0 (13.1)</td>
<td>85.9 (14.1)</td>
</tr>
<tr>
<td>Special Education</td>
<td>76.4 (12.1)</td>
<td>74.6 (14.1)</td>
<td>75.2 (13.5)</td>
</tr>
<tr>
<td>African American</td>
<td>78.9 (15.4)</td>
<td>80.0 (14.8)</td>
<td>79.7 (15.0)</td>
</tr>
<tr>
<td>Caucasian</td>
<td>84.9 (13.6)</td>
<td>83.0 (13.5)</td>
<td>83.9 (13.5)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>88.4 (15.3)</td>
<td>79.5 (13.1)</td>
<td>81.2 (13.8)</td>
</tr>
<tr>
<td><strong>Reading - WJ-III</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>83.7 (16.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Education</td>
<td>88.0 (13.6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Education</td>
<td>78.2 (17.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>81.0 (16.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>91.9 (14.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>85.0 (12.1)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reading - GSRT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>86.4 (16.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Education</td>
<td>91.6 (14.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Education</td>
<td>79.6 (15.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>83.4 (15.8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>90.3 (15.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hispanic</td>
<td>88.4 (20.0)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Multi-racial and Other categories were excluded because of small numbers in each group.
Prior History of Therapy and Medication Use

Over 40% of the sample reported participating in therapy prior to their current detention or commitment, with a higher percentage of special education participants (55.1%) reporting prior therapy than general education participants (33.3%). About 29.5% of the sample reported prior use of psychotropic medications, with a higher percentage of special education participants (39.5%) reporting prior psychotropic medication use than general education participants (21.5%). Differences in percentages between detained and committed participants were small.

Logistic Regression Analysis

Special education status. The model for the first analysis was significant ($X^2 (df = 9) = 127.0, p < .001$), indicating differences between the special education and general education groups. Table 3 displays the $B$ coefficients, the odds ratios and the 95% confidence intervals for the odds ratios for each predictor in the model. The Wald test is the test of significance for the logistic regression model. Examination of the odds for each predictor allowed us to examine the relative importance of specific variables in predicting special education and general education status. The odds ratios represent the odds for special education students compared to general education students (the reference group). Prior therapy, prior psychotropic medication use, and achievement were each predictive of special education status. The odds of reporting prior therapy and prior psychotropic medication use were significantly higher for the special education students than for the general education students. The odds for achievement were significantly lower for the special education students than for the general education students. Age, race, and placement were not predictive of special education status.

Placement. The second model was significant ($X^2 (df = 9) = 26.3, p < .01$), indicating differences between the detention and commitment groups. Table 4 displays the $B$ coefficients, the odds ratios and the 95% confidence intervals for the odds ratios for each predictor in the model. In the model, age and race were predictive of placement. The odds ratios represent the odds of participants being in the detention setting compared to the commitment setting (the reference category). The odds for age were significant; however, the upper limit of the 95% interval approaches 1.0, limiting the interpretability of the finding. The Wald statistic for African American students was significant, indicating that Race is predictive of placement. The odds ratios for the other racial groups represent the odds for each racial group being in the detention setting compared to the African American group.
Table 3
Logistic Regression Analysis Predicting Special Education Status by Student Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>B-coefficient</th>
<th>Wald</th>
<th>Odds</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placement</td>
<td>0.15</td>
<td>0.46</td>
<td>1.16</td>
<td>(0.75 - 1.78)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.03</td>
<td>0.22</td>
<td>0.98</td>
<td>(0.88 - 1.08)</td>
</tr>
<tr>
<td>Race (AA)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>-0.43</td>
<td>4.45</td>
<td>0.65</td>
<td>(0.28 - 1.52)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-0.94</td>
<td>2.52</td>
<td>0.39</td>
<td>(0.12 - 1.25)</td>
</tr>
<tr>
<td>Multi-racial</td>
<td>0.78</td>
<td>0.89</td>
<td>2.19</td>
<td>(0.43 - 11.10)</td>
</tr>
<tr>
<td>Other</td>
<td>-0.09</td>
<td>0.13</td>
<td>0.92</td>
<td>(0.57 - 1.47)</td>
</tr>
<tr>
<td>Medications</td>
<td>1.00***</td>
<td>18.7***</td>
<td>2.71</td>
<td>(1.73 - 4.27)</td>
</tr>
<tr>
<td>Therapy</td>
<td>0.77***</td>
<td>13.58***</td>
<td>2.16</td>
<td>(1.43 - 3.25)</td>
</tr>
<tr>
<td>Achievement</td>
<td>-0.07***</td>
<td>63.54***</td>
<td>0.94</td>
<td>(0.91 - 0.95)</td>
</tr>
</tbody>
</table>

*** Significant to the p < .001 level

Table 4
Logistic Regression Analysis Predicting Placement by Student Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>B-coefficient</th>
<th>Wald</th>
<th>Odds</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education</td>
<td>-0.12</td>
<td>0.32</td>
<td>0.88</td>
<td>(0.58 - 1.35)</td>
</tr>
<tr>
<td>Age</td>
<td>-0.12</td>
<td>5.19**</td>
<td>0.89</td>
<td>(0.81 - 0.98)</td>
</tr>
<tr>
<td>Race (AA)</td>
<td></td>
<td>15.53**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>0.76</td>
<td>12.14***</td>
<td>2.14</td>
<td>(1.40 - 3.29)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>-0.51</td>
<td>1.32</td>
<td>0.60</td>
<td>(0.25 - 1.43)</td>
</tr>
<tr>
<td>Multi-racial</td>
<td>0.23</td>
<td>0.20</td>
<td>1.26</td>
<td>(0.45 - 3.51)</td>
</tr>
<tr>
<td>Other</td>
<td>-0.20</td>
<td>0.06</td>
<td>0.82</td>
<td>(0.16 - 4.25)</td>
</tr>
<tr>
<td>Medications</td>
<td>0.36</td>
<td>2.68</td>
<td>1.43</td>
<td>(0.93 - 2.22)</td>
</tr>
<tr>
<td>Therapy</td>
<td>-0.33</td>
<td>2.52</td>
<td>0.72</td>
<td>(0.47 - 1.08)</td>
</tr>
<tr>
<td>Achievement</td>
<td>-0.00</td>
<td>0.31</td>
<td>0.99</td>
<td>(0.98 - 1.01)</td>
</tr>
</tbody>
</table>

* Significant to the p < .05 level
** Significant to the p < .01 level
*** Significant to the p < .001 level
EXAINING DIFFERENCES

457

... the reference category. The odds of White students being placed in the detention settings were 2.14 times the odds of African American students, although the 95% confidence interval for the odds ratio was large. This finding also indicates that African American participants were more likely to be placed in the commitment settings than in detention settings when compared to White participants. None of the other variables were predictive of placement.

Discussion

In this investigation, we examined participant educational and mental health information obtained through an intake screening protocol, and found that student academic and mental health characteristics were predictive of special education status but not of placement. Results from our investigation indicate serious academic and mental health problems among this population of incarcerated participants, consistent with current research. For example, we found severe deficiencies in academic achievement, consistent with the findings of Brunner (1993) and Foley (2001). We found high rates of students identified with disabilities, particularly EBD, consistent with findings reported by Quinn and her colleagues (2005), and we found high percentages of students who reported a history of mental health problems, consistent with prevalence rates reported by Atkins and colleagues (1999), Cauffman (2004), Teplin and colleagues (2002), and Wasserman and colleagues (2004). However, in this study we collected comprehensive achievement data as well as student-reported mental health, medication, and special education data. As a consequence, the findings from this study are unique and add to our knowledge of the characteristics of detained and committed students and enhance our understanding of the prevalence of mental health needs among incarcerated boys.

Our results regarding the racial composition of the population were consistent with those of Snyder and Sickmund (1999) and Quinn et al. (2005) respectively. We found nearly two thirds of the students in the facility were African Americans, but the ratio of African American students to Caucasian students was higher in the committed placements than in the detention placements. In fact, we found that Caucasian students represented 37.1% of the detention population, but only 20.7% of the committed population. In contrast, the percentages of African American and Hispanic students in the committed population were higher than in the detention population. Furthermore, our logistic regression analysis revealed significant differences between Caucasian and African American students with respect to placement in detention or commitment programs. These findings are troubling as they suggest that African American students receive more severe
sanctions than their Caucasian peers. Although we did not have information about the adjudicatory proceedings, the findings point to possible racial inequity in the juvenile justice process.

We also found severe deficiencies in academic achievement, consistent with the findings of Brunner (1993) and Foley (2001). However, the findings represent the first research-based comprehensive academic assessment of incarcerated youth using a reliable and valid instrument in nearly 30 years. The extremely low standard scores on the reading and math tests reveal substantial academic limitations of court-involved youth. They also highlight a continuing problem confronting juvenile corrections educators charged with helping youth make academic gains in content areas despite glaring deficiencies in basic academic skills. The findings emphasize the need for juvenile corrections facilities to provide powerful empirically validated reading and math remediation programs that supplement the core curriculum in the content areas. Without these supports, incarcerated youth will likely be unable to obtain high school credits, a high school diploma, or a GED.

We found the percentage of participants identified for special education in our sample was consistent with those found by Quinn and her colleagues (2005). The percentage of youth receiving special education services in juvenile corrections is extremely high in comparison to those of public schools, which typically serve about 10% of the student population. Nearly 50% of special education students in the facility were identified with emotional behavioral disorders (EBD), students typically requiring substantial services for behavioral and mental health needs. We found higher rates of students with EBD in the detained population than in the committed population, which emphasizes that students in detained settings have comparable needs as those youth in committed placements.

The first logistic regression analysis revealed that educational achievement, prior participation in therapy, and prior psychotropic medication use were predictive of special education status. The odds of being in the special education groups associated with achievement, prior participation in therapy, and prior psychotropic medication use highlight the complex educational and mental health problems of incarcerated youth with disabilities. This is not surprising considering that nearly half of the special education students were identified with an EBD. By definition, these students have serious academic, social, and behavioral problems.

The second analysis revealed that our model was predictive of placement, but all of the difference between the groups was attributed to race, and to a lesser extent age, as predictors. We found that
EXAINING DIFFERENCES

The academic and mental health characteristics were not predictive of placement. The results suggest that there were no differences in the complex academic and mental health needs of detained or committed youth. This discovery has implications for detained youth who may not be receiving adequate services because detention facilities typically do not provide adequate mental health screening or care (Acosta, 2004a, Acosta, 2004b; Boyd, 2003; Patrick, 1994; Pinzler, 1997; Schlozman, 2005, US Department of Justice, 2005). In addition, this finding highlights the need for timely and comprehensive intake procedures in detention facilities to identify youth who may require special education and mental health services.

The prevalence of academic and mental health problems among the general education sample may have important implications as well. We hypothesize that the high rates of academic underachievement, reports of prior therapy, and reports of prior psychotropic medication in this group use may be due to students who were not accurately diagnosed with a disability, or who had inaccurate or missing records. Many of the participants in the general education group had concomitant mental health problems and severe academic deficiencies which may make them eligible for special education services under the emotional disturbance category if systematic Child Find procedures were implemented and the special education referral process were followed.

Limitations and Implications for Future Research

The information regarding prior participation in therapy and use of psychotropic medications was obtained from student self-reports. The use of self-report raises some concerns about the validity of causal conclusions because of systematic response distortions, and issues with obtaining accurate data from students. Since the interview was developed to obtain the data presented in this study, there was no way to verify the accuracy of the data. Additionally, we only examined reports from a sample of males which prevents generalization across gender. The detention portion of the sample represents only one of several detention facilities from the State, and may not adequately represent the characteristics of detained youth from the broader population of detained youth in the State. Finally, the lack of reading scores across populations (detention and commitment) restricts our analysis of academic achievement.

Future research should investigate the efficacy of comprehensive mental health screening procedures as part of the student academic intake process. Studies should be conducted to identify (a) prevalence of students identified as needing special education services following
comprehensive intake procedures and systematic Child Find process; (b) the extent to which students with special education and mental health needs receive those required services from juvenile corrections agencies; and (c) outcomes of students who receive mental health and special education services as a result of identification through a comprehensive intake process. Research should also investigate the mental health and special education needs of girls who are detained and committed.

Researchers from the fields of psychiatry, psychology, criminal justice, and education should begin a cooperative effort to better understand the complex mental health and academic needs of detained and incarcerated youth, to understand the mechanisms for service delivery under the direct care and special education systems, and to develop comprehensive assessment and mental health care programs to improve mental health care for incarcerated youth.

Conclusions

In light of our findings, it is clear that special educators and related service providers at juvenile corrections facilities must have the tools to accurately identify (a) students currently involved in the special education system, (b) students with histories of academic and/or mental health problems, and (c) students who may need to be referred for special education and related services. The findings from this study suggest that an intake protocol that includes achievement assessments and an interview that identifies previous mental health problems and medication use is critical for screening special education and mental health needs of incarcerated youth.

We believe that the use of a comprehensive screening protocol at intake will help facilities with accurate identification. Considering the difficulty these and other facilities have in obtaining accurate student records in a timely manner, the intake screening measure may be critical for insuring that students receive required services with a minimal lapse in delivery. Although a screening protocol cannot replace records, it can help personnel to identify at-risk youth. Students who perform poorly on educational assessments and/or report histories of special education or mental health services can be targeted for additional mental health screenings, pre-referral academic and behavioral interventions, and a more aggressive search for information from parents, guardians, or schools. Facilities may need to initiate Child Find procedures for these students. This process may lead to special education eligibility and subsequent services and supports. Collecting this information at intake will likely increase the accurate identification of student needs, improve and accelerate the delivery of
educational and mental health services, and insure that facilities are aligned with the requirements of the IDEIA (2004) and Section 504 of the Rehabilitation Act (1973). This study also highlights the need for comprehensive mental health services in both detention and commitment facilities. Planning and delivering behavioral and mental health treatment should be a coordinated activity that involves special educators, general educators, and clinicians other related service providers to ensure that youth receive comprehensive, mental health and education services tailored to their individual needs.

Notes
1 Detained youth are those awaiting a hearing, the juvenile court version of a trial, before a magistrate or juvenile court judge. Detained youth may also include youth who have had an adjudicatory hearing and are waiting to be placed in a residential program. In contrast, committed youth are those who have been placed in a residential setting following a juvenile court hearing. Detention is generally a short-term placement that may last from a few days to several months. In contrast, commitment typically involves a placement of more than three months to as long as several years.

References


Individuals with Disabilities Education Act (IDEA), 20 U.S.C. § 1401 et. seq.; 34 C.F.R. § 300 et seq.


Sandoval, J. (2004). Test review of the Woodcock-Johnson III. From B. S. Plake & J.C. Impara (Eds.), *The fifteenth mental measurements yearbook* [Electronic version]. Retrieved December 7,
2005, from the Buros Institute’s Test Reviews Online website: http://www.unl.edu/buros.


