3 Reading Achievement, Suspensions, and African American Males in Middle School

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ABSTRACT

Associations between reading achievement and behavior, albeit problematic, are empirically supported in the literature. Although well documented, many of the studies were conducted outside of the school context using reading measures not typically aligned with school curricula. Furthermore, previous studies primarily document the existence of delinquent behavior without assessing outcomes of the behaviors. To provide more insight on this issue, this study examines the relationship of reading achievement and suspensions for African American males in the middle grades using four years of archival data from a large urban school district. Results show that the strongest relationship between reading achievement and suspensions occur at the end of sixth grade, while other indicators, depending on grade level, show strong relationships to suspensions, as well. Implications for these findings are discussed and SSR^2I, a literacy-based alternative to conventional suspensions, is introduced.

INTRODUCTION

Suspensions remain a key issue for public education. Over and again, African American males have been found to have the highest suspension rates in schools (Raffaele Mendez & Knoff, 2003; Skiba, Michael, Nardo, & Peterson, 2002). Unfortunately, rather than serve as a rehabilitative tool, repeated patterns of suspensions usually occur, often leading to higher dropout rates (Dupper, 1994). A number of factors have been linked to the disparate proportions of African American males being suspended, including cultural differences and differential treatment (Cooper & Jordan, 2003; Maag, 2001; Vavrus & Cole, 2002). Other factors related to suspensions include zero-tolerance policies, ineffective discipline practices, and a lack of male role models (Cooper & Jordan, 2003; McFadden, Marsh, Price, & Hwang, 1992; McGinnis, 2003; Rodney & Mupier, 1999; Skiba & Knesting, 2001; Stader, 2004).

Behavior modification is a key intention of suspensions, but in reality, suspensions are often related to repeat offenses (Bock, Savner, & Tapscott, 1998; Dupper, 1994). Atkins et al. (2002) noted that many students treat suspensions as rewards. These rewards can occur in the form of extended episodes of unsupervised periods, which as Gagnon and Leone (2001) suggest can also shift inappropriate behaviors from schools to communities. Therefore, more work needs to be done to curb suspensions, which not only affect schools, but greater communities at large.

BACKGROUND
Reading Achievement and Behavior

The debate over the existence of a relationship [and directionality] between reading achievement and behavior has been a topic of inquiry for several decades. Gellert and Elbro (1999) published a review of research on this issue, primarily focusing on European studies that dated back to the 1970s. In this review, the authors summarized the cross-sectional studies included in the review with four overarching themes, citing:

- "a high occurrence of behaviour [sic] problems in school children with reading disabilities…;
- A high occurrence of delinquents among young disabled readers…;
- A high occurrence of disabled readers among school children suffering from behaviour [sic] problems…; and
- A high occurrence of disabled readers among juvenile delinquents...(p. 138)."

Gellert and Elbro (1999) used longitudinal evidence to support a reciprocal causal relationship between behavior and reading disabilities, while also suggesting that alternative underlying factors may influence the relationship between reading ability and behavior problems as well. The authors graphically represented their findings by devising a model tracking the effects of behavior and reading readiness by focusing on three major periods: preschool/school entry, the first school years, and teenage years. A brief explanation of the model is provided.

The basic premise of the model suggests that *behavior problems* in preschool can lead to *behavior problems* in the first school years and teenage years. Behavior problems in the preschool years can also influence *reading skills* during the first years of schooling. Furthermore, *reading skills* in the first years of schooling is related to *reading skills* and *behavior* or *delinquency* in the teenage years. Lastly, the authors suggest that *reading readiness* in the preschool years influence *reading skills* in the later periods. Likewise, *reading skills* in the first years of schooling influence *behavior* and *delinquency* in the teenage years.

Based on Gellert and Elbro's (1999) review, statistical support linking reading disabilities in the first years of schooling and behavior problems at age 13-15 was noted. Connections between reading disabilities and delinquency at age 18 were affirmed as well. Although empirically supported, these conjectures were cited with reservation due to the lack of uniform design in the studies reviewed.

Similar to Gellert and Elbro (1999), Trzesniewski, Moffitt, Caspi, Taylor, and Maughan (2006) found a similar connection to reading achievement, as measured by the Test of Word Reading Efficiency, and behavior, as measured by mother and teacher reports for 5-7 year olds. In fact, antisocial behavior was strongly associated with lower reading achievement. Out of a sample of 1,116 families participating in the Environmental Risk Survey, negative correlations existed between reading achievement and antisocial behavior. When separated by gender, the authors found that the negative correlation between reading achievement and antisocial behavior was significantly stronger for boys. As with the Gellert and Elbro (1999) review, this study contained a sample of participants in two European countries.

While Trzesniewski's et al. (2006) study and Gellert and Elbro's (1999) review of research appropriately addressed the authors' intent, frame of reference, context, and demographic issues were noted as it relates to our study. Specifically, reading achievement was typically measured using commercially-available instruments and behavior was often captured using behavior scales or parent surveys. Behavior scales and parent surveys are certainly appropriate measures, but these indicators do not capture the perspective of the school. Furthermore, many [studies] were conducted in countries outside of the

United States, which may have similar or different norms or expectations for reading achievement and behavior. Lastly, of the studies cited or reviewed in Gellert and Elbro's review, our population of interest, African American males, were seldom represented in the samples. In our search to capture the perspective of the school, contextualize the setting to studies conducted in the United States, and find representative samples of our population of interest, we were more successful at contextualization than frame of reference or demographic identification.

A report on a single case study of a second grader in California provided the contextual match, but not the breadth of coverage on issues of reading and behavior. Ashcroft and Ashcroft's (2005) case provided evidence that the perception of improved reading achievement on the part of the child decreased unwanted negative behaviors such as inattentiveness and off-task behaviors, while increasing attentiveness, time-on-task, and overall demeanor. The authors attributed these improved behaviors to reinforcement of positive reading behaviors, increased intrinsic motivation to read, enhanced rapport with the researcher, and enhanced bonding with reading through decodable text. The authors concluded with a call for further investigation on the relationship between increased reading achievement and social outcomes.

Achievement and Behavior Trajectories

Crystallization of behavior and achievement patterns has been examined by several researchers. A key focus of crystallization usually rests with if and when patterns of behavior or achievement take shape. Using data from the National Survey of Youth, a longitudinal survey sponsored by the Department of Labor assessing mother-reported behavior of children, achievement, and labor conditions over 15 years, Kowaleski-Jones and Duncan (1999) examined crystallization of childhood behaviors during the middle years, spanning ages 6-13. Results showed that achievement in reading and math was typically curvilinear, noting that boys tended to vary in achievement patterns more than girls. Boys also showed more variability and resilience in behavior trajectories, suggesting that boys' behavior patterns tended to be less "fixed" and amenable to change, despite negative circumstances, whereas girls stabilized more over the middle years. This finding corroborated Eccles' (as cited in Kowaleski-Jones and Duncan, 1999) finding that achievement trajectories differ for girls and boys.

As previously mentioned, the relationship between reading achievement and delinquency or misbehavior is influenced by a number of factors. A recurrent underlying factor of interest is attention. Fleming, Harachi, Cortes, Abbott, and Catalano (2004) examined this

relationship more closely by developing a series of structural models to assess the types and levels of changes in reading scores and attention as a predictor of problem behavior in 7th grade. Using a sample of students from five elementary schools in the Pacific Northwest in grades 3-6, the authors found that by assessing growth in reading scores and growth in attention scores as separate models, they were able to explain 7% and 11% of the variance in problem behavior. Modeling reading and attention together resulted in 14% of the variance explained for problem behavior. While these estimates may appear statistically modest, as suggested by the authors, the potential for double digit reduction in behavior problems due to effective interventions is huge in a practical sense.

African American Males

The literature on the relationship between reading achievement and delinquency for African American males is limited. Of the previous studies cited, very few had large numbers of Black students in the samples. In a Pittsburgh study of urban Black and White males in first, fourth, and seventh grades, delinquency correlated with low reading achievement as measured by the California Achievement Test, a commercial battery endorsed by the school district under investigation (Maguin, Loeber, & LeMahieu, 1993). Although delinquency and lower reading achievement were related, the authors found no differences in ethnicity between Black and White males. Further analyses showed that when student attention problems were included, the relationship between reading achievement and delinquency went away. This finding affirms Gellert and Elbro's (1999) conclusions that an intervening variable may mediate the relationship between reading and delinquency.

It remains unclear exactly which variables mediate the relationship between reading achievement and behavior. The fact that reading achievement can be thought of as the mediator between other factors further complicates the task of providing clear relationships between reading achievement and behavior. For example, Stanton, Feehan, McGee, and Silva (2001) cited reading ability as the mediating factor between IQ and behavior problems. Maguin et al. (1993) sum the complexity of assessing the effects of reading achievement nicely by stating, "The relationship between reading and delinquency is complicated by a number of variables that are known to be associated with both reading performance and delinquency" (Reading and Delinquency section, ¶ 5). Some of the variables include personal and neighborhood socioeconomic status, family relationships, and attention problems.

PURPOSE

The lack of research on within group differences of reading achievement for African American males is rather substantial. Of the studies cited in the review, none studied African American males in isolation. Moreover, when studies are inclusive of African American males, deficit models (e.g. continually comparing black vs. white when achievement differences have already been well documented) rather than achievement models are regularly employed (see Harry & Klinger, 2007 or Stinson, 2006 for more information on deficit and achievement models).

For this study, we employed an achievement model or as we refer to it, a "surplus model" where we compared demonstrably strong African American male readers to less skilled African American male readers. We recognized the importance of between-group comparisons and cumulative assessments of conglomerate populations, but also felt that within-group analyses are equally and arguably more important in terms of targeted prevention/intervention techniques. Therefore, the present study employed a surplus model to provide more insight on the "spillover effects" of reading achievement differences for African American males. Our aim was to enhance the body of knowledge on reading achievement and suspensions among African American males.

African American males are continually underrepresented in academically gifted tracks and higher education, yet traditionally overrepresented in dropout data, special education, and prisons (Bureau of Justice Statistics, 2005; Ford, 1998, Grantham, 2004; Pettit & Western, 2004). As can be implied through a synthesis of the literature, we suggest that the relationship between 1) suspensions, 2) dropouts, and 3) prisons is temporally ordered. Similarly, reading achievement has been associated with all three aforementioned conditions, yielding hope for reductions in these conditions through reading enhancement. While dropouts and prison encounters were not a focus of this study, suspensions, an early indicator of the former were.

After completing the literature review and reflecting on this very contentious issue of suspensions, we found a few gaps; and as expected, more questions were raised. Particularly, we found a deficit in the literature regarding the impact of prior reading achievement, as measured by school districts, on suspension rates for African American males. Due to mere absence from school, suspensions can negatively affect academic performance; thus, we were curious to see if successful reading achievement was related to fewer suspensions among African American males. Since reading achievement is related to behavior, this conjecture makes conceptual sense, but there is not much empirical data to support this notion.

Lastly, most of the studies cited addressed between group comparisons, usually controlling for gender, attention deficits,

ethnicity, or some combination. Additionally, many of the studies reported in the review used commercialized measures of reading achievement that are typically decontextualized from the school. The present study assessed reading achievement, as measured by state-mandated standardized assessments, specific to African American males by evaluating how well reading scores predicted suspensions in the following year. Shifting the focus away from reading achievement and problem behaviors to reading achievement and suspensions provides more insight on the outcomes of problem behaviors, rather than solely documenting the existence of unwanted behaviors. We also set out to examine other school-based indicators and investigate the rank orders regarding magnitude of these variables as well, leading us to the following research questions.

1. Does reading achievement predict suspensions among African American males in middle school?
2. Do other demographic factors (disability, lunch status, previous suspensions) predict suspensions among African American males in middle school?

METHOD
Sample

This study was conducted using data from Wake County Schools, a large metropolitan school district serving more than 108,000 students in the southeastern region of the United States. Data were obtained through an application process with the Evaluation and Research Department for the district. Considering the research presented on achievement-behavior trajectories during middle childhood (see Fleming et al., 2004 and Kowaleski-Jones & Duncan, 1999), middle school was our focus. Four years of archival district data from 26 middle schools containing information on all African American males in grades 6-8 from 2001-2004 were used to conduct three years of analyses. Data from the school year beginning 2001 were used as baseline data to conduct the 2002 analysis. Subsequent yearly data were used as baseline data for the school years beginning 2003 and 2004. The overall sampling frame included all African American males in grades 6-8, which included 5th grade data to establish baselines. To ensure robustness of probability consistency across the range of predictors (Peng, Lee, & Ingersoll, 2002), students were selected using a 10% random sample, stratified by grade level for each school year. Thus, a 10% percent sample of the students in 6th grade during 2002 (*n*=612), 2003 (*n*=774), and 2004 (*n*=730) were selected using a random number generator, resulting in a total of 211 students for the 6th grade analysis. Using the same selection techniques for 7th grade during the school years ending 2002 (*n*=522), 2003 (*n*=683), and 2004 (*n*=811), 201 students were selected. Finally, 172 students were

selected in 8th grade based on sampling frames of 430, 581, and 711 during the 2002, 2003, and 2004 school years.

Measures

As noted in the research questions, prior reading achievement as a predictor of suspensions was a primary variable of interest. Standardized scores from the state end-of-grade (EOG) tests were used to assess prior reading achievement. The EOG reading test items were developed by teachers from across the state [selected by the state department] and field tested over 2 years with groups of 1300 or 1400 randomly selected students from across the state. The EOG tests are organized into four categories, cognition, interpretation, critical stance, and connections. Each item in the category is aligned to an objective from the state standard course of study in English/language arts. Test items were approved by the state department using the classical measurement model, item response theory statistics, and teacher comments, resulting in a developmental scale range of 228-290 for grades 5-8, with each grade level having a separate scale within the aforementioned range. For interpretation purposes, the developmental scale scores for each grade were converted into z-scores to assess standard deviations from the means. To account for any conditions that may be unique to an academic year, transformation of scores was completed before any sampling or combining of yearly data was carried out. As an aside, we focused on z-scores for four additional reasons: 1) the test was norm referenced, 2) clear guidance on how grade level norms were determined in each academic year was not available, 3) grade levels norms were often controversial in that standards were deemed too low in some circumstances, and 4) we wanted to focus on within-group differences.

The primary outcome variable of interest was whether or not the student was suspended in the following year. In addition to the reading scores at the end of the previous years, we used three categorical variables from the previous year to determine if school-based indicators predicted whether or not a student would be suspended in the following year. These subsequent variables included lunch status (received assistance or not, 0=no, 1=yes), exceptional status (identified with a disability or not, 0=no, 1=yes), and whether or not the student was suspended (0=no, 1=yes) in the year prior to the year under investigation.

Techniques

Since our outcome variable was categorical, suspended or not, and we were interested in rank order of predictors, we conducted a series of multiple logistic regressions using a chi-square (X^2) test of significance

for each year under investigation using the SPSS 13 software. After running each analysis, we examined the Wald X^2 test statistic for significance and examined the odds ratio to assess magnitude of each predictor. Sensitivity, the proportion of correctly identified cases (i.e. suspended), and specificity, the proportion of correctly identified noncases (i.e. not suspended) were also examined in this study (Fleiss, 1981 as cited in Cohen, Cohen, West, & Aiken, 2003). Additional diagnostic statistics are presented as well.

Results

Three levels of analyses were conducted to address the research questions in this study. Results from 6th, 7th, and 8th grades are explained by presenting descriptive statistics first, followed by results from each of the logistic regression models.

6th Grade

A four-predictor logistic model was fitted to the data to assess the odds-ratio of being suspended in 6th grade based on reading achievement at the end of 5th grade, disability status, eligibility for lunch assistance, and whether or not a student was suspended in 5th grade. Descriptive statistics show that of the 211 African American males randomly selected over a three-year period, 51 were identified with a disability, 70 were suspended in the previous year, and 107 received lunch assistance in the previous year. Out of the 211 participants in this group, 54 were suspended in 6th grade and 74.4% (n=157) were reading at or above grade level before entering 6th grade. The analysis resulted in the following logistic regression equation:

Predicted logit of (Suspensions) = -2.15 + (-0.29)*Reading score + (1.03)*Disability + (1.10)*(Suspended in Previous Year) + (0.55)*(Received lunch assistance).

As shown in Table 1, the significant Wald test statistic shows that the overall model is an improvement over the intercept model and the insignificant goodness of fit test statistic (Hosmer-Lemeshow) suggests that this model fits the data well (Peng, Lee, & Ingersoll, 2002). Results also show that having a disability and being suspended in 5th grade is positively related to being suspended in 6th grade ($p<.01$). Specifically, the odds of an African American male with a disability in 5th grade being suspended in 6th grade is 2.80 ($= e^{1.03}$) times greater than those without a disability. In addition, the odds of an African American male who was suspended in 5th grade being suspended in 6th grade is 3.00 ($= e^{1.10}$) times greater than those not suspended in 5th grade.

Table 1
Multiple Logistic Regression Predicting Suspension Rates Among
African American Males for Grade 6 (N = 211)

Overall model evaluation			X^2	df	p			
Wald			32.42	4	0.00*			
Goodness-of-fit test Hosmer & Lemeshow			6.77	8	0.56			

							95% *CI*	
Predictor (Previous Year)	β	SE	Wald's X^2	df	p	Exp(β) Odds ratio	Lower	Upper
Received lunch assistance	0.55	0.36	2.36	1	0.13	1.74	0.89	3.52
Suspended	1.10	0.35	9.84	1	0.00*	3.00	1.51	5.94
Disability	1.03	0.37	7.63	1	0.01*	2.80	1.35	5.80
Reading score	-0.29	0.19	2.27	1	0.13	0.75	0.52	1.09
Constant	-2.15	0.33	43.19	1	0.00*	NA	NA	NA

*$p \leq .01$
Note. Cox and Snell R^2 = .14. Nagelkerke R^2 = .21.

        The classification table (see Table 2) demonstrates that our
model predicted students who would not be suspended 94% of the time
and students who would be suspended 26% of the time, resulting in a
76.8% improvement by using the predictors in the model.

Table 2
The Observed and Predicted Frequencies for Students Suspended in
Grade 6 by Logistic Regression (cutoff = .5)

	Predicted		
Observed	No	Yes	% Correct
No	148	9	94.3
Yes	40	14	25.9
Overall % correct			76.8

Note. Sensitivity = 94.3%. Specificity = 25.9%. False Positive = 39.1%.
False Negative = 21.3%.

7th Grade

Similar to 6th grade, a four-predictor logistic model was fitted to the data to assess the odds-ratio of being suspended in 7th grade based on reading achievement at the end of 6th grade, disability status in 6th grade, eligibility for lunch assistance in 6th grade, and whether or not the student was suspended in 6th grade. Descriptive statistics show that of the 201 African American males randomly selected over a three-year period, 38 were identified with a disability, 56 were suspended in the previous year, and 100 received lunch assistance in the previous year. Out of the 201 participants in this group, 53 were suspended in 7th grade and 69.2% ($n=139$) were reading at or above grade level before entering 7th grade. The analysis resulted in the following logistic regression equation:

> Predicted logit of (Suspensions) = -1.57 + (-0.419)*Reading score + (0.14)*Disability + (1.01)*(Suspended in previous year) + (0.25)*(Received lunch assistance).

As shown in Table 3, the significant Wald test statistic shows that the overall model is an improvement over the intercept model. Like 6th grade, the insignificant goodness of fit test statistic suggests that this model fits the data well (Peng, Lee, & Ingersoll, 2002). Results also show that having a disability in 6th grade and being suspended in 6th grade was positively related to being suspended in 7th grade ($p<.01$). Reading achievement at the end of 6th grade was a significant predictor of suspensions in 7th grade. The odds of an African American male being suspended in 7th grade decreases .66 ($= e^{-0.41}$) times for every standard deviation increase in reading score at the end of 6th grade. Furthermore, the odds of an African American male who was suspended in 6th grade being suspended in 7th grade is 2.76 ($= e^{1.01}$) times greater than those not suspended in 6th grade.

Table 3
Multiple Logistic Regression Predicting Suspension Rates Among African American Males for Grade 7 (N = 201)

Overall model evaluation			X^2	df	p			
Wald			20.33	4	0.00*			
Goodness-of-fit test Hosmer & Lemeshow			11.34	8	0.18			

Predictor (Previous Year)	β	SE	Wald's X^2	df	p	Exp(β) Odds ratio	95% CI Lower	Upper
Received lunch assistance	0.25	0.34	0.55	1	0.46	1.29	0.66	2.53
Suspended	1.01	0.36	8.17	1	0.00*	2.76	1.38	5.52
Disability	0.14	0.44	0.11	1	0.75	1.154	0.48	2.73
Reading score	-0.41	0.19	4.80	1	0.03**	0.66	0.46	0.96
Constant	-1.57	0.28	30.58	1	0.00*	NA	NA	NA

*$p \le .01$
**$p \le .05$
Note. Cox and Snell R^2 = .10. Nagelkerke R^2 = .14.

Table 4 demonstrates that our model accurately predicted students who would not be suspended 95% of the time and students who would be suspended 17% of the time, resulting in a 74% improvement by using the predictors in the model. As with 6th grade, sensitivity was more robust than specificity in this model.

Table 4
The Observed and Predicted Frequencies for Students Suspended in Grade 7 by Logistic Regression (cutoff = .5)

	Predicted		
Observed	No	Yes	% Correct
No	140	8	94.6
Yes	44	9	17.0
Overall % correct			74.1

Note. Sensitivity = 94.6%. Specificity = 17.0%. False Positive = 47.1%. False Negative = 23.9 %.

8th Grade

Lastly, a four-predictor logistic model was fitted to the data to assess the odds-ratio of being suspended in 8th grade as predicted by reading achievement at the end of 7th grade, disability status in 7th grade, whether or not lunch assistance was received in 7th grade, and whether or not a student was suspended in 7th grade. Descriptive statistics show that of the 172 African American males randomly selected over a three-year period, 49 were identified with a disability in the previous year, 51 were suspended in the previous year, and 72 received lunch assistance in the previous year. Out of the 172 participants in this group, 47 were suspended in 8th grade and 66.3% (n=114) were reading at or above grade level before entering 8th grade. The analysis resulted in the following logistic regression equation:

Predicted logit of (Suspensions) = -1.48 + (-0.17)*Reading score + (0.33)*Disability + (1.82)*(Suspended in Previous Year) + (-0.25)*(Received lunch assistance).

As shown in Table 5, the significant Wald test statistic shows that the overall model is an improvement over the intercept model and the insignificant goodness of fit test statistic suggests that this model fits the data well (Peng, Lee, & Ingersoll, 2002). Results also show that being suspended in 7th grade is positively related to being suspended in 8th grade (p<.01). Specifically the odds of an African American male being suspended in 8th grade increases 6.2 ($= e^{1.82}$) times if the student was suspended in 7th grade (see Table 5).

Table 5
Multiple Logistic Regression Predicting Suspension Rates Among African American Males for Grade 8 (N = 172)

Overall model evaluation			X^2	df	p			
Wald			27.34	4	0.00*			
Goodness-of-fit test Hosmer & Lemeshow			8.26	8	0.41			

| | | | | | | | 95% CI | |
Predictor (Previous Year)	β	SE	Wald's X^2	df	p	Exp(β) Odds ratio	Lower	Upper
Received lunch assistance	-0.25	0.40	0.36	1	0.55	0.79	0.36	1.73
Suspended	1.82	0.42	18.75	1	0.00*	6.20	2.71	14.15
Disability	-0.33	0.45	0.54	1	0.46	0.71	0.30	1.73
Reading score	-0.17	0.23	0.55	1	0.46	0.84	0.54	1.32
Constant	-1.48	0.32	20.74	1	0.00*	NA	NA	NA

*$p \leq .01$
Note. Cox and Snell R^2 = .15. Nagelkerke R^2 = .21.

The classification table (see Table 6) demonstrates that our model predicted students who would not be suspended 86% of the time, whereas it was able to predict students who would be suspended 47% of the time, resulting in a 75% improvement by using the predictors in the model. As noted in the previous two models, sensitivity was more robust, but specificity improved notably in 8th grade.

Table 6
The Observed and Predicted Frequencies for Students Suspended in Grade 8 by Logistic Regression (cutoff = .5)

	Predicted		
Observed	No	Yes	% Correct
No	107	18	85.6
Yes	25	22	46.8
Overall % correct			75.0

Note. Sensitivity = 85.6%. Specificity = 46.8%. False Positive = 45.0%. False Negative = 18.9%.

DISCUSSION

After analyzing the results, we found that suspensions showed the strongest relationship with having been suspended in the previous year. Having a disability at the end of 5th grade proved to be a significant predictor of suspensions in 6th grade, whereas reading achievement at the end of 6th grade proved to be a significant predictor of suspensions in 7th grade. At no point in the series of analyses did student lunch status, an indirect indicator of family income, predict suspensions during the following year.

Disabilities

Having a disability at the end of 5th grade was a significant predictor of suspensions in 6th grade. There are a number of plausible explanations which may elucidate this phenomenon. In this district, like many others, 6th grade marks the beginning of middle school. Not surprisingly, middle school marks a period of transition that can be rough. As shown by the increased number of suspensions, students with disabilities in this study seem to be having difficulty making smooth transitions to middle school. This rough transition is likely inflated by having to adjust to new teachers, new routines, and more freedom. In addition, it takes considerable time for teachers to re-assess students, develop relationships, and devise appropriate support plans to accommodate disabilities. For this reason, earlier and increased communication between the elementary schools, middle schools, and caregivers could add preventive measures against suspensions for African American males making the transition to middle school.

Lunch Status

Receiving lunch assistance did not predict suspensions in any of our analyses. While having access to fewer financial resources certainly has disadvantages (Sirin, 2005), lunch status did not make a difference in this study and thus should encourage researchers to redirect attention to more instructive variables. This may illuminate the fact that lunch status may have different effects for different groups. Furthermore, educators must cease to make assumptions about student outcomes based on student family income alone. Family income cannot be altered by the school, but other issues, such as reading instruction remain under the school's sphere of influence.

Reading Achievement

Our primary variable interest, reading achievement, as it relates to suspensions showed that as reading achievement increased at the end of 6th grade, suspensions decreased in 7th grade. This finding supports Kowaleski-Jones and Duncan's (1999) finding that achievement influences behavior across middle childhood. Our finding also confirmed Fleming's et. al (2004) finding that achievement differences can predict problem behaviors in 7th grade. After careful analysis, we also found that being suspended in 7th grade exponentially increased an African American male's chance of being suspended in 8th grade by 6.2 times, compared to 3.00 and 2.76 in 6th and 7th grade. This increase is much larger than the other grades, suggesting that during 7th grade, tactical consideration of African American males is necessary. Although our study focused on one district, our findings highlight a critical period for African American males, 7th grade. Overall, our findings suggest that a downward spiral of suspensions can be reduced if reading is improved by the end of 6th grade.

The evidence in this study demonstrating that suspensions predict suspensions overwhelmingly supports the literature in that suspensions are ineffective (see Atkins et al., 2002; Dupper, 1994). School leaders should consider alternatives to keep more students in school rather than initiating this downward cycle. Our findings highlight significant connections to reading and suspensions in 7th grade, but also demonstrate negative but statistically insignificant relationships in 6th and 8th grade. Depending on magnitude of incidents, an alternative to suspensions or at least a supplement to suspensions could be after-school detention that incorporates sustained silent reading. Sustained silent reading (SSR) is a reading technique that requires students to engage in uninterrupted reading with the intent to increase interest in literacy (see Hunt, 1996 or Pilgreen, 2000).

Sustained Silent Reading Reflection Initiative (SSR[2]I)

In order to remediate students having encounters with problem behaviors or perceived problem behaviors, we decided to focus on an after-school model. We chose not to focus on an in-school suspension model because we advocate for keeping students in the classroom with a qualified teacher as much as possible. Furthermore, whereas in-school suspension allows students to "carry on as usual", after-school detention requires sacrifice on the part of the student as extra commitments in a supervised environment will have to be made beyond the normal school day. If a student has truly disrupted normal instruction time, we feel that fair recompense would be to make up this time in an alternative setting.

Incorporating the basic premise of SSR, we feel that after-school detention can serve as a controlled learning environment focusing on sustained silent reading. We call our strategic intervention the Sustained Silent Reading Reflection Initiative (SSR^{2}I). The difference in our approach to traditional SSR is that our intervention is programmatically strategic using pre-selected texts as a platform for students to read and reflect. SSR^{2}I has the potential to promote literate behaviors, offer additional reading support by staff, and reduce the incentive of being rewarded a stay at home for inappropriate behaviors (see Atkins et al., 2002). More importantly, SSR^{2}I can offer an ecological socialization context (Akmal, 2002; Brookins, 2004) whereby positive self-identity can be shaped through literature and expository text.

In Tatum's (2005) text, the author emphasizes the importance of allowing African American males to see themselves in text. Text representation offers a tremendous opportunity for positive identity development for African American males. As Tatum suggests, text allows opportunities for personal discoveries, increased reading habits, and new thinking habits. In addition, Ford (2005) suggested that African American males often lack an academic identity. Taking these thoughts one step further, we feel that SSR^{2}I can be effective in promoting a *literacy identity* for African American males through teacher-reinforced reading habits, while simultaneously promoting positive identity by requiring students to engage and reflect on text that represent typical issues of a middle school African American male. Although, we expect implementation of SSR^{2}I to be developmentally responsible incorporating site-based management, we encourage school leaders to require students to read texts in cohorts. Alternative texts can be assigned during the suspensions, but during SSR^{2}I students should read the same texts and discuss them at critical points as determined by the moderator. Furthermore, African American history should be incorporated to reinforce the positive contributions of African Americans to society.

In an effort to reduce recidivism of engaging in inappropriate or risky behavior, SSR^{2}I provides the reflective component notably absent from conventional suspensions. Having proposed this alternative, we put forth that the SSR^{2}I environment should be positive and thoughtful accountability must be in place to ensure success. Thoughtful accountability means that the teacher or moderator, ideally an African American male, models sustained silent reading during this intervention, holds students accountable for content, and provides support to ensure content mastery. Individual accountability for text content should be demonstrated through assessment and meaningful reflection should be achieved through group discussion and written responses. While simultaneously maintaining a positive atmosphere, students should not be allowed to depart from SSR^{2}I until satisfactory

reflection and content mastery has been documented. Lastly and simply stated, students enrolled in SSR^{2}I are reading; ideally this increased reading will lead to increased academic success. While SSR^{2}I is designed to address the needs of African American males, this initiative can provide benefits for all students. Strategic interventions favoring one group may be apolitical in some contexts, yet our data supports that strategic interventions are necessary. Thus, we encourage school leaders to remain steadfast to the principle of strategic intervention, but also encourage school leaders to use precepts of SSR^{2}I for other groups as well.

Limitations

Reading achievement has demonstrative connections to suspensions in 7th grade for African American males. While our study documented standardized reading achievement, it would be quite specious to assume that reading achievement at the classroom level does not influence suspensions as well. Ideally, our model captures classroom-level achievement through a standardized measure aligned with the curriculum; however there are likely exceptions and hence is a limitation of this study.

Contributions and Future Research

Our study contributes empirical evidence that supports previous research on behavior and reading achievement during the middle childhood. Using prior research as a foundation, we provide additional insight on African American males and make connections to outcomes [of behaviors] rather than confirmation of behaviors. Our study also verifies that suspensions are largely ineffective and African American males should be kept in school as much as possible where interventions can be controlled and student development can be influenced. Lastly, we propose a literacy-based alternative or supplement to suspensions, SSR^{2}I. While premature in conception, SSR^{2}I has the philosophical framework to succeed. Future research efforts should focus on developing data-driven evidence for the use of SSR^{2}I and similar interventions in schools.

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