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Reconsidering the Alternatives: The Relationship Between Suspension, Disciplinary Alternative School Placement, Subsequent Juvenile Detention, and the Salience of Race

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Introduction

Alternative school settings for students who are identified as "disruptive or dangerous" are playing an increasingly prominent role in the world of public education. Though the rapid expansion and reliance on alternative schools is evident, the body of research is far from parallel to their growth. In theory, alternative schools exist to advocate and provide optional learning environments for students struggling in the traditional school environments. For students deemed failures or at risk of failure, two basic subsets of alternative schools have emerged: One for students experiencing academic difficulty and at risk of dropping out, and the other for students described as dangerous or disruptive. Beginning in the early 1980's, the Office of Juvenile Justice and Delinquency Prevention began promoting alternative schools for delinquent students based on the premise that schools could play a significant role in reducing youth crime (Barber, 1980; Cox, 1999). Alternative schools continue to be promoted by education leaders and advocates as a promising strategy to reduce school expulsion, provide alternative learning environments for students that are not having success in regular schools, ensure safety at mainstream schools, and reduce juvenile delinquency. However, the dearth of empirical evidence that demonstrates disciplinary alternative schools are actually supporting these objectives should temper the rush to increasingly employ this strategy.

National data reflect an expansion of alternative schools for at-risk students that can be defined as skyrocketing, not steady (Lehr, Soon Tan, & Ysseldyke, 2009). In 1998, National Center for Education Statistics (NCES) indicated there were 3,850 alternative schools. By 2002, NCES identified 10,900 public alternative schools for at-risk students which represented a conservative estimate in the growth as researchers looking at national data estimated the existence of over 20,000 alternative schools and programs for at risk students (Lange and Sletten, 2002). Reflecting on current suspension and expulsion practices nationwide, some researchers

recently forecasted that the use of alternative school will continue to rise (Lehr et al., 2003; Morrison et al., 2001).

The increase in alternative schools is correlated with the mounting population of disenfranchised students (Kim & Taylor, 2008), particularly minority students and students that live in poverty (Verdugo & Glenn, 2006) The demand for more alternative schools serving disruptive students is clearly growing across the country (Aaron & Zweig, 2003; Dunbar, 2001; Loflin, 2000; Verdugo & Glenn, 2006). Currently, at the local, state and national levels, the demand for alternative schools for "disruptive or dangerous" students outweighs the supply, particularly in urban districts, and evidence continues to emerge that disciplinary alternative schools are increasingly serving younger students (NCES, 2010). Urban school districts are relying on alternative schools at far greater rates than rural and suburban districts to purportedly decrease school crime, yet national trends puts this proposition in question. In the 2003 national school survey on crime and school safety 70% of urban public schools reported lack of alternative placements for disruptive students as the most limiting factor impeding efforts to reduce or prevent crime at school (NCES, 2007). Paradoxically, a 2003 report on indicators of school crime and safety showed a decrease in violent victimization in schools, from 10 percent to 6 percent between 1995 and 2001(NCES, 2003).

Some research highlighting best practice alternative school sites indicates the promise alternative schools hold for supporting excluded students (Quinn& Poirier, 2006), yet the wide variation in implementation and lack of regulation and accountability at state and district levels is cause for great concern. The literature has revealed in general alternative school characteristics associated with both positive and negative student outcomes. Small school size, low student teacher ratio, flexible and understanding teachers, individualized instruction, student

involvement in decision-making and family/parent participation result in more positive school climate and student outcomes. The characteristics that are deemed deleterious to student outcomes include racial isolation, punitive focus, intensified social control, inadequate resources, lack of accountability, and an unchallenging curriculum.

There is an agreement among researchers who examine issues related to alternative schools and school discipline that placement of disruptive students into alternative schools is a growing popular strategy schools are using to deal with students who are considered behavior problems (Banicky, 2000; Lehr et al., 2003; Loflin, 2000). Research suggests that this strategy has exacerbated inequities rooted in race, poverty, and special education status. The increasing trend is indicative of a wider pervasive problem of segregation based and disability in the educational system and research indicates there may be a lack of services provided to special education students in alternative settings (Lehr & Lange, 2003; Verdugo & Glenn, 2006). Research also suggests that disciplinary alternative schools are increasingly being used as an act of punishment, exclusion, and containment of African-American students (Dunbar, 2001; Lehr, Lanners & Lange, 2003; Morrison et al., 2001). Several decades of research document that exclusionary discipline is consistently disproportionately applied to Black students (Arnove & Strout, 1980; Cox, Davidson & Bynum, 1995; Losen & Gillespie, 2012; Wald & Losen, 2003) and alternative school placement is no exception.

Students inevitably enter into the public schooling system with large variations in the advantages and disadvantages, yet individual trajectories are impacted by their schooling experiences, which can pose cascading advantage or disadvantage (Elder, 1995). Young children are particularly vulnerable to the beginning process of a 'domino effect' regarding misbehavior and discipline. Elementary students with school records documenting ongoing

misconduct were 12 times as likely to be suspended in middle school (Safer, 1986). Looking even earlier, Gilliam (2005) found that Pre-Kindergarten students are expelled at three times the rate of K-12 students, disproportionately impacting African American children.

Expanded school exclusion endorses the prevailing rationale of contemporary criminal justice practice- deterrence and incapacitation (Garland, 2001). Exclusion remains the intervention of choice due to the dominant worldview in the education policy realm that reflects the general orientation of the U.S. criminal justice and legal system as opposed a worldview that recognizes interactions and student misbehavior and school discipline practices as a result of longstanding inequalities rooted in social, economic, and historical forces (Morrison et al., 2001). Educational policies that render individual students or particular student groups as the "problem" and exclusion as the "fix" minimizes the contributions of policies and practices in the schooling system as a whole (i.e., ability tracking, concentrated school poverty, teaching quality, curriculum, school climate, high-stakes testing, zero-tolerance policies) while sustaining the "logic" of school exclusion.

There is ample evidence to support a thesis of an overarching criminalization of school discipline, especially within urban schools (Hirschfield, 2008). At nearly every stage of the school disciplinary process, criminal justice tools and personnel are playing play an increasingly prominent role. In fact, school policing is the fastest growing law enforcement field (Pascopella, 2005). While many alternative schools provide a variety of services, there appears to be more emphasis placed on collaboration with the juvenile justice and police than agencies that those that can help with life after school (Dunbar, 2001; Verdugo & Glenn, 2006). Kliner, Porch & Ferris (2002) found that for large districts and districts with high minority enrollment and poverty concentration 84% of the alternative schools collaborated with the juvenile justice

system, 75% with mental health agencies, and 70% collaborated with police departments. The punitive nature of placement into disciplinary alternative schools coupled with the strong law enforcement presence in them may construct one possible route through the "school-to-prison" pipeline.

Due to the ever increasing numbers of young people and particularly African-American youth entering the juvenile justice system, the need for research that explores the relationship between schooling experiences and entry into the juvenile justice system is grave. The findings in this study illustrates the need for a shift in focus from the deficit thinking about individual children deemed "disruptive" to how school systems contribute across time to the school to prison pipeline and what school systems can do to prevent children from entering the pipeline.

Purpose of the Study

The primary purpose of this study is to learn more about the relationships between out of school suspension, the use of disciplinary alternative school placement and to explore any relationship they might have to the racially disparate juvenile justice system involvement. The longitudinal nature of the data set allowed changes in students' event histories to be tracked through their education careers and can help determine if out of school suspensions is an effective deterrent to future disciplinary events. The data can also indicate if disciplinary alternative schools are helping to keep children in school and on a path toward social and academic success, or if they might be facilitating the pipeline to prison for children of color.

Site of Study

Jefferson County Public Schools (JCPS) in Kentucky serves as the site of this study. JCPS is a large ethnically diverse urban school district that serves approximately 100,000

students where approximately 60% of the students receive free or reduced price lunch. The district has a total of 161 schools, 135 mainstream schools, and 26 alternative schools. This is a typical number of alternative schools for districts of similar sizes. The types of alternative schools in the district vary widely serving several types of student populations such as pregnant and parenting teenage students, overage struggling students, and students that are placed in youth psychiatric hospital units.

The four disciplinary alternative schools in this study serve students that have been determined by school and district administration to be either (a) in violation of the student code of conduct for which placement is an option, or (b) be too disruptive, behaviorally challenged, or dangerous to remain in the regular school setting. Importantly, placement is mandatory in order to remain enrolled in a school within the district. The district has a policy of no expulsions. However, if a student is relegated to a disciplinary alternative school and they do not attend, there is no other option for continuing education aside from home schooling. These alternative schools in the district were developed over a period of approximately 18 years. Following the adoption of the Safe and Drug Free Schools and Community Act in 1994, the widespread implementation of zero-tolerance policies throughout the district, rooted in a revised code of conduct, resulted in an increase of mandatory placements into alternative schools. In fact, with respect to elementary aged children, the disciplinary middle school expanded to serve students in 4th and 5th grade due to increased calls for placements for elementary students.[1]

With respect to juvenile detention, it is important to note that the state the district is situated in, Kentucky, ranks second highest in the nation for incarcerating juveniles for non-violent offences. In 2010, Kentucky spent 2 million dollars to incarcerate juveniles for status

[1] Of all the students placed in elementary 59% were placed in the middle school with expanded capacity for elementary aged students.

offenses (e.g., truancy, running away from home)[2]. Jefferson County is the largest county in Kentucky and as such is one of the largest contributors to the state juvenile incarceration rates. Jefferson county had the second highest arrest rate for juveniles for offenses such as disorderly conduct and drunkenness.[3]

Methods

Population and Sample

The purposive sample used in this study consists of an entire cohort of 3rd grade students (N=7668) enrolled in the district during the 1997-1998 school year.[4] The demographic characteristics of the cohort sample in 3rd grade reflect the overall district characteristics. There is a relatively even distribution of gender, as 52% of the cohort students are male and 48% are female. In terms of race, 35% of the students are African-American, 61% are White, and 3.5% represent other ethnicities. 59.6% received Free or reduced price lunch. Approximately 23% of students were identified enrolled in special education. Approximately 13% received special education services for speech, 5% were considered having a learning disability (LD), and 1.3% were categorized as having an emotional-behavioral disability (EBD), and 3.7% as Mild Mental or Other Health Impaired. With respect to EBD, there was a race gap as 2.3% of the Black students were identified as EBD, while less than 1% (0.8%) of White students were labeled EBD.

[2] http://www.courier-journal.com/article/20111211/NEWS01/312110023/status-offenders-1
[3] KY juvenile crime analysis 2006 Retrieved from http://www.jjab.ky.gov/NR/rdonlyres/EE16300F-20EC-4981-A304-B4CD01A01DEE/199938/KYJuvenileCrimeAnalysis2006.pdf

[4] Four students that had already been enrolled in the elementary alternative school by the start of 3rd grade were removed. 121 students from sample with missing data on substantive variables spanning the entire study period were also removed.

Measures and Procedures

Alternative School Placement was the primary dependent variable determined through individual student records of student entry into one of the disciplinary alternative schools in the study at any point during a give school year.[5] There is a high degree of repeat entries into alternative schools. For the purpose of this study, only the first occurrence of placement was used in the statistical modeling analysis. Similarly, subsequent juvenile detention was determined based on enrollment into a youth detention facility that serves students who were adjudicated or are awaiting adjudication. The age range of students served in these facilities ranges from age 11 to 18. The level of security varies in these facilities from a small seemingly school like detention setting to secure detention similar to a typical jail that houses pre-adjudicated juveniles, perceived as needing the most secure form of detention. Similar to alternative placement, in the analysis of subsequent juvenile detention only a juvenile detention event that occurred *after* placement into an alternative school was considered in this study. This allows for assessment of the impact of placement in alternative schools on juvenile detention for students that had no prior contact with the juvenile justice system.

The predictor variables include student demographics (i.e., Race, Gender, Lunch Status), Out of School suspension, school mobility, school attendance, grade retention, disability status (EBD and LD), and Comprehensive Test of Basic Skills (CTBS) reading. With respect to race, it is important to note that race was collapsed into two groups (i.e., Minority and White) for the statistical modeling analyses. Minority ethnicities in the cohort include African-American[6],

[5] Alternative school placement and juvenile detention are time-dependent dichotomous variables that records whether in any given period a student did (=1) or did not (=0) experience the even at anytime during the school year.

[6] African-American and Black are used interchangeably.

Asian, Hispanic, and other multi-racial, yet the majority (92%) of the Minority students in the 3rd grade Cohort (1997-98) are African-American.

Ten years of student level data were extracted from the district's large primary data warehouse for all students enrolled in 3rd grade in 1997-98 and included all variables and movements for each student each year between 3rd-12th grade (1997-08 to 2007-08). A set of statistical procedures[7] were used that allowed for tracking the predictive input of each potential predictor variable to alternative school placement across the 10 year period. A second set of descriptive and statistical procedures were used to determine subsequent juvenile detention and the impact of race on juvenile detention.[8]

Results

Of the 3rd grade class of 7668 students, only 62.1% remained in the cohort through grade 12. Over the course of ten years, 2,910 students (37.9%) were withdrawn due to a variety of factors including dropped out, transfer into another district out of the county or state, homeschooled, placed in an alternative school (because they were withdrawn from sample after first placement) and in a few cases were deceased.

Risk of placement in a disciplinary alternative school

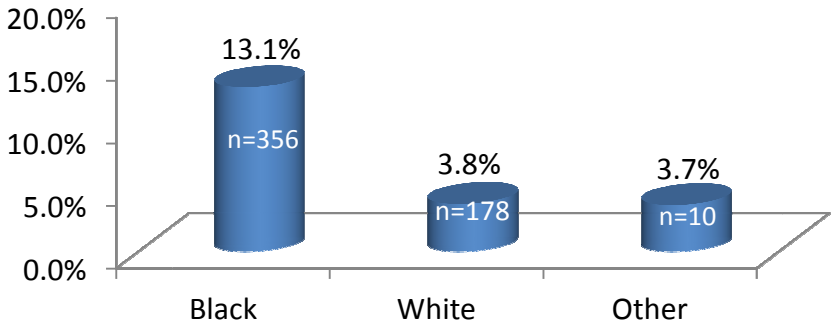
A simple look at a one year snapshot of the percent of the students enrolled in a disciplinary alternative school in JCPS , one might be led to believe that a very small percentage (between 1-2%) ever experience placement. The data reveal that in absolute terms (not taking

[7] Discrete-time hazard analysis, a survival analysis technique for statistical modeling to explore if and how the risk of event occurrence is systematically related to predictors over time (Singer and Willett, 2003),was the primary method used in this study. The use of simple regression analyses on longitudinal event data is problematic in that it cannot explicate the impact of variables that may change in value over time. Thorough the process of censoring, data from students who never experience alternative placement are used which provides equal amounts of information about non-occurrence as event occurrence.

[8] Logistic Regression was used to analyze the impact of race, controlling for gender on subsequent detention.

into account students that withdrew over time) 7.1% (n = 544) of the original 7668 3rd grade students were placed at least once by 12th grade. However, when taking into account the decreasing population across time, the total cumulative proportion of students that experienced placement in a disciplinary school between 3rd and 12th grade is 9%, or nearly 1 in 10 students.[9] The racial gaps in placement are large. 13.1% of the 2715 Black students in the 3rd grade were placed, compared to 3.8% of the 4638 White students, and 3.7% of the 270 students in other ethnic categories. It is important to remember that many students experience repeated entries in and out of alternative schools within the same year and across time. These percentages reflect only the *first time* they experience a placement event. That is, if a student is placed in 3rd grade and again in 6th grade, the student is only counted in 3rd grade.

Figure 1: Percent of 3rd grade student population placed in alternative school by 12th grade



Overall, the risk of placement begins low during 3rd and 4th and steadily increases each year with the highest risk at grades 7 and 8. The hazard probability remains fairly steady with a slight dip in grade 9 until a small decline in grades 11 and 12 due to greater incidences of dropout. As shown in Figure 1, the impact of race on placement begins in 5th grade.

[9] See full Life Table in Appendix

Figure 2: the risk of placement across time

Characteristics of students placed in disciplinary alternative school

As shown descriptively in Table 1, at each level African-American students that receive free/reduced lunch are placed in alternative schools at a higher proportion of their population than all other groups. Conversely White students on paid lunch are placed at a far lower proportion than all other groups. Students identified as having an emotional behavioral disability (EBD) and students reading below average on the CTBS[10] are over-represented in the disciplinary alternative school population at every level. Students who are retained are over-represented in alternative schools in middle and high school.

[10] A large percentage of students in the alternative school sample did not have a CTBS score. This speaks to missing accountability for academic testing. In 3rd grade, 29 (85%) had missing scores, in 6th grade 149 (41%) had missing scores, and 160 (62%) had missing scores on CTBS reading in 9th grade. Due to the large amount of missing CTBS data, this variable was removed from the discrete-time hazard analyses, but is presented in the descriptive statistics.

Table 1: Select Characteristics of Students Placed in Disciplinary Alternative Schools

	Elem		Middle		High	
	Alt (n =34)	Cohort (n =7341)	Alt (n =254)	Cohort (n=6404)	Alt (n=256)	Cohort (n=5394)
Free/Red Minority	76.5	33.0	56.7	32.3	55.9	26.3
Free/Red White	20.6	25.9	28.0	21.7	17.2	16.7
Paid Minority	0.0	6.5	6.3	8.8	14.5	14.5
Paid White	2.9	34.6	9.1	37.2	12.5	42.6
EBD	52.9	1.6	11.4	2.2	10.5	1.5
Retained	2.9	4.2	9.4	1.8	18.4	4.7
CTBS Below Avg.	40.0	35.5	63.8	28.7	64.6	32.0

Key Predictors of Placement in Disciplinary Alternative School

Race: The statistical models for demographic factors demonstrate the significant impact of race even when controlling for the effects of gender and lunch status. Regardless of grade of placement, the estimated odds of placement are 2 times higher for minority students then white students.[11] This finding coupled with the descriptive results indicates that poor minority students are most at risk of placement.

Emotional – Behavioral Disability (EBD): With respect to special education status, students diagnosed as EBD are at great risk of placement in alternative school. The odds of odds of placement are over 8 times higher for EBD students than non-EBD students[12]. Prior research has illustrated the vast disproportionate suspensions of EBD students nation-wide, particularly Black EBD students.[13] When controlling for the effects of suspension, the odds of placement is

[11] coefficient.692 (p<.001) yielding an odds ratio (*expβ*) of 1.99.
[12] estimated coefficient for EBD is 2.135 (p=.000) , odds ratio (*expβ*) of 8.46 reveals
[13] Opportunities Suspended, August 2012,Civil Rights Project

still almost 3 times higher for EBD students[14]. In this study during the 8th grade year, 14% of the entire Black EBD population was placed in a disciplinary alternative school.

School Mobility: Moving from school to school within any given year is typically beyond the control of students, particularly in elementary and middle. Mobility can be an indication of the hardships of poverty and residential instability coupled with the student assignment process, school and bus suspension issues. The data reveal that students who attend 2 or more different schools within the same year are 19 times more likely to be placed in a disciplinary alternative school than students that don't move.[15]

School Attendance: Students that experience higher absenteeism within a school year are at greater risk of placement in a disciplinary alternative school. When controlling for the effects of mobility, the odds of placement are almost 1.3 times greater for students with a one unit higher in absences.[16]

Grade Retention: Students that are retained, having to repeat a grade they did not successfully complete, have a high risk of placement. Regardless of the grade(s) that retention took place, students that experience retention at least once are over 4.5 times more likely to be placed in a disciplinary alternative school. [17] Grade retention typically indicates that the student is struggling academically or socially where intervention is either lacking or ineffective and they

[14] Controlling for suspension, the estimated coefficient for EBD is .977 (p=.000). yielding an odds ratio (*expβ*) of 2.65

[15] The estimated coefficient for mobility is 2.081 (p=.000). The antilog of this parameter estimate yields an odds ratio (*expβ*) of 7.52. The interpretation of odds ratios with continuous variables can be less intuitive than with dichotomous, so transforming them into relative risk ratios make them more understandable (Bollmer, J et al, 2007). By dividing the probability for students in alternative schools compared with the cohort for 1 school move (.195 and .030 respectively) and 2+ moves (.077 and .004 respectively) the results show that students who move schools 1 time within the school year are 6.5 times more likely to be placed in alternative schools than students that do not move.

[16] The estimated coefficient for absenteeism .284 (p=000) when controlling for mobility does not change the odds ratio (*expβ*) of 1.32. This indicates that while significant, absenteeism is still not as powerful of a predictor of placement as is mobility.

[17] The estimated coefficient for retention is 1.511 (p=.000) yielding an odds ratio (*expβ*) of 4.53

are not prepared to move to the next level. Controlling for the impact of being diagnosed as having a Learning Disability did not change the effect size of retention on placement.[18]

Unlike grade retention, having been diagnosed with a learning disability does not appear to be systematically related to placement in a disciplinary alternative school.[19] Interestingly, the descriptive statistics revealed that students scoring below average in the CTBS (a national normed referenced test) in reading are over-represented among those placed in disciplinary alternative schools. The lack of timely diagnosis of a learning disability which is supposed to result in additional and targeted academic support is often associated with ongoing academic failure. So while students may be retained for academic struggles, they may not be receiving a necessary diagnosis or getting the intervention services needed for academic progress.

These significant findings shed more light on the fact that students being placed in disciplinary alternative schools have multiple factors, many of which they are not in control of especially as children, that place them at risk for school failure regardless of grade level. This suggests that early interventions and supports for addressing the challenges are lacking for students that eventually experience placement for being deemed "dangerous or disruptive." Perhaps effective early interventions may have curtailed the likelihood of placement in alternative school during their schooling.

Out of School Suspensions, Race and Alternative School Placement

Confirming nearly 4 decades of research on school suspensions, the existence of over-representation of minority and poor children in out of school suspensions was evident in this study. As shown in Table 2, when looking at the entire cohort of 7668 students, the suspension

[18] When controlling for LD, the estimated coefficient for retention is .1.510 (p=.000) *and expβ* = 4.53
[19] The estimated coefficient for LD is .116 . Though there is a positive coefficient, the lack of statistical significance and the insignificant Wald chi-square statistic .447 (p=.504) deem it not systematically related to placement

rates for minority students that receive free/reduced lunch are considerably higher than all other groups across time. In high school, the suspension rate of minority students on free/reduced lunch (68.7%) is similar to minority students on paid lunch (63.6%).

Table 2: Suspension Rates for Entire Cohort by Level

	Elementary			Middle			High		
	N	n suspensions	Susp. Rate	N	n suspensions	Susp. Rate	N	n suspensions	Susp. Rate
Paid White	2626	29	1.1%	2400	462	19.3%	2255	529	23.5%
Free/R White	2057	119	5.8%	1514	723	47.8%	1201	482	40.1%
Paid Minority	471	12	2.5%	542	215	39.7%	596	379	63.6%
Free/R Minority	2514	282	11.2%	2200	1644	74.7%	1841	1265	68.7%

In the final statistical model, out of school suspension was demonstrated to be the strongest predictor even when controlling for the effects of poverty, mobility, and grade retention. [20] It is important to note that these are suspensions students experienced prior to the "final" suspension that resulted in alternative school placement, so the potential of a biased effect of suspension to placement is controlled for in the analysis. Probability results indicate that students who are suspended 1-2 times were almost 8 times more likely, and students with 3 or more suspensions are 25.6 times more likely to be placed in alternative school than students without suspensions.[21]

This may seem to be a likely or "common sense" finding. However, it reveals that prior to and regardless of the "offense" that led to placement in an alternative school, students experienced repeated suspensions that were ineffective at deterring the behaviors resulting in

[20] See Appendix. When controlling for lunch, mobility and retention, the coefficient (1.996) and odds ratio for suspension (*expB* 7.36) remained large in comparison to the other substantive predictors and has the greatest association with the hazard of placement as indicated by the Wald chi-square statistic 1024.38 (p=.000).

[21] Obtained by dividing the probability for students in alternative schools compared with the cohort in the category 1-2 suspensions (.438 and .077 respectively) and 3+ suspensions (.349 and .014 respectively)

continued exclusion and exacerbating the likelihood of a trajectory to alternative school. Additionally, the large race poverty gaps in both suspension, and alternative school placement for the entire cohort population solidifies that being both poor and minority increase the likelihood of experiencing exclusionary school discipline across time. Clearly, suspension is not an effective early intervention for students, and is in fact detrimental. Relying on suspensions as a strategy, as opposed to inclusive and proactive early supports for students increases the likelihood of eventual alternative school placement and the potential for subsequent involvement with the juvenile justice system.

The Cyclical Nature of Alternative School Placements

One noteworthy finding that arose during the course of the study was the high incidences of re-entry into the disciplinary alternative schools after first placement. For example, in 7th grade and within the same school year, there were 266 entries into the disciplinary alternative schools by the 186 cumulative cohort students placed. This suggests that not only was the first placement ineffective at deterring a future placement once returning to a mainstream school, but also confirms a lack of formal transition planning that prior research has demonstrated as a chief limitation.

Another disturbing finding revealed high incidences of students placed in the alternative schools experiencing cyclical placements among foster care school settings, and schools within psychiatric settings. The internal evaluation[22] at the end point of this study showed that of the students enrolled in one of the disciplinary high schools, 30% had attended the disciplinary alternative middle school, 11% attended the alternative elementary school, and disturbingly, 50%

[22] Program evaluation of the JCPS middle and high disciplinary alternative schools retrieved from http://www.jefferson.k12.ky.us/Departments/Planning/ProgramEvaluation/WebMASTER_Updates_July2011/AltSchools_JV.pdf

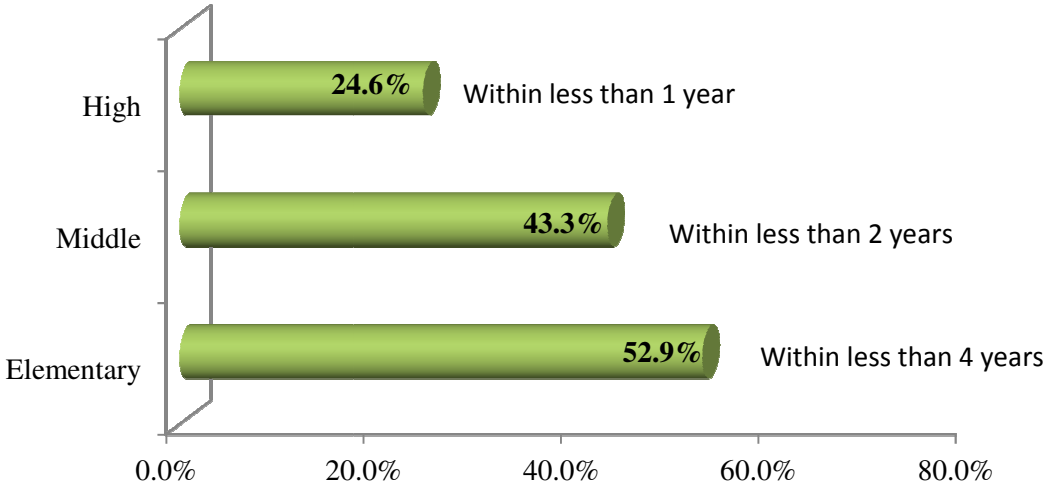
of students had previously attended a special school located in a psychiatric facility. This raises serious concerns regarding the cyclical nature of placements in segregated settings for students experiencing emotional, mental and behavioral difficulties. The staffing, program decisions, and capacity of disciplinary alternative schools to support the addressing the root cause of students challenges should be seriously considered.

Subsequent Juvenile Detention after the First Alternative Placement

Of the 544 cohort students that were placed in alternative school, a total of 215 (39.5%) experienced juvenile detention at some point between their time of alternative school placement and 12th grade.[23] Among the 34 students placed in alternative schools during elementary 52.9% experienced juvenile detention before 12th grade. The average number of years between first placement in elementary and juvenile detention was almost 4 years [24] Of the 254 students placed in middle school, 43.3% were subsequently detained within an average 2 years.[25] Of the 256 students placed in alternative high school, 24.6% were subsequently detained by 12th grade within less than one year[26]. Of all grade levels, students placed in 5th grade had the highest percentage of alternative school students subsequently detained as juveniles (55.6%).

[23] Incidences of detention are conservative because (a) the data system only captures detention that occurs during the school year, and not in the summer, and (b) in high school, students may be detained in the regular local jail which is not entered into the district data warehouse.
[24] Elementary Time between Mean = 3.83, SD=2.31Of
[25] Middle Time between: Mean = 1.95, SD=1.29
[26] Mean = .73, SD=.87

Figure 3: Percent of students first placed in alternative school that experienced subsequent juvenile detention by 12th grade



The grade of alternative placement is significantly related to the amount of time between placement and juvenile detention [27] the higher the grade of first placement, the less time there is before a subsequent juvenile detention. This suggests that especially for students being placed early on, there is sufficient time for the implementation of early effective interventions to prevent the trajectory to the juvenile justice system.

Race and Subsequent Juvenile Detention

The rate of subsequent detention varied based on both grade level and race. A greater number of Black students are detained as juveniles after placement in an alternative school at every level. When comparing rates of detention of those placed in alternative schools, the race gap is largest in middle school. There is nearly an 18% gap in the rate of subsequent detention in middle school, where 50% of the Black students placed were eventually detained compared with 32% of the White students. In high school over a quarter of Black students were subsequently

[27] A statistically significant negative correlation between grade of first alternative school placement and the length of time between placement and juvenile detention r = -.632, n = 191, p = 0.000 confirming that the higher the grade of placement, the less time there is before a juvenile detention event.

detained by 12th grade. In elementary school, while more Black students were placed in alternative school and detained as juveniles than were White students, the rate of placement for White students is 62.4% while the rate of placement for Black students is 50%.

Table 3: Number and Percent placed in alternative school subsequently detained by 12th grade

	N	n	%
Elementary	Alt School	Detained	Detained
Black	26	13	50.0%
White	8	5	62.4%
Middle			
Black	153	76	49.6%
White	94	30	31.8%
High			
Black	176	46	26.1%
White	76	17	22.4%

The interaction of race and gender on juvenile detention has implications as well. African American males are over represented in the population of students placed in alternative school and over represented in the population of students that were subsequently detained as juveniles. Among the female students, African-American females were over represented in the population of students placed in alternative schools and those eventually detained after placement. When controlling for gender, the odds of subsequent detention were 1.5 times for minority students than white students[28]

Discussion

The longitudinal nature of the study demonstrates that almost one in ten students entering school will experience placement in a disciplinary alternative school. Minority students, particularly those on free/reduced lunch have a significantly higher risk of placement. The peak

[28] Logistic regression analysis ($\beta = 0.37$, SE = 0.19, $p<.05$).

of placement occurs in grades 7 and 8, pointing to a need to address the dynamics of middle school placement. Four out of ten students placed middle school were subsequently detained as juveniles within 2 years. Critically, young children also experience placement and over half of them were eventually detained as juveniles. The instances of the elementary placements in this study occurred ten years ago, and even then, some the middle alternative schools were expanded to serve elementary aged students. The decisions and ramifications of placement of all children should be kept at the forefront of district and national policy discussions. Research has identified specific characteristics associated with both positive and negative outcomes. The level of accountability for states and districts that rely on disciplinary alternative schools needs to be severely strengthened to ensure system-wide implementation of sound policies around placement decisions, research based practices towards positive student outcomes, accommodations for special education students, and transition planning. Urgently, accountability measures need to drive the elimination policies and practices known to be detrimental and abusive, including excessive use of seclusion and physical restraints.

The results indicate multiple risk factors – most of which are beyond control of the child- are systematically related to placement in disciplinary alternative schools such as race, poverty, school mobility, grade retention, attendance and disability status. Of all the predictors repeated out of school suspension in a child's schooling history was the strongest predictor. This is a key finding because it confirms that the initial exclusions from school as a discipline strategy is ineffective at deterring future events and is disproportionally applied to minority students in poverty. Several decades of research confirm that suspension is an ineffective form of punishment (Skiba, Peterson & Williams, 1997; 1999). The impact and effectiveness of this initial act of exclusion should be carefully considered, as should alternatives to reliance on this

practice. While initially more time-consuming, social-emotional school-wide programs, positive behavior intervention supports, and restorative justice practices are proving to be promising alternatives that have short and long term implications for students, schools and their communities. Policies that support improving proactive and early intervention supports for students should far outweigh any that support exclusion.

The high likelihood of subsequent juvenile detention for those students placed in alternative disciplinary schools is disturbing and suggests that the alternative schools may be increasing - not reducing juvenile detention rates. The finding that the earlier the grade of alternative placement the longer the duration to subsequent juvenile detention suggests there is more than ample time to provide effective interventions to reduce the likelihood of juvenile detention. Policies and practices within the alternative schools that may help prevent or promote contacts with the criminal justice system should be strongly considered. Careful assessment of the types of partnerships used and emphasized and the corresponding worldviews they promote is key to tackling the "school-to-prison" pipeline. Decisively, policies that ensure equal levels of accountability and oversight for what occurs in alternative schools as in mainstream schools is imperative. Policy makers should strongly consider the ramifications of the erosion of the traditional boundaries between the juvenile justice system and the educational system (Hirshchfield, 2008) and the school disciplinary policies that facilitate greater interactions between the two.

The salience of race is undeniable. African American males are over represented in both those placed and those subsequently detained reinforce the presence of a "school to prison pipeline". This reality reflects nothing less than a state of crisis. In fact the Council of Great City Schools (2010) recently recommended convening a conference at the White House to develop a

call to action and strategic directions for improvement. Racial disparity is even more pronounced in the juvenile justice system than in the adult system and provides the foundation for further discrimination in the criminal justice system (Weissman, et al, 2005). This pipeline problem can be seen as nothing other than a systemic one, which requires and equally systemic response. Education leaders, policy makers and districts should examine and change the policies and processes, by which they exacerbate racial disparities in school exclusion, particularly zero tolerance policies, and adopt alternative solutions. Related, the process of engaging in the difficult conversations around issues of race and culture are beginning to be embraced by school districts that have committed to addressing head on the longstanding issue of cultural competence and personal and institutional racism.

States and districts have improved overall their capacity for stronger more reliable student information data systems. As such, the implementation of an early warning student identification program that is linked to research based interventions would allow for the systematic intervention for students early and could prevent placement in disciplinary alternative schools. Critically, careful consideration of the benefits, ramifications, and efficacy of current disciplinary practices and policies in mainstream schools is an important and necessary precondition for districts that aim to systematically ensure the implementation of best-practices in the area of school discipline.

Limitations of the Study

This study has several limitations that should be noted. First, though the longitudinal nature of the study is its strength, the primary limitation is the study sample consisted of one cohort of 3rd grade students within one large urban school district. However, the typicality of the district improves the generalizability of the findings to districts of similar size and demographics.

Second, due to missing data, direct measures of student academic performance (i.e., standardized test scores) were not examined. This should raise concern regarding the lack of accountability for the academic achievement of students placed in these schools. Third, the variables used in this study included those that were housed in the district database and did not provide direct measures of psychological or environmental measures -factors that research has documented definitively help shape the levels of risk for poor student experiences and outcomes related to schooling. Finally, the study does not include looking at placement between K-2nd grade students. The use of exclusionary discipline practices for the youngest school children is a critical topic in need of examination.

Directions for Future Research

There are a multitude of facets that need further exploration that should be accompanied with a sense of urgency. These include the qualitative investigation of student's experiences before, during and after placement; examination of multiple student short term and long term outcomes; and the dynamics of placement decisions themselves. Due to consistent findings of repeat entrances into disciplinary alternative schools exploration of the contributing factors to recidivism can help identify policies and factors in these schools and at the regular schools they return to that may facilitate recidivism. Also, the incidences of placement for students in alternative schools and residential enrollments in foster care facilities and some subsequent placements into psychiatric hospital care is a line of investigation should continue particularly as it relates to disciplinary alternative schools. Methodologically, conducting a multilevel Discrete-time hazard analysis that examines the possible nested impact of student and school characteristics would lend evidence to environmental school factors that increase the hazard of placement. Importantly, research documenting the implications of staffing decisions (i.e., use of

police and security, counselor/student ratios) and collaborations with the criminal justice system is greatly needed.

While a fair amount is known about risk factors and characteristics of students likely to be placed, far less is known about protective factors of children that act as a mediator of the significant predictors and risk factors of placement. Research in this area would also aid in efforts to strengthen such protective factors in students, and more importantly in the school system itself. Importantly, it would also promote and facilitate discussions that highlight resilient characteristics of children and youth as opposed to the dominate conversations that are saturated in a deficit view of children, particularly African-American children placed at risk (APA, 2008).

Conclusion

For some, these schools are highly valued for providing students that would otherwise be expelled an alternative setting allowing them to continue their schooling. For others, they are places where students most in need of support are tracked, and stigmatized, and criminalized leading to further marginalization. And for some, these schools play a simultaneously beneficial and harmful role within the public school system. The findings of this study suggest a need to reconsider the efficacy and the deleterious ramifications of out of school suspension and disciplinary alternative school placement. In addition to promoting and supporting policies and practices aimed at early proactive intervention as opposed to exclusionary approaches, a simultaneous focus on strengthening the level accountability and oversight for districts currently using alternative schools is a vital necessity to systematically ensure the success of the nation's most vulnerable children.

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Appendix

Statistical Modeling Technique: Discrete time hazard analysis

The use of simple regression analyses on longitudinal event data is problematic in that it cannot explicate the impact of variables that may change in value over time. Thorough the process of censoring, data from students who never experience alternative placement are used which provides equal amounts of information about non-occurrence as event occurrence. Discrete-Time hazard models are semi parametric as the model makes several parametric assumptions because while they do not assume that the effects of the predictor variables are constant over time, the model invokes assumptions about the functional form that links predictors to log hazard (Singer & Willit, 2003, p.522). The proportional hazards model specifies hazard rates as a log-linear function of parameters for the effect of covariates

$$h_i(t) = h_0(t)\exp\left(\sum_{k=1}^{K} \beta_k X_{ik}(t)\right)$$

where $h_i(t)$ is the hazard rate value (alternative placement) for person i at time t, $h_o(t)$ is the baseline hazard function that represents the major dimension of time dependence (grade/year), and $X_{ik}(t)$ is the value of the k^{th} covariate for person i at time t. Statistically significant covariates are determined according to the alpha level of 0.05. The values of Discrete-time hazard, as conditional probabilities lie between 0 and 1 which can pose difficulties with interpretations and comparisons. As such, the values are transformed for expression on a different scale – the logit transformations in the forms of odds and log odds where odds = probability/1-probability, and the log odds is calculated by taking the natural logarithm of odds (Singer and Willit, 2003). Results of Discrete-Time hazard modeling are expressed as odds ratio (*Exp*) that denotes the regression result in terms of *e* raised to the power of each effect. The interpretation of each parameter β_k is that Exp(β_k) indicates the hazard ratio, the factor change associated with an increase of one unit in X_{ik}, with all other covariates statistically held constant. The relative risk of alternative school placement is attributable to each possible variable while fully accounting for other variables included in the model.

In order to summarize and illustrate trends over time related to the substantive predictors, graphic displays of the fitted values of hazard are shown for each predictor. This is done by substituting the parameter estimates back into the discrete-time hazard models and obtaining predicted values by outputting parameter estimates for the logistic regression procedure as explicated in Singer and Willett (2003). The syntax used for this procedure was provided by UCLA Academic Technology Services, Statistical Consulting Group (2010). Illustrating the fitted values of hazard is the most effective way to explicitly show how much different the risk of placement is in each grade for students based on their demographic characteristics, and other predictors.

Four groups of discrete-time hazard models were run separately to determine the most significant predictors in each variable category (i.e., student demographics, behavior related variables, non-cognitive variables, and academic related variables). The most significant predictor from each of the four groups was used in the final full model.

A second data set was constructed for the analysis of subsequent juvenile detention (research question 3) that included only the subset of cohort students who experienced an alternative placement event. The time/duration variable was set at years to determine the number of school years between the first alternative school placement and the juvenile detention event.

Descriptive statistics were used to determine the number and proportion of cohort students who experienced a juvenile detention event and the duration of time between alternative school placement and juvenile detention. Logistic regression was used to determine the effect of race and gender on juvenile detention after entry into a disciplinary alternative

Table 1*: Life Table of Discrete-time data for the Cohort from 3rd to 12th Grade (N=7668)*

		Number			*Proportion*		
Year	*Interval Grade*	*n at Risk*	*n Placed in Alt school*	*n Censored*	*Hazard Function*	*Survivor Function*	*Cumulative Proportion Surviving*
1997-98	3	7668	2	345	0.0003	0.9997	0.9997
1998-99	4	7321	5	282	0.0007	0.9993	0.9990
1999-00	5	7034	27	351	0.0038	0.9962	0.9952
2000-01	6	6656	50	222	0.0075	0.9925	0.9877
2001-02	7	6384	102	110	0.0160	0.9840	0.9719
2002-03	8	6172	102	231	0.0165	0.9835	0.9558
2003-04	9	5893	86	145	0.0146	0.9854	0.9419
2004-05	10	5662	85	314	0.0150	0.9850	0.9277
2005-06	11	5263	55	450	0.0105	0.9895	0.9180
2006-07	12	4758	30	-	0.0063	0.9937	0.9122

Final Model

Results of fitting Discrete-Time Hazard models for Predictor Variables Lunch, Suspension, Mobility and Retention to the Grade of First Placement in Disciplinary Alternative School

	Model A	Model D	Model G	Model I	Model L	Model O
Parameter Estimates and Asymptotic Standard Errors						
D_3	-8.251**	-9.297**	-8.428**	-8.944**	-8.251**	-9.262**
	(.707)	(.713)	(.708)	(.711)	(.707)	(.716)
D_4	-7.288**	-8.333**	-7.468**	-7.652**	-7.590**	-8.203**
	(.447)	(.457)	(.448)	(.450)	(.450)	(.460)
D_5	-5.559**	-6.582**	-5.845**	-5.843**	-5.650**	-6.457**
	(.193)	(.214)	(.196)	(.197)	(.193)	(.220)
D_6	-4.884**	-5.885**	-6.121**	-5.220**	-4.902**	-6.759**
	(.142)	(.169)	(.162)	(.148)	(.142)	(.193)
D_7	-4.120**	-5.103**	5.508**	-4.423**	-4.194**	-6.071**
	(.100)	(.135)	(.127)	(.105)	(.101)	(.155)
D_8	-4.086**	-5.051**	-5.590**	-4.359**	-4.178**	-6.102**
	(.100)	(.134)	(.129)	(.104)	(.101)	(.156)
D_9	-4.212**	-5.162**	-5.508**	-4.428**	-4.255**	-5.933**
	(.109)	(.140)	(.133)	(.112)	(.109)	(.157)
D_{10}	-4.184**	-5.114**	-5.252**	-4.428**	-4.426**	-5.819**
	(.109)	(.140)	(.127)	(.114)	(.115)	(.156)
D_{11}	-4.551**	-5.451**	-5.517**	-4.773**	-4.765**	-6.033**
	(.136)	(.161)	(.151)	(.139)	(.140)	(.174)
D_{12}	-5.060**	-5.546**	-5.739**	-5.166**	-5.164**	-5.944**
	(.183)	(.192)	(.192)	(.184)	(.184)	(.198)
Lunch		1.410**				.585**
		(.109)				(.118)
		expβ 4.10				**expβ** 1.79
Suspension			2.176**			1.996**
			(.058)			(.062)
			expβ 8.81			**expβ** 7.36
Mobility				2.018**		1.577**
				(.076)		(.091)
				expβ 7.52		**expβ** 4.84
Retention					1.511**	.402*
					(.134)	(.153)
					expβ 4.53	**expβ** 1.49
Goodness-of-Fit						
LL	-2952.89	-2848.90	-2280.44	-2724.74	-2905.59	-2129.47
Deviance	5905.77	5697.80	4560.88	5449.48	5811.18	4258.94
n parameters	10	11	11	11	11	14
AIC	5925.77	5719.80	4582.88	5471.48	5833.18	4286.94
Deviance-based Hypothesis Tests						
H_0: B_{FRE}= 0		207.97**				1438.86**
H_0: B_{SUSP} = 0			1344.89**			301.94**
H_0: B_{MOB} = 0				456.29**		1190.54**
H_0: B_{RET}= 0					94.59**	1552.24*
Wald Hypothesis Tests						

H_0: $B_{FRE} = 0$	166.28**				24.39**
H_0: $B_{SUSP} = 0$		1431.28**			1024.38**
H_0: $B_{MOB} = 0$			788.19**		302.91**
H_0: $B_{RET} = 0$				127.63**	6.844*