OUT-OF-SCHOOL SUSPENSION AND DIFFERENCES IN READING AND MATHEMATICS ACHIEVEMENT BY GENDER AND ETHNICITY/RACE

Brittney Lee Henkel, John R. Slate, and Cynthia Martinez-Garcia,
Sam Houston State University

Abstract

In this empirical research study, the relationship of out-school suspension with the reading and mathematics achievement of Texas Grade 6, 7, and 8 White, Hispanic, and Black boys and girls was examined. Data were provided from the Texas Education Agency for Grades 6, 7, and 8 students for the 2008-2009 and 2010-2011 school years. Statistically significant differences were present in reading and mathematics achievement for Grades 6, 7, and 8 White, Hispanic, and Black boys and girls as a function of out-of-school suspension. In every case, the average reading and mathematics performance was statistically significantly lower for boys and girls who received an out-of-school suspension than for their peers who did not receive an out-of-school suspension. Mathematics scores were more adversely influenced than were reading scores.

INTRODUCTION

Texas schools are permitted different methods of disciplining students who misbehave; methods of discipline are delineated in the Texas Education Code (Texas Education Agency, 2010). If students interrupt the learning environment in the classroom, teachers are allowed to remove them (Tobin, 1996). If student behavior interferes with the teacher's ability to teach or the other students' ability to learn, teachers have the right to escort the misbehaving students to the administrator's office (Texas Education Agency, 2010). Principals then conference with the student and parent(s) and the teachers involved before the student is permitted back into the learning environment. With in-school suspension being an initial disciplinary consequence, when the disruptions do not stop, the next method of discipline is out-of-school suspension (Association of Texas Professional Educators, 2014). The Texas Education Agency described out-of-school suspension as the discipline consequence for misbehaving students who have already received at least one in-school suspension. An important note regarding out-of-school suspension is that student removal from the regular learning environment as a disciplinary measure cannot exceed three consecutive days (Texas Education Agency, 2010).

With specific reference to the use of out-of-school suspension, Hilberth (2010) analyzed its relationship to reading and mathematics achievement for Texas Black and White students in Grades 6, 7, and 8. She established that Black and White students who received an out-of-school suspension had lower Texas Assessment of Knowledge and Skills (TAKS) Reading and Mathematics scaled scores than Black and White students who were not assigned to out-of-school suspension. Grade 6 Black and Grade 6 White students who were assigned out-of-school suspension received lower TAKS Reading and Mathematics scores than Grade 6 Black students who were not assigned to out-of-school suspension (Hilberth, 2010). With respect to Grade 7, Black students and White students who were assigned to out-of-school suspension had similar results to Grade 6 Black students and White students who were assigned to out-of-school suspension (Hilberth, 2010). Similar results were present for both Grade 8 Black students who were assigned to out-of-school suspension and for Grade 8 White students who were assigned to out-of-school suspension. Thus, in Hilberth's (2010) research investigation, both Black and White students in Grades 6, 7, and 8 who were assigned to out-of-school suspension had statistically significantly lower TAKS Reading and Mathematics scores than their counterparts who were not assigned to out-of school suspension.

Similar findings were present for Hispanic and White Texas Grade 6, 7, and 8 students who were assigned an out-of-school suspension. Their TAKS Reading and Mathematics scaled and raw scores were lower than their peers who were not assigned an out-of-school suspension (Jones, 2013). Grade 6 Hispanic and White students who were assigned an out-of-school suspension scored 97.50 and 129.63 points lower, respectively, on the TAKS Reading test than their counterparts who were not assigned to out-of-school suspension. Moreover, Grade 6 Hispanic and White students scored 135.41 and 170.82 points lower, respectively, on the TAKS Mathematics test than their peers who were not assigned an out-of-school suspension (Jones, 2013). For these Grade 6 students, their mathematics test scores were more affected by the assignment of an out-of-school suspension than were their reading test scores.

Similar results were documented for Grade 7 Hispanic and White students who were assigned an out-of-school suspension. Both their reading and mathematics achievement were negatively influenced by receiving an out-of-school suspension, with their mathematics test scores being more adversely affected by the receipt of an out-of-school suspension than were their reading test scores. Moreover, Jones (2013) provided extensive evidence that the reading and mathematics achievement of Grade 8 Hispanic and White students who received an out-of-school suspension were lower than their peers who did not receive an out-of-school suspension. Results were commensurate with Grade 6 and Grade 7 students.

The U.S. Department of Education reported that more than 3.3 million students are suspended yearly (Kalimeris & Borrelli, 2013). Suh and Suh (2007) investigated data to determine the most substantial risk factors for students to drop out of school. Through using multiple logistic regression procedures on 180 possible indicators of students dropping out of school, 16 statistically significant indicators were identified. Students who had previously been suspended from school had an increase of 78% in the possibility of dropping out of school. Student removal from the classroom setting appears to serve only as a temporary solution as it does little if anything to help correct the underlying issue behind the behavior (Suh & Suh, 2007).

Statement of the Problem

Student ethnicity/race and disciplinary consequence assignment have been investigated in numerous studies (Carrell & Hoekstra, 2010; Dickinson & Miller, 2006; Fielding, 2004; Hilberth, 2010; Jones, 2013; Luiselli, Putnam, Handler, & Feinberg, 2005; Lunenburg, 2013; Skiba & Peterson, 2000; Wallace, Goodkind, Wallace, & Bachman, 2008; Witt, 2007). What is missing in the research literature is a focus on gender within different ethnic/racial groups and the relationship of disciplinary consequence to academic performance. Girls are less likely to be suspended than boys (National Center for Education Statistics, 2010). Across the nation, the average suspension rate for Black students is 13%; a rate that is the highest for all ethnic/racial groups (National Center for Education Statistics, 2010). With specific reference to student gender, Black boys have the highest suspension and expulsion rates (Adams, 2008; Billitteri, 2008; Monroe, 2005; U.S. Department of Health and Human Services, 2008; Witt, 2007). In 2000, girls had lower suspension and expulsion rates than boys regardless of ethnic/racial membership (U. S. Department of Health and Human Services, 2008). The results of this empirical research investigation will add to the literature on the relationship of disciplinary consequences (i.e., out-of-school suspension) to the reading and mathematics achievement of White, Black, and Hispanic boys and girls.

Purpose of the Study

The purpose of this article was to determine the extent to which differences were present in the reading and mathematics achievement of White, Black, and Hispanic students as a function of out-of-school suspension. Specifically, the reading and mathematics performance of Grade 6, 7, and 8 White, Black, and Hispanic boys and girls

was analyzed in regard to the receipt or non-receipt of out-of-school suspension. Accordingly, the relationship of out-of-school suspension with student reading and mathematics achievement was addressed for Grade 6, 7, and 8 White, Black, and Hispanic boys and girls.

Significance of the Study

The results of this study provide information on the relationship of out-of-school suspension with the reading and mathematics achievement of White, Black, and Hispanic boys and girls. Specifically, the extent to which the receipt or non-receipt of out-of-school suspension was related to the academic achievement of Grade 6, 7, and 8 students was determined. Results obtained from this study regarding the relationship of out-of-school suspension and student academic performance may provide useful information to educational leaders and policymakers. Educational leaders and policymakers could use results from this study to implement change in the use of out-of-school suspension as a primary mode of discipline in Texas schools

Research Questions

The following research questions were addressed: (a) What is the difference in the academic achievement of Grade 6, 7, and 8 White, Black, and Hispanic boys as a function of out-of-school suspension? and (b) What is the difference in the academic achievement of Grade 6, 7, and 8 White, Black, and Hispanic girls as a function of out-of-school suspension? These two research questions were repeated for each of the three ethnic groups (i.e., White, Hispanic, and Black) and for three grade levels (i.e., Grade 6, 7, and 8) on which data were present. Furthermore, all research questions were examined for two school years of data (i.e., 2008-2009 and 2010-2011).

METHODOLOGY

Research Design

This study used a non-experimental causal-comparative research design (Creswell, 2009; Johnson & Christensen, 2012). In such a design, no manipulation of the independent variable nor of the dependent variable occurs. Because an archival dataset obtained from the Texas Education Agency was analyzed, the discipline consequence of out-of-school suspension and the reading and mathematics tests had already taken place for the Grade 6, 7, and 8 Texas students in this investigation. The independent variables that constitute the design of this investigation were student gender within three ethnic/racial groups (.e.g., White, Hispanic, and Black), and the receipt or non-receipt of out-of-school suspension. The dependent variables for this research study consisted of TAKS Reading and Mathematics test scores for each grade level (i.e., Grades 6, 7, and 8).

Participants

The Texas Education Agency Public Education Information Management System provided archival data for the 2008-2009 and for the 2010-2011 school years for all Grade 6, 7, and 8 White, Hispanic, and Black students. Hilberth (2010) and Jones (2013) analyzed the archival dataset that was used in this investigation. In their dissertations, Grade 6, 7, and 8 Black, White, and Hispanic students who received an out-of-school suspension assignment and their TAKS Reading and Mathematics scores were analyzed. Hilberth (2010) focused solely on Black and White students in the 2008-2009 school year and Jones (2013) focused only on Hispanic and White students for the 2008-2009 and 2010-2011 school years. What is unique to this investigation is the focus on boys and girls within each of these three ethnic/racial groups for each of three grade levels. Student enrollment during the 2008-2009 school year was 809,765 students, and student enrollment during the 2010-2011 school year increased to 1,073,250 students.

Instrumentation

Raw or scaled scores on the TAKS Reading and Mathematics exams were analyzed in this investigation. As such, the reliability and validity of these test scores is relevant. For more in-depth information than can be provided in this article, further description of the score reliability and validity of these scores can be obtained at the Texas Education Agency website. The TAKS test scores have a very high reliability of .87 to .90, with perfect reliability being 1.0 (Texas Education Agency, 2008). The reporting of out-of-school suspension, the disciplinary consequence examined in this investigation, is believed to be accurate because audits are conducted by the Texas Education Agency, with penalties provided to schools who provide inaccurate data.

RESULTS

The outcomes of the study will be presented in order of the research questions. Results of data analyses for White, Hispanic, and Black boys will be described by grade level first. Then, the results of the statistical analyses for White, Hispanic, and White girls will be discussed by grade first. Results will be presented first for the 2008-2009 school year and then for the 2010-2011 school year.

Checks of Underlying Assumptions for Statistical Procedures

The underlying assumptions of the Multivariate Analysis of Variance (MANOVA) were checked prior to conducting the multivariate statistical procedures to address the research questions for boys and girls in Grades 6, 7, and 8. Specifically, the Box's Test of Equality of Covariance, the Levene's Test of Equality of Error Variances, and data normality were determined. Even though these assumptions were not met for students' reading and mathematics scores by gender within each ethnic/racial group, the robustness of a MANOVA procedure can withstand this violation (Field, 2013).

2008-2009 School Year Results

For Grade 6 boys in the 2008-2009 school year, results were statistically significant at the overall level for White boys (Wilks' $\Lambda = .98$, $p < .001$, $\eta^2 = .025$); for Hispanic boys (Wilks' $\Lambda = .96$, $p < .001$, $\eta^2 = .036$); and for Black boys (Wilks' $\Lambda = .95$, $p < .001$, $\eta^2 = .048$). Regarding Grade 7 boys, results were statistically significant at the overall level for White boys (Wilks' $\Lambda = .97$, $p < .001$, $\eta^2 = .033$); for Hispanic boys (Wilks' $\Lambda = .95$, $p < .001$, $\eta^2 = .046$); and for Black boys (Wilks' $\Lambda = .94$, $p < .001$, $\eta^2 = .063$). Concerning Grade 8 boys, results were statistically significant at the overall level for White boys (Wilks' $\Lambda = .96$, $p < .001$, $\eta^2 = .039$); for Hispanic boys (Wilks' $\Lambda = .95$, $p < .001$, $\eta^2 = .052$); and for Black boys (Wilks' $\Lambda = .94$, $p < .001$, $\eta^2 = .057$). Of the effect sizes, eight effect sizes were small and one effect size was moderate (Cohen, 1988).

Readers are directed to Table 1 for the descriptive statistics for the TAKS Reading and Mathematics scores for the 2008-2009 school year for Grade 6 boys as a function of out-of-school suspension. Descriptive statistics for Grade 7 boys are provided in Table 3. In Table 5 are the descriptive statistics for Grade 8 boys.

Table 1

Descriptive Statistics for Grade 6 Boys' TAKS Reading and Mathematics Scores by Ethnicity/Race and Out-of-School Suspension for the 2008-2009 School Year

Academic Area, Ethnicity/Race by Out-of-School Suspension	*n*	*M*	*SD*
Reading			
White Students who received an OSS	3,386	2282.65	239.21
White Students who did not receive an OSS	57,694	2405.34	210.11
Hispanic Students who received an OSS	10,675	2188.72	229.11
Hispanic Students who did not receive an OSS	72,073	2285.47	232.19
Black Students who received an OSS	6,212	2209.28	210.83
Black Students who did not receive an OSS	18,113	2294.24	207.50
Mathematics			
White Students who received an OSS	3,386	2198.51	251.85
White Students who did not receive an OSS	57,694	2364.60	251.52

Hispanic Students who received an OSS	10,675	2115.75	221.86
Hispanic Students who did not receive an OSS	72,073	2251.40	241.71
Black Students who received an OSS	6,212	2101.38	213.87
Black Students who did not receive an OSS	18,113	2212.48	229.60

Table 3

Descriptive Statistics for Grade 7 Boys' TAKS Reading and Mathematics Scores by Ethnicity/Race and Out-of-School Suspension for the 2008-2009 School Year

Academic Area, Ethnicity/Race by Out-of-School Suspension	*n*	*M*	*SD*
Reading			
White Students who received an OSS	4,259	2185.15	205.56
White Students who did not receive an OSS	57,438	2292.78	179.06
Hispanic Students who received an OSS	12,558	2110.18	212.12
Hispanic Students who did not receive an OSS	68,314	2198.42	206.84
Black Students who received an OSS	6,888	2131.23	188.68
Black Students who did not receive an OSS	17,570	2214.07	176.85
Mathematics			
10White Students who received an OSS	4,259	2153.24	189.49
White Students who did not receive an OSS	57,438	2281.92	182.10
Hispanic Students who received an OSS	12,558	2097.17	171.72
Hispanic Students who did not receive an OSS	68,314	2200.19	170.48
Black Students who received an OSS	6,888	2083.41	165.68

Black Students who did not receive an OSS	17,570	2174.99	164.22

Table 5

Descriptive Statistics for Grade 8 Boys' TAKS Reading and Mathematics Scores by Ethnicity/Race and Out-of-School Suspension for the 2008-2009 School Year

Academic Area, Ethnicity/Race by Out-of-School Suspension	*n*	*M*	*SD*
Reading			
White Students who received an OSS	4,606	2269.12	245.95
White Students who did not receive an OSS	56,745	2395.88	212.05
Hispanic Students who received an OSS	13,959	2186.03	272.03
Hispanic Students who did not receive an OSS	66,048	2284.69	275.59
Black Students who received an OSS	6,880	2223.13	221.66
Black Students who did not receive an OSS	17,724	2311.11	212.06
Mathematics			
White Students who received an OSS	4,606	2156.33	211.01
White Students who did not receive an OSS	56,745	2301.09	202.34
Hispanic Students who received an OSS	13,959	2096.08	196.08
Hispanic Students who did not receive an OSS	66,048	2217.50	198.70
Black Students who received an OSS	6,880	2081.76	182.70
Black Students who did not receive an OSS	17,724	2177.09	182.04

With respect to Grade 6 boys, univariate follow-up analysis of variance procedures revealed statistically significant differences in TAKS Reading scores for White boys, $F(1, 61078) = 1072.96$, $p < .001$, $\eta^2 = .02$; for Hispanic boys, $F(1, 82746) = 1619.90$, $p < .001$, $\eta^2 = .02$; and for Black boys, $F(1, 24323) = 769.14$, $p < .001$, $\eta^2 = .03$. Regarding Grade 7 boys, statistically significant differences were revealed in TAKS Reading scores for White boys, $F(1, 61695) = 1401.51$, $p < .001$, $\eta^2 = .02$; for Hispanic boys, $F(1, 80870) = 1915.06$, $p < .001$, $\eta^2 = .02$; and for Black boys, $F(1, 24456) = 1045.06$, $p < .001$, $\eta^2 = .04$. Concerning Grade 8 boys, statistically significant differences were yielded in TAKS Reading scores for White boys, $F(1, 61349) = 1484.00$, $p < .001$, $\eta^2 = .02$; for Hispanic boys, $F(1, 80005) = 1483.66$, $p < .001$, $\eta^2 = .02$; and for Black boys, $F(1, 24602) = 831.47$, $p < .001$, $\eta^2 = .03$. Of the effect sizes, all nine effect sizes were small (Cohen, 1988).

With regard to the TAKS Reading assessment, Grade 6 White boys who were assigned to out-of-school suspension had an average scaled score that was 122.69 points lower than White students who were not assigned to out-of-school in-school suspension. Hispanic students who were assigned to out-of-school suspension had an average scaled score that was 96.75 points lower than Hispanic boys who were not assigned to out-of-school suspension. Black boys who received an out-of-school suspension had an average scaled score that was 84.96 points lower than Black students who were not assigned to out-of-school suspension. Concerning the TAKS Reading assessment, Grade 7 White, Hispanic, and Black boys who were assigned to out-of-school suspension earned an average scaled score that was 107.63, 88.24, and 82.84 points lower, respectively, than their peers who were not assigned to out-of-school suspension. For the TAKS Reading assessment, Grade 8 White, Hispanic, and Black boys who were assigned to out-of-school suspension had an average scaled score that was 126.76, 98.66, and 87.98 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension.

For Grade 6 boys TAKS Mathematics scores, univariate follow-up analysis of variance procedures revealed statistically significant differences for White boys, $F(1, 61078) = 1394.44$, $p < .001$, $\eta^2 = .02$; for Hispanic boys, $F(1, 82746) = 2989.01$, $p < .001$, $\eta^2 = .04$; and for Black boys, $F(1, 24323) = 1120.96$, $p < .001$, $\eta^2 = .04$. Regarding Grade 7 boys, univariate follow-up analysis of variance procedures revealed statistically significant differences in TAKS Mathematics scores for White boys, $F(1, 61695) = 1968.58$, $p < .001$, $\eta^2 = .03$; for Hispanic boys, $F(1, 80870) = 3865.16$, $p < .001$, $\eta^2 = .05$; and for Black boys, $F(1, 24456) = 1531.02$, $p < .001$, $\eta^2 = .06$. Concerning Grade 8 boys, statistically significant differences were present in TAKS Mathematics scores for White boys, $F(1, 61349) = 2166.36$, $p < .001$, $\eta^2 = .03$; for Hispanic boys, $F(1, 80005) = 4322.46$, $p < .001$, $\eta^2 = .05$; and for Black boys, $F(1, 24602) = 1356.39$, $p < .001$, $\eta^2 = .05$. Of the effect sizes, eight effect sizes were small and one effect size was moderate (Cohen, 1988).

With regard to the TAKS Mathematics assessment, Grade 6 White, Hispanic, and Black boys who were assigned to out-of-school suspension had an average scaled score that was 166.09, 135.65, and 111.10 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension. With respect to the TAKS Mathematics assessment, Grade 7 White, Hispanic, and Black boys who were assigned to out-of-school suspension earned an average scaled score that was 128.68, 103.02, and 91.58 points lower, respectively, than their peers who were not assigned to out-of-school suspension. Concerning the TAKS Mathematics assessment, Grade 8 White, Hispanic, and Black boys

who were assigned to out-of-school suspension had an average scaled score that was 144.76, 121.42, and 95.33 points lower than their counterparts who were not assigned to out-of-school suspension.

For Grade 6 girls in the 2008-2009 school year, results were statistically significant at the overall level for White girls (Wilks' $\Lambda = .99$, $p < .001$, $\eta^2 = .010$); for Hispanic girls (Wilks' $\Lambda = .98$, $p < .001$, $\eta^2 = .018$); and for Black girls (Wilks' $\Lambda = .97$, $p < .001$, $\eta^2 = .033$). Regarding Grade 7 girls in the 2008-2009 school year, results were statistically significant at the overall level for White girls (Wilks' $\Lambda = .98$, $p < .001$, $\eta^2 = .019$); for Hispanic girls (Wilks' $\Lambda = .97$, $p < .001$, $\eta^2 = .033$); and for Black girls (Wilks' $\Lambda = .95$, $p < .001$, $\eta^2 = .049$). Concerning Grade 8 girls in the 2008-2009 school year, results were statistically significant at the overall level for White girls (Wilks' $\Lambda = .98$, $p < .001$, $\eta^2 = .019$); for Hispanic girls (Wilks' $\Lambda = .97$, $p < .001$, $\eta^2 = .033$); and for Black girls (Wilks' $\Lambda = .95$, $p < .001$, $\eta^2 = .053$). Of the effect sizes all nine effect sizes were small (Cohen, 1988).

Readers are directed to Table 7 for the descriptive statistics for the TAKS Reading and Mathematics scores for the 2009-2010 school year for Grade 6 girls as a function of out-of-school suspension. Descriptive statistics for Grade 7 girls are provided in Table 9. In Table 11 are the descriptive statistics for Grade 8 girls.

Table 7

Descriptive Statistics for Grade 6 Girls' TAKS Reading and Mathematics Scores by Ethnicity/Race and Out-of-School Suspension for the 2008-2009 School Year

Academic Area, Ethnicity/Race by Out-of-School Suspension	*n*	*M*	*SD*
Reading			
White Students who received an OSS	831	2282.06	231.64
White Students who did not receive an OSS	56,821	2419.08	212.34
Hispanic Students who received an OSS	4,556	2193.41	219.25
Hispanic Students who did not receive an OSS	74,597	2289.70	227.54
Black Students who received an OSS	3,079	2213.47	205.64
Black Students who did not receive an OSS	20,417	2309.05	208.18
Mathematics			
White Students who received an OSS	831	2163.86	233.66

White Students who did not receive an OSS	56,821	2360.38	246.05
Hispanic Students who received an OSS	4,556	2117.65	212.65
Hispanic Students who did not receive an OSS	74,597	2252.06	234.74
Black Students who received an OSS	3,079	2213.47	205.64
Black Students who did not receive an OSS	20,417	2309.05	208.18

Table 9

Descriptive Statistics for Grade 7 Girls' TAKS Reading and Mathematics Scores by Ethnicity/Race and Out-of-School Suspension for the 2008-2009 School Year

Academic Area, Ethnicity/Race by Out-of-School Suspension	*n*	*M*	*SD*
Reading			
White Students who received an OSS	1,320	2197.15	213.40
White Students who did not receive an OSS	56,677	2333.96	178.71
Hispanic Students who received an OSS	6,663	2131.18	208.91
Hispanic Students who did not receive an OSS	70,833	2228.15	208.81
Black Students who received an OSS	3,916	2166.35	183.19
Black Students who did not receive an OSS	19,329	2254.70	178.63
Mathematics			
White Students who received an OSS	1,320	2123.45	181.62
White Students who did not receive an OSS	56,677	2284.13	179.58
Hispanic Students who received an OSS	6,663	2089.29	163.89
Hispanic Students who did not receive an	70,833	2199.58	167.88

OSS			
Black Students who received an OSS	3,916	2089.98	163.40
Black Students who did not receive an OSS	19,329	2186.63	165.55

Table 11

Descriptive Statistics for Grade 8 Girls' TAKS Reading and Mathematics Scores by Ethnicity/Race and Out-of-School Suspension for the 2008-2009 School Year

Academic Area, Ethnicity/Race by Out-of-School Suspension	*n*	*M*	*SD*
Reading			
White Students who received an OSS	1,639	2321.40	233.28
White Students who did not receive an OSS	56,905	2444.25	205.54
Hispanic Students who received an OSS	7,405	2225.70	250.57
Hispanic Students who did not receive an OSS	68,950	2320.20	277.64
Black Students who received an OSS	4,270	2252.84	216.50
Black Students who did not receive an OSS	19,425	2357.99	212.78
Mathematics			
White Students who received an OSS	1,639	2129.73	191.88
White Students who did not receive an OSS	56,905	2293.19	202.88
Hispanic Students who received an OSS	7,405	2080.46	188.01
Hispanic Students who did not receive an OSS	68,950	2202.47	194.95
Black Students who received an OSS	4,270	2076.96	176.12
Black Students who did not receive an OSS	19,425	2181.77	184.64

With respect to Grade 6 girls, univariate follow-up analysis of variance procedures revealed statistically significant differences in TAKS Reading scores for White girls, $F(1, 57650) = 340.13$, $p < .001$, $\eta^2 = .01$; for Hispanic girls, $F(1, 79151) = 772.27$, $p < .001$, $\eta^2 = .01$; and for Black girls, $F(1, 23494) = 565.72$, $p < .001$, $\eta^2 = .02$. Regarding Grade 7 girls, revealed statistically significant differences were yielded in TAKS Reading scores for White girls, $F(1, 57995) = 748.78$, $p < .001$, $\eta^2 = .01$; for Hispanic girls, $F(1, 77494) = 1313.39$, $p < .001$, $\eta^2 = .02$; and for Black girls, $F(1, 23243) = 789.74$, $p < .001$, $\eta^2 = .03$. Concerning Grade 8 girls, statistically significant differences were revealed in TAKS Reading scores for White girls, $F(1, 58542) = 564.61$, $p < .001$, $\eta^2 = .01$; for Hispanic girls, $F(1, 76353) = 788.80$, $p < .001$, $\eta^2 = .01$; and for Black girls, $F(1, 23693) = 849.42$, $p < .001$, $\eta^2 = .04$. Of the effect sizes all nine effect sizes were small (Cohen, 1988).

With regard to the TAKS Reading assessment, Grade 6 White, Hispanic, and Black girls who were assigned to out-of-school suspension had an average scaled score that was 137.02, 96.29, and 95.58 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension. Concerning the TAKS Reading assessment, Grade 7 White, Hispanic, and Black girls who were assigned to out-of-school suspension had an average scaled score that was 136.81, 96.97, and 88.35 points lower, respectively, than their peers who were not assigned to out-of-school suspension. For the TAKS Reading assessment, Grade 8 White, Hispanic, and Black girls who were assigned to out-of-school suspension had an average scaled score that was 122.85, 94.50, and 105.15 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension.

For Grade 6 girls TAKS Mathematics scores, univariate follow-up analysis of variance procedures revealed statistically significant differences for White girls, $F(1, 57650) = 523.20$, $p < .001$, $\eta^2 = .01$; for Hispanic girls, $F(1, 79151) = 1422.29$, $p < .001$, $\eta^2 = .02$; and for Black girls, $F(1, 23494) = 686.16$, $p < .001$, $\eta^2 = .03$. Regarding Grade 7 girls, statistically significant differences were present in TAKS Mathematics scores for White girls, $F(1, 57995) = 1032.19$, $p < .001$, $\eta^2 = .02$; for Hispanic girls, $F(1, 77494) = 2639.39$, $p < .001$, $\eta^2 = .03$; and for Black girls, $F(1, 23243) = 1114.66$, $p < .001$, $\eta^2 = .05$. Concerning Grade 8 girls, statistically significant differences were revealed in TAKS Mathematics scores for White girls, $F(1, 58542) = 1037.22$, $p < .001$, $\eta^2 = .02$; for Hispanic girls, $F(1, 76353) = 2636.98$, $p < .001$, $\eta^2 = .03$; and for Black girls, $F(1, 23693) = 1146.52$, $p < .001$, $\eta^2 = .05$. Of the effect sizes all nine effect sizes were small (Cohen, 1988).

With regard to the TAKS Mathematics assessment, Grade 6 White, Hispanic, and Black girls who were assigned to out-of-school suspension had an average scaled score that was 196.52, 134.41, and 113.44 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension. Concerning the TAKS Mathematics assessment, Grade 7 White, Hispanic, and Black girls who received an out-of-school suspension had an average scaled score that was 160.68, 110.29, and 96.65 points lower, respectively, than their peers who did not receive an out-of-school suspension. For the TAKS Mathematics assessment, Grade 8 White, Hispanic, and Black girls who were assigned to out-of-school suspension had an average scaled score that was 163.46, 122.01, and 104.81 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension.

2010-2011 School Year Results

For Grade 6 boys in the 2010-2011 school year, results were statistically significant at the overall level for White boys (Wilks' $\Lambda = .97$, $p < .001$, $\eta^2 = .031$); for Hispanic boys (Wilks' $\Lambda = .96$, $p < .001$, $\eta^2 = .036$); and for Black boys (Wilks' $\Lambda = .95$, $p < .001$, $\eta^2 = .046$). Regarding Grade 7 boys in the 2010-2011 school year, results were statistically significant at the overall level for White boys (Wilks' $\Lambda = .96$, $p < .001$, $\eta^2 = .039$); for Hispanic boys (Wilks' $\Lambda = .95$, $p < .001$, $\eta^2 = .051$); and for Black boys (Wilks' $\Lambda = .95$, $p < .001$, $\eta^2 = .054$). Concerning Grade 8 boys in the 2010-2011 school year, results were statistically significant at the overall level for White boys (Wilks' $\Lambda = .96$, $p < .001$, $\eta^2 = .039$); for Hispanic boys (Wilks' $\Lambda = .95$, $p < .001$, $\eta^2 = .048$); and for Black boys (Wilks' $\Lambda = .94$, $p < .001$, $\eta^2 = .060$). Of the effect sizes eight effect sizes were small and one effect size was moderate (Cohen, 1988).

Readers are directed to Table 2 for the descriptive statistics for the TAKS Reading and Mathematics scores for the 2010-2011 school year for Grade 6 boys as a function of out-of-school suspension. Descriptive statistics for Grade 7 boys are provided in Table 4. In Table 6 are the descriptive statistics for Grade 8 boys.

Table 2

Descriptive Statistics for Grade 6 Boys' TAKS Reading and Mathematics Scores by Ethnicity/Race and Out-of-School Suspension for the 2010-2011 School Year

Academic Area, Ethnicity/Race by Out-of-School Suspension	*n*	*M*	*SD*
Reading			
White Students who received an OSS	2,949	31.14	8.77
White Students who did not receive an OSS	55,570	35.80	6.39
Hispanic Students who received an OSS	9,995	28.54	8.82
Hispanic Students who did not receive an OSS	80,698	32.56	7.86
Black Students who received an OSS	5,540	29.40	8.61
Black Students who did not receive an OSS	17,742	32.74	7.46
Mathematics			
White Students who received an OSS	2,949	31.26	9.71

White Students who did not receive an OSS	55,570	37.42	7.87
Hispanic Students who received an OSS	9,995	28.83	9.53
Hispanic Students who did not receive an OSS	80,698	34.22	8.87
Black Students who received an OSS	5,540	27.67	9.53
Black Students who did not receive an OSS	17,742	32.28	9.18

Table 4

Descriptive Statistics for Grade 7 Boys' TAKS Reading and Mathematics Scores by Ethnicity/Race and Out-of-School Suspension for the 2010-2011 School Year

Academic Area, Ethnicity/Race by Out-of-School Suspension	*n*	*M*	*SD*
Reading			
White Students who received an OSS	3,430	33.83	11.36
White Students who did not receive an OSS	55,316	40.01	7.98
Hispanic Students who received an OSS	11,942	30.27	10.90
Hispanic Students who did not receive an OSS	78,456	35.71	9.60
Black Students who received an OSS	6,077	30.66	10.36
Black Students who did not receive an OSS	17,963	35.26	9.27
Mathematics			
White Students who received an OSS	3,430	29.15	11.11
White Students who did not receive an OSS	55,316	36.78	8.95
Hispanic Students who received an OSS	11,942	26.48	10.53
Hispanic Students who did not receive an	78,456	33.09	9.72

OSS			
Black Students who received an OSS	6,077	25.23	10.03
Black Students who did not receive an OSS	17,963	30.51	9.96

Table 6

Descriptive Statistics for Grade 8 Boys' TAKS Reading and Mathematics Scores by Ethnicity/Race and Out-of-School Suspension for the 2010-2011 School Year

Academic Area, Ethnicity/Race by Out-of-School Suspension	*n*	*M*	*SD*
Reading			
White Students who received an OSS	3,727	38.08	9.79
White Students who did not receive an OSS	55,099	42.70	6.55
Hispanic Students who received an OSS	12,644	34.44	11.16
Hispanic Students who did not receive an OSS	74,534	39.17	9.56
Black Students who received an OSS	5,818	35.36	9.99
Black Students who did not receive an OSS	17,512	39.38	8.23
Mathematics			
White Students who received an OSS	3,727	31.27	10.10
White Students who did not receive an OSS	55,099	38.52	8.87
Hispanic Students who received an OSS	12,644	27.52	10.64
Hispanic Students who did not receive an OSS	74,534	34.31	10.66
Black Students who received an OSS	5,818	26.77	9.82
Black Students who did not receive an OSS	17,512	32.37	9.75

With respect to Grade 6 boys, univariate follow-up analysis of variance procedures revealed statistically significant differences in TAKS Reading scores for White boys, $F(1, 58517) = 1430.12$, $p < .001$, $\eta^2 = .02$; for Hispanic boys, $F(1, 90691) = 2263.46$, $p < .001$, $\eta^2 = .02$; and for Black boys, $F(1, 23280) = 780.26$, $p < .001$, $\eta^2 = .03$. Regarding Grade 7 boys, statistically significant differences were yielded in TAKS Reading scores for White boys, $F(1, 58744) = 1828.88$, $p < .001$, $\eta^2 = .03$; for Hispanic boys, $F(1, 90396) = 3198.58$, $p < .001$, $\eta^2 = .03$; and for Black boys, $F(1, 24038) = 1050.45$, $p < .001$, $\eta^2 = .04$. Concerning Grade 8 boys, univariate follow-up analysis of variance procedures revealed statistically significant differences were present in TAKS Reading scores for White boys, $F(1, 58824) = 1605.14$, $p < .001$, $\eta^2 = .03$; for Hispanic boys, $F(1, 87176) = 2509.94$, $p < .001$, $\eta^2 = .03$; and for Black boys, $F(1, 23328) = 932.31$, $p < .001$, $\eta^2 = .04$. Of the effect sizes all nine effect sizes were small (Cohen, 1988).

With regard to the TAKS Reading assessment, Grade 6 White boys, Hispanic boys, and Black boys who were assigned to out-of-school suspension earned average raw scores that were 4.66, 4.02, and 7.61 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension. For Grade 7, White boys, Hispanic boys, and Black boys who were assigned to out-of-school suspension had an average raw score that was 6.18, 5.44, and 4.60 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension. Grade 8 White boys, Hispanic boys, and Black boys who were assigned to out-of-school suspension earned average raw scores that were 4.62, 4.73, and 4.02 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension.

For Grade 6 boys TAKS Mathematics scores, univariate follow-up analysis of variance procedures revealed statistically significant differences for White boys, $F(1, 58517) = 1673.66$, $p < .001$, $\eta^2 = .03$; for Hispanic boys, $F(1, 90691) = 3231.14$, $p < .001$, $\eta^2 = .03$; and for Black boys, $F(1, 23280) = 1044.95$, $p < .001$, $\eta^2 = .04$. Regarding Grade 7 boys, statistically significant differences were yielded in TAKS Mathematics scores for White boys, $F(1, 58744) = 2275.93$, $p < .001$, $\eta^2 = .04$; for Hispanic boys, $F(1, 90396) = 4681.47$, $p < .001$, $\eta^2 = .05$; and for Black boys, $F(1, 24038) = 1270.79$, $p < .001$, $\eta^2 = .05$. Concerning Grade 8 boys, statistically significant differences were revealed in TAKS Mathematics scores for White boys, $F(1, 58824) = 2282.90$, $p < .001$, $\eta^2 = .04$; for Hispanic boys, $F(1, 87176) = 4387.88$, $p < .001$, $\eta^2 = .05$; and for Black boys, $F(1, 23328) = 1434.99$, $p < .001$, $\eta^2 = .06$. Of the effect sizes eight effect sizes were small and one effect size was moderate (Cohen, 1988).

With regard to the TAKS Mathematics assessment, Grade 6 White boys, Hispanic boys, and Black boys who were assigned to out-of-school suspension earned average raw scores that were 6.16, 5.39, and 4.61 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension. For Grade 7, White boys, Hispanic boys, and Black boys who were assigned to out-of-school suspension had an average raw score that was 7.63, 6.61, and 5.28 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension. Grade 8 White boys, Hispanic boys, and Black boys who were assigned to out-of-school suspension earned average raw scores that were 7.25, 6.79, and 5.60 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension.

For Grade 6 girls in the 2010-2011 school year, results were statistically significant at the overall level for White girls (Wilks' $\Lambda = .99$, $p < .001$, $\eta^2 = .012$); for Hispanic girls (Wilks' $\Lambda = .98$, $p < .001$, $\eta^2 = .019$); and for Black girls (Wilks' $\Lambda = .96$, $p < .001$, $\eta^2 = .037$). Regarding Grade 7 girls, results were statistically significant at the overall level for White girls (Wilks' $\Lambda = .98$, $p < .001$, $\eta^2 = .023$); for Hispanic girls (Wilks' $\Lambda = .97$, $p < .001$, $\eta^2 = .032$); and for Black girls (Wilks' $\Lambda = .95$, $p < .001$, $\eta^2 = .048$). Concerning Grade 8 girls, results were statistically significant at the overall level for White girls (Wilks' $\Lambda = .98$, $p < .001$, $\eta^2 = .023$); for Hispanic girls (Wilks' $\Lambda = .97$, $p < .001$, $\eta^2 = .029$); and for Black girls (Wilks' $\Lambda = .95$, $p < .001$, $\eta^2 = .047$). Of the effect sizes all nine effect sizes were small (Cohen, 1988).

Readers are directed to Table 8 for the descriptive statistics for the TAKS Reading and Mathematics scores for the 2010-2011 school year for Grade 6 girls as a function of out-of-school suspension. Descriptive statistics for Grade 7 girls are provided in Table 10. In Table 12 are the descriptive statistics for Grade 8 girls.

Table 8

Descriptive Statistics for Grade 6 Girls' TAKS Reading and Mathematics Scores by Ethnicity/Race and Out-of-School Suspension for the 2010-2011 School Year

Academic Area, Ethnicity/Race by Out-of-School Suspension	*n*	*M*	*SD*
Reading			
White Students who received an OSS	688	32.60	7.32
White Students who did not receive an OSS	55,012	36.96	5.46
Hispanic Students who received an OSS	4,333	30.69	7.83
Hispanic Students who did not receive an OSS	83,013	34.05	7.00
Black Students who received an OSS	2,878	31.31	7.71
Black Students who did not receive an OSS	19,763	34.60	6.41
Mathematics			
White Students who received an OSS	688	30.01	9.12
White Students who did not receive an OSS	55,012	37.62	7.64
Hispanic Students who received an OSS	4,333	28.92	9.29

Hispanic Students who did not receive an OSS	83,013	34.40	8.66
Black Students who received an OSS	2,878	28.19	9.40
Black Students who did not receive an OSS	19,763	33.21	8.89

Table 10

Descriptive Statistics for Grade 7 Girls' TAKS Reading and Mathematics Scores by Ethnicity/Race and Out-of-School Suspension for the 2010-2011 School Year

Academic Area, Ethnicity/Race by Out-of-School Suspension	*n*	*M*	*SD*
Reading			
White Students who received an OSS	1,185	33.78	11.33
White Students who did not receive an OSS	54,278	40.77	7.39
Hispanic Students who received an OSS	6,731	31.54	10.02
Hispanic Students who did not receive an OSS	79,353	36.51	9.07
Black Students who received an OSS	3,635	32.43	9.53
Black Students who did not receive an OSS	19,043	36.87	8.45
Mathematics			
White Students who received an OSS	1,185	27.60	10.68
White Students who did not receive an OSS	54,278	36.84	8.86
Hispanic Students who received an OSS	6,731	26.49	10.00
Hispanic Students who did not receive an OSS	79,353	32.93	9.50
Black Students who received an OSS	3,635	25.58	9.72
Black Students who did not receive an OSS	19,043	31.39	9.65

Table 12

Descriptive Statistics for Grade 8 Girls' TAKS Reading and Mathematics Scores by Ethnicity/Race and Out-of-School Suspension for the 2010-2011 School Year

Academic Area, Ethnicity/Race by Out-of-School Suspension	*n*	*M*	*SD*
Reading			
White Students who received an OSS	1,454	39.64	9.32
White Students who did not receive an OSS	53,812	43.94	5.68
Hispanic Students who received an OSS	7,005	36.90	9.54
Hispanic Students who did not receive an OSS	76,647	40.47	8.80
Black Students who received an OSS	3,608	37.96	8.18
Black Students who did not receive an OSS	18,648	41.26	7.31
Mathematics			
White Students who received an OSS	1,454	30.56	9.99
White Students who did not receive an OSS	53,812	38.77	8.61
Hispanic Students who received an OSS	7,005	28.27	9.91
Hispanic Students who did not receive an OSS	76,647	34.61	10.30
Black Students who received an OSS	3,608	27.98	9.21
Black Students who did not receive an OSS	18,648	33.67	9.60

With respect to Grade 6 girls, univariate follow-up analysis of variance procedures revealed statistically significant differences in TAKS Reading scores for White girls, $F(1, 55698) = 429.06$, $p < .001$, $\eta^2 = .01$; for Hispanic girls, $F(1, 87344) = 938.17$, $p < .001$, $\eta^2 = .01$; and for Black girls, $F(1, 22639) = 625.52$, $p < .001$, $\eta^2 = .03$. Regarding Grade 7 girls, statistically significant differences were present in TAKS Reading scores for White girls, $F(1, 55461) = 1006.45$, $p < .001$, $\eta^2 = .02$; for Hispanic girls, $F(1, 86082) = 1830.55$, $p < .001$,

η^2 = .02; and for Black girls, $F(1, 22676) = 810.03$, $p < .001$, η^2 = .03. Concerning Grade 8 girls, statistically significant differences were revealed in TAKS Reading scores for White girls, $F(1, 55264) = 776.75$, $p < .001$, η^2 = .01; for Hispanic girls, $F(1, 83650) = 1039.42$, $p < .001$, η^2 = .01; and for Black girls, $F(1, 22254) = 588.86$, $p < .001$, η^2 = .03. Of the effect sizes all nine effect sizes were small (Cohen, 1988).

With regard to the TAKS Reading assessment, Grade 6 White girls, Hispanic girls, and Black girls who were assigned to out-of-school suspension earned average raw scores that were 4.36, 3.36, and 3.29 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension. For Grade 7, White girls, Hispanic girls, and Black girls who were assigned to out-of-school suspension had an average raw score that was 6.99, 4.97, and 4.44 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension. Grade 8 White girls, Hispanic girls, and Black girls who were assigned to out-of-school suspension had an average raw score that was 4.30, 3.57, and 3.30 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension.

For Grade 6 girls TAKS Mathematics scores, univariate follow-up analysis of variance procedures revealed statistically significant differences for White girls, $F(1, 55698) = 670.32$, $p < .001$, η^2 = .01; for Hispanic girls, $F(1, 87344) = 1638.32$, $p < .001$, η^2 = .02; and for Black girls, $F(1, 22639) = 789.72$, $p < .001$, η^2 = .03. Regarding Grade 7 girls, statistically significant differences were yielded in TAKS Mathematics scores for White girls, $F(1, 55461) = 1248.48$, $p < .001$, η^2 = .02; for Hispanic girls, $F(1, 86082) = 2828.45$, $p < .001$, η^2 = .03; and for Black girls, $F(1, 22676) = 1105.54$, $p < .001$, η^2 = .05. Concerning Grade 8 girls, statistically significant differences were present in TAKS Mathematics scores for White girls, $F(1, 55264) = 1275.21$, $p < .001$, η^2 = .02; for Hispanic girls, $F(1, 83650) = 2444.06$, $p < .001$, η^2 = .03; and for Black girls, $F(1, 22254) = 1075.76$, $p < .001$, η^2 = .05. Of the effect sizes all nine effect sizes were small (Cohen, 1988).

With regard to the TAKS Mathematics assessment, Grade 6 White girls, Hispanic girls, and Black girls who were assigned to out-of-school suspension earned average raw scores that were 7.61, 5.48, and 5.02 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension. For Grade 7, White girls, Hispanic girls, and Black girls who were assigned to out-of-school suspension had an average raw score that was 9.24, 6.44, and 5.81 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension. Grade 8 White girls, Hispanic girls, and Black girls who were assigned to out-of-school suspension earned average raw scores that were 8.21, 6.34, and 5.69 points lower, respectively, than their counterparts who were not assigned to out-of-school suspension.

DISCUSSION

In this investigation, the extent to which differences were present in the reading and mathematics achievement of Grade 6, 7, and 8 White, Hispanic, and Black boys and girls as a result of out-of-school suspension was examined. Statistically significant results were present for each analysis. In the next section, results will be summarized.

2008-2009 School Year

White, Hispanic, and Black boys who received an out-of-school suspension had statistically significantly lower average TAKS Reading and Mathematics test scores than their counterparts who did not receive an out-of-school suspension. White, Hispanic, and Black girls who had an out-of-school suspension also had statistically significantly lower average TAKS Reading and Mathematics test scores than their peers who were not given receipt of an out-of-school suspension. Effect sizes for these statistically significant differences were small for boys and girls in reading for White, Hispanic, and Black students. Small and moderate effect sizes were present in mathematics for White, Hispanic, and Black boys and girls. Noteworthy, for boys and girls alike, regardless of ethnicity/race and grade level, the receipt of an out-of-school suspension was negatively related to students' reading and mathematics achievement in the 2008-2009 school year.

2010-2011 School Year

White, Hispanic, and Black boys who received an out-of-school suspension had statistically significantly lower average TAKS Reading and Mathematics test scores than their counterparts who did not receive an out-of-school suspension. Moreover, White, Hispanic, and Black girls who had an out-of-school suspension had statistically significantly lower average TAKS Reading and Mathematics test scores than their peers who were not given an out-of-school suspension. Effect sizes for these statistically significant differences were small for boys and girls in reading for White, Hispanic, and Black students. Small and moderate effect sizes were revealed in mathematics for White, Hispanic, and Black boys and girls. Regardless of ethnicity/race and grade level, the receipt of an out-of-school suspension was negatively related to students' reading and mathematics achievement in the 2010-2011 school year.

Connection with Existing Literature

The findings that students who were assigned to out-of-school suspension had lower reading and mathematics test scores than their counterparts who were not assigned to out-of-school suspension are congruent with Hilberth (2010) and Jones (2013). Black and White Texas middle school students who were assigned to out-of-school suspension performed below their peers on the TAKS Reading and Mathematics assessments (Hilberth, 2010). Hispanic and White students in Grades 6, 7, and 8 were less academically successful on the TAKS Reading and Mathematics tests as a result of being placed into out-of-school suspension (Jones, 2013). Furthermore, the findings that mathematics performance was lower than reading for boys and girls in all three ethnic/racial groups in received an out-of-school suspension was congruent with the results of Hilberth (2010) and Jones (2013). Results of this study are commensurate with Mendez et al. (2002) in that student academic success is negatively influenced by suspension.

Implications for Policy and Practice

Clearly evident in this investigation was that White, Hispanic, and Black boys and girls who received an out-of-school suspension had statistically significantly lower reading and mathematics scores than their counterparts who did not receive an out-of-school suspension. Also clearly present was that, regardless of grade level and student ethnicity/race, students' mathematics performance was lower than their reading performance for students who received an out-of-school suspension. Given the strong relationships noted herein between out-of-school suspension and lower student reading and mathematics performance, the efficacy of out-of-school suspension as a disciplinary technique needs to be examined. As evidenced in the tables in this article, a large number of out-of-school suspensions were assigned to students. In our opinion, the efficacy of any disciplinary action that is assigned this many times ought to be questioned. Given the emphasis on student learning, to what extent does assigning an out-of-school suspension that is negatively related to student learning make sense? As a result of the findings indicated in this study, a restructuring of the current disciplinary methods used in Texas schools should occur.

Given that mathematics instruction was lower than student reading performance for students who received an out-of-school suspension, more teacher support should be considered in the area of mathematics. It may be that students are able to acquire the reading skills while being out of the classroom environment, however, it appears that they are not able to obtain the mathematics skills their classmates acquire in class while students are suspended from school. Perhaps simply making educational leaders and educators aware of this adverse impact will be enough to elicit a change in teaching strategies, however, we are not optimistic that this awareness would change teaching strategies. Clearly, some change must occur with the assignment and administration of out-of-school suspensions.

Further recommendations were made by Mendez et al. (2002) who documented that elementary schools with lower rates of out-of-school suspensions used positive reinforcement more often, as well as provided social skills training for students than elementary schools with higher rates of out-of-school suspension. Moreover, middle schools in which staff members were provided with professional development in classroom management had lower rates of out-of-school suspension than middle schools in which such professional development was not available. Mendez et al. (2002) noted that increased parental involvement was present at high schools with low out-of-school suspension

Moreover, the guidance package generated by the U.S. Department of Education and the U.S. Department of Justice (2014) provides assistance to school staff members that could be used when assigning students to disciplinary consequences such as out-of-school suspension. Being proactive in eliminating student discrimination such as race, color, or national origin, with the possibility after reviewing the data from this study to include gender discrimination, is essential when school staff deliberate who should be assigned to out-of-school suspension and who should not be assigned to out-of-school suspension.

The lifelong negative effects that students face when they are suspended include lower academic achievement, possibility of dropping out of school, and negative life

outcomes (Skiba, 2014). With substantial evidence present that students of color being suspended more often than their peers, educators and policymakers need to reconsider the extensive use of out-of-school suspension as a disciplinary consequence (Hilberth, 2010; Jones, 2013; Skiba, 2014). Moreover, based on the results of this investigation that the average test scores of students who received an out-of-school suspension were lower than the average test scores of students who did not receive such a disciplinary consequence, the use of out-of-school suspension needs to be reevaluated for all students.

Suggestions for Future Research

Because the focus of this investigation was only on students in Grades, 6, 7, and 8 and only on the disciplinary consequence of out-of-school suspension, researchers are encouraged to extend this study to students in elementary grade levels and in secondary grade levels. Expanding this study to its use for students in Grades 1 through 6 assignment could provide detailed information regarding its frequency and the reasons that this disciplinary consequence is assigned. Such an investigation should be conducted by student ethnicity/race, gender, and economic status. Additionally, analyzing the use of out-of-school assignment in relation to certain transitions students encounter such as moving from an elementary setting to a middle school should be examined.

This study could also be extended to secondary students in Grades 9 through 12. The generalizability of results obtained herein on middle school students may or may not generalize to students in Grades 9 through 12. Furthermore, the relationship of out-of-school suspension with dropping out of school could be investigated. Are students who receive more than one out-of-school suspension more likely to drop out of school than students who receive one out-of-school suspension?

The disproportionality in which students are being assigned to out-of-school suspension is another suggestion for future research studies. Are Black boys and girls assigned to disciplinary consequences to the same degree that White boys and girls are assigned to a disciplinary consequence with respect to their proportion of the overall student enrollment? The same question could be asked for other ethnic groups as well.

In this research study, statistically significant relationships were present among academic achievement and the assignment of disciplinary consequences. Future research studies could help answer the question if the assignment of out-of-school suspension resulted in the students' lower academic achievement or if the students' lower academic achievement contributed to the students' inappropriate behavior which was a direct result of being placed into out-of-school suspension. This analysis of the relationship between academic performance and disciplinary consequences should be conducted by future researchers through the use of a longitudinal design.

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AUTHOR BIOGRAPHIES

Dr. Brittney Lee Henkel is currently Vice President of EH Solution Services, LLC where she creates administrative policy as well as leads company operations. Dr. Henkel has taught in Texas public schools as well as served as team leader, new teacher mentor, Trainer of Trainees for STAAR, Differentiated Behavior and Instructional Specialist, and organized Title I Family Events. Dr. Henkel obtained her Doctorate degree in Educational Leadership from Sam Houston State University. Her research interests encompass behavioral implications and academic achievement, GED attainment, and leadership.

Dr. John R. Slate is a Full Professor in the Department of Educational Leadership at Sam Houston State University. He teaches the Applied and Advanced Statistics courses, along with the Academic and Professional Writing course, and the Proposal course. Dr. Slate has graduated 46 doctoral students in educational leadership at SHSU. His research interests lie in the analysis of state and national education bases for school improvement.

Dr. Cynthia Martinez-Garcia is an Associate Professor in the Department of Educational Leadership at Sam Houston State University. She coordinates the Master of Education in Administration and Principal Certification graduate programs and advises/teaches the candidates in these programs and teaches the students in the K-12 Doctoral Educational Leadership program. Her research interests include supporting and mentoring new faculty, principals, and teachers and improving student achievement.

PREFERRED CITATION

Henkel, B.L., Slate, J.R., & Martinez-Garcia, C. (2016). Out-of-school suspension and differences in reading and mathematics achievement by gender and ethnicity/race. *Journal of Ethical Educational Leadership, 4*(2), 1-27. Retrieved from: http://www.jeppa.org.

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