# Differences in Days Assigned to Exclusionary Discipline Consequences as a Function of Student Poverty for Texas Middle School Students 

John W. White and John R. Slate<br>Sam Houston State University, University Ave, Huntsville, USA<br>Corresponding Author<br>John W. White


#### Abstract

Examined in this study were the number of days assigned to in-school suspension and to out-of-school suspension to Grade 6, 7, and 8 students based on their economic status in Texas for the 2015-2016 school year. Inferential statistical procedures revealed the presence of clear inequities in the average number of days Grade 6,7, and 8 students who were economically disadvantaged were assigned to an in-school suspension and to an out-of-school suspension. Grade 6,7 , and 8 students who were poor were assigned statistically significantly more days to in-school suspension and to out-of-school suspension than their grade level peers who were not poor. Implications of the findings are discussed and suggestions for further research are made.


Keywords: in-school suspension, out-of-school suspension, days assigned, Grade 6, 7, and 8, middle school students, Economically Disadvantaged, poor, not poor

## INTRODUCTION

Differences in Days Assigned to Exclusionary Discipline Consequences as a Function of Student Poverty for Texas Middle School Students. Poverty has been established to be related not only to academic achievement, but also to discipline consequence assigned in public schools. In a current article in the state of interest for this study, Texas, White and Slate [1] analyzed the extent to which ethnic/racial differences were present in the assignment of an out-ofschool suspension to Grade 9 and Grade 10 students Inferential statistical procedures revealed the presence of clear inequities in the assignment of Black and Hispanic Grade 9 and 10 boys and girls to an out-ofschool suspension. Grade 9 and Grade 10 Black boys and girls and Grade 9 and Grade 10 Hispanic boys and girls were assigned statistically significantly more to an out-of-school suspension than were their grade level White peers. Representation ratios (i.e., the ratio of population proportions) revealed consistent underrepresentations in being assigned to an out-ofschool suspension for Grade 9 and Grade 10 White boys and girls. Grade 9 and Grade 10 Hispanic boys were nearly equally represented in their assignment to an out-of-school suspension whereas Grade 9 and Grade 10 Hispanic girls were slightly underrepresented in their assignment to an out-of-school suspensions. Lastly, Grade 9 and Grade 10 Black boys were overrepresented in their assignment to an out-of-school suspension, with the highest rate of overrepresentation occurring for Grade 9 and Grade 10 Black girls.

In another recent article, also conducted in Texas, Barnes, Slate, Moore, and Martinez-Garcia [2] conducted a multi-year analysis on the extent to which discipline consequence assignments differed by student economic status (i.e., Not Poor, Moderately Poor, or Extremely Poor) for middle school students for the 2013-2014 through the 2015-2016 school years. In
their study, economic status was statistically significantly related with higher rates of in-school suspension and higher rates of out-of-school suspension for students who were Extremely Poor than for their peers who were either Moderately Poor or Not Poor. Students who were Moderately Poor also had statistically significantly higher rates of in-school suspension and higher rates of out-of-school suspension than their peers who were Not Poor. A clear stair-step effect was present for each school year and at each grade level. Barnes et al., [2] recommended further examination of the inverse relationship between student economic status and disciplinary consequence assignment separately by gender and for White, Hispanic, and Black students.

Furthermore, Barnes and Slate [3] analyzed the extent to which differences were present in discipline consequence assignments for Grade 4 and Grade 5 students by their ethnicity/race (i.e., White, Black, and Hispanic) and gender. With the exception of Grade 4 boys and girls, statistically significantly differences were revealed. Grade 4 and Grade 5 White students were not assigned to any part day out-of-school suspension. Grade 4 Black students were assigned to five part day out-of-school suspensions, with Grade 5 Black students receiving 53 part day out-of-school suspensions. Grade 4 Hispanic students were assigned 31 part day out-of-school suspensions, with Grade 5 Hispanic students receiving 14 part day out-of-school suspensions. An analysis of the results by gender revealed that 36 Grade 4 boys and 62 Grade 5 boys were assigned to part day out-of-school suspension. In contrast, no Grade 4 girls and only 5 Grade 5 girls were assigned to part day out-of-school suspension. Barnes and Slate [3] contended that comparing differences among ethnicity/race in the disciplinary consequences assigned at each grade level could lead to more
effective and equitable exclusionary discipline practices.

In a related investigation, Eckford and Slate [4] examined the degree to which differences were present in Juvenile Justice Alternative Education Program placement for Grade 7 and Grade 8 boys as a function of their ethnicity/race and economic status. Statistically significant results were yielded for both Grade 7 and Grade 8 boys. Grade 7 and Grade 8 Black boys were three to four times more likely to be assigned to a Juvenile Justice Alternative Placement Program placement than were their Grade 7 and Grade 8 Black counterparts. Grade 7 and Grade 8 Black boys were two to three times more likely to be assigned to a Juvenile Justice Alternative Education Program placement than their Grade 7 and Grade 8 Hispanic counterparts. As a result of their findings, Eckford and Slate [4] recommended that further researchers should explore the number of days assigned to a Juvenile Justice Alternative Education Program placement based on their ethnicity/race and economic status.

In another recent investigation, Coleman and Slate [5] analyzed the extent to which differences were present in discipline consequence assignments for Grade 6 students by their ethnicity/race (i.e., White, Black, and Hispanic) and by their economic status (i.e., economically disadvantaged, not economically disadvantaged). Statistically significant findings were present in all cases except for Grade 6 White students and students who were not economically disadvantaged. Grade 6 Black students were assigned to an out-ofschool suspension at almost twice the rate of their Hispanic counterparts and at almost eight times the rate of their White counterparts. Coleman and Slate [5] acknowledged the need for future researchers to expand on the generalizability of their research as well as the need for educators to build the cultural capital of students, specifically students in poverty.

Lastly, Henkel, Slate, and Martinez-Garcia [6] addressed the relationship of Disciplinary Alternative Education Program placement with the reading and mathematics achievement of Grade 6, 7, and 8 White, Hispanic, and Black Texas students for the 2008-2009 and 2010-2011 school years. Henkel et al., [7] documented the presence of statistically significant differences in the reading and mathematics performance of White, Hispanic, and Black students who received a Disciplinary Alternative Education Program placement when compared to their counterparts who did not receive such a placement. More specifically, mathematics performance was more negatively influenced than was reading performance, a finding suggestive of the fact that middle school students require more instructional time in their general mathematics classroom than in reading. Henkel et al., [7] advised caution when assigning Disciplinary Alternative Education Program placements to students
of color and to students who were economically disadvantaged and to use alternative disciplinary strategies when possible.

## Statement of the Problem

Inequities in the assignment to in-school suspension and out-of-school suspension as a function of student economic status have been well documented $[2,5,4]$. The presence of gaps in attendance rates, State of Texas Assessments of Academic Readiness achievement, and graduation rates for students who are economically disadvantaged are exacerbated when students are assigned inequitable disciplinary consequences. However, less information is available about the number of days assigned to in-school suspension and to out-of-school suspension as a function of student economic status. A more detailed analysis of the number of days assigned to a disciplinary consequence could provide invaluable insight that could lead to improved decision making for school leaders and policymakers when faced with inequitable disciplinary practices.

## Purpose of the Study

The purpose of this study was to ascertain the extent to which differences were present in the number of days Texas Grades 6,7 , and 8 students were assigned to an in-school suspension and to an out-of-school suspension based on their economic status. By examining the numbers of days that Texas Grades 6, 7, and 8 students were assigned to an in-school suspension and to an out-of-school suspension, a determination could be made regarding the degree to which inequities were present based on the economic status of students. These discipline consequences assignments were analyzed for the 2015-2016 school year in Texas public middle schools.

## Significance of the Study

Although researchers [8, 9] have consistently documented the link between the assignment of inschool suspension and out-of-school suspension and the school dropout to jail pipeline for students who are economically disadvantaged, no published articles were located in which researchers had focused their efforts on the number of days assigned to an in-school suspension or to the number of days assigned to an out-of-school suspension and the effect of extended time removed from the classroom on the academic achievement of students who are economically disadvantaged. As Texas schools continues to experience an increase with their population of students who are economically disadvantaged, it is imperative that students who are economically disadvantaged are provided every opportunity at an equal learning environment. The singular focus of this investigation was on the degree to which student economic disadvantage was correlated to an increase in the number of days assigned to an in-school suspension or out-of-school suspension.
number of days assigned to an out-of-school suspension, the total Grade 6 sample was 25,686 students, of which 20,847 students were economically disadvantaged and 4,839 students were not economically disadvantaged. The Grade 7 sample was 30,224 students, of which 23,880 students were economically disadvantaged and 6,344 students were not economically disadvantaged. The Grade 8 sample was 32,050 students, of which 24,427 students were economically disadvantaged and 7,623 students were not economically disadvantaged.

## Instrumentation and Procedures

According to the Texas Education Agency [11], a student who is economically disadvantaged is "eligible for free or reduced-price meals under the National School Lunch and Child Nutrition Program". In addition, Texas Education Code $\S 37.005$ [11] defines suspension as the temporarily removal of a student from their traditional learning environment. Two forms of suspension exist under the Texas Education Code: inschool suspension and out-of-school suspension. An administrator may assign an in-school suspension or an out-of-school suspension to a student who engages in any conduct identified under this code. Assignment to an in-school suspension or out-of-school suspension may not exceed three school days.

In-school suspension and out-of-school suspension data were submitted by school districts to the Public Education Information Management System, which is used by the Texas Education Agency to rate school districts and campuses. Data were requested from the Texas Education Agency Public Education Information Management System through a Public Information Request form. Once obtained, the data were imported into the Statistical Package for Social Sciences software program. Because school districts submit their in-school suspension and out-of-school suspension data directly to the Texas Education Agency via standardized computer files, minimal errors in the data are assumed to be present.

## RESULTS

Prior to conducting inferential statistical procedures to answer the aforementioned research questions, checks for normality of data were conducted. With respect to the distribution of scores underlying the number of days spent in in-school suspension and the number of days spent in out-of-school suspension, the standardized skewness coefficients (i.e., skewness divided by the standard error of skewness) and the standardized kurtosis coefficients (i.e., kurtosis divided by the standard error of kurtosis) revealed serious departures from normality for the variable of interest. All 12 standardized coefficients for the number of days spent in in-school suspension for Grade 6, 7, and 8 students and all 12 standardized coefficients for number of days spent in out-of-school suspension for Grade 6, 7 , and 8 students were outside the ranges of $+/-3$ [12].

Another assumption underlying the use of a parametric Analysis of Variance (ANOVA) procedure, the Levene's Test of Error Variance, was not met. Field [13], however, contends that the parametric ANOVA is sufficiently robust that this violation can be withstood. Accordingly, use of a parametric ANOVA procedure was justified.

## In-School Suspension Results

Regarding the extent to which differences were present in the number of days spent in in-school
suspension as a function of the economic status (i.e., Poor, Not Poor) of Grade 6 students, the parametric ANOVA revealed a statistically significant difference, $F(1,54801)=447.29, p<.001$, partial $n^{2}=.01$. The effect size for this statistically significant difference was below small [14]. As revealed in Table-1, the average number of days assigned to in-school suspension was 1.05 days more for Grade 6 students who were economically disadvantaged than for Grade 6 students who were not economically disadvantaged.

Table-1: Descriptive Statistics for the Number of Days Spent in In-School-Suspension for Grade 6 Students as a Function of Their Economic Status

| Economic Status | $n$ | $M$ | $S D$ |
| :--- | :---: | :---: | :---: |
| Not Economically Disadvantaged | 14,012 | 3.50 | 4.06 |
| Economically Disadvantaged | 40,791 | 4.55 | 5.37 |

Concerning the degree to which differences were present in the number of days assigned to inschool suspension as a function of the economic status of Grade 7 students, the parametric ANOVA revealed a statistically significant difference, $F(1,61602)=$ $460.87, p<.001$, partial $n^{2}=.008$. The effect size for
this statistically significant difference was below small (Cohen, 1988). As presented in Table 2, the average number of days assigned to an in-school suspension was 1.09 days more for Grade 7 students who were economically disadvantaged than for Grade 7 students who were not economically disadvantaged.

Table-2: Descriptive Statistics for the Number of Days Spent in In-School-Suspension for Grade 7 Students as a Function of Their Economic Status

| Economic Status | $n$ | $M$ | $S D$ |
| :--- | :---: | :---: | :---: |
| Not Economically Disadvantaged | 16,313 | 3.87 | 4.63 |
| Economically Disadvantaged | 45,291 | 4.96 | 5.81 |

With respect to the extent to which differences were present in the number of days spent in in-school suspension as a function of the economic status of Grade 8 students, the parametric ANOVA revealed a statistically significant difference, $F(1,62508)=$ $355.89, p<.001$, partial $n^{2}=.007$. The effect size for
this statistically significant difference was below small [14]. As delineated in Table-3, the average number of days assigned to an in-school suspension was approximately one day more, 0.87 , for Grade 8 students who were economically disadvantaged than for Grade 8 students who were not economically disadvantaged.

Table-3: Descriptive Statistics for the Number of Days Spent in In-School-Suspension for Grade 8 Students as a Function of Their Economic Status

| Economic Status | $n$ | $M$ | $S D$ |
| :--- | :---: | :---: | :---: |
| Not Economically Disadvantaged | 17,955 | 3.82 | 4.43 |
| Economically Disadvantaged | 44,555 | 4.69 | 5.53 |

## Out-of-School Suspension Results

Regarding the degree to which differences were present in the number of days spent in out-ofschool suspension as a function of the economic status of Grade 6 students, the parametric ANOVA revealed a statistically significant difference, $F(1,25684)=65.42$, $p<.001$, partial $n^{2}=.003$. The effect size for this
statistically significant difference was below small [14]. As revealed in Table 4, the average number of days assigned to an out-of-school suspension was greater than half a day, 0.52 , for Grade 6 students who were economically disadvantaged than for Grade 6 students who were not economically disadvantaged.

Table-4: Descriptive Statistics for the Number of Days Spent in Out-of-School-Suspension for Grade 6 Students as a Function of Their Economic Status

| Economic Status | $n$ | $M$ | $S D$ |
| :--- | :---: | :---: | :---: |
| Not Economically Disadvantaged | 4,839 | 3.39 | 3.45 |
| Economically Disadvantaged | 20,847 | 3.91 | 4.11 |

Concerning the extent to which differences were present in the number of days spent in out-of-
school suspension as a function of the economic status of Grade 7 students, the parametric ANOVA revealed a
statistically significant difference, $F(1,30222)=71.41$, $p<.001$, partial $n^{2}=.002$. The effect size for this statistically significant difference was below small [14]. As presented in Table 5, the average number of days
assigned to an out-of-school suspension was greater than half a day, 0.53 , for Grade 7 students who were economically disadvantaged than for Grade 7 students who were not economically disadvantaged.

Table-5: Descriptive Statistics for the Number of Days Spent in Out-of-School-Suspension for Grade 7 Students as a Function of Their Economic Status

| Economic Status | $n$ | $M$ | $S D$ |
| :--- | :---: | :---: | :---: |
| Not Economically Disadvantaged | 6,344 | 3.74 | 3.92 |
| Economically Disadvantaged | 23,880 | 4.27 | 4.55 |

With respect to the degree to which differences were present in the number of days spent in out-ofschool suspension as a function of the economic status of Grade 8 students, the parametric ANOVA revealed a statistically significant difference, $F(1,62508)=$ $355.89, p<.001$, partial $n^{2}=.002$. The effect size for
this statistically significant difference was below small [14]. As revealed in Table 6, the average number of days assigned to an out-of-school suspension was nearly half a day more, 0.45 , for Grade 8 students who were economically disadvantaged than for Grade 8 students who were not economically disadvantaged.

Table-6: Descriptive Statistics for the Number of Days Spent in Out-of-School-Suspension for Grade 8 Students as a Function of Their Economic Status

| Economic Status | $n$ | $M$ | $S D$ |
| :--- | :---: | :---: | :---: |
| Not Economically Disadvantaged | 7,623 | 3.93 | 4.18 |
| Economically Disadvantaged | 24,427 | 4.38 | 4.62 |



Fig-1: Representation ratios of the number of days spent in in-school suspension for Grade 6, 7, and 8 students as a function of their economic status.


Fig-2: Representation ratios of the number of days spent in out-of-school suspension for Grade 6, 7, and 8 students as a function of their economic status.

## DISCUSSION

In this study, the degree to which differences were present in the average number of days assigned to in-school suspension and to the average number of days assigned to out-of-school suspension to Texas middle school students by their economic status was analyzed for the 2015-2016 school year. Inferential statistical analyses yielded statistically significant differences in the average number of days assigned to an in-school suspension for Grade 6, 7, and 8 students who were economically disadvantaged, compared to their same grade level peers who were not economically disadvantaged. Representation ratios of the mean for each grade level were also calculated in an effort to determine the extent to which the number of days assigned to an in-school suspension or an out-of-school suspension as a function of economic status were equitable.

Grade 6 students who were economically disadvantaged received $75 \%$ of the total in-school suspensions assigned. As such, a ratio of 1.30 was presented which may be interpreted to mean that Grade 6 students who were economically disadvantaged were assigned an inequitable rate of in-school suspensions. Grade 7 students who were economically disadvantaged received $74 \%$ of the total in-school suspensions assigned. As such, a ratio of 1.28 was presented which may be interpreted to mean that Grade 7 students who were economically disadvantaged were assigned an inequitable rate of in-school suspensions. Grade 8 students who were economically disadvantaged received $71 \%$ of the total in-school suspensions assigned. Accordingly, a ratio of 1.23 was presented which may be interpreted to mean that Grade 7 students who are economically disadvantaged were assigned an inequitable rate of in-school suspensions. Overall, the ratio of the mean for students who were economically
disadvantaged increased along with the student grade level at a lower rate than the mean for students who were not economically disadvantaged. The inequitable assignment of in-school suspensions to Grade 6, 7, and 8 students who were economically disadvantaged is depicted in Figure-1.

Inferential statistical analyses yielded statistically significant differences in the days assigned to an out-of-school suspension for Grade 6, 7, and 8 students who were economically disadvantaged. Grade 6 students who were economically disadvantaged received $81.00 \%$ of the total out-of-school suspensions assigned. As such, a ratio of 1.15 was presented which may be interpreted to mean that Grade 6 students who were economically disadvantaged were assigned an inequitable rate of out-of-school suspensions. Grade 7 students who were economically disadvantaged received $79.00 \%$ of the total out-of-school suspensions assigned. Accordingly, a ratio of 1.14 was presented which may be interpreted to mean that Grade 7 students who were economically disadvantaged were assigned an inequitable rate of out-of-school suspensions. Grade 8 students who were economically disadvantaged received $76.00 \%$ of the total out-of-school suspensions assigned. As such, a ratio of 1.11 was presented which may be interpreted to mean that Grade 8 students who were economically disadvantaged were assigned an inequitable rate of in-school suspensions. Overall, the ratio of the mean for students who were economically disadvantaged increased along with the student grade level at a lower rate than the mean for students who were not economically disadvantaged. The inequitable assignment of out-of-school suspensions to Grade 6, 7, and 8 students who were economically disadvantaged is depicted in Figure-2.

As established in the findings of this investigation, Texas middle school students who were economically disadvantaged were consistently overrepresented in the assignment to either in-school suspension or to out-of-school suspensions. The most salient findings of this study are the average days assigned to an in-school suspension and out-of-school suspension results for Texas middle school students who were economically disadvantaged. On average, Grade 6, 7, and 8 students who were economically disadvantaged spent a day more in in-school suspension when compared to similar grade level students who were not economically disadvantaged. Similar results were repeated for Grade 6,7 , and 8 students who were economically disadvantaged and who were assigned an out-of-school suspension. Such disparities in the number of days assigned to an exclusionary discipline consequence assignment for Grade 6,7 , and 8 students who were economically disadvantaged are clearly cause for concern. Because Grade 6, 7, and 8 students are most at risk of being assigned an exclusionary discipline consequence, they are equally at risk of missing instructional time, mastering the standards assessed on state-mandated assessments, and negatively influencing the accountability rating of the school. Because Texas middle school students who were economically disadvantaged comprised the majority of students assigned to an exclusionary discipline consequence, it is imperative that educational leaders make every effort to use corrective, restorative disciplinary measures aimed at keeping students in their typical classroom setting before using traditional, exclusionary methods.

## CONCLUSION

It should be noted that no attempts were made in this investigation to differentiate between student ethnicity/race and gender. Furthermore, no attempt was made to compare results across grade levels or between the exclusionary discipline consequences, for that was not the focus of this study. As a result, these issues should be explored in future studies, along with attempting to understand why differences in the assignment of exclusionary discipline consequences to Texas middle school students who were economically disadvantaged existed in the first place. School officials interested in closing the inequitable gaps between students who are economically disadvantaged and students who are not economically disadvantaged should exercise caution in generalizing these findings. In-school suspension and out-of-school suspension data were analyzed for only the 2015-2016 Texas school year and could represent as an outlier when compared to multiple years of data or across state levels.

## REFERENCES

1. White, J. W., \& Slate, J. R. (2018). Differences in out-of-school suspension assignments by the ethnicity/race of Texas high school students.

Inaugural Edition of the Journal of Educational System, 2(1), 1-8.
2. Barnes, M. J., Slate, J. R., Moore, G. W., \& Martinez-Garcia, C. (2017). Disciplinary consequence assignment differences by degree of economic disadvantage: A Texas statewide investigation. International Journal of Modern Education Research, 4(6), 42-52.
3. Barnes, M. J., \& Slate, J. R. (2016). Grade 4 and Grade 5 inequities in disciplinary consequences by ethnicity/race and gender. Journal of Global Research in Education and Social Science, 5(4), 216-221.
4. Eckford, C., \& Slate, J. R. (2016). Differences in disciplinary consequence for Texas middle school boys as a function of ethnicity/race and economic status. Global Journal of Human-Social Science, 16(8), 43-47.
5. Coleman, C. L., \& Slate, J. R. (2016). Inequities in disciplinary reasons and consequences by ethnicity/race and economic status for grade 6 students in Texas. Journal of Global Research in Education and Social Science, 9(1).
6. Henkel, B. L., Slate, J. R., \& Martinez-Garcia, C. (2015). Disciplinary alternative education program placement and academic achievement by student gender and ethnicity/race. International Research Journal for Quality in Education, 2(12), 11-25.
7. Ginsburg, A., Henkel, C., Ao, Y., Riquelme, D., Kauffmann, J., Pillai, T., ... \& Ott, J. (2016). Dense gas in the Galactic central molecular zone is warm and heated by turbulence. Astronomy \& Astrophysics, 586, A50.
8. Gregory, A., Skiba, R. J., \& Noguera, P. A. (2010). The achievement gap and the discipline gap: Two sides of the same coin? Educational Researcher, 39(1), 59-68.
9. Ryan, T. G., \& Goodram, B. (2013). The impact of exclusionary discipline on students. International Journal of Progressive Education, 9(3), 169-177.
10. Johnson, B., \& Christensen, L. (2012). Educational research: Quantitative, qualitative, and mixed approaches. Los Angeles, CA: Sage.
11. Texas Education Agency. (2012). Public Education Information Management System (PEIMS) report 2011-2012. Retrieved from ritter.tea.state.tx.us/adhocrpt/
12. Onwuegbuzie, A. J., \& Daniel, L. G. (2002). Uses and misuses of the correlation coefficient. Research in the Schools, 9(1), 73-90.
13. Field, A. (2009). Discovering statistics using SPSS (3rd ed.). Thousand Oaks, CA: Sage.
14. Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

