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## Rural Research Report: A Longitudinal Study on the Effect of the Texas Behavior Support Initiative on Rural Middle School Students

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## **Rural Research Brief**

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### **A Longitudinal Study on the Effect of the Texas Behavior Support Initiative on Rural Middle School Students**

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*The purpose of this study was to analyze the effects of a school wide positive behavior initiative designed to improve student behavior. Researchers analyzed the last 3 years (2005-2008) of student discipline referral data for grades 7 and 8. Implementation resulted in a significant reduction in the number of discipline referrals. Data revealed a decrease of 23% in the number (2239 vs. 1723) of discipline referrals from year one to year two and a decrease of 22% in the number (1723 vs. 1340) of discipline referrals from year two to year three. Results obtained from the analysis indicate that the TBSI was effective in improving student behavior in a rural middle school.*

**Key words:** classroom management, student behavior, school-wide behavior initiative.

In 2001, the Texas Legislature passed Senate Bill 1196 in an effort to improve academic achievement and encourage a proactive approach to behavior management. This bill required training on a full continuum of positive behavioral interventions including an array of professionally accepted practices for all public school personnel. The development and implementation of the Texas Behavior Support Initiative (TBSI) was initiated in response to Senate Bill 1196. The goal was to enhance the capacity of schools to educate all students, especially students with challenging behaviors, by adopting a sustained, positive, preventative instructional approach to school-wide discipline and behavior management.

Management of student behavior is a major concern of teachers because of its importance in establishing a positive learning environment. Disruptive behavior within the school setting interferes with effective classroom instruction and deteriorates the overall educational climate of the school. Research indicates that higher rates of discipline referrals are associated with problematic behavioral climates in schools (Irwin, Tobin, Sprague, Sugai, & Vincent, 2004; Kant & March, 2004). No studies could be found that examined the Texas Behavior Support Initiative in relation to

student behavior over a three-year period in a rural school district. As a result, the purpose of this study was to analyze the effects of a school-wide positive behavior initiative designed to improve student behavior in a rural middle school. The purpose of this study was to analyze the effects of a school-wide positive behavior initiative designed to improve student behavior in a rural middle school.

#### **Method**

A longitudinal quantitative study was conducted over a 3-year period from school year 2005-2007 to school year 2007-2008, using student discipline referral data to assess the effectiveness of a school-wide positive behavior support initiative on middle year behavior referrals.

#### **Sample**

The sample in this study was drawn from a larger project in which regional school district consultants partnered with area school districts in an effort to enhance the school's capacity to implement evidence-based practices and formulate decisions at three levels: primary (school-wide), secondary (targeted efforts for selected groups of students and

targeted settings), and tertiary (individual student) to promote behavioral competence (Positive Behavior Interventions and Supports, 2009). The sample included all seventh and eighth grade students enrolled at the middle school during the data collection years (2005-2008). The average student enrollment over the 3-year period was 516 students, with a demographic diversity of 81% Hispanic, 14% Caucasian, 4% African American, 1% Asian Pacific, and 0.2% Native American. Sixty eight percent of the student population was classified as economically disadvantaged, 65% was identified as at-risk, and 12% received special education services.

### Procedures

The project incorporated strategies designed to promote and sustain the use of evidence-based practices and data-driven problem solving. Successful strategies included: setting clear expectations, providing the students with choices, reinforcing desired behavior and providing immediate consequences for inappropriate behavior. Strategies and interventions were put into practice at every level to encourage positive behavior. The majority of the interventions were implemented at the primary (school-wide) level. These interventions included creating a set of school-wide rules, revising the master schedule to include an advisory period, reducing the passing period from five to four minutes, universal monitoring of hallways between classes, visual reminders of the school-wide rules, and increased communication via radios for the behavior support team. At the secondary level, the behavior support team concentrated their efforts on selected groups of students and targeted settings. Successful interventions at this level included daily administrative walk throughs for targeted settings, initiating a partnership with Communities in Schools, improving interactions between students and staff, building relationships, and collecting and utilizing discipline data to guide decision-making. Strategies and interventions at level three focused on the individual student. Interventions included hand scheduling of "frequent flyers" to avoid an accumulation of problem behaviors in a single classroom, lunch detention, intent to cite warning notifications, civil citations, re-integration conferences for students returning from a disciplinary alternative campus, and continued collection and analysis of data to drive the decision-making process.

### Data Collection

Data were collected for 7<sup>th</sup> and 8<sup>th</sup> grade students who were enrolled during the 2005-2006 (year one),

2006-2007 (year two), and 2007-2008 (year three) school years. Discipline referral data were obtained from the district's Student Plus Information System. Discipline referral data were analyzed using descriptive statistics such as totals, percentages, and means. Chi-square analysis was utilized to determine if there was a statistically significant decrease in offenses between years 1, 2 & 3. This resulted in three analyses (Y1 vs. Y2, Y1 vs. Y3, Y2 vs. Y3). The number of offenses from the previous year served as the expected frequencies for each chi-square analysis. The Bonferroni adjustment ( $\#analyses/.05$ ) was utilized to protect against making a Type I error. This resulted in alpha being set at .017 for all statistical comparisons. The Statistical Program for Social Sciences (SPSS), version 16, was used to analyze the data.

### Results

The research focused on specific offenses identified in the data as recurring or demonstrating a high frequency of incidents. These high frequency incidents were organized into three categories: classroom offenses, hallway offenses, and communication offenses.

### Classroom Offenses

Classroom offenses included class disruption, disruptive behavior, disobedience, and leaving without permission. Class disruption is any action or event that disrupts the flow of instruction or causes others to be distracted from direct instruction, an assignment, or class work and includes such behaviors as uncontrolled laughing, loud talking, throwing objects and getting up. Disruptive behavior is typically difficult to define as each situation has to be evaluated in the context of the occurrence. Tardiness for example, may be disruptive but does not impede the teacher's ability to sustain instruction. Other examples of disruptive behavior include sleeping in class and students sitting with their back to the room. The main difference between these types of offenses is the overt intent of the individual to interrupt and interfere with instruction. Any refusal to comply with a teacher's directive constitutes disobedience. Walking out of class without the teacher's permission or pass would result in an infraction of leaving without permission. From years one to three there were decreases in incidences in the following areas: Leaving without permission (203 to 64), disobedience (301 to 124), and disruptive behaviors (471 to 40). However, class disruption referrals increased from 51 in year one to 284 in year three. Two interventions put into place may have

been the causal factor in the increase reporting of class disruptions. First, the teachers were taught to recognize the difference between classroom management and student discipline. Second, the teachers were empowered to take control of their

classroom. They were instructed to determine if the behavior in question constituted a class disruption or not. The administrators no longer made that determination. This resulted in an increase in the number of class disruption offenses (See Figure 1

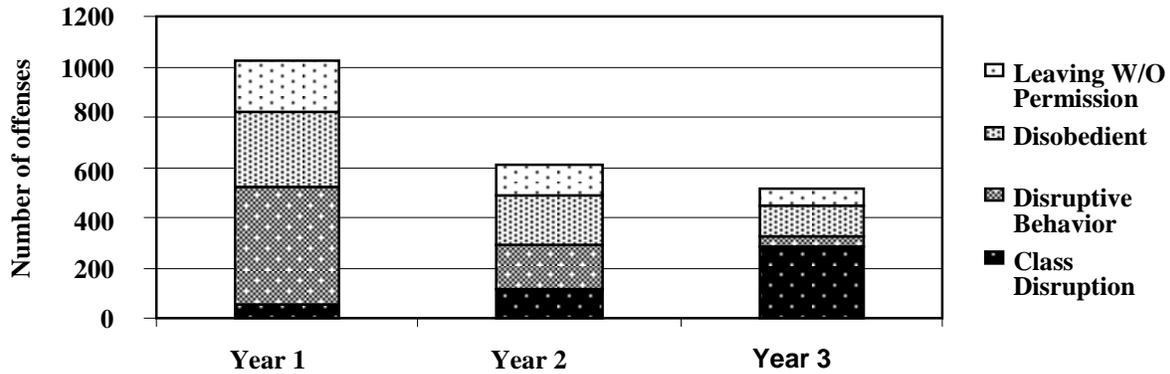


Figure 1. The number of classroom offenses (i.e., leaving without permission, disobedient, disruptive behavior, and class disruption) from year one to year three.

**Communication Offenses**

Communication offenses included disrespect of authority, insubordination, and profanity. The data revealed a decrease in the number of incidents of disrespect of authority from 120 in year one to 62 in year three. The number of incidents of profanity decreased from 174 in year one to 106 in year three.

However, there was an increase in insubordination referrals, 73 in year one compared to 87 in year three. In year three, insubordination incidents were actively reported and addressed, whereas in year one, these incidents were considered minor and were not reported consistently. This paradigm shift might explain the increase in the number of insubordination offenses (See Figure 2).

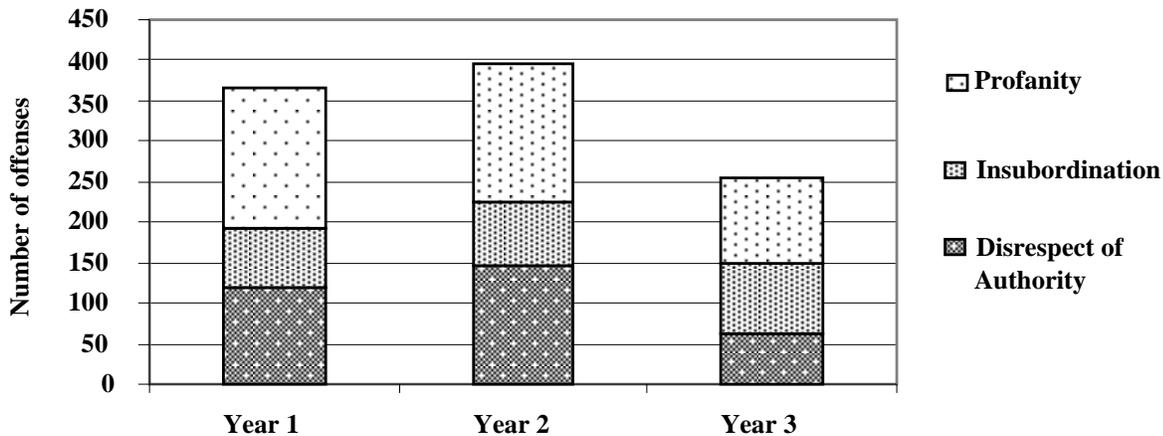


Figure 2. The number of communication offenses (i.e., profanity, insubordination, and disrespect of authority) from year one to year three.

**Hallway Offenses**

Hallway offenses included inappropriate behavior, fighting, skipping class, and tardiness (referred to as tardies). Incidences of all four categories decreased from year one to year three:

Inappropriate behavior referrals from decreased from 110 in year one to 49 in year three. Skipping class dropped from 130 in year one to 55 in year three. However, tardy referrals decreased only slightly from 36 in year one to 34 in year three, as did referrals for fighting (41 in year one to 38 in year three). See Figure 3.

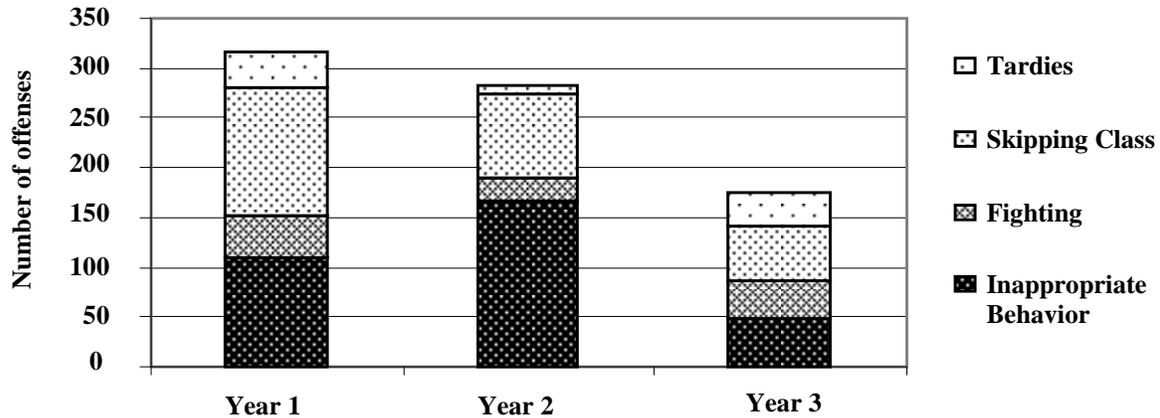


Figure 3. The number of hallway offenses (tardies, skipping class, fighting, and inappropriate behavior) from year one to year three.

Researchers analyzed 3 years (2005-2008) of student discipline referral data for grades 7 and 8 and examined what these results meant in terms of school-wide discipline and student behavior. Continuous progress monitoring of student behavior through office referral data helped to guide systemic reform efforts. Implementation resulted in a significant reduction in the number of discipline referrals. Data revealed a decrease of 23% in the total number (2239 vs. 1723) of discipline referrals from year one to year two and a decrease of 22% in the number (1723 vs. 1340) of discipline referrals from year two to year three. Results obtained from the analysis indicate that the implementing the Texas Behavior Support Initiative (TBSI) was effective in reducing the overall number of offenses in student behavior in a rural middle school (See Figure 4).

Results of the Chi-square analyses revealed statistically significant decreases in offenses. There was a significant  $\chi^2(1) = 117.29, p < .017$  decrease in offenses from year 1 to year 2 (2239 vs. 1723). There was a significant  $\chi^2(1) = 85.14, p < .017$  decrease in offenses from year 2 to year 3 (1723 vs. 1340). Obviously, this also resulted in a significant

$\chi^2(1) = 358.40, p < .017$  decrease in offenses from year 1 to year 3 (2235 vs. 1340).

Strategies and interventions were put into practice at every level to encourage positive

behavior. The majority of the interventions were implemented at the primary (school-wide) level. These interventions included creating a set of school-wide rules, revising the master schedule to include an advisory period, reducing the passing period from five to four minutes, universal monitoring of hallways between classes, visual reminders of the school-wide rules, and increased communication via radios for the behavior support team. At the secondary level, the behavior team concentrated their efforts on selected groups of students and targeted settings. Successful interventions at this level included daily administrative walk-throughs for targeted settings, initiating a partnership with Communities in Schools, improving interactions between students and staff, building relationships, and collecting and utilizing discipline data to guide decision-making.

Strategies and interventions at level three focused on the individual student. Interventions included hand scheduling of “frequent flyers” to

avoid an accumulation of problem behaviors in a single classroom, lunch detention, intent to cite warning notifications, civil citations, reintegration conferences for students returning from a disciplinary

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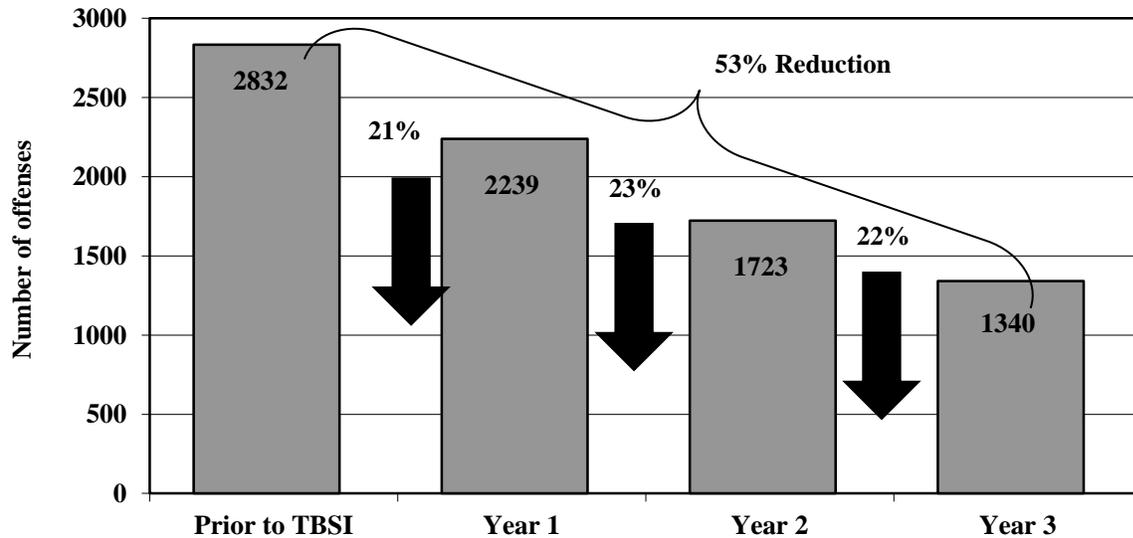


Figure 4. The total number of offenses prior to TBSI to year 1, year 2, and year 3 of study. A reduction of 53% was seen since the inception of the Texas Behavior Support Initiative.

Results of the data analysis prompted the researchers to investigate academic achievement as measured by the Texas Assessment of Knowledge and Skills (TAKS) in relation to the decrease in discipline referrals. Data from the Texas Assessment of Knowledge and Skills (TAKS) revealed that scores improved from prior to TBSI implementation when

compared to year three of implementation. The sample included all 7<sup>th</sup> and 8<sup>th</sup> grade students who were continually enrolled at the middle school during each of the data collection years (2005-2008). Improvement in scores could be attributed in part to the decrease in discipline referrals (See Table 1).

Table 1  
7<sup>th</sup> and 8<sup>th</sup> Grade State Assessment Data from 2005-2007

Test	Prior TBSI	Year 1	Year 2	Year 3
Sum of all grades tested.				
Reading	69	68	79	82
Math	32	45	56	57
Writing	82	85	94	84
Social Studies	65	70	58	75
Science	*	66	41	49

Note. All data are represented as a percentage. \* No science assessment test was given in the year prior to TBSI.

Some common themes that data revealed were

1. Most referrals occurred in the first semester of school. The lack of a smooth transition from one campus to another may be the reason for the greater number of referrals generated in the first semester. Infractions of the rules occur when the students are learning the new rules;
2. Most referrals occurred on Tuesdays. Tuesday was the day of the week in which school attendance was the highest;
3. Sixty-nine percent of all referrals came from male students. There were more boys than girls in the sample population resulting in a greater number of referrals generated by the male population;
4. Fifty-three percent of all referrals came from 7<sup>th</sup> grade students. Seventh grade students are in transition from one campus to another;
5. Ninety percent of all referrals came from the classroom. Most infractions occur while they are learning the expectations of their new campus. That most referrals occur in a classroom is not surprising considering students spend most of the school day in this setting;
6. Eighty-five percent of all referrals were from Hispanic students. School demographics indicated that 81% of the student population was Hispanic. Therefore, the largest student population generated the most discipline referrals;

7. TAKS scores improved overall from prior to TBSI implementation to year three of implementation. Time previously spent correcting disruptive behavior was applied to direct instruction. This managed instruction resulted in an improvement in academic achievement. Implementation of these school-wide strategies and interventions have resulted in a reduction in the number of behavioral disruptions in both classroom and non-classroom settings such as hallways and cafeterias. Although academic achievement outcomes were not the primary focus of this study, the initial data suggests that there is a strong empirical connection between school-wide behavior support and academic achievement as measured by the Texas Assessment of Knowledge and Skills. Researchers compared the TAKS scores from the years prior to implementation of TBSI to year three, the state assessment data revealed an improvement in scores over a three year period (See Table 1). In conclusion, implementation of the Texas Behavior Support Initiative (TBSI) was an effective program in a rural middle school in reducing the number of offenses from Year 1 to Year 3. Senate Bill 1196 was successful in decreasing the number of referrals among seventh and eighth grade students in a rural school district. This type of program may perhaps be effective in other rural areas of the state, as well as other metropolitan and urban areas.

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