IMPLEMENTING POSITIVE BEHAVIOR SUPPORTS FOR K-1 STUDENTS WITH SEVERE EMOTIONAL AND BEHAVIOR DISORDERS

By

MATTHEW BARROWS

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The Educational Leadership Faculty
Northwest Missouri State University Missouri
Department of Educational Leadership
College of Education and Human Services
Maryville, MO  64468

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ABSTRACT

The purpose of this study was to determine if implementing Positive Behavior Supports (PBS) in a classroom for K-1 students with behavior and emotional disorders had a positive effect on their behaviors. PBS is a behavior intervention system that is an approach to eliminating problem behaviors and replacing them with the correct behaviors. This school implemented PBS because the school district had several schools successfully use the PBS system. This specific study was conducted in a K-1 classroom with 4 students with behavior and emotional disorders. This group of students used the same data tracking system to determine their type of day which is the incredible five point scale. The study was to determine if there was a significant effect on the student’s daily behavior chart after PBS had been implemented. A t-Test was conducted to determine if there was a significant difference in both red and green days after implementing PBS. A green day is considered a great day for the students where they had no behavior issues. A red day is considered to be a very poor day where they had severe behavior problems or were very aggressive. The t-Test showed that there was a significant difference in both red and green days after PBS was implemented in the classroom. Based on this data, PBS was an effective way to reduce the amount of behavior problems.
INTRODUCTION

Background, Issues and Concerns

Behavior problems can lead to slowed academics and veer a person away from a normal social life. Positive Behavior Supports (PBS) is a behavior intervention system that focuses on using positive reinforcement of correct behaviors instead of reprimanding for the bad behaviors. The positive reinforcement for doing something good should incline the student to keep doing those correct behaviors.

This study was used at a K-12 alternative school for behavior and emotional disorders. The students were unsuccessful in their original school environment and placed in this alternative setting. The numbers of students are less than a regular classroom, and there is also a high staff to student ratio. The focus here is to be able to correct the behaviors while maintaining an importance on academics. The ultimate goal of this alternative school is to correct the behaviors so that the student can transition back to their original school.

The reason behind this alternative school adopting PBS was to bring a common behavior intervention system to the school and classrooms. The school district had already had some success adopting PBS in other schools. The team implemented this system midway through the first semester.

In this specific K-1 classroom where the study was conducted, their specific PBS goals were to be safe, respectful, and responsible. In order to be safe, the student must keep their hands, feet, and objects to themselves. Being respectful means speaking politely and listening and trying their best. Showing responsibility means to follow directions the first time and to stay on task. After each subject a student can earn up to five stickers for doing achieving those goals,
then at the end of the week the students get to shop using their stickers they earned through the week.

The focus on this study was conducted using The Incredible 5 Point Scale. This uses colors to determine how the student’s day went. Green, blue, yellow, orange, and red are the five colors that can be recorded. They range in that order from best to worst. This study used the extremes of the scale, so the two areas of focus were the green and red days. Green day ultimately means that the student had a great day, while a red day means that it was very bad day. The objective of this study was to increase the number of green days and decrease the number of red days.

*Practice Under Investigation*

The practice under investigation is the type of behavior intervention system that the school is using. The school as a whole started the school year without a specific school-wide behavior intervention system. The school then transitioned midway through the first semester of implementing Positive Behavior Supports as a whole school.

*School Policy to be Informed by Study*

The students in this school are all working at transitioning back to their original school. Behavior problems seemed to be happening at a high rate. The school wanted to decrease those behavior problems so they implemented a school-wide behavior intervention system. PBS was chosen to decrease the discipline and negative office referrals and increase the positive reinforcement for good behaviors.

*Conceptual Underpinnings*

PBS is based off of Behavioral Theory (Cohn, 2001). Behavioral theory is where the problem behavior continues to occur because it is consistently followed by the child getting
something positive or escaping something negative. By focusing on the contexts and outcomes of the behavior, it is possible to determine the functions of the behavior, make the problem behavior less effective and efficient, and make the desired behavior more functional. This often involves changing systems, altering environments and teaching new skills, as well as focusing on the problem behavior (Cohn, 2001).

This is simply stating that any type of behavior will continue to happen depending on the type of feedback that is given. A parent might have a child that cries a lot when they don’t get their way. The parent then doesn’t know how to deal with it and wants the child to stop crying, so the parent gives the child a piece of candy to stop. That child then is able to escape the negative. He or she believes that if they cry, then they will get candy. This then leads them to believe it is normal to cry to receive what they want.

The other side of it would be a child being rewarded for good behaviors. A positive incentive will be needed for the student to feel like they are achieving something. This could be rewarding a student who showed excellent behaviors some free time on the computer if they finish their lesson. This then motivates the student to do their work while also showing good behavior. This behavior then continues over time as the student is rewarded.

**Statement of the Problem**

The problem is that there was not a consistent behavior intervention system in the school. Behavior incidents were high and an intervention needed to take place to reduce those incidents. An alternative school for behavioral and emotional disorders needed to find a way to better reach the students. There was too much negativity in the building with too much punishment and discipline for doing things wrong.
Purpose of the Study

The purpose of the study was to determine if switching over to the Positive Behavior Supports intervention system had a significant effect on student’s behaviors. This study was done to see if there was a significant effect on a student’s green days per week after PBS had been implemented. The study also was conducted to see if there was a significant effect on the amount of red days after PBS had been implemented. The goal was for an increase in green days and a decrease in red days.

Research Questions

RQ 1. Is there a significant difference in the number of green days per week between having no behavior intervention system and having Positive Behavior Supports intervention system?

RQ 2. Is there a significant difference in the number of red days per week between having no behavior intervention system and using Positive Behavior Supports intervention system?

Null Hypothesis

There is no significant difference in the number of green and red days per week between having no behavior intervention system and having Positive Behavior Supports intervention system.

Anticipated Benefits of the Study

This is to show whether or not moving the school in the PBS intervention system was successful in creating better behaviors. If it is not successful then another intervention system should be looked into.
Definition of Terms

1. **Positive Behavior Supports (PBS):** An empirically validated, function-based approach to eliminate challenging behaviors and replace them with prosocial skills.

2. **t-Test:** The t-Test analysis is a comparative data analysis that assesses whether the means of groups are statistically different from each other. This test compares mean scores of two groups. The t-Test analysis is a statistical test that can be used to answer research questions about the effectiveness of methods and strategies within the classroom.

3. **The Incredible 5 Point Scale:** A color rating scale that a student and teacher can look at to determine how where their target behavior was for the day. This uses five colors which are green, blue, yellow, orange, and red. Green day would be considered the best, while a red day would be considered the worst. This scale uses visuals or writing to classify what determines each color.

Summary

Positive Behavior Supports intervention system is a way of giving something positive for good behaviors. This system is a way to maintain good behaviors or correct the inappropriate behaviors. This is an intervention system that can work for all students, not just the ones with behavior problems.

Positive Behavior Supports is the intervention system that this alternative school for behavioral and emotional disorders adopted as their behavior intervention system. This study specifically looked at the change in behaviors in a K-1 classroom after PBS had been implemented.

The hope of implementing PBS is that the students would decrease their poor behaviors and increase their good behaviors. This would increase the rate of being able to transition the
students back to their original school. The use of PBS is also an intervention system that does not interfere with academics. This is a system that can work to improve the academics because it is mostly the behavior problems that cause an interference with the student’s academics.
Positive Behavior Supports (PBS) defined by Bradley and Horner (1998) “is a broad range of systemic and individualized strategies for achieving important social and learning outcomes while preventing problem behavior with all students.” PBS is the integration of valued outcomes, behavioral and biomedical sciences, validated procedures, and systems change to enhance the quality of life and minimize or prevent the behavior problems (Bradley & Horner). The use of PBS can decrease the need for interventions such as punishment or suspension. This can also lead to systemic and individual changes in behavior (Cohn, 2001).

PBS is an intervention system that can target individual students or the entire school. The focus of the intervention doesn’t only pertain to changing the student’s behaviors but also the environment around the school like the physical setting, task demands, curriculum, instructional pace and individualized reinforcement (Cohn, 2001). With all of these playing a factor in how PBS can be implemented it allows for a wide range of students, context, and behaviors to be involved in this intervention strategy (Cohn, 2001). PBS uses data to make decisions on the types of interventions. It requires using functional behavioral assessments and ongoing monitoring of the students of how they are doing during the intervention (Cohn, 2001).

PBS is a way to teach proper social skills to the students. The PBS programs that are being used today are the development of positive behavioral expectations, specific methods to teach these expectations to staff and students, proactive supervision or monitoring of behaviors, contingency management systems to reinforce and correct behavior, and methods to measure outcomes and evaluate the student’s progress (Handler et al., 2007). In order to implement this practice successfully, it will require a change from the administration, staff, and leadership team. These team members should go through training and have assistance as they learn the new
process of ways to change the student’s behaviors. Changes that might need to take place in order for these to work successfully are three key areas. These areas are practices, systems, and data. If all of these are implemented correctly then the outcome should be dramatically affected (Handler et al., 2007). The practices are going to be what the staff does to support these student behaviors. The system is how the staff behavior is changed and supported through the new implementation. The use of data will be used to decide how these systems are managed (Handler et al., 2007).

Students with behavior problems can disrupt the learning environment. These behaviors can lead to having an unsafe school atmosphere. Behaviors can also get in the way of academics. The academics are often slowed because the student behavior is intervening with the learning process. A student won’t only disrupt his or her own academics, but can also prevent other students from learning. Ultimately, the goal would be to eliminate risk factors, enhance protective factors, prevent the common occurrence of the problem behavior, reduce the incidence and prevalence, and enhance the student’s academic gains (Sugai & Horner, 2006).

Sugai and Horner (2006) explain the three main tenets of being able to put Positive Behavior Supports into the classroom, school, and district. The first tenet is prevention. The Office of Special Education Programs has a three-tiered triangle of interventions that range from preventing the problem behavior to reducing the impact or intensity of the behavior occurrences. The prevention of the problem is described as the primary set of students. This is normally directed towards all students in the school setting. The primary prevention is based off of 80 percent of students. The areas of focus for the primary prevention of PBS are the teaching of social skills, positive reinforcement or encouragement of expected proper behaviors, and having
a teaching and learning environment that discourage any inappropriate behaviors (Sugai & Horner, 2006).

Secondary and Tertiary prevention is reducing the impact or intensity of the problem behavior occurrences. Secondary prevention is for students with At-Risk Behavior. This includes about 15 percent of the student population (Sugai & Horner, 2006). These students will require more support than the students at the primary prevention stage. The same strategies are used for these students at the secondary level but are usually more intensive and need more staff attention and monitoring (Sugai & Horner, 2006).

Tertiary prevention is at the top of the triangle and includes about 5 percent of the student population (Sugai & Horner, 2006). Tertiary preventions are specialized individualized systems for students with High-Risk Behavior. This prevention system is for the students that are unresponsive to both the primary and secondary interventions. These interventions will be highly individualized and intensive. The tertiary level will have major support from special educators, school psychologists, counselors, and behavior interventionists. These members will have specialized areas for each individual student to create these behavior intervention plans (Sugai & Horner, 2006).

The next main tenet of PBS is theoretically sound and evidence-based practices. Effective practices are often based on which theories and evidence are going to support the decisions. PBS is based on behavioral theory. Behavioral theory emphasizes the lawfulness of behavior, interplay between physiology and environment, and the ability to affect behavior through environmental manipulations (Sugai & Horner, 2006).

Evidence-based practices refer to information that is verifiable to support the adoption and use of the new system or program. When the experimentally supported practices aren’t
available, there are usually other practices that can be implemented. Without the data, other practices should be carefully implemented to prevent negativity and a worsening practice (Sugai & Horner). These should be tested first in a smaller setting to prevent a loss of time, costs, and resources. When these new practices are being tested, they need to be evaluated early and often (Sugai & Horner, 2006).

The evaluation should ask four different questions in order to be determined a good system. The first question asks if the practice is effective. Effectiveness on this is determining if the desired outcomes will be achieved with this new practice (Sugai & Horner, 2006). The second question asks if the practice is efficient. This question is determining if the new practice will be cost efficient and are the benefits of keeping this practice going worth it (Sugai & Horner, 2006). The third question asks if the practice is relevant. This question is determining if the practice all fits together in the areas it is being used. The people using the practice and the setting that the practice is being used needs to mold together (Sugai & Horner, 2006). The last question asks if the practice is durable. This question is used to determine what supports are going to be needed in order to keep the practice accurate and sustainable over an extended amount of time (Sugai & Horner, 2006).

The last main tenet of PBS is the systems perspective. For PBS the system perspective is based on how a school is characterized and that is determined by the collective actions of the individuals within the school on how they contribute their actions (Sugai & Horner, 2006). Horner (2003) indicated that to work effectively with the school as a whole, one must remember that organizations do not “behave.” Instead, individuals within the organization engage in behaviors. The greater the extent to which these behaviors move the organization toward a common goal, the stronger the organization is. This means that the system’s success will be
determined by the achievement of reaching the common goals. For PBS, that means trying to reduce the problem behaviors from where they were (Sugai & Horner, 2006).

There are four elements that guide the systemic implementation of PBS. The first is that the school needs to establish measurable and achievable long term outcomes that are induced by students, families, and the educators (Sugai & Horner, 2006). The second element is that the school will identify practices that are considered to be trustworthy, replicable, and educationally evident (Sugai & Horner, 2006). The third element is the information or data that is used to document the status of the current practices to provide the justification to implement the change of systems. This is also useful to evaluate the intervention effectiveness, efficiency, and relevance (Sugai & Horner, 2006). The last element is where the school formally establishes the system supports to enable the accurate and durable implementations of the practices of PBS. These four elements all work together and they are a guidance system where each can be supported by one another (Sugai & Horner, 2006).

There are several different reasons that PBS needs to be implemented into schools. Problem behavior is the single most common reason why students are removed from the regular classroom. Students with extreme behavior problems represent only 20 percent of school enrollment, but they can account for over 50 percent of the behavior incidents (Cohn). Punishing students or zero tolerance policies haven’t been effective or improving the behavioral climate or preventing students with behavior problems from entering the juvenile justice system (Cohn). It has been shown that three years after these severe behavior problem children are removed from their school that almost 70 percent have been arrested (Cohn). With these stats about schools that don’t use PBS, it shows that there is a need for change to prevent these numbers from
growing. Students need that positive reinforcement in their life instead of only receiving the negative punishments.

Cohn also talks about some of the benefits of using PBS in schools (2001). Over the past 15 years, it has shown that PBS has been effective in promoting positive behavior in students and schools. The use of PBS as a strategy maintains the appropriate behavior which leads to a safer school environment. The safer school environment then creates a more effective learning environment for students (Cohn, 2001). Schools that implement these intervention systems report an increased engagement time in academic activities and improved academic performance (Cohn, 2001). After schools have implemented PBS office discipline referrals in those schools have decreased 20 to 60 percent (Cohn, 2001). A review of research has shown that there was over a 90 percent reduction in problem behavior in over half the studies, and the problem behavior stopped entirely in over 26 percent of the studies (Cohn, 2001).

According to Bradley and Horner (1998), there are misrules about the Positive Behavior Supports. PBS is not considered a curriculum, instead it just a general approach to preventing the behavior problems. PBS is also not set for any particular type of students; all students can be used for this system. It is not relevant to instruction priorities. PBS is not something new either; it is just based off of a long history of certain behavioral practices and instructional strategies (Bradley & Horner, 1998).

When using PBS for students with severe behavior problems, there is a step by step process to go through in order to help that individual student. Step one is to identify the target behavior of the student. This would be focusing on a certain behavior such as physical aggression that the student is exerting. Observations need to be done on that certain target to determine why this student is having those behavior problems. Lots of students will use these
actions to seek attention. A behavior support plan then needs to be created to have ways of preventing this type of behavior. Strategies are made to create behavior prevention for the individual student. These are often done with charts for the student to follow to be able to earn what they are striving for after using positive behaviors (Sharma, Singh, & Geromette, 2008).

The next step in the process is having a recording system. This recording system should be a way of documenting the number of times the problem behavior occurs. It needs to be something easy and quick to document. An example would be a chart where tallies can be taken down to mark the number of times a student put his or her hand on another student. It is important to have the time frames already listed in this document so the times of the incidents can determine when the incidents are happening (Sharma, Singh, & Geromette, 2008).

Step 3 is providing the procedure and strategies. This will be getting all team members for the student present in the plan. The team could consist of speech pathologists, the student’s specific teacher, paraprofessionals, and other service members, and the student’s family. These members will all meet together to develop and intervene in the plans that have been made for the individual (Sharma, Singh, & Geromette, 2008).

Step 4 is the comprehensive functional assessment. This assessment can be done after some data and observations have been taken. This is the number of incidents and when the incidents occurred that to find out the times that the behaviors are most likely to occur. These might be certain subject areas, times during the day, or interactions with certain kids. The assessment needs to show the type of trigger, the behavior being done, the consequences during the behavior, and the possible function of the behavior (Sharma, Singh, & Geromette, 2008).

Step 5 is creating the best hypothesis for development. The assessment should lead to producing a good hypothesis of why these behaviors are occurring exactly. There should be a
guess to about the relationship between the challenging behaviors and the communicative function of the behavior (Sharma, Singh, & Geromette, 2008). The hypothesis is usually based on 4 things for the behavior problem; it can be attention, escape, tangible, and sensory (Sharma, Singh, & Geromette, 2008).

Step 6 is developing the Positive Behavior Support plan. This plan needs to include long term support, prevention strategies, physical structure of the classroom, and schedule in the classroom. The long term support will be scheduling meetings with the team members to discuss everything going on. Prevention strategies are having antecedent manipulations in the environment, activities, and other interactions with the student (Sharma, Singh, & Geromette, 2008). Physical Structure of the classroom includes having enough area or workspace for the student, having the least distracting work areas, distracting features around the room, are work materials easily accessible for the students, are there visual cues around the room for the student, areas for students to put finished work, the students materials are marked for easy access, and that play areas are located away from the exits (Sharma, Singh, & Geromette, 2008). The schedules in the classroom need to be posted for everyone to see. Students with individual or altered schedules also need to have their own visual schedule for them (Sharma, Singh, & Geromette, 2008). Class schedules can be made with bulletin boards or pocket charts, while the individual schedules can be a laminated sheet of paper with their schedule of classes. These should most likely have the times, type of subject, and a visual cue for the student to actually see the subject.

Step 7 is developing the replacement skills. This needs to be something that the student can replace their current problem behavior with an alternative that works for them (Sharma, Singh, & Geromette, 2008). For an aggressive student, this might be changing their aggressive
behaviors towards people and changing them to using their aggression on some type of manipulative that they can hit or squeeze.

Step 8 is the consequence strategies. The consequence strategies are used to promote the desired behavior. These can be anything from a student getting computer time to anything else reinforcing that the student enjoys. A student could earn so much time on the computer for going through a lesson without having any aggressive behaviors. This time is slowly reduced as the student gets accustomed to it. This means that computer time will be decreased while number of subjects that the student cannot be aggressive is increased (Sharma, Singh, & Geromette, 2008).

There is always room for improvement when dealing with types of interventions. Cohn mentions that a good area to improve PBS and behaviors is to address the problems early (2001). A student will often not have a plan of intervention until something serious happens that requires multiple suspensions. There are many states that require the functional behavior assessment before developing that serious infraction. Cohn believes that more states should jump on board with this to prevent having a serious problem (2001). Punishment and exclusion are two things that usually happen for a student if there is no plan in place before the problem occurs. The plan needs to be based around prevention instead of how it is handled after it has already happened (Cohn, 2001).

Cohn also thinks that lots of schools behavior interventions are implemented in schools that are unproven strategies (2001). Too many schools use a trial and error system which can waste time and resources for the student as well as the school. Something that goes along with that would be the staff members that are using the systems without having any training. Cohn believes that the school needs to pick a certain intervention system and train the staff members
that will be using it (Cohn, 2001). When the staff members are unfamiliar with how the interventions work, then that puts the burden onto the families at home. Most of those parents at home do not receive the support needed to intervene with these types of behaviors (Cohn, 2001).

Positive Behavior Supports is real big for preventing problem behaviors. The prevention comes from what needs to happen in order to make the child use the correct behavior. This is done with a lot of recognition, positivity, and praise when a child has good behavior. Positive Behavior Supports works in ways with students just like adults like to be treated for their job. The students and adults need to know what’s expected of them. If there are no expectations, then it can be hard for the person to understand right from wrong. People then like to have those expectations taught to them, especially for younger ages. This might mean demonstrating correct and incorrect behaviors so people can visually see the expectations.

People like to be rewarded and acknowledged for their good behaviors. Students love being praised for doing the right things and those rewards can be from a hug to a little prize. Adults tend to try and do their job well because they are rewarded with money. It is very hard for an adult to be motivated for a job if they know they aren’t receiving anything for it. Most people need to know how to correct their behaviors as well. It is best to be able to correct the behavior as soon as it happens. That immediacy uses a lot more reinforcement instead of trying to correct the behavior after it has happened.

Having the support from people higher up is very important too. As a student, it is nice to know the reasons for doing these things and that comes from the teachers. A teacher or staff member should have full support from their administration or bosses as well. When this support is given, it gives motivation to keep doing those great things.
PBS can be a great way to develop a positive school culture. This system is great for bringing people together as a team. It also really helps for those students that never receive praise. All people need positivity to keep them motivated and going. It really does a great job of molding a person into positive outlooks and creating those correct behaviors.
RESEARCH METHODS

Research Design

An experimental design will be used to determine if the students with emotional and behavioral disorders improve their behavior in a K-1 classroom after switching to Positive Behavior Supports for the intervention system. PBS was implemented halfway through the first semester, and the same four students were used throughout the study. The independent variable for this is the type of behavior intervention system. The dependent variable for this is the number of green or red days before and after PBS was implemented.

Study Group

The study group for this study consists of four students that are diagnosed with behavior disorders. There is one kindergartener, and three first graders in the study. The four students all use the same behavior intervention system. Midway through the first semester, the four students all switched over to PBS at the same time. The same four students were used for both types of intervention systems.

Data Collection and Instrumentation

Data will be collected at the end of every school day for each student over one semester. This study was conducted over a 16 week period. The data tracking device is the Incredible 5 Point Scale. This is a color chart that determines what kind of day the student had. The chart uses five different colors to determine how their day went. The two colors being looked at in the study was green and red. A green day is considered a great day with no behavior problems and a red day is on the opposite end of the spectrum and means that the student had some major behavior problems.
Each student has their colors tallied up at the end of each week. For each week then, the total number of green and red days for the entire class was charted. This study is specifically looking at increasing the total number of green days per week as a class, while reducing the number of red days per week as a class.

*Statistical Analysis Methods*

The number of green and red days per week will be averaged to find the mean value per week. Using A Statistical Package, the mean score of green days before implementing PBS will be compared to the mean score of green days after implementing PBS. The same thing will be done with red days by comparing the mean scores of the red days before and after PBS. This will be done by conducting the t-Test to determine if there was a significant difference in both colors after PBS had been implemented. There is a small group size, but a large time frame, so an alpha level of .20 will be used to challenge the null hypothesis.
FINDINGS

This chart below shows the results of the number of green days that the classroom of four students averaged a week before and after implementing Positive Behavior Supports. This table shows the mean score of green days per week before and after PBS. It also reports the mean difference (Mean D), the t-Test, degrees of freedom (df), the p-value, and the alpha level. A graph of the data is underneath the table.

<table>
<thead>
<tr>
<th>Source</th>
<th>Mean</th>
<th>Mean D</th>
<th>t-Test</th>
<th>df</th>
<th>p-value</th>
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<tr>
<td>Green Days Per Week Before PBS</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Green Days Per Week After PBS</td>
<td>9.22</td>
<td>2.79</td>
<td>2.84</td>
<td>14</td>
<td>.013</td>
</tr>
</tbody>
</table>

Note: Significant when p<0.20

This study was conducted with four students diagnosed with behavior disorder. The four students used the same data tracking system before implementing PBS and after implementing PBS. The four students combined their number of green days each week to determine how many green days the class had as a whole. The average number of green days per week before
implementing PBS was compared to the average number of green days after implementing PBS. The mean for the number of green days per week before PBS was 6.43. The mean for the number of green days after PBS was 9.22. The mean difference was 2.79 and the t-Test score was 2.84. There were 14 degrees of freedom. The null hypothesis stated that there was no significant difference in the number of green days per week between having no behavior intervention system and having Positive Behavior Supports intervention system. The p-value was .013. The alpha level is .20, and since the p-value is lower than the alpha level, the null hypothesis must be rejected. This means that there was a significant difference in the number of green days per week the class averaged after implementing PBS. The class started by averaging 6.43 green days per week and improved that to 9.22 green days per week after PBS was implemented. This was a difference of 2.79 green days per week after PBS was implemented.
This chart below shows the results of the number of red days that the classroom of four students averaged a week before and after implementing Positive Behavior Supports. This table shows the mean score of red days per week before and after PBS. It also reports the mean difference (Mean D), the t-Test, degrees of freedom (df), the p-value, and the alpha level. A graph of the data is underneath the table.

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<th>t-Test</th>
<th>df</th>
<th>p-value</th>
</tr>
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<tbody>
<tr>
<td>Red Days Per Week Before PBIS</td>
<td>6.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red Days Per Week After PBIS</td>
<td>2.67</td>
<td>3.48</td>
<td>3.31</td>
<td>14</td>
<td>.005</td>
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The mean for the number of red days per week before PBS was 6.14. The mean for the number of red days after PBS was 2.67. The mean difference was 3.48 and the t-Test score was 3.31. There were 14 degrees of freedom. The null hypothesis stated that there was no significant difference in the number of red days per week between having no behavior intervention system and having Positive Behavior Supports intervention system. The p-value was .005. The alpha level is .20, and since the p-value is lower than the alpha level, the null hypothesis must be rejected. This means that there was a significant difference in the number of red days per week the class averaged after implementing PBS. The class started by averaging 6.14 red days per week and improved that to 2.67 red days per week after PBS was implemented. This was a difference of 3.48 red days per week after PBS was implemented.
CONCLUSIONS AND RECOMMENDATIONS

After this study had been conducted, it was found that switching the behavior intervention system to Positive Behavior Supports had a significant effect on the student’s behaviors. The null hypothesis for this study was there is no significant difference in the number of green and red days per week between having no behavior intervention system and having Positive Behavior Supports intervention system. The null hypothesis was rejected for both red and green days because the p-values of .013 and .005 were lower than the set alpha level of .20. The number of green days per week increased from 6.43 to 9.22 which was a difference of 2.79 green days per week. The number of red days per week decreased from 6.14 to 2.67 which was a difference of 3.48 red days per week. The goal was for the students to have more green days and less red days. This would ultimately mean that there would be an improvement in behavior. The importance of running this study and test was not to just see if the green days increased and red days decreased, but to decide if there was a significant difference in the numbers.

Positive Behavior Supports is an intervention system where positive reinforcement is used for good behavior rather than negative discipline or punishment against the wrong behaviors. It is set up to mold the student to be able to keep using those positive behaviors. Using this behavior intervention system in an alternative school for emotional and behavioral disorders was a great opportunity. These are kids that often don’t receive a whole lot of positive feedback, which makes this system great for improvement upon behaviors.

Changing to PBS was very significant. Numbers of red and green days were very similar before the implementation of PBS. After PBS was implemented, both numbers changed for the better. The amount of green days per week increased while the amount of red days decreased. The same type of data collection was used throughout the entire study; the only thing that
changed during this study was the behavior intervention system. The type of intervention system was what was being determined though in order to find what was more effective.

A way of improving this study would be to conduct the numbers for the entire alternative school. It was shown that the implementation of PBS was successful in a K-1 classroom. Since the school as a whole switched to PBS, it might have been beneficial to see the results of all of the other grade levels in the school. PBS might not have worked in every classroom as good as the prior intervention system. Expanding this study to more classrooms or the school as a whole would be a good way to determine specific classroom needs for types of interventions.

Another way of improving this study would be to see if there was also a significant difference in the color of days that a student gets in between the green and red days. This would ask if switching to PBS had any effect on the number of blue, yellow, and orange days per week. The extreme ends were both significantly effected which is ultimately what you want when changing behaviors, but it would be interesting to see if those middle numbers were also significantly effected.

To conclude this study, it was determined that switching over to PBS had a significant effect on student’s behaviors. The student’s green days increased while their red days decreased which was the goal when PBS was implemented. It showed that PBS is an effective intervention system for poor behaviors in a K-1 self-contained classroom for children with behavioral and emotional disorders. Based on this study and evidence, more alternative schools and classrooms for problem behaviors would possibly benefit from using PBS as their behavior intervention system.
REFERENCES


