Teacher-Student Relationships: Impact of Positive Behavioral Interventions and Supports

By Rene Martinez* & Mervyn Wighting‡

The purpose of this study was to investigate how caring student-teacher relationships facilitate positive student behavior. Additionally, it examined the effect of student behavior when building positive student-teacher relationships. Previous research by the authors determined that when teachers build relationships with children it is one of the most effective strategies to impact student learning. A secondary implication identified by the participants and their administrators in that study was that building relationships can create a positive classroom environment resulting in fewer discipline disruptions. This current study was conducted to measure the relationships between school children, in grades K-8 in the USA, and their teachers using a standardized instrument before and after a two-week implementation of a positive behavioral intervention and supports strategy to determine if there are any significant differences. The participants involved in this study are comprised of classroom teachers in their first year of teaching, and experienced classroom teachers (5+ years).

Keywords: teacher preparation, teacher-student relationships, positive behavior support interventions

Introduction

As many educators have attested, when teachers build relationships with students it is one of the most effective strategies to impact student learning. Positive teacher-student relationships have “long been considered a foundational aspect of a positive school experience” (Brophy, 1988). When teacher-student relationships improve, classroom behavior is positively impacted. In contrast, when students and teachers have conflict and negative interactions, there is a greater risk of behavior problems. Research has shown the importance of teacher-student relationships, but there are few studies that share how intentionally implementing a positive behavioral support intervention can help build teacher-student relationships in the classroom.

Teachers face increasingly more demands and challenges in the classroom. Strong teacher-student relationships are considered to be the essential element in academic engagement and student motivation (Jerome, Hamre, & Pianta, 2008; Roorda et al., 2017; Wentzel & Miele, 2016). This paper aims to explore whether there are differences in teacher-student relationships after implementing a two-week positive behavioral support intervention. Additionally, teachers shared their perceptions of the effects of this two-week intervention. The research study

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investigated differences between the pre-and post-survey; the positive behavioral support intervention chosen to be implemented; as well as differences in teacher-student relationships among students that are excelling, students that are struggling, and students that are neither excelling nor struggling. This may be an important step in determining the ways teachers can build relationships and the time commitment needed to build teacher-student relationships.

**Research Question**

Are there any significant differences in teacher-student relationships when a teacher implements a positive behavioral intervention support strategy?

**Impact of Teacher-Student Relationships**

Classrooms are complex social systems, and student-teacher relationships and interactions can also be complex. Pianta, Hamre, and Allen (2012) posit that the nature and quality of relationship interactions between teachers and students are fundamental to understanding student engagement, can be assessed through standardized observation methods, and can be changed by providing teachers knowledge about developmental processes relevant for classroom interactions and personalized feedback/support about their interactive behaviors and cues. According to Tyler and Boelter (2008), positive teacher expectations were associated with high academic performance or academic gains, whereas negative teacher expectations resulted in a decrease in academic performance. Further information on the impact of caring teacher-student relationships on academic achievement is provided by Johnston, Wildy, and Shand (2022) who report that the students in their study improved their academic attainment when their teachers communicated high expectations of them.

Students spend approximately 8 hours a day at school and most of that time is spent with their teachers. It is not surprising that teacher-student relationships are a predictor as to a students’ liking of school (Roorda, Koomen, Spilt, & Oort, 2011). Research has shown that students who like school are less likely to drop out of school, have lower disciplinary issues, and overall perform better academically. Students tend to like school more when they have a respectful and caring relationship with their teacher (Hallinan, 2008). Strong teacher-student relationships also predict how connected a student feels to school (Monahan, Oesterle, & Hawkins, 2010). Student connectiveness refers to a classroom environment where students believe that teachers care about them and their learning. Students that feel connected to school are more likely to succeed (Mosley, Broyles, & Kaufman, 2021). Building relationships with students helps students have a more positive attitude about school and learning.
Student Discipline and Classroom Management

There is a growing body of research that provides evidence that poor student discipline is associated with lower academic achievement. Teachers reported one of the reasons for the loss of instruction is due to classroom disruptions. On the contrary, the less disruptions, the more class time that is allotted for classroom learning (Vieluf, Kaplan, Klieme, & Bayer, 2012). Student disruptions decrease the opportunity for classroom instruction and learning and overall has a negative impact on student learning.

According to Postholm (2013), the principal goal of effective classroom management is to establish a quiet and calm environment in the classroom so that the pupils can take part in meaningful learning in a subject, and the second aim is to contribute to the pupils’ social and moral development. In regard to classroom management, the aim is to develop a positive climate conducive to teaching and learning with minimal disruptions, rather than a focus on student discipline.

Regarding teacher–student relationships, successful classroom management focuses on “establishing and working within personal relationships with students” (Brophy 1988, p. 18), making it the task of teachers “to develop caring, supportive relationships with and among students” (Evertson & Weinstein 2006, p. 5). In order to develop relationships with students, teachers need to create a positive classroom environment where students feel safe and feel cared for.

Implementing PBIS

The purpose of this study is to examine any differences in teacher-student relationships after teachers implement the use of a selected positive behavioral intervention support (PBIS) strategy. PBIS is a nationally-recognized approach to support positive academic and behavioral outcomes for students in the USA. It is a school-wide prevention strategy that is currently being utilized by over 16,000 schools in the United States in order to address the academic and behavioral needs of students (Bradshaw, Pas, Debman, & Johnson, 2015). PBIS promotes school level change in order to promote a positive school environment and prevent student behavior problems.

PBIS helps teachers and administrators learn about and implement new techniques that reduce disruptive student behavior, which typically leads to office referrals, in-school suspensions, and out-of-school suspensions that decrease instructional time for students. Based on extensive research, PBIS utilizes a positive approach to discipline. PBIS ultimately impacts the very culture of the school to shift attention to positive behavior and successful learning systems for children, teachers and administrators (Petrasek et al., 2022).

When implementing PBIS, a school-wide behavior plan is needed that focuses on positive behavior expectations across all school contexts. This model, used by all school staff consistently, draws on social and emotional learning, behavioral, organizational, and positive youth development theories (Lewis & Sugai, 1999; Sugai & Horner 2001; Bradshaw, Pas, Debman, & Johnson, 2015). PBIS is a behavior plan that recognizes, supports, and rewards students who demonstrate
positive behavior, cultivates positive relationships between the children and staff members, and strives for continuous improvement in student discipline.

A school-wide PBIS plan uses incentives to recognize, support, and reward positive student behavior. PBIS is a research-based framework that can improve student behavior where the focus is on positive behaviors. Teachers spend time teaching expectations to students, they intervene early when disruptive behaviors begin, and when students exhibit positive behavior, they are rewarded for that behavior. Schools create their own expectations which typically center around respect, responsibility, and safety.

Classroom dynamics are complex and involve the relationships and interactions between teachers and their students and between students and their classmates. Research reported by Koth, Bradshaw, and Leaf (2008), indicates that student- and classroom-level factors tend to have a greater influence on students’ perceptions of the school environment than do school-level factors. By implementing PBIS, not only does this help create a safe school environment, but it also creates a safe classroom environment. When a teacher intervenes at the onset of undesired behaviors and dedicates time to teaching expected classroom behaviors, more positive attitudes may be formed.

PBIS implementation has been known to help decrease behavioral problems in the school and classroom. Researchers have found that as a result of PBIS implementation, discipline problems have decreased (McGurty et. al., 2016). This study provided participating teachers with five different types of positive behavior support interventions and they decided which support they would implement with their students. The following were the support options:

1. Support students by spending 2 minutes a day in conversation connecting with them individually.
2. Provide written feedback to students individually in their daily journals.
3. Support students with verbal praise for good behavior.
4. Provide an immediate reward (food, candy, stickers).
5. Provide material privilege (use of cell phone, use of a special chair in the room, etc.).

Once teachers chose which PBIS method they would employ, they completed a before and after survey to measure the results.

**Method**

This research employed a mixed-methods approach. Participants volunteered to be a part of the study and data were collected using a standardized instrument as well as asking open-ended questions. The participants were classroom teachers in their first year of teaching and experienced classroom teachers (5+ years).
Participants

The present study was conducted among twenty-eight teachers. A convenience sample of twenty-three first year teachers, and five experienced classroom teachers with five or more years of experience participated in the study. All participants are employed teaching children in grades preK-sixth grade. The biggest percentage of teachers teach grade 6, 30.4%; 29% of the teachers teach preK; 8.9% teach Kindergarten; and the remainder of the teachers teach in grades 1-5. When teachers completed the survey they purposefully selected six students in their class to take part in the study as requested by the researchers. Two of the students were excelling in their class; two were struggling; and the other two students were neither struggling nor excelling. Data were collected on a total of 168 students. After implementing a two-week positive behavioral support intervention, teachers completed a post-survey with the same six students. All participants were teaching in the same state in the USA. The first-year teachers (23) had recently completed alternative licensure preparation courses; the seasoned teachers (5) had been teaching in public education for at least five years.

Instrument

Teachers’ perceptions of the quality of their relationships with the students they teach were measured using the short form of the Student-Teacher Relationship Scale (Pianta, 2001). This 15-question survey Student-Teacher Relationships Scale (STRS) is a reliable and valid teacher-reporting standardized instrument for measuring the quality of relationships with students. An example of the instrument is included in the Appendix. Teachers responded to all items using a 5-point Likert-type scale, where 1 = definitely does not apply and 5 = definitely applies. After teachers completed this survey, teachers selected a positive behavioral support intervention to implement for a two-week period. At the conclusion of two-weeks, the teachers completed a post-survey using the same instrument. Additionally, the participating teachers were asked two open-ended questions: “What did you discover from participating in this study?” and “What help do think this might be to you in your classroom next year and beyond?”

Participants were asked to choose a positive behavioral support intervention strategy to implement over a two-week period. Each participating teacher employed one strategy selected from the following options:

1. Support students by spending 2 minutes a day in conversation connecting with them individually.
2. Provide written feedback to students individually in their daily journals.
3. Support students with verbal praise for good behavior.
4. Provide an immediate reward (food, candy, stickers) or
5. Provide material privilege (use of cell phone, use of a special chair in the room, etc.).
Teachers selected one of these strategies to estimate the effect produced after employing the PBIS strategy.

**Analyzing Data**

The short form of the STRS is scored by summing groups of items corresponding to two factor-based subscales that capture two dimensions of the student-teacher relationship: closeness and conflict. To assess the overall quality of the relationships, a total score was calculated. These total scores were compared from the pre to post survey in order to measure the effect of the teacher-student relationship when a teacher implements a positive behavioral intervention support strategy.

**Results**

This research investigated the following research question: Are there any significant differences in teacher-student relationships when a teacher implements a positive behavioral intervention support strategy?

The results indicate an overall improvement that is statistically significant for teachers developing closer relationships with students using a PBIS strategy. The overall mean of closeness between the pre and post survey was 3.196, indicating that the mean of the post-test was greater than the mean of the pre-test, hence the negative difference. It is also a significant difference given that both the one and two-sided p tests are less than 0.001. This is to be expected from a question on closeness. Additionally, the results show that the overall conflict between teachers and students goes down when employing one of these PBIS strategies. The overall mean difference of 2.946 is larger on the pre-test than the post-test, indicating less conflict. The conflict results also indicate a significant difference given that both 1 and 2 sided p is less than 0.001. Table 1 is a breakdown of each individual question and the implications.

**Table 1. Analysis between Closeness and Conflict from the Pre- to Post-survey**

<table>
<thead>
<tr>
<th>Subscale (Conflict or Closeness)</th>
<th>Question</th>
<th>Mean of the paired difference</th>
<th>Significant difference Two-sided p</th>
</tr>
</thead>
<tbody>
<tr>
<td>closeness</td>
<td>1. I share an affectionate, warm relationship with this child.</td>
<td>-0.482</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>conflict</td>
<td>2. This child and I always seem to be struggling with each other.</td>
<td>0.435</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>closeness</td>
<td>3. If upset, this child will seek comfort from me.</td>
<td>-0.56</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>closeness</td>
<td>4. This child is uncomfortable with physical affection or touch from me.</td>
<td>0.161</td>
<td>0.154</td>
</tr>
<tr>
<td>closeness</td>
<td>5. This child values his/her relationship with me.</td>
<td>-0.476</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>closeness</td>
<td>6. When I praise this child, he/she beams with pride.</td>
<td>-0.476</td>
<td>&lt;0.001</td>
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</table>
Table 1 shows the results of the analysis between closeness and conflict from the pre- to post-survey. The results show the mean of the differences between the pre- and post-test. Each question shows a significant difference with the exception of question 4. This is to be expected because question 4 is a reversed scored item based upon the wording of the question: This child is uncomfortable with physical affection or touch from me. Teachers chose a score of a 1 on the Likert-Scale if it did not apply and a score of 5 if it did, thus, the results are comparable because the researchers had to account for the reversed score.

Table 2 shows the results of the positive behavioral strategies teachers chose to employ. The data shows 41.9% of the participating teachers chose to implement the strategy of supporting students by spending 2 minutes a day in conversation with them individually. Table 2 shows a breakdown of the strategy that each teacher chose to use for this study.

Table 2. Employed Positive Behavioral Strategies

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Percentage of teachers selecting this strategy</th>
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</thead>
<tbody>
<tr>
<td>Support students by spending 2 minutes a day in conversation connecting with them individually</td>
<td>41.9%</td>
</tr>
<tr>
<td>Provide written feedback to students individually in their daily journals</td>
<td>2.4%</td>
</tr>
<tr>
<td>Support students with verbal praise for good behavior</td>
<td>24.1%</td>
</tr>
<tr>
<td>Provide an immediate reward (food, candy, stickers)</td>
<td>22.7%</td>
</tr>
<tr>
<td>Provide material privilege (use of cell phone, use of a special chair in the room, etc.)</td>
<td>8.9%</td>
</tr>
</tbody>
</table>

Teachers were asked what they discovered from participating in this study and how it may impact their relationships in the future with students. Teachers, overall, reported positive results when employing a PBIS strategy. One teacher reported that when he intentionally invested in student relationships, students tended to respond

...
more positively to correction in class. Another teacher shared how he was able to get a glimpse of what a small reward, such as a sticker, can do to reinforce desired behaviors. Several teachers mentioned how surprised they were by the difference two minutes a day can make in the life of a child.

**Conclusion**

The results of this study have the potential to be useful for state agency administrators, program administrators, researchers, faculty, and teachers. Educators can use the findings of this study in making decisions to help build student-teacher relationships by implementing a PBIS strategy in the classroom. As research shows, teacher-student relationships are a predictor of students’ liking of school (Roorda, Koomen, Spilt, & Oort, 2011). If students like school, we may have fewer students drop out of school and schools may see student improvement on academic achievement (Johnston Wildy, & Shand, 2022).

This study has shown the improvement that can be made in teacher-student relationships in a short amount of time by employing a PBIS strategy. This study shows that providing teachers with a toolkit of strategies is important in order for them to choose one that will work when needed. Another implication of this study is that teachers should strive to build relationships with the children they teach from the outset. This study concludes that positive student-teacher relationships can be formed when a teacher shows he/she cares for the student. Starting this at the beginning of the year creates an opportunity for this relationship to grow by the end of the year. This does not have to be complicated – a teacher just needs to choose a positive behavioral support intervention, implement it and begin forming student-teacher relationships.

Bradshaw, Pas, Debman, and Johnson (2015) provide evidence that if a teacher implements PBIS, then classroom discipline will be better and therefore, there will be fewer discipline referrals. In regard to classroom management, rather than focusing on student discipline, the aim for teachers is to develop a positive climate conducive to teaching and learning with minimal disruptions. Therefore, the implication for administrators is that they might wish to conduct professional development on the focus on relationship building between their teachers and the children they instruct, stress the importance of this concept during the hiring process and in faculty meetings, and to look for evidence of it when conducting classroom observations.

Implications for teacher educators who prepare licensure candidates for the classroom are that building relationships with children in schools is just as important as building relationships to be successful in business, in commerce, or in the military. Alternative licensure teachers who have already developed and employed inter-relationship skills in their first career should be encouraged to carry those skills with them as they transition to teaching.

**Limitations**
This study was limited by the number of participants. There was a total of twenty-eight teachers. Twenty-three first year teachers and five experienced classroom teachers with five or more years teaching. This is a limitation because it is a small sample and a larger-scale study may yield different results.

The participants in this study were provided with a list of 5 positive-behavior intervention strategies from which to choose the one they wanted to implement in their classroom. This is a limitation that may have impacted the results as teachers were able to self-select a strategy that they preferred.

**Recommendation for Further Study**

The results from this research indicate that positive teacher-student relationships can impact student behaviors. A follow-up study using a larger sample size over a longer duration while tracking discipline referrals is recommended. After analyzing the data from this research additional questions became apparent. Further study on the following question should be conducted:

- Are there any significant pre-survey and post-survey differences among first year teachers?
- Are there any significant pre-survey and post-survey differences among seasoned teachers?
- Would the outcome change if teachers were given a single PBIS strategy to use instead of choosing from a list of PBIS strategies?
- Are there any differences between excelling students and teacher relationships; struggling students and teacher relationships; and students neither struggling or excelling and teacher relationships?
- What did teachers discover from participating in this study? What help do teachers think this might provide for their future classroom management?

**References**


Appendix

Student-Teacher Relationship Scale – Short Form

Participation in this study will consist of completing two surveys (a pre- and post-survey) and the implementation of a positive behavior intervention support strategy. For this pre-survey, you will submit six times, one for each student you selected to be part of your sample. Each survey will only take two or three minutes to complete.

In order to keep track of the 6 students, please use this format. Start with the teacher's last name, then give each of your students a number 1-6, and then end with an E for excelling, S for struggling, or A for average. For example: Edwards1E, Edwards2E, Edwards3S, Edwards4S, Edwards5A, Edwards6A. Please track which student you assigned each number because when you complete the post survey, you will use these same numbers.

Email: ______________________
Teacher: ______________________
Child’s Assigned Letter: (Teacher last name, student #, S, E, A -struggling, excelling, average)

Grade Level: ______________________

Choose 1 of the following PBIS methods to implement for this student (if you are already using one of these methods, please choose a new one):

1. Support students by spending 2 minutes a day in conversation connecting with them individually
2. Provide written feedback to students individually in their daily journals
3. Support students with verbal praise for good behavior
4. Provide an immediate reward (food, candy, stickers)
5. Provide material privilege (use of cell phone, use of a special chair in the room, etc.)

Please reflect on the degree to which each of the following statements currently applies to your relationship with this child. Using the scale below, circle the appropriate number for each item.

<table>
<thead>
<tr>
<th>Definitely does not apply</th>
<th>Not really</th>
<th>Neutral, not sure</th>
<th>Applies somewhat</th>
<th>Definitely applies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. I share an affectionate, warm relationship with this child. (1 = definitely does not apply; 5 = definitely applies)
2. This child and I always seem to be struggling with each other. (1 = definitely does not apply; 5 = definitely applies)
3. If upset, this child will seek comfort from me. (1 = definitely does not apply; 5 = definitely applies)
4. This child is uncomfortable with physical affection or touch from me. (1 = definitely does not apply; 5 = definitely applies)
5. This child values his/her relationship with me. (1 = definitely does not apply; 5 = definitely applies)
6. When I praise this child, he/she beams with pride. (1 = definitely does not apply; 5 = definitely applies)
7. This child spontaneously shares information about himself/herself. (1 = definitely does not apply; 5 = definitely applies)
8. It is easy to be in tune with what this child is feeling. (1 = definitely does not apply; 5 = definitely applies)
9. This child remains angry or is resistant after being disciplined. (1 = definitely does not apply; 5 = definitely applies)
10. Dealing with this child drains my energy. (1 = definitely does not apply; 5 = definitely applies)
11. When this child is in a bad mood, I know we’re in for a long and difficult day. (1 = definitely does not apply; 5 = definitely applies)
12. This child’s feelings toward me can be unpredictable or can change suddenly. (1 = definitely does not apply; 5 = definitely applies)
13. This child is sneaky or manipulative with me. (1 = definitely does not apply; 5 = definitely applies)
14. This child openly shares his/her feelings and experiences with me. (1 = definitely does not apply; 5 = definitely applies)

**Post-Survey Student-Teacher Relationship Scale – Short Form**

Participation in this study will consist of completing two surveys (a pre- and post-survey) and the implementation of a positive behavior intervention support strategy. For this pre-survey, you will submit six times, one for each student you selected to be part of your sample. Each survey will only take two or three minutes to complete.

In order to keep track of the 6 students, please use this format. Start with the teacher’s last name, then give each of your students a number 1-6, and then end with an E for excelling, S for struggling, or A for average. For example: Edwards1E, Edwards2E, Edwards3S, Edwards4S, Edwards5A, Edwards6A. Please track which student you assigned each number because when you complete the post survey, you will use these same numbers.

Email: ____________________________
Teacher: ____________________________

The purpose of this study is to investigate how authentic student-teacher relationships facilitate positive student behavior. It aims to examine the effect of student behavior when building positive student-teacher relationships. As a current classroom teacher, what did you discover from participating in this study? What help do you think this might be to you in your classroom next year and beyond? You only need to respond to this reflection one time, and not for each student. (short answer)
Child’s Assigned Letter: (Teacher last name, student #, S, E, A -struggling, excelling, average)

Grade Level: __________________________________________

Which of the following PBIS methods did you implement for this student:
1. Support students by spending 2 minutes a day in conversation connecting with them individually
2. Provide written feedback to students individually in their daily journals
3. Support students with verbal praise for good behavior
4. Provide an immediate reward (food, candy, stickers)
5. Provide material privilege (use of cell phone, use of a special chair in the room, etc.)

Please reflect on the degree to which each of the following statements currently applies to your relationship with this child. Using the scale below, circle the appropriate number for each item.

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<tr>
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<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

1. I share an affectionate, warm relationship with this child. (1 = definitely does not apply; 5 = definitely applies)
2. This child and I always seem to be struggling with each other. (1 = definitely does not apply; 5 = definitely applies)
3. If upset, this child will seek comfort from me. (1 = definitely does not apply; 5 = definitely applies)
4. This child is uncomfortable with physical affection or touch from me. (1 = definitely does not apply; 5 = definitely applies)
5. This child values his/her relationship with me. (1 = definitely does not apply; 5 = definitely applies)
6. When I praise this child, he/she beams with pride. (1 = definitely does not apply; 5 = definitely applies)
7. This child spontaneously shares information about himself/herself. (1 = definitely does not apply; 5 = definitely applies)
8. It is easy to be in tune with what this child is feeling. (1 = definitely does not apply; 5 = definitely applies)
9. This child remains angry or is resistant after being disciplined. (1 = definitely does not apply; 5 = definitely applies)
10. Dealing with this child drains my energy. (1 = definitely does not apply; 5 = definitely applies)
11. When this child is in a bad mood, I know we’re in for a long and difficult day. (1 = definitely does not apply; 5 = definitely applies)
12. This child’s feelings toward me can be unpredictable or can change suddenly. (1 = definitely does not apply; 5 = definitely applies)
13. This child is sneaky or manipulative with me. (1 = definitely does not apply; 5 = definitely applies)
14. This child openly shares his/her feelings and experiences with me. (1 = definitely does not apply; 5 = definitely applies)