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Qualitative Assessment of the PAX Good Behavior Game Implementation

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Abstract

This paper reports on a program evaluation of the PAX Good Behavior Game (GBG), an evidence-based practice intervention designed to create a nurturing environment conducive to learning in elementary schools. To evaluate and improve the PAX Good Behavior Game, a focus group was conducted at the end of the 2016-17 academic year. A total of ten teachers and school administrators from schools who implemented the PAX Good Behavior Game (PAX professionals) participated in a focus group session and provided feedback about the program. Focus group questions assessed four program objectives, (1) environmental change, (2) personal well-being and stress levels, (3) engagement with parents, and (4) networking with other PAX professionals. Results indicated that the PAX GBG decreased problematic classroom behaviors, provided more instructional time for teachers, and generated public interest of the program in the home and community.

Keywords: early childhood development, educational psychology, evidence-based intervention, PAX Good Behavior Game, teacher wellness

Qualitative Assessment of the PAX Good Behavior Game Implementation

In the United States, Congress passed the No Child Left Behind Act (NCLB) and the Individuals with Disabilities Education Act (IDEA) to improve the education system for lower income families (Cortiellia, 2006). The emergence of these federal laws relating to children's education has inspired teachers to cultivate positive learning environments where children can learn skills needed to be successful throughout their lives. Studies have shown that universal, classroom-based preventive interventions are able to reduce disruptive behaviors and encourage positive learning environments (Hahn et al., 2007; Wilson & Lipsey, 2007; Becker, Bradshaw, Domitrovich, & Ialongo, 2013).

One such intervention is the PAX Good Behavior Game (GBG). The PAX Good Behavior Game is an evidence-based practice intervention designed to create a nurturing environment conducive to learning in the pre-kindergarten to sixth grade students (hazelden.org,n.d.; PAXIS Institute, 2018). PAX stands for Peace, Productivity, Health, and Happiness, emphasizing values that the program encourages within classrooms (PAXIS Institute, 2018). The PAX Good Behavior Game was developed by scientists and researchers from the PAXIS Institute based in Arizona as a modification of the Good Behavior Game model, which was successfully implemented in fourth-grader classrooms in the 1960s to improve the classroom behaviors (Barrish, Saunders, & Wolf, 1969; Intervention Summary – PAX Good Behavior Game).

According to Barrish, Saunders, and Wolf (1969), the Good Behavior Game model was originally developed to decrease disruptive classroom behaviors among two groups of fourth graders in Kansas, by introducing a "game" that allowed the groups to compete with each other. The game was carried out twice a day during the second half of the reading time and the first half

of mathematics class in the classroom. The group of students who followed the ground rules (i.e., no whispering, no talking, and no moving around the classroom without permission) won the game. As a reward, they received special treatments such as being the first team to line up for lunch and going to the recess 4 minutes earlier than the other students (Barrish, Saunders, & Wolf, 1969).

The current PAX Good Behavior Game that was evaluated in this report is a modification the original model developed in the 1960's. To help the teachers to implement a more effective PAX GBG in their classroom, the PAXIS Institute provides the teachers with support materials, including: (1) a manual, (2) OK/Not OK desk cards (used to show appropriate/inappropriate behaviors), (3) Granny's Wacky Prizes box (from which the winners get to select a prize), (4) digital timer (to limit the time spent on the Granny's Wacky Prizes), (5) PAX Quiet harmonica (to coordinate the classroom more effectively with specific rhythms), (6) PAX Tootle Notes (a tool for students to compliment their classmates) and (6) PAX Stix (use to randomly draw students to answer questions and engage in classroom activities) (goodbehaviorgame.org, n.d.). In addition, as compared to the original game, the modified version involves using the game more frequently during class instructional time, resulted in more teaching and learning time (PAXIS Institute, n.d.).

Longitudinal studies have provided evidence of the effectiveness of the PAX GBG in improving academic and behavioral outcomes. Specifically, the implementation of the PAX GBG in the elementary schools decreases problematic behaviors, substance abuse, and juvenile delinquency later in life (hazelden.org, n.d.; Storr, Ialongo, Kellam, & Anthony, 2002; Wilcox et al, 2008). Additionally, studies have shown that the PAX GBG is able to decrease problematic behaviors among children (Wilson, Hayes, Biglan, & Embry, 2014), increase instructional time

(O'Donnell, Morgan, Embry, O'Kelly, & Owens, 2016), increase academic success (Brawshaw, Zmuda, Kellam, & Ialongo, 2009), improve the psychological well-being of children (Fruth, 2014; Jiang, Santos, Mayer, & Boyd, 2015; Weis, Osborne & Dean, 2015), decrease stress levels of the teachers (Domitrovich et al., 2016; O'Donnell et al., 2016), and enhance family relationships (Ialongo, Werthamer, Kellam, Brown, Wang, & Lin, 1999; Ialongo, Poduska, Werthamer, & Kellam, 2001).

Whereas most of the previous studies focused on the longitudinal outcomes of the program, there has been limited research assessing the effectiveness of the program from the teachers' perspectives. This information would be valuable, because teacher and administrator perspectives on the program would likely affect the willingness to implement the program, as well as levels of commitment to the program. Therefore, the current study used a focus group to investigate teachers and school administrators' perspectives on the effectiveness of the PAX GBG program, as well their suggestions for areas of improvement. Specifically, the focus group was designed to assess four objectives regarding the PAX GBG program. The first objective was to assess perceptions of any behavioral changes within the classroom environment as a result of the PAX GBG program. The key behaviors include, but were not limited to, team building, overall peer support within the classroom, and the frequency of disruptive behaviors. The second objective, personal well-being and stress levels, was included to determine if teachers' personal stress levels surrounding their job had changed after the implementation of the PAX GBG. Teaching can be a stressful job due to the considerable amount of responsibilities, such as teaching new topics, keeping pace with the planned curriculum, preparing class material, fostering relationships with the students and their parents, and establishing a safe, comfortable

environment for all students. If the PAX GBG results in decreased teachers' stress levels and increased teacher well-being, this would result in improved outcomes for students.

The third objective, engagement with parents, was designed to assess the level of parental involvement with the PAX GBG during the academic year. Although there were no formal opportunities for engagement between parents and the teachers and administrators implementing the PAX GBG (hereby referred to as "PAX professionals"), we wanted to investigate whether parents had communicated noticeable changes in their child's behaviors with the PAX teachers. Furthermore, this objective was designed to learn more about children's behaviors in environments outside the classroom. The PAX GBG was originally created for classroom settings, but a future goal is to expand the program into the broader community, such as the home environment. During parent-teacher conferences, teachers have a chance to interact directly with the parents and therefore their communication and connection with parents would help to create awareness of the benefits to the PAX GBG for implementation in home and community contexts. Additionally, parents' involvement in this program could help familiarize the community with the PAX vocabulary (i.e., PAX Voice, PAX Stix, PAX Quiet; PAXIS, 2018). Hence, we also sought out PAX professionals' suggestions for integrating the PAX GBG into the community.

The fourth goal, networking with other PAX professionals, was included to determine in what ways PAX professionals might benefit from networking opportunities to connect with other PAX professionals from other pilot school(s) implementing the PAX GBG. The focus group served as a platform to gain feedback from the current PAX professionals.

In summary, the current study utilized a focus group to assess teacher and school administrator perspectives on the effectiveness and areas of improvement of the PAX GBG

program. The focus group session was designed to assess four objectives: (1) assess classroom environmental change, (2) assess teacher well-being and stress levels, (3) gather information on engagement with parents, and (4) allow for networking among PAX professionals.

Method

Participants

Teachers and school administrators from three elementary schools volunteered to be a part of the PAX pilot program during the 2016-17 school year. All teachers, principals, and school administrators participated in a one-day PAX training in October 2016 to ensure that they could properly implement the PAX GBG in their classroom. At the end of 2016-17 school year, ten out of twenty-seven PAX Professionals (6 teachers and 4 school administrators) from the pilot schools participated in the focus group session. To preserve the anonymity and confidentiality of the participants, each participant was assigned a random number and all possible identifiable information was removed from the transcripts.

Procedure

Guidelines by Eliot (2005) and Krueger (2002) for designing and conducting a focus group was utilized to design the focus group questions, and to conduct the focus group. There were a total of ten questions asked, based on the four objectives mentioned above, (1) Environmental changes, (2) Personal well-being and stress levels, (3) Engagement with parents, and (4) Networking with other PAX professionals (see Appendix A for list of questions).

The focus group took place in the evening on a college campus in the Pacific Northwest at the end of 2016-17 school year. Each participant filled out an informed consent form that outlined the purpose and expectations of the focus group session and highlighted the participant's freedom of speech. Participants were asked to provide their school's name, grade

level of instruction, and the number of years of teaching experience. The focus group session was hand recorded by a note taker and audio recorded.

Prior to the start of the focus group session, participants were verbally debriefed about the presence of the note takers and the use of audio taping throughout the session. Additionally, the participants received a list of ground rules to maximize participation and ensure the presence of respect among the participants. To increase the response rates to each question, the PAX Stix kernel method from the PAX GBG program was used by the two focus group facilitators. Specifically, each participant's name was written on the PAX Stix and the facilitators would randomly select a PAX Stix after asking each question. The selected participant was encouraged to answer the question; however, they could decline from answering any question at any time.

Data coding. After completion of the focus group, the audio recording was transcribed into a written record by two trained coders. Both content analysis and a grounded analysis were used to examine the data. Responses provided by the participants were grouped into four different objectives created prior to the focus group session: (1) environmental change, (2) personal well-being and stress levels, (3) engagement with parents, and (4) networking with other PAX professionals.

Results

A total of 66 statements were collected throughout the focus group session. Teacher and school administrators' responses were grouped together for all analyses[1].

Environmental change (n = 7). Overall, the PAX Professionals gave positive feedback about the implementation of the PAX GBG in their classroom and were excited to implement the program in the upcoming school year. Participants gave positive feedback about the effect of the

1. *n* refers to the total number of respondents of each question in the following paragraphs.

PAX GBG program in three specific areas.

First, they noticed a reduction in behavioral issues among their students. One teacher noted:

> *"I had one particular student who struggles very much at the beginning of the year and so a lot of things were put in place to support him. The PAX program really helped him to self-regulate ... that was the biggest, most important thing of all. In the beginning he had to have his own group, his own friends. My goal for him was to blend in, and now he does that. There was a moment even today, he was just having the most terrible day, and it was related him being very much aware. In his group there were students who were getting spleems and he was bothered by that and he wanted them to know how he felt about that; it was amazing to see his personal growth."*

Second, teachers appreciated how PAX provided a common framework and set of expectations for students, as noted in the following response:

> *"...We all were able to share that language even to the point where, we trained the classroom teachers but not the specialists and the IAs, and they were "We want to know what this is! We want to know the language! We want to use it! We want to all be on the same page!" And you can hear the staff using it when they encounter a child in the hallway or when we have a brief assembly every morning, I can stand up in front of the entire school and put up PAX quiet and in 10 seconds the entire building is quiet and I have eyes on me. I mean it's really impactful how the expectation is the same in every room and every space you go. The kids do well because they know what to do and there is no change in that."*

Third, teachers noted that the program resulted in improved classroom control:

> *"One of the biggest impacts is the children being able to self-regulate, but that as the year progressed and the year came to an end, even then, typically towards the end of the school year there's chaos, the kids are more anxious, getting ready to track off, getting ready for the summer, they still have that sense of structure. They still responded positively to the harmonica and doing the PAX good behavior game and so it kept everything from escalating into an out-of-control end of the year situation."*

Fourth, the PAX Professionals (*n* = 8) were able to manage behavioral issues, have eager to continue teaching, keep students' attention, keep students' in class, and gain confidence in teaching:

> *"...It changed some of the things I've done in the past in the classroom and helped out the harmonica. I don't know why that didn't come around sooner. We've come up with so many different symbols, things we've down trying to get kids to quiet down, doing timeouts, but after about the third time out your voice is up here. After a while your voice gets tired. But with the harmonica they are all present and quiet and you have a much more calm presence that way."* (Keep students' attention)

Fifth, according to the participants (*n* = 11), the positive changes in the classroom environments after the PAX GBG program implementation had cultivated overall positive and curious attitudes of the teachers who were not involved in the PAX program (non-PAX professionals). Most of the participants said that the non-PAX professionals expressed interest towards the PAX GBG program, especially the role of a Harmonica as an effective kernel to reduce students' behavioral

problems and help self-regulation which resulted in a positive teaching environment. In sum, they viewed PAX as an effective program to gain attention from the students as illustrated below:

> *"I have repeatedly throughout the year had specialists and instructional assistants and other staff around the building who have… because there are so many of us using it… who have picked up on the language, picked up on the routine, really want to know more and dig deeper into what this program is, so they can be replicating it as much as they can. And our hope is to allow those folks to get trained for that so this can truly be building wide..."*
>
> *"They took my harmonica so they could use it, so I have three harmonicas, and they saw how effective it was to quiet the class, and so I was passing out harmonicas to the specialists in the building..."*
>
> *We were having a parade of the high school students come through, or about to come through, so we were all lined up, and my teaching partner next to me says something about, 'Oh well maybe we should play them a song, maybe use your harmonica?' And so I play a couple bars, 'Doo do doo,' and all the kids in our wing looked at me and went **peace sign** False alarm! They picked up on it real quick even though I was the only one using it in my grade level."*

Personal Well-being and Stress Levels (n = 8). To improve the mental health and wellbeing of the teacher that implemented PAX program, participants suggested several changes that would be beneficial to improve the program in their classrooms as highlighted below:

> *"I would say better suited for your classroom, in my opinion, would be having it school wide so that every staff member, every space, every part of the school has that, that's going to in turn it make it better in your classroom because they'll already have experienced it before. They are going to know that coming in and I think, it's also going to help answer, as people try to respond, we've done it for a year, we learned a lot about it. And as you see a whole new group of kids, you are going to find different ways that it's going to fit; modifications or things you can do to get the buy in."*

Second, to minimize the stress level of the PAX Professionals that are new to the program, the current PAX Professionals suggested several positive impacts of the program to the new PAX Professionals as noted below:

> *"...Teachers were expressing to me the value of having something like that in place for kids to own because then it opened up the possibilities of what we could do in the classroom and the instruction that could be had. We wouldn't be constantly chasing after and battling behavioral components, and suddenly we had a classroom that functioned much better so it could be focused on the academic pieces of it. Just sharing those stories and those pieces of advice, this is not just a new initiative we are throwing out that we are trying to make you do, but we are trying to open up your classroom so it can be a phenomenal learning environment. If you are willing to go on that journey, you'll find that experience."*

> *"I really appreciate it so much because it took the classroom responsibility away from me and gave it to the students, as far as management. I always felt as though I was always working so hard to help them become successful and it just became them doing it for themselves and for one another. And it was incredible!…"*

Third, participants shared that the PAX GBG made teaching easier by increasing instructional time. Implementing the PAX GBG made the pace slower at the beginning of the program, but soon led to more time to cover the curriculum, and added a level of consistency in teaching as noted below:

> *"At the beginning of the school year I was totally unable to teach in my classroom because the behavior was just so horrendous and by the end of the year I was teaching every day, which was wonderful."*

> *"…One of the things that stands out to me around this question and the pace and how much curriculum you can cover is that when a teacher is able to loop with kids, teach them a couple years in a row, you can get started a lot quicker a lot easier at the beginning of the year because those things are all built. Well this is a way to do that across teachers, so the systems and structures are in place for day one, they walk in they know you are going to do the same thing next year, year after, maybe a couple years, and obviously it's good for getting to the good solid teaching that way."*

Engagement with parents. Some PAX Professionals (*n* = 3) received minimal to no feedback about PAX GBG from the parents, whereas one PAX Professional received positive feedback from parents about the program.

> *I kind of have a different perspective. I am a parent of a student who was in PAX. She has come so far this year; she is very shy, very quiet, and very reserved. In fact, her whole first half of kindergarten I don't think she talked to her teacher once. This year it took her maybe a couple weeks and she came out of her shell. There are tootle notes all over our refrigerator at home. And she comes home, 'Mom, look at this! Check this out!' And she is writing tootle notes to her friends. She has more friends and she actually talks to them than I've ever seen...she is so excited; she loves it; she feels confident; she has that good self-esteem that I wanted. She had all along, she just needed to have it be pulled out."* (Positive feedback from parent)

Additionally, one of the PAX professionals received positive feedback about the program from community members:

> *"I don't know so much about parents but as far as community members, we had a presentation at one of our school board meetings and they came and the teacher came and she showed video of what's going on in the classroom and then talked about the idea and how it's benefiting the classroom and people were very impressed and excited about the things happening there at the school board level."*

The PAX Professionals (*n* = 7) also gave several valuable suggestions to increase parental involvement with the PAX GBG, including (1) expanding the use of tootle notes to the home and

other places in the community (i.e., display the tootle notes at a local business), (2) seeking feedback from parents on how to help them to implement the PAX GBG at home, (3) sharing PAX GBG during the parent-teacher conferences and other events connecting the parents and teachers, and (4) inviting parents to be observers of the PAX GBG in the classrooms.

Networking with other PAX Professionals. The PAX Professionals (*n* = 3) suggested that a PAX teacher network could be established through social media (e.g., a Facebook group) as well as a semi-annual social networking event for the purpose of answering questions, sharing updates about the implementation process, and connecting with other professionals going through a similar implementation process.

Lastly, the PAX Professionals (*n* = 4)-suggested that it would benefit the program to receive more support for behaviorally difficult students. They also recommended developing a wider range of prizes to include in the Granny's Wacky Prizes box.

Discussion

The main goals of this study were to examine the effectiveness and areas of improvements of the PAX GBG program from the teachers and school administrators' perspectives. To achieve these goals, a focus group session was held to assess four objectives: (1) environmental change, (2) personal well-being and stress levels, (3) engagement with parents, and (4) networking with other PAX professionals.

Through a qualitative content and grounded analysis, we found multiple positive outcomes of the PAX GBG for teachers, students, and the school. Those who implemented the program felt that the PAX GBG reduced behavioral issues among students, increased instruction time, and generated interest of the non-PAX Professionals to be involved in the PAX GBG. These positive findings were coherent with the results of past studies that showed that the PAX

GBG program was able to decrease problematic behaviors (Storr et al., 2002; Wilcox et al., 2008), and increase instruction time (O'Donnell et al., 2016). Second, those who participated in the focus group felt that the PAX GBG was able to improve the self-regulation skills of the students and decrease the stress levels of the professionals, which supported the findings of previous studies (Domitrovich et al., 2016; O'Donnell et al., 2016). In addition, several PAX professionals mentioned that parents and the community members gave positive feedback regarding the implementation of PAX GBG in the classroom.

Lastly, the PAX GBG was able to create networking connections among the PAX professionals from different school districts to help establish a PAX community as well as give them an opportunity to network with each other during the focus group session. This suggests that such networking could lead to several positive benefits. For example, perhaps PAX professionals could exchange information about the PAX GBG in order to help the program grow. Moreover, sharing of information among PAX professionals about difficulties with the PAX training sessions could help to prevent future challenges for the future PAX professionals. It would also provide a better partnership between schools and PAX professionals during the implementation of the program. However, additional resources and time will be required in order to discover gaps in the training sessions. The PAX professionals who implemented the PAX GBG in their classroom that provided valuable insights and shared their advice and testimonials were crucial to achieving the widespread support from the schools, education administrations, and even the communities. In short, these findings demonstrated that PAX administrators perceived benefits of the PAX GBG implementation that paralleled those found in prior research.

In order to improve the implementation of the PAX GBG in the future, several specific actions are recommended. First, increase recruitment of PAX Professionals from additional

school districts within the county in order to expand the area where PAX is being implemented. Second, expansion of existing components of the PAX GBG, such as developmental of additional Granny Wacky Prizes teachers to motivate students and "tootle note award ceremonies" to foster positive interactions between students and to demonstrate for parents the impact of the PAX GBG. Third, development of programs that introduce the PAX GBG into homes and the broader community, in order to create a more consistent environment for students. Finally, establishment of a partnership with the local higher education institutions to garner more support of the implementation of the PAX GBG and increase awareness of the program within the teaching community in the Pacific Northwest.

Although our data showed favorable outcomes after the implementation of the PAX GBG, the Focus Group session had several limitations. First, the participants were not randomly assigned; they self-selected to attend the focus group. Second, the sample size was small; there were only ten focus group participants. All PAX professionals were invited but only 37 percent (N = 10) attended. The availability of the PAX professionals were restricted by the date and time chosen. Third, the response rates for several questions during the focus group session were limited because not all participants implemented the PAX GBG in their classrooms. Lastly, the effect of groupthink during the focus group may have limited the diversity of opinions expressed, as participants may have wanted to only share opinions that coincided with the majority. Despite these limitations, the positive feedback given by the PAX and non-PAX professionals during the focus group session suggest that the PAX GBG has many potential benefits for educational settings. The implementation of this program supports an environment that is more conducive to learning, improves the well-being of teachers, and has positive effects on student classroom behaviors that will contribute to their success in the future.

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Appendix A

Focus Group Questions

Objective 1: Environmental changes

1. What impact has PAX had on achieving goals and milestones in your classroom?
2. How has PAX affected the pace of the classroom relative to the curriculum?
3. How do staff and colleagues at the school who haven't been trained in PAX feel about the program?

Objective 2: Personal well-being and stress levels

4. What would you change about PAX GBG to make it better suited for your classroom?
5. What are techniques or advice that you would like to share with new PAX teachers?
6. Has the implementation of the PAX program changed your outlook on teaching?

Objective 3: Engagement with parents

7. Have you received feedback from parents about PAX? (Optional follow-up prompt: How do parents see the effects of PAX at home?)
8. Do you have any suggestions on how to get parents more involved in the implementation process of PAX GBG?
    a. Take home projects
    b. Handouts for helpful behavior changes that can be implemented at home

Objective 4: Networking with other PAX teachers

9. What would be the best way to help build a PAX Teacher network in Yamhill County?
10. What do you need from us to make you feel supported?