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The Effectiveness of Using Behavior Specific Praise Versus General Praise For One

Elementary-Aged Child with Autism Spectrum Disorder

Angie Slusar

A thesis submitted to the Graduate Faculty of

JAMES MADISON UNIVERSITY

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Abstract

The purpose of this study was to look at the effectiveness of general praise (GP) versus behavior specific praise (BSP) on increasing on-task behavior and decreasing the behavior of hitting in an elementary-age child with autism spectrum disorder. The researcher conducted a single function functional analysis to confirm that hitting was maintained by access to adult attention. The researcher used an alternating treatment design to compare GP and BSP as behavior change interventions. The researcher observed an educator working one-on-one with an elementary-aged child with autism. In each condition, the educator gave the praise that corresponded with the condition, to the student, on a variable-interval schedule of 2 min. The results showed BSP to be slightly more effective at increasing on-task behavior, and GP to be slightly more effective at decreasing the problem behavior of hitting in this particular student. More research is needed to support the effectiveness of these interventions with this particular population.

Keywords: behavior specific praise, general praise, attention-maintained, elementary

The Effectiveness of Using Behavior Specific Praise Versus General Praise For One Elementary-Aged Child with Autism Spectrum Disorder

Behavior specific praise (BSP) is verbal praise delivered contingent upon the desired behavior occurring, and includes specific reference to the behavior being acknowledged (Ennis et al., 2019). BSP is a type of verbal praise that has been found to be an effective reinforcer to increase correct academic response, on-task behavior, and task completion (Coleman, 2020). Researchers (eg. Madsen et al., 1968; Flores's et al., 2018; Ennis et al., 2019; Coleman, 2020) argue that BSP is more effective in influencing behavior than general praise (GP) because it explicitly highlights what the individual has done well. In turn, making it more likely for the individual to engage in the specified behavior again since the individual knows the exact behavior they performed that gained them praise (Ennis et al., 2019).

Madsen et al. (1968) was the first to study the effectiveness of BSP. Madsen et al. (1968) investigated the effect of rules and expectations, BSP, and planned ignoring on decreasing inappropriate behavior in students without disabilities. The researchers found that rules and planned ignoring had little effect on student behavior. Whereas, when BSP and other forms of approval were used, student behavior improved substantially. Since 1968, BSP has been widely employed by both education practitioners and researchers (e.g., Bloodsaw, 2011; Chalk & Bizo, 2004; Gibbins , 2013, Kranak et al., 2017, Roberts, 2018). BSP is an important component of many behavior change interventions, used by and for a range of relevant parties to support students specifically with difficult behaviors (Ennis et al., 2019).

Despite the effectiveness of BSP, research also suggests that most teachers do not rely on the use of praise as a reinforcement technique within the classroom. For example, Floress et al. (2018) studied the rates of BSP in 28 general education classrooms (K-5th grade). They found

teachers provided praise statements 0.75 per min in the kindergarten classrooms, with that number decreasing to 0.35 per min in the fourth grade classrooms. GP was also found to be used more frequently than BSP by teachers across all 28 classrooms observed (Floress et al., 2018). For BSP to be effective, the praise must be contingent on the behavior occurring (ABA Education Interventions, 2021). Furthermore, the praise must specify the exact behavior that is being acknowledged and delivered immediately (within zero to three seconds; ABA Education Interventions, 2021). If the praise is not specific, research suggests it is less likely the behavior being praised will increase in the future (Coleman, 2020).

Past research suggested BSP to be effective in elementary-aged children with and without disabilities. When reviewing the literature, studies that included changes in student behavior being the primary dependent variable were reviewed. The five different studies, being (a) Bloodsaw (2011); (b) Chalk and Bizo (2004); (c) Gibbins (2013); (d) Kranak et al. (2017); and (e) Roberts (2018) all resulted in positive relations between BSP and student on-task/positive behaviors. To uncover the identified articles for this review I first, used electronic databases to search for articles, which included *PsycNet*, *PsychInfo*, and *Jstor*. I then conducted a search of various journals including the *Educational Psychology in Practice*, *Scholars Junction*, as well as searching through thesis and dissertation articles. Throughout this procedure, the following keywords: “Behavior specific praise,” “behavior modification,” “behavior intervention,” “elementary,” “specific praise,” and “behavior change” were used to identify articles. Upon completion of this process, the total number of articles meeting inclusion criteria included the following five articles: Bloodsaw (2011), Chalk and Bizo (2004), Gibbins (2013), Kranak et al. (2017), and Roberts (2018).

Gibbins (2013) study demonstrated the greater amounts of BSP given by teachers resulted in more students receiving the color green rating representing on-task/good behavior. Kranak et al. (2017) study resulted in three out of the five participants in the study emitting higher rates of on-task behavior during the BSP intervention phase compared to baseline rates. Chalk and Bizo (2004) found that BSP increased levels of on-task student behavior significantly more than the general-positive-praise condition. The researchers in this study also found that BSP increased children's self-concept of themselves as measured by the "Myself-As-Learner"(MALS) scale, which is a 20-item scale composed of simple self-referring statements to measure students' self-concept. Lastly, Roberts (2018) study revealed that disruptive behaviors of children decreased for all teachers from baseline to intervention where higher rates of BSP were being delivered from teachers; thus, proving a functional relation between BSP and students' positive behavior.

Rationale and Purpose of Study

Additional research is warranted due to the limitations found across these five studies. The following questions guided this study A.) To what extent is BSP a better reinforcer than GP for elementary aged children whose behaviors are maintained by attention? B.) Will the effects BSP/GP have on the participants behaviors maintain overtime? C.)Will the instructor prefer using BSP or GP as a behavioral intervention? The previous five studies stated that their participants were elementary-aged children though none of them specified any of the participants' behaviors being maintained by attention, leaving a gap in the literature. Thus, the purpose of the current study is to extend the literature base to examine the effects of GP versus BSP to decrease hitting and increase on-task behavior in an elementary-aged child whose behaviors are maintained by attention.

Method

Participants and Settings

The participant for this study was an eight-year-old, African American, male with autism spectrum disorder, and a language delay, named Billy (pseudonym) who emitted the problem behavior of hitting. Billy could say very few one-word sentences to communicate (ex. “no”, “stop”, “help”, “done”) and was acquiring how to communicate with an augmentative alternative communication device. A functional assessment completed in October 2021 indicated that hitting was maintained by attention, although in this study an additional functional assessment was conducted by the researcher to confirm that the behavior was still maintained by attention. The secondary participant for this study was an educator who worked one-on-one with Billy. The educator was a 35 year old African American Female. She was a registered behavior technician and had a bachelor's degree in elementary education. This study was conducted at a charter school in a self-contained special education classroom in the mid-Atlantic region of the U.S. The researcher observed Billy and the educator (secondary participant) during times where the educator worked one-on-one with Billy at his desk, in his classroom, while working on educational assignments (e.g. letter identification, match-to-sample activities, tracing letters). This study was approved by the James Madison University’s Institutional Review Board.

Dependent Variables

Hitting was measured by frequency count, and on-task behavior was measured by momentary time sampling of 15 s intervals. The interval length of 15 s was chosen by the researcher because when doing momentary time sampling, shorter intervals increase the accuracy of the data (Saudargas & Zanolli, 1990). The data were collected by the researcher in 10 min direct observation periods. The researcher decided on 10 min observation session because the

educator worked with Billy on educational assignments for 10 min periods before giving Billy a break. The data for both frequency of hitting and percentage of on-task behavior were recorded using one data recording sheet. Please refer to Appendix A for the data recording sheet.

Hitting

Hitting was counted as any occurrence of making contact or attempting to make contact with any part of another peer or staff's body with an open or closed hand. An occurrence of hitting was recorded using tally marks any time hitting was observed. Hitting was observed in 10 minute sessions during Billy's academic learning times.

On-task

On-task behavior was counted whenever Billy was sitting at his desk looking at the teacher or the assigned work task. On-task behavior was recorded using momentary time sampling; if the behavior of being on-task was observed when the 15 s interval ended, a plus sign was recorded in that time slot by the researcher, and if the behavior was not observed at the end of that interval a minus sign was recorded. On-task behavior was observed in 10 min sessions during Billy's academic learning times.

Design and Procedure

The design of this study was a within-subjects alternating treatment design (Ledford & Gast, 2018) to study the difference in effectiveness between GP and BSP on increasing on-task behavior and decreasing hitting behavior. There was no baseline condition included in this study. The educator that implemented the intervention wore a device called a "MotivAider" (Behavioral Dynamics, 2023) which is an interval timer that vibrates. The intervals were set to go off every two minutes. Either GP or BSP (depending on the condition) was to be given on a variable interval schedule of two minutes. So, the tactile prompt from the "MotivAider" reminded the

educator that either GP or BSP should be given to the student soon but the praise did not need to be given right as the device vibrated. Two minute intervals were chosen because a 4:1 ratio of BSP to reprimands is recommended to be effective (Caldarella et al., 2020). For the 10 min session, two minute intervals were chosen to ensure at a minimum the educator was giving either GP or BSP five times in the 10 min observation sessions. The researcher instructed the educator to give as much praise as feels natural for them in the sessions as long as the type of praise given corresponds with the praise condition occurring. So, more than five praises were being given to the participant during the 10 min sessions by the educator. The “MotivAider” was used to ensure that at a minimum the educator gave five praises within the 10 min session.

Functional Assessment

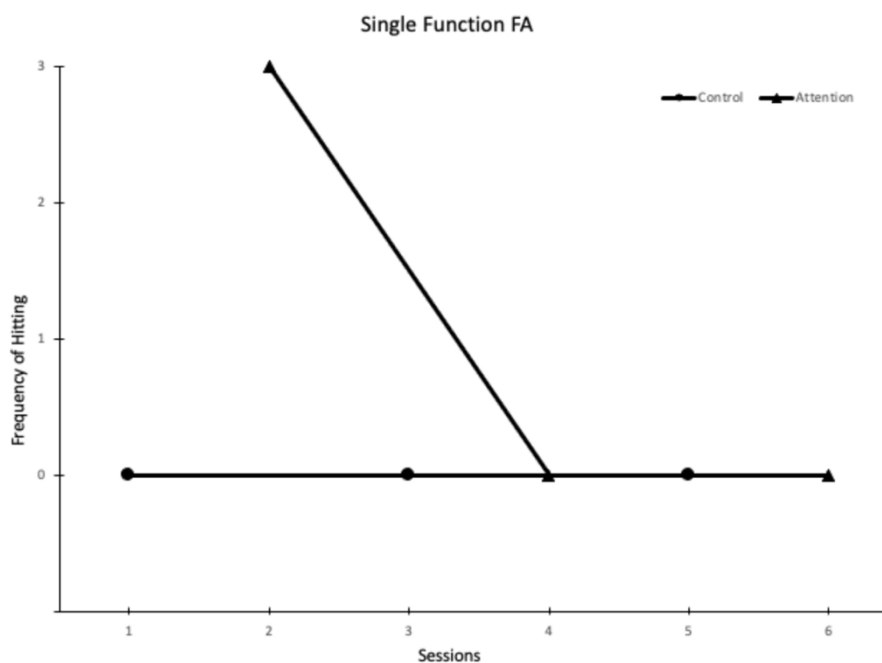
Since the functional assessment done on Billy was done over a year ago the researcher conducted a single function-test-control on Billy’s hitting behavior before the study started in order to demonstrate hitting behavior was still being maintained by adult attention. A single function-test-control is a type of functional assessment that tests and controls for only one function of behavior (Chok et al., 2020). The researcher used this type of functional analysis since the possible function of hitting was suspected to be adult attention based off of the results from the functional assessment completed on Billy in the past. The functional analysis was conducted by the researcher and the supervising Board Certified Behavior Analyst (BCBA). Both the researcher and supervising BCBA recorded data so interobserver agreement (IOA) could be calculated. The supervising BCBA also observed for procedural fidelity as well using a procedural fidelity checklist created by the researcher.

The single function-test-control assessment consisted of an attention condition and a control condition. In the first attention condition three total hits were observed. No other

instances of hitting were observed in the remaining conditions. No instances of hitting were observed in the control conditions as well (see Figure 1). The results of the single function-test-control assessment suggested that the behavior of hitting was still maintained by attention, although the researcher did not see a replication of effect across the other two attention conditions.

Figure 1

Frequency of Hitting During The Single Function-Test-Control



Note. This figure displays the data results from the single function-test-control done on Billy.

Training

A training on the study procedures was given to the educator implementing the behavior interventions before the study was conducted. The training was done after school hours in a classroom setting. The training consisted of a PowerPoint presentation that provided a brief overview of what BSP was, the study procedures, and examples of BSP statements versus GP

statements. Then, the study procedures were modeled for the educator, and the educator rehearsed the study procedures herself while getting feedback from the researcher. The study procedures that the educator was trained on consisted of using the “MotivAider” as a tactile prompt to give GP on a variable interval schedule of two minutes [VI-2], as well as practicing giving BSP on a VI-2 schedule. These procedures were modeled to the educator by the researcher through role play, where the educator played the student and the researcher played the educator. The researcher wore the “MotivAider” while modeling the procedures. The “MotivAider” was set to vibrate every two minutes. The researcher first demonstrated giving GP on VI-2 schedule, using the vibrations from the “MotivAider” as a reminder to give praise soon. Then the researcher modeled the same procedure while giving BSP. After the procedures were modeled the researcher and the educator switched roles and the educator rehearsed the procedures. The researcher gave the educator feedback after each rehearsal. The researcher also watched the educator rehearse the procedures while filling out the procedural fidelity checklist for the intervention procedures. Once the educator was able to rehearse the procedures with 100% fidelity (e.g. checking off all boxes on the procedural fidelity intervention checklist) across three rehearsals the educator was ready to start implementing the procedures with Billy. A fidelity checklist was also filled out by a supervising BCBA to verify each aspect of the training was complete before the study began. Please refer to Appendix C for the training fidelity checklist.

General and Behavior Specific Praise Conditions

Both conditions were ran during one-on-one working periods with the educator and Billy. The educator wore a “MotivAider” that prompted every two minutes during both conditions. Since praise (GP and BSP) was given on a variable interval schedule, praise was not given

immediately when the timer prompted the educator. The educator was also given a sheet of paper with GP phrases, or BSP phrases that was given to the educator. The paper given to the educator was folded in half (refer to Appendix D). One side of the paper had typed out GP phrases (e.g. “good job”, “amazing”, “nice job”) and on the other side of the paper was typed out BSP phrases (e.g. “good job sitting at your desk and focusing on your work”). This sheet was given to the educator to have as a reminder as to what condition the researcher was in and what type of praise should be given. Both conditions were ran in four separate 10 min observation sessions across a two week period randomly alternating between the BSP condition and the GP condition.

The GP condition consisted of the educator delivering GP (e.g., “Good job,” “Amazing”) to Billy at least every two minutes throughout the 10 min observation session for each of the four GP sessions. In the BSP condition the educator gave BSP (e.g., “Good job pointing to the letter U,” “I like how you’re sitting with your hands to yourself”) at least every two minutes throughout the entire 10 min observation session to Billy for each of the four BSP sessions. These two conditions were randomly alternated. The order of the conditions was chosen by a random order generator online (random.org). The following details the order in which the conditions alternated : GP condition, BSP condition, GP condition, GP condition, BSP condition, BSP condition, GP condition, and BSP condition. The researcher chose to randomize the order of the conditions to reduce the threat of cyclical variability (e.g. condition A always occurs in the morning and condition B always occurs in the afternoon) (Ledford & Gast, 2018).

Social Validity

A survey was given to the educator to fill out after the study was completed to evaluate the social validity of the intervention used. Please refer to Appendix E for the social validity survey. A modified version of Elliot and Treuting’s (1991) *Behavior Intervention Rating Scale*

was used. The educator answered the statements using a Likert-type scale ranging from 1 to 5; one being strongly disagree and five being strongly agree. The survey consisted of 12 statements (e.g., “This was an acceptable intervention to use for the child’s problem behavior,” “Most teachers would find this intervention appropriate for behavior problems,” “I would be willing to use this again as a behavior intervention for a child”).

Procedural Fidelity

Procedural fidelity data were recorded through a checklist that the researcher completed while observing the intervention sessions. Please refer to Appendix F for the procedural fidelity checklist. The checklist’s statements included (a) the educator gave praise on average every two minutes, (b) the educator gave the correct kind of praise according to the session condition , and (c) the educator only used verbal praise as reinforcement for good behavior throughout the whole session. The secondary observer was instructed to check the box to the left of the statement if they observed the procedure being described in the statement being completed correctly.

Interobserver Agreement

A second observer (the supervising BCBA) observed the participant during the functional analysis as well as 25% of the intervention sessions. The researcher went over the instructions for taking data before IOA was recorded but, no official training occurred to train the second observer to a specific criterion. The second observer recorded frequency count data on hitting as well as data on on-task behavior using momentary time sampling in 15 s intervals. The researcher and the BCBA took the data simultaneously and independently, then the data were compared after the observation session to determine interobserver agreement (IOA). The total count method was used to calculate IOA for frequency of hitting, and the interval-by-interval method was used to calculate IOA for percent of on-task behavior. The IOA for both conditions

equalled 97.5% agreement for the on-task behavior data. There was no instances of hitting during both sessions where IOA was recorded so IOA for both conditions equalled 100% agreement for the hitting behavior data.

Data Analysis

The graphs were evaluated using Ledford and Gast's (2018) within-conditions technique to measure level, variability, and trend. This analytical process is used to discern patterns within a single condition, and is often used when analyzing single case designs. First the level of each data path was observed. The level refers to the amount of behavior that occurred according to the ordinate scale value and is generally described as being low, moderate, or high. (Ledford & Gast, 2018). Second, variability was analyzed for each data path. Variability is the fluctuation between data points, and is the opposite of stability (Ledford & Gast, 2018). Lastly the trend of each data path was analyzed. The trend is looking at the slope and the directions of each data path and is often described as the trend decelerating if the data path is trending downwards, accelerating if the data path is trending upwards, or zero celeration/no trend if the data path is trending straight across (Ledford & Gast, 2018).

When analyzing the graph of percent of on-task behavior, if the data path was shown to have an accelerating trend and/or stay at a high level with little variability that showed that the intervention was successfully increasing on-task behavior. On the other hand when looking at the graph of frequency of hitting, if the data path was showing a decelerating trend and/or had a low level with little variability that showed that the intervention was successfully decreasing the behavior of hitting.

Results

Two separate line graphs were used to represent the frequency of hitting and percent of on-task behavior. Two data paths are shown on each graph: one representing the GP intervention, and one representing the BSP intervention.

General Praise Condition

The GP condition was implemented four times. In the graph for percent of on-task behavior (see Figure 2) the data path that represented the GP condition demonstrated little variability across all four observation sessions. The data showed no trend, starting at a high level, then moving to a moderately high level, and ending back at a high level. The percent of on-task behavior observed ranged from 75% to 95% during the GP condition with the mean on-task percentage being 85%. There was no instances of hitting observed across all four GP conditions. The data showed no variability, trend, or level (see Figure 3).

Behavior Specific Praise Condition

The BSP condition was ran four times. The data path representing the BSP condition in the percent of on-task behavior graph (see Figure 2) also showed little variability. The data path showed a slight counter-therapeutic trend, though the data path consistently stayed at a high level across sessions. The percentages for on-task behavior observed during the BSP condition ranged from 87.5% to 97.5% with the mean percentage being 92.5%. The data path for the frequency of hitting across sessions (see Figure 3) demonstrated high variability, with the data starting at a low level, increasing to a high level, and ending back at a low level. These data showed no trend. There was no instances of hitting observed in the first observation session and the last observation session. During the fifth session in the BSP condition, five hits were observed and during the sixth session three hits were observed.

Social Validity

The educator generally rated BSP as a behavior change intervention highly on the social validity intervention rating scale. On a rating scale ranging from 1 (strongly disagree) to a 5 (strongly agree), she scored a five on all eight indicators pertaining to the BSP intervention. On the other hand, the educator did not rate the GP intervention as favorably. When asked if she thought that most teachers would think GP is a suitable intervention to address the behaviors of being off-task and hitting, as well as if she would be willing to use GP again, the educator rated these phrases a three. Stating she was neutral/undecided. Other statements were asked, including (a) if she thought GP would be appropriate to use with a variety of children, (b) if she would recommend it to other teachers, (c) if she thought it was a fairway to handle the students behaviors, and (d) if it would be a beneficial intervention to use in elementary school classrooms. The educator said she agreed with all these statement about GP but did not strongly agree. When asked if she felt GP generally did not result in negative side effects for Billy she said she strongly agreed with this statement. The educator gave both interventions good scores on the social validity survey giving no scores lower then a three on either intervention, Overall her responses for using BSP as a behavior change intervention was more favorable than using GP.

Maintenance

Only one 10 min observation was recorded during the maintenance phase a week and a half after the intervention phase was finished. Only one observation session was able to be recorded because of extraneous variables and time constraints. The data that was taken shows that the educator gave 11 BSP statements and seven GP statements to Billy during this particular 10 minute work period. The educator also gave an average of three praise statements every two minutes during the observation session. The participant Billy displayed on-task behavior 100%

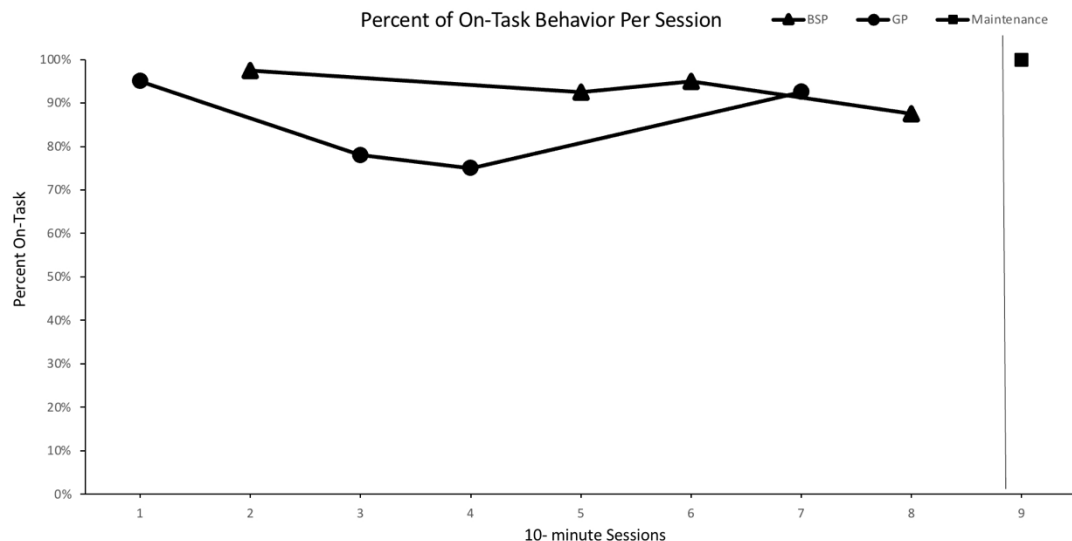
of the 10 min the researcher observed and also showed one instance of hitting during this session. Although there is only one maintenance session, this one data point suggests that the results from the study maintained and that the educator was continuing to give praise at least every two minutes, as well as utilizing BSP more than GP.

Procedural Fidelity

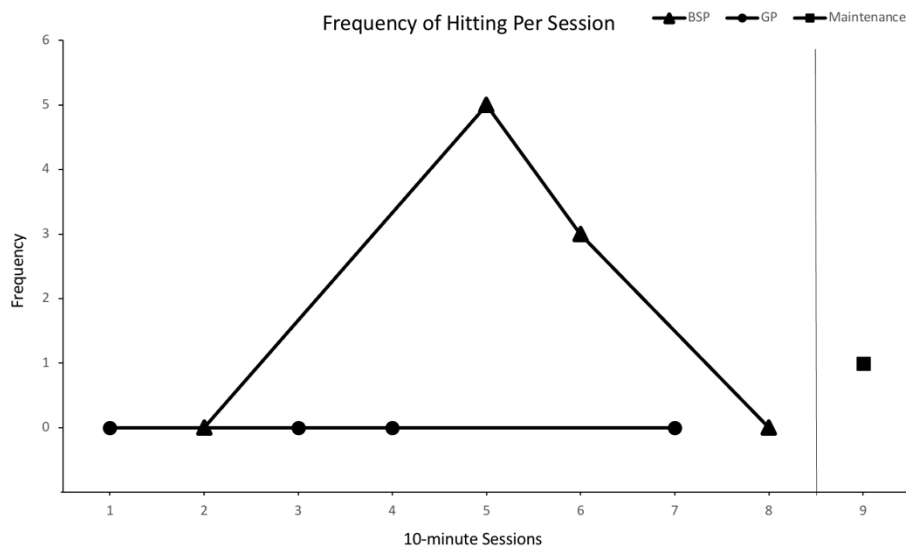
Procedural fidelity was recorded in six out of eight sessions and five out of those six sessions were completed with 100% fidelity. One of the four sessions where procedural fidelity was recorded the educator did not give the correct praise the entire session. The educator was giving BSP for the first two minutes of the session before realizing they were giving the wrong type of praise and changing to GP for the last of the eight minutes of the observation session. This occurred during session seven when referencing figure two and figure three.

Figure 2

Percent of On-task Behavior Recorded Per-10 min Observation



Note. This graph displays the amount Billy was observed by the researcher to show on-task behavior when working one-on-one with the educator during 10 min work sessions.

Figure 3*Frequency of Hitting Per-10 min Session*

Note. This graph displays the amount Billy was observed by the researcher to show the behavior of hitting while working one-on-one with the educator during 10 min work sessions.

Discussion

The current study set out to investigate whether GP or BSP is a viable behavior change intervention tool to decrease problematic behaviors and increase desirable behaviors in an elementary-aged child whose behavior of hitting was maintained by attention. The results of the study suggested that the two interventions had very slight differing effects on the student participant's behaviors of hitting and on-task behavior. Past research suggests BSP to be effective at increasing on-task behavior in elementary aged children (Markelz et al., 2022; Jenkins et al., 2015; Gibbins, 2013; Kranak et al., 2017; Bizo, 2004). The current study further proves this. BSP was slightly more effective at increasing on-task behavior for Billy than GP when visually analyzing the data. Although the opposite effect was found for hitting. More hitting was observed during the BSP conditions than during the GP conditions. These results differ from the results seen in the literature. Overall the literature suggests a functional (negative)

relationship between BSP and disruptive classroom behaviors (Jenkins et al., 2015; Roberts, 2018). The effect BSP had on hitting was surprising to the researcher. While in the BSP condition five hits were observed in session five, and three hits were observed in session six. The researcher did not observe any extraneous variables that could have caused these results. Although the total rate of praise was not recorded during the sessions. The possible differing rates of praise during these sessions could have effected Billy's behavior. The results of the current study suggests that BSP was more effective than GP at increasing on-task behavior, while GP was more effective than BSP at decreasing problem behaviors that were maintained by attention for Billy, an elementary-aged child with autism.

Limitations

The researcher encountered multiple limitations throughout this study, which warrant discussion. First, the single function-test-control assessment did not yield as strong results as the functional analysis that was completed on Billy when previously administered. Thus, there was not a strong conclusion at the start of the study that hitting was still being maintained by adult attention. A limitation of using the single function-test-control assessment is that because only one functions was tested the researcher could not rule out that there may be additional variables contributing to the problem behavior. Future research should consider conducting a more robust functional analysis testing and controlling for all functions of behavior to ensure the correct consequence is identified prior to moving forward with intervention.

The second limitation within this research study was the lack of frequency data taken on the total number of praises the educator gave during the praise conditions. The researcher originally intended for the educator to just give praise on a VI-2 schedule in each condition. Once the intervention started to be implemented it was imminent that it was hard for the educator

to withhold praise till the “MotivAider” vibrated because there were many moments where Billy did something well that he would usually be praised for and should be praised for. The researcher felt it was unethical to have the educator withhold praise from Billy in moments where he deserved to be praised for doing something well. Although, since no data were taken on the frequency of praise in each condition the researcher cannot tell how much the different rates of praise may have effected the results. For future studies taking frequency data on how much praise statements the educator gives to the participant in each session would give a better picture of the results.

The third limitation in the study was that the researcher was not able to record enough maintenance data to be able to compare data across multiple sessions. Although the one one data point in the maintenance phase suggests that the results from the study maintained, more maintained data were needed to truly study the maintenance of GP and BSP as behavior change interventions. Future research should be sure to schedule more time after the intervention phase to record maintenance data.

Lastly, The fourth limitation the researcher encountered was that one session (session seven) was not implemented with 100% fidelity. Session seven was a GP condition, although the educator mistakenly gave BSP to Billy in the beginning of the session. This may have effected the results for that GP session given that GP was not the only type of praise given during this observation session. For future research it is important to make sure the secondary participant knows what praise condition (either GP or BSP) is being implemented by briefly rehearsing the type of praise being used with the secondary participant before the session starts.

Contribution to Current Research

The current study contributed to the research on the effectiveness of BSP for the

population of elementary-aged children that display behaviors maintained by attention. The researcher can conclude from this study that the use of BSP to increase on-task behavior was slightly more effective than the use of GP for Billy, although the GP intervention was slightly more effective at decreasing hitting for Billy. Therefore, the researcher did not find the results to be overwhelmingly supportive of the use of BSP over the use of GP as a behavior change intervention for this particular elementary-aged student whose behavior of hitting was maintained by attention. Regardless, more research must be done on this population to fully conclude whether BSP or GP is the most effective praise intervention to use for behavior change in elementary-aged children with autism with problem behaviors maintained by attention.

Areas for Future Research

The first area for future research is to keep researching on this population of elementary-aged children with autism with problem behaviors maintained by attention and the effectiveness of BSP versus GP with this population. In this study, only one participant was available. More research with this population should be conducted to compare the results between the different participants. Just because the intervention did or did not work with one participant does not prove that it does not work for other participants who fall into this population. There are many factors that could affect the effectiveness of an intervention.

The second area for future research is to study the use of BSP in combination with other behavior change interventions. Combining two behavior change interventions could possibly increase the effectiveness of the behavior intervention plan as a whole. After completing this study, the researcher questioned if using BSP in combination with another behavior change intervention could show more positive results.

Finally, future research should consider conducting generalization probes once

implementation of intervention ceases. The researcher was unable to test for generalization.

Generalization would have been important to account for in this study to see if Billy's behaviors generalized to other educators, also if Billy's behaviors generalized when using the same praise interventions in different settings.

Implications For Practice

When implementing BSP it is important to reference the desired behavior within the praise statement, and give BSP within 0-3 seconds of the desired behavior occurring. It is important to note that not every child may prefer praise for reinforcement. Therefore it is essential take into account client preference when deciding whether BSP is the right intervention to use for a client. Being sure to evaluate the function of the behavior being targeted when choosing whether BSP is a viable behavior change intervention to use with a client is also crucial, considering the current study was done on a child whose behavior was maintained by attention. BSP and GP are good low effort interventions to start with when creating a behavior intervention plan. Although, these interventions should be used in combination with other evidence-based interventions.

Appendix A

Intervention Data Recording Sheet

Date: _____

Behavior Praise Observational Data Sheet

Time: _____

Condition: BSP GP

Directions: Mark a + if on-task behavior is observed at the 15 second mark or a – if on-task behavior is not observed.

On-task: Will be counted when JB is sitting at his desk looking at the teacher or the assigned work task.

Interval	- No behavior + Behavior	Interval	- No behavior + Behavior
1		21	
2		22	
3		23	
4		24	
5		25	
6		26	
7		27	
8		28	
9		29	
10		30	
11		31	
12		32	
13		33	
14		34	
15		35	
16		36	
17		37	
18		38	
19		39	
20		40	

Directions: mark a talley in "Talley of Occurrences Box" every instance hitting is observed.

Hitting: Was counted as any occurrence of making contact or attempting to make contact with any part of another peer or staff's body with an open or closed hand.

Start Time	End Time	Talley of Occurrences	Total

Directions: Mark a tally mark in the corresponding type of praise that was given whenever praise is observed during the 10-minute observation session.

2-Minute Intervals	1	2	3	4	5
BSP					
GP					

Appendix B

Maintenance Data Recording Sheet

Date: _____ Behavior Praise Observational Data Sheet
 Time: _____
 Condition: Maintenance

Directions: Mark a + if on-task behavior is observed at the 15 second mark or a – if on-task behavior is not observed.

On-task: Will be counted when JB is sitting at his desk looking at the teacher or the assigned work task.

Interval	- No behavior + Behavior	Interval	- No behavior + Behavior
1		21	
2		22	
3		23	
4		24	
5		25	
6		26	
7		27	
8		28	
9		29	
10		30	
11		31	
12		32	
13		33	
14		34	
15		35	
16		36	
17		37	
18		38	
19		39	
20		40	

Directions: mark a talley in "Talley of Occurrences Box" every instance hitting is observed.

Hitting: Was counted as any occurrence of making contact or attempting to make contact with any part of another peer or staff's body with an open or closed hand.

Start Time	End Time	Talley of Occurrences	Total

Directions: Mark a tally mark in the corresponding type of praise that was given whenever praise is observed during the 10-minute observation session.

Type of Praise	Frequency	Total
BSP		
GP		

Appendix C

Training Fidelity Checklist

Instructions: Check the box if you observed the procedure described being implemented correctly.

- ☐ The researcher gave an overview of behavior specific praise
- ☐ The researcher gave an overview of the study procedures
- ☐ The researcher modeled the procedures
- ☐ The educator rehearsed the procedures
- ☐ The researcher gave the educator feedback

Appendix D

Sample Praise Statements for the Educator

Specific praise statements

- Good job sitting at your desk and focusing on your work
- I love how you are keeping your hands to yourself and sitting at your desk
- Your doing a great job completing your work with me
- I love how you are listening and following directions
- Thank you for sitting in your chair with a calm body and listening hears

General praise

- Great job
- Nice Job
- Nice work
- You're doing great
- You're doing amazing

Appendix E

Intervention Rating Profile

The purpose of this questionnaire is to obtain information that will aid in the selection of classroom interventions. These interventions will be used by teachers of children with behavior problems. Please circle the number which best describes your agreement or disagreement with each statement.

Behavior Specific Praise	Strongly Disagree	Disagree	Neutral/ Undecided	Agree	Strongly Agree
1. Behavior specific praise was an acceptable intervention for addressing the child's problem behaviors.	1	2	3	4	5
2. I would suggest the use of behavior specific praise to other teachers.	1	2	3	4	5
3. Most teachers would find behavior specific praise suitable for addressing off-task behavior, and the behavior of hitting.	1	2	3	4	5
4. I would be willing to use behavior specific praise again as a behavior intervention for a child.	1	2	3	4	5
5. Behavior specific praise did <i>not</i> result in negative side effects for the child.	1	2	3	4	5
6. Behavior specific praise would be appropriate for a variety of children.	1	2	3	4	5
7. Behavior specific praise was a fair way to handle off-task behavior, and the behavior of hitting.	1	2	3	4	5
8. Overall, implementing behavior specific praise would be beneficial for elementary aged children in the classroom.	1	2	3	4	5

General Behavior Praise

1. General behavior praise was an acceptable intervention for addressing the child's problem behaviors.	1	2	3	4	5
2. I would suggest the use of general behavior praise to other teachers.	1	2	3	4	5
3. Most teachers would find general behavior praise suitable for addressing off-task behavior, and the behavior of hitting.	1	2	3	4	5
4. I would be willing to use general behavior praise again as a behavior intervention for a child.	1	2	3	4	5
5. General behavior praise did <i>not</i> result in negative side effects for the child.	1	2	3	4	5
6. General behavior praise would be appropriate for a variety of children.	1	2	3	4	5
7. General behavior praise was a fair way to handle off-task behavior, and the behavior of hitting.	1	2	3	4	5
8. Overall, implementing general behavior praise would be beneficial for elementary aged children in the classroom.	1	2	3	4	5

Appendix F

Procedural Fidelity Checklist

Instructions: Check the box if you observed the procedure described being implemented correctly.

- ☐ The educator gave praise on average every 2-minutes.
- ☐ The educator gave the correct kind of praise according to the intervention phase.
- ☐ The educator only used verbal praise as reinforcement for good behavior throughout the whole session.

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