

The Effect of the Good Behavior Game

on the

Behavior of Third-Grade Students

By Danielle Mooney

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## Abstract

The purpose of this study was to determine the effectiveness of the Good Behavior Game (GBG) in reducing the maladaptive behaviors of disruption and noncompliance in third-grade students. The study had a quasi-experimental one group design comparing pre-intervention/baseline frequencies of behavioral disruptions and noncompliance to intervention frequencies to determine the effects of the GBG on third-grade students. The baseline data was collected over 12 observations, which occurred over the course of one week. Then the GBG intervention was implemented for a four-week timeframe. During that time, frequency data was again collected over twelve observations. The difference in frequency between the pre-intervention (Mean = 8.33, SD = 11.52) and the intervention (Mean = 16.33, SD = 57.52) was not significantly significant [ $t(11) = -1.83, p = .09$ ]. Therefore, the null hypothesis, which stated that the Good Behavior Game will have no significant impact on the frequency of behavioral disruptions and noncompliance of third-grade students, was retained.

## **CHAPTER I**

### **INTRODUCTION**

#### **Overview**

Negative behaviors are a growing concern in classrooms today. More and more students are exhibiting maladaptive behaviors within the classroom. There are many negative academic and social consequences for students who exhibit these maladaptive behaviors including a loss of instructional time due to having to redirect students and more negative peer interactions. This also impacts the students' classmates as they also lose instructional time. Preventing the maladaptive behaviors when possible and intervening when prevention is not possible is essential for ensuring that teachers and schools are supporting the academic, behavioral, and social needs of all students and fostering student success.

As seen in this researcher's classroom, two of the most common maladaptive behaviors exhibited by students is disruption and noncompliance. These behaviors impact students' academic success as well as their peer relationships. Therefore, this study is designed to examine the impact of the Good Behavior Game on the frequency of disruptive and noncompliant behaviors in third-grade students.

This study was conducted in one third-grade classroom that participated in the behavioral intervention called the Good Behavior Game (GBG). Before the intervention was implemented, the researcher and classroom teacher collected frequency data on students' disruptive and noncompliant behaviors. Over the course of the four-week intervention, the researcher and classroom teacher again collected data of the frequency on the disruptive and noncompliant behaviors exhibited by those third-grade students in order to determine if the GBG helped to reduce those maladaptive behaviors.

## **Statement of Problem**

The purpose of this study was to determine the effectiveness of the Good Behavior Game (GBG) in reducing the maladaptive behaviors of disruption and noncompliance in third-grade students.

## **Hypothesis**

The null hypothesis is that the Good Behavior Game will have no significant impact on the frequency of behavioral disruptions and noncompliance of third-grade students.

## **Operational Definitions**

**The Good Behavior Game:** Good Behavior Game is an evidence-based practice used to stimulate prosocial behavior and reduce negative behavior. Students are placed in three to five teams and compete for rewards. During the game, students are given a rule to follow and if they exhibit a behavior that violates that rule, a clip or point gets taken from their team. For example, if the rule is raising your hand to speak and a student calls out, a point would be taken from that student's team. The team with the most points at the end of that game wins the reward. The game is played several times throughout the school day in order to promote positive behaviors while reducing negative behaviors.

**Prosocial or Positive Behavior:** Prosocial or positive behaviors are behaviors that benefit the classroom as a whole. This includes behaviors such as “cooperating with others, exhibiting self-control, and following directions help students demonstrate social competence, and in turn, allow them to actively engage in academic instruction” (McDaniel, Bruhn, & Troughton, 2017, p. 2).

**Maladaptive or Negative Behaviors:** Behaviors that inhibit a person’s ability to adjust to situations and are nonproductive behaviors that impede one’s success. These can be

inappropriate behaviors such as aggression, noncompliance, disruption, and tantrums.

**Disruptive Behaviors:** Behavior causing an interruption in a class or school activity including talking out of turn, blurting out, yelling, screaming, whistling, escalated confrontation between students/teachers, noise with materials, tapping pencils, slamming books, or knocking books/materials to the floor in anger.

**Noncompliant Behaviors:** A failure to respond to adult requests including talking back, not following directions, refusal to complete assignments, ignoring request of adult, etc.

**Frequency:** The number of occurrences of a repeating behavior.

## **CHAPTER II**

### **REVIEW OF THE LITERATURE**

#### **Introduction**

Students are exhibiting challenging behaviors more and more within classrooms today. There are many negative academic and social ramifications for students who exhibit these maladaptive behaviors, as well as for these students' classmates. Preventing the maladaptive behaviors when possible and intervening when prevention is not possible is essential for ensuring that teachers and schools are supporting the academic, behavioral, and social needs of all students and fostering student success.

This literature review seeks to explore the reasons and methods for ameliorating challenging behavior within the classroom. Section one provides justification for preventing maladaptive behaviors when possible and intervening when not possible is vital. Section two explores available prevention and intervention strategies and programs for students exhibiting maladaptive behaviors. In section three, a summary is provided.

#### **The Importance of Prevention and Intervention**

According to Pisacreta, Tincani, Connell, and Axelrod (2011), discipline is one of the top concerns of school personnel. When making this assertion, they cited the National Center for Education Statistics' study completed in 2000, in which the researchers found that 40% of teachers reported that challenging behavior interfered with their teaching. Additionally, some of the most common student-related challenges faced by teachers include a lack of academic engagement (Minkos, Chafouleas, Bray, & LaSalle, 2018), difficulty with sustaining attention, off-task behavior, disruptive behaviors (McDaniel et al., 2017; Minkos et al., 2018; Smith,

Poling, & Worth, 2018; Watson et al., 2016), aggression (McDaniel et al., 2017; Smith et al., 2018), and defiance (McDaniel et al., 2017).

As Minkos et al. (2018) point out, this is problematic “because research has demonstrated that student engagement is positively correlated with academic achievement” (p. 1). Students who exhibit these maladaptive behaviors often experience academic underperformance or failure (McDaniel et al., 2017; McKenna et al., 2017; Pisacreta et al., 2011; Smith et al., 2018; Watson et al., 2016), a lack of school success (McKenna, Flower, Falcomata, & Adamson, 2017), high rates of disciplinary exclusions (McKenna et al., 2017; Smith et al., 2018), impaired social relationships with peers and adults (McDaniel et al., 2017; Smith et al., 2018), a higher dropout rate (McDaniel et al., 2017; Smith et al., 2018), a higher rate of postschool unemployment (Smith et al., 2018), and incarceration. Moreover, these maladaptive behaviors also affect the other students in the classroom. Watson et al. (2016) explain that:

“Although reducing a student’s inappropriate behaviors is not always correlated with an increase in that student’s learning, disruptive classroom behaviors can have a detrimental influence on classmates’ learning. Educators often spend an inordinate amount of time reacting to disruptive behaviors, which reduces their time to teach. In addition, both the disruptive behaviors and teacher reactions to these behaviors often distract peers who are attempting to engage in sustained academic tasks.” (p. 2)

In contrast to the maladaptive behaviors listed, prosocial behaviors such as “cooperating with others, exhibiting self-control, and following directions help students demonstrate social competence, and in turn, allow them to actively engage in academic instruction” (McDaniel et al., 2017, p. 2). Therefore, preventing the maladaptive behaviors when possible and intervening when not is clearly needed.

## **Prevention and Intervention Strategies and Programs**

According to Royer, Lane, Cantwell, and Messenger (2017), since the Individuals with Disabilities Education Improvement Act (IDEA) was passed in 1975, schools have implemented systems to support the academic, behavioral, and social needs of all students. Some of these behavioral interventions include building positive relationships with students by employing the Check-In/Check-Out program, utilizing behavior specific praise, incorporating mindful breathing interventions, building in instructional choice for students, utilizing programs like the Good Behavior Game, and incorporating direct and targeted social skills instruction into the students' curricula like the Stop and Think program.

### **Building Positive Relationships with Students**

Anyon et al. (2018) point out in their research that punitive school discipline practices (e.g. out-of-school suspension, expulsion) have come under scrutiny due to their negative impacts on "student's life trajectories and glaring racial disparities" (p. 1). Their research emphasized the importance of establishing strong, healthy relationships built on trust and respect between school staff, students, and their families in order to combat disciplinary issues while also limiting those negative punitive practices. They cited others' research (Crosnoe, Johnson, & Elder, 2004; Murray & Greenberg, 2000; Woolley, Kol, & Bowen, 2009) that suggests "a strong association between a range of academic and behavioral outcomes and students' perceptions of teachers and administrators as caring and encouraging" (Anyon et al., 2018, p. 1). Anyon et al. (2018) also highlight research that indicates that supportive relationships are essential for creating a positive school climate, reducing problem behaviors, and lessening racial discipline gaps. They explain that students' perceptions of positive relationships

are predictors of a variety of behavioral outcomes and they promote academic success as measured by student grades.

Collins, O'Connor, Supplee, and Shaw (2017), define a high-quality teacher-child relationship as one that is characterized by closeness, warmth, and positive affect, and a lack of conflict, discordance, and anger. The research Collins et al. (2017) conducted, indicates that there is a negative correlation between teacher-child relationship quality and problem behaviors. The more positive a relationship was the less behaviors were exhibited by the student. Collins et al. (2017) postulated that close, nonconflictual teacher-child relationships can act as protective factors against the development of behavior problems and that this has implications for the use of relationship-building as a preventive intervention to mitigate maladaptive behaviors. This conclusion was further supported by the research conducted by Anyon et al. (2018) in their qualitative study. Anyon et al. (2018) interviewed teachers, most of whom identified strong student-staff relationships as the "foundation for productive problem solving in times of conflict" (p. 5). Teachers in the study went further to explain that they were able to develop these strong relationships by gaining awareness of their students' lives both inside and outside school. Their understanding of their students' strengths, triggers, coping resources, and areas of growth helped them to understand the underlying motivation behind misbehavior, which allowed them to respond to misbehavior by implementing tailored and relevant consequences or interventions. Educators participating in Anyon et al.'s 2018 research reported that "their commitment to relationship building was warranted because it paid dividends for both behavioral and academic outcomes" (p. 5). Anyon et al found that educators utilized home visits, greetings, morning meetings, increased adult visibility, advisory periods, and positive contact with families to build close student-teacher relationships. During this research, educators cited relationship-building as

a key strategy for reducing problem behaviors. Anyon et al. (2018) closed their report by suggesting that relationship building “plays a positive role in students’ social, emotional, behavioral, and academic outcomes” (p. 7). One way to build positive relationships with students is to utilize the Check-In/Check-Out Program.

### ***Check-In/Check-Out Program***

Yeung et al. (2016) explain that the Check-In/Check-Out program (CICO) involves having a CICO trained staff member check-in with a student at the start of the school day to review the expectations for the day and receive their daily behavior report card. The intent of this is to provide specific positive, constructive feedback to students in order to help prevent future problem behavior. The student’s classroom teacher(s) provides both written and verbal feedback throughout the day, reminding students about the goals that they are trying to achieve. Also, throughout the day, students rate their behavior at the end of each class and talk with their teacher(s). During this time, their teacher provides additional positive, but at times, corrective feedback. At the end of the day, students then go back and “check-out” with the staff member they met with at the start of the day, enter their daily point total, celebrate progress, and set goals for the next day. These point cards are often sent home with the students. According to Mong, Johnson, & Mong (2011), the CICO was developed as an efficient intervention for reducing problem behavior. “The program was designed to increase feedback and positive adult attention” (p. 2). Mong et al’s findings (2011) support the idea that the CICO program is effective at decreasing problem behaviors in the classroom and increasing appropriate behavior. Additionally, Mong et al. (2011) point out that “if implementing CICO demonstrates students engaging in fewer problem behaviors and spending less time in the school office, improved academic achievement may likely follow” (p. 2).

## **Behavior Specific Praise**

According to Clair, Bahr, Quach, and LeDuc (2018), Behavior Specific Praise (BSP) is a verbal statement that compliments and describes an appropriate, desired behavior. Behavior Specific Praise (BSP) lets students know what they need to do in order to receive praise as well as lets the student know how to behave in similar situations. Both the research from Clair et al. (2018) and Pisacreta et al. (2011) indicate that Behavior Specific Praise (BSP) is an effective tool to increase students' academic achievement and positive behavior in the classroom. Furthermore, based on the research of Clair et al. (2018), students benefiting from Behavior Specific Praise (BSP) had significantly higher on-task behavior, student engagement, and appropriate behavior compared to students with teachers using only general praise. They found that Behavior Specific Praise (BSP) was also effective for students demonstrating serious behavior problems, as results indicated that noncompliant and disruptive behaviors decreased when using BSP. They noted a positive correlation between the use of BSP and on-task behaviors as well as a negative correlation between use of BSP and problem behaviors, including disruption.

## **Mindful Breathing Intervention**

Minkos et al., (2018) research found that using a Mindfulness-Based Intervention (MBI) promoted self-management skills and increased academic engagement in students. Mindfulness has been defined as the awareness that comes from paying attention on purpose, in the present moment. The research conducted by Minkos et al. (2018) indicated that mindfulness training “may promote early recognition of a problem, which can then provide an opportunity to apply previously learned skills at a time when they are most likely to be effective in preventing the problem” (p. 2). Therefore, engaging in mindfulness can promote self-management, enabling the student to think more clearly and to be less reactive to emotional stimuli. Their research also

noted improvements in child and adolescent attention as well as reduction in disruptive behavior as a result of MBI. Through their research, Minkos et al. (2018) found that when students participated in an audio-delivered, daily, mindful breathing intervention, there was an increase in academic engagement in adolescent students and their findings support MBS as an effective intervention for increasing academic engagement and decreasing disruptive behavior for students.

### **Instructional Choice**

According to Royer et al. (2017), instructional choice occurs when “the student is provided with two or more options, is allowed to independently select an option, and is provided with the selected option . . . within naturally occurring classroom events” (p. 1). Offering a choice of what reinforcer to work for is another form of choice paired with instruction which provides extra motivation to increase task completion rate, task accuracy, and appropriate on-task behavior (Royer et al., 2017). Royer et al. (2017) also highlighted research indicating that student choice promoted “self-esteem, self-determination, and feelings of control and independence in life that in turn become positive behavioral supports toward preventing problem behaviors” (p. 2). Providing choice-making opportunities to students gives students more chances to increase independence and quality of life, promotes their sense of empowerment and self-determination, and builds their internal locus of control. Royer et al. (2018) also mention that providing students with opportunities to make choices also may lessen reliance on punishment and extinction. They make the claim that it’s possible providing choice increases student “buy-in,” which contributes to students taking more ownership over self-selected assignments and leads to increased engagement, task completion, and reduces students’ opportunities to behave inappropriately. Based on their research, Royer et al. (2017) posited that

choice can increase motivation, and thus, decrease problem behaviors when “a student has clear preferences, appreciates the options provided, enjoys the act of choosing, and benefits from the outcome of choosing” (p. 14).

### **The Good Behavior Game**

According to Clair et al. (2018), the Good Behavior Game (GBG) is one of the most researched inter-dependent group contingency interventions. For the GBG, classes are usually divided into teams and given a set of rules to follow during portions of the day. For example, the teacher may use a variety of rules such as looking for students to be working quietly, following directions the first time they are given, raising their hand if they need help or have a question, standing in line silently, or having their eyes on the speaker. Teams are given “penalty” points for inappropriate behavior, and teams wins when they end the time period with fewer than the allowed number of penalty points. According to Clair et al. (2018), “the GBG has many advantages such as use of natural contingencies, potential for group solidarity, and cooperation” (p. 3). According to research by Ialongo et al. (2019), the GBG intervention results in significant reductions in aggressive, disruptive, and off-task behavior.

### **Behavioral and Social-Emotional Skills Instruction**

McDaniel et al. (2017) cited Gresham et al. (2006) when they defined social skill as “a set of competencies that (1) facilitate initiating and maintaining positive social relationships, (2) contribute to peer acceptance and friendship development, (3) result in satisfactory school adjustment, and (4) allow individuals to cope with and adapt to the demands of the social environment” (p. 3). Social skills instruction entails explicitly teaching the skills listed above through coaching, modeling, practicing, problem-solving, and reinforcement. Smith et al. (2018) argue that intensive skill-based instruction is required in order to help students better regulate

their own behavior and allow them to more effectively “navigate the increasingly demanding social and emotional environment as they proceed through their school years and engage more successfully in academic instruction” (p. 5). One intervention that is founded in the principles of this direct, explicit, and focused social and emotional instruction is Stop and Think.

### ***Stop and Think***

The skills contained in the Stop and Think program are “organized into four groups: survival skills (e.g., listening, following directions), interpersonal skills (e.g., sharing), problem-solving skills (e.g., asking for help), and conflict resolution skills (e.g., handling peer pressure)” (McDaniel et al., 2017, p. 3). Stop and Think utilizes a five-step approach to teaching each of these social skills: “(1) Stop and Think!, (2) Are you going to make a good choice or bad choice?, (3) What are your choices or steps?, (4) Just do it!, and (5) Good job!” (p. 3). This process is designed to help students become more aware of the problem facing them, evaluate their options, apply learned strategies, and learn from their choices. Each social skills lesson follows the same process of direct instruction of the skill, modeling the five steps, role-playing for practice, providing performance feedback, and having students apply the skill (McDaniel et al., 2017). McDaniel et al. (2017) conducted a single-subject study examining the effects of the Stop and Think program for students with serious challenging behaviors. All five second- and third-grade students demonstrated reductions in problem behavior and sustained this positive behavioral change over time. Thus, the researchers determined that the Stop and Think program was an effective intervention (McDaniel et al., 2017).

### **Summary**

In conclusion, studies show that challenging behavior is a growing concern in classrooms today. Students who exhibit maladaptive behaviors, as well as these students’ classmates, often

experience many negative academic and social repercussions. Preventing the maladaptive behaviors when possible and intervening when prevention is not possible is crucial. By reviewing various successful prevention and intervention programs and strategies and implementing the program(s)/strategies that best meet the needs of their students, schools and school systems can ensure that they are supporting the academic, behavioral, and social needs of all students in order to foster student success.

## **CHAPTER III**

### **METHODS**

The purpose of this study was to determine the effectiveness of the Good Behavior Game (GBG) in reducing the maladaptive behaviors of disruption and noncompliance in third-grade students.

#### **Design**

This study utilized a quasi-experimental one group pre-intervention-during-intervention design to determine the effects of the Good Behavior Game (GBG) on behavioral disruptions and noncompliance in third-grade students. Initially, a pretest was conducted using frequency data for every time a student exhibited disruptive or noncompliant behavior, over the course of twelve observation sessions within one week, to determine baseline behavioral data. Then the GBG intervention was implemented for a four-week timeframe. During which, frequency data was again collected for every time a student exhibited disruptive or noncompliant behavior over the course of twelve observations. The third-grade group used for this study was considered a convenience sample due to the researcher's position as a third-grade special education teacher at the same school as the sample population. The independent variable in this study was whether the Good Behavior Game intervention was used. The dependent variable was the frequency of disruptions and noncompliance students exhibited during twelve observation sessions. The constraints involved within the study were the small participant group, lack of a control group, and the length of the intervention.

#### **Participants**

This study utilized a convenience sample of one classroom in a rural elementary school in Harford County, Maryland. There were approximately 445 students enrolled in the school ranging from kindergarten to fifth grade. Of the total student population, 92% was White, 3%

was Hispanic, 2% was African American, and 3% were two or more races. Additionally, 6.1% of the student population were Students with Disabilities (SWD), 10.3% were on Free and Reduced Meals (FARMS), and less than 5% of students had a 504 plan.

The third-grade classroom involved in this study was a heterogenous, inclusive classroom with 30 students. Of the 30 students in the classroom, 15 students (50%) were male and 15 students (50%) were female. The students' ages ranged between eight (37%) and nine (63%) years old. Out of the 30 students, 29 students (97%) were Caucasian and 1 student (3%) was multiracial. Additionally, 1 student (3%) had a 504 plan, 9 students (30%) had an IEP, and 5 students (17%) were considered gifted. Of the 9 students with a disability, 3 had a Specific Learning Disability, 3 had an Other Health Impairment for Attention Deficit Disorder, 2 had Autism, and 1 had a Speech Language Impairment.

### **Instrument**

The instrument used for this study was developed by the researcher (see Appendix). Disruption and noncompliance were measured through observation of the students in the classroom. Every time the teacher or classroom aides observed a student exhibiting the defined behaviors, they tallied that frequency data on the instrument. Disruption was defined as behavior causing an interruption in a class or school activity including talking out of turn, blurting out, yelling, screaming, whistling, escalated confrontation between students/teachers, noise with materials, tapping pencils, slamming books, knocking books/materials to the floor in anger, etc. Noncompliance was defined as failure to respond to adult request including talking back, not following directions, refusal to complete assignments, ignoring request of adult, etc. This data was collected during the non-treatment period pre-test and the treatment period during which the intervention was being implemented. The behavior data collected was frequency data only. There

was no data collected regarding duration of behavior; the amount of time of a behavior was not taken into account. For example, if a child A had a tantrum for 15 straight minutes and child B had a tantrum for 1 minute, they both would count as one incident. Additionally, there is no reliability or validity data on the instrument used.

### **Procedure**

Observations of maladaptive behaviors in the classroom led the researcher to investigate possible interventions to mitigate these disruptive and noncompliant behaviors. After discussing possible interventions with the classroom teacher and school psychologist, the researcher settled on the Good Behavior Game (GBG). The researcher then met with the classroom teacher, her paraeducators, and inclusion helpers to go over the intervention that would be taking place in that third-grade classroom including the materials, progress monitoring options, student teams, intervention steps, possible student rewards, and the time period in which the intervention would be conducted.

The pretest was conducted during the initial non-treatment period. The researcher reviewed and clarified the operational definitions of disruption and noncompliance with the teacher and her support staff and went over the data collection instrument with them as well. The researcher, classroom teacher, and support staff then collected a week's worth of pre-intervention behavior data to determine a baseline for disruption and noncompliance. Twelve observations each lasting from fifteen to thirty minutes were conducted. Observations were conducted in Reading, Science, Mathematics, Writing, and Words Work.

Before beginning the intervention, the researcher and classroom teacher divided all thirty students into four teams, making sure that the teams contained approximately equal numbers of males and females and that students with problem behaviors were divided equally among the

teams. The researcher and classroom teacher then conducted a class meeting with students, explaining the game, the rules of the game, revealing teams, and allowing students to develop team names to encourage comradery and excitement. Students also developed a class list of rewards they would like to earn if their team won the game. The researcher and teacher then conducted a practice round of the GBG so that students became familiar with the game and understood the expectations. Students were shown the game board divided into four teams with ten clips on each team's space and the rules for each game that would be placed in the center of the game board. The game board was placed in the front of the room with the names of each team listed next to the board.

The classroom teacher and researcher then implemented four weeks of the Good Behavior Game (GBG). At the beginning of each game, the teacher conducted a brief review of the GBG criterion/rules (i.e. follow directions the first time, silence, raising hand to speak) and let the students know that the GBG was starting but did not give the students a specific stopping time. Then, during the game, the classroom teacher and support staff removed a clip from the corresponding team's section of the game board set up in the front of the room each time a student broke the rule of the game. At the end of the time period, the teacher would identify the team(s) with the most clips as the winner. That team would then get to pick their prize from the reward menu. Reward items could include lunch and a movie with the teacher, ten minutes of extra recess, ten dollars for the school store, picking a prize from the prize box, free seating at lunch, bringing in a stuffed animal the following day, a homework pass, etc. The GBG was played several times a week for a period of four weeks.

During the four-week implementation phase, data were collected. The researcher, classroom teacher, and support staff collected behavior data in which frequency data was again

collected for every time a student exhibited disruptive or noncompliant behavior in order to determine if the frequency of the disruptive and noncompliant behaviors declined compared to before the intervention was implemented. During the implementation phase, again twelve observations were conducted to collect this frequency data. Observations lasted from ten minutes to an hour and were conducted in guidance lessons, the hallway, Mathematics, Reading, during transition times, Word Work, and Writing.

## **CHAPTER IV**

### **RESULTS**

This study examined the effectiveness of the Good Behavior Game (GBG) on reducing the maladaptive behaviors of disruption and noncompliance in third-grade students. Data included pre- and during-intervention measures of the frequency of maladaptive behaviors in order to support or refute the null hypothesis of this study. The null hypothesis of this study was that the Good Behavior Game will have no significant impact on the frequency of behavioral disruptions and noncompliance of third-grade students.

Data were analyzed by the dependent t-test (sometimes referred to as the paired t test) because the researcher was comparing two related groups (the before intervention group and the during-intervention group containing the same students), using the same instrument each time, and looking at one dependent variable (frequency of maladaptive behavior). The mean frequencies between the paired observations from the pre-intervention (Mean = 8.33, SD = 11.52) and the during-intervention (Mean = 16.33, SD = 57.52) were not significantly different [ $t(11) = -1.83, p = .09$ ] because p was greater than .05. Therefore, the null hypothesis was retained, and no alternative hypothesis could be proven. Results indicate that the Good Behavior Game had no significant impact on the frequency of behavioral disruptions and noncompliance of third-grade students. Table 1 displays both the measures of central tendency and also the statistical test of the data.

**Table 1***Measures of Central Tendency and Statistical Test of Maladaptive Behavior*

	Pre- Intervention	During- Intervention
Mean	8.33	16.33
Variance	111.52	57.52
Observations	12.00	12.00
Pearson Correlation	-0.38	
Hypothesized Mean Difference	0.00	
df	11.00	
t Stat	-1.83	
p two-tail	0.09*	
t Critical two-tail	2.20	

\* p calculated is greater than .05 and therefore statistical significance was not established.

## **CHAPTER V**

### **DISCUSSION**

The purpose of this study was to determine the effectiveness of the Good Behavior Game (GBG) in reducing the maladaptive behaviors of disruption and noncompliance in third-grade students. Data included pre- and during-intervention measures of the frequency of maladaptive behaviors. The statistical data analysis conducted in Chapter IV indicated that the null hypothesis should be retained and that the treatment did not significantly impact maladaptive behavior frequency.

This study was conducted during beginning of the COVID-19 pandemic, and as such, the parameters of the study changed from the initial design that was developed. Initially, this study was going to utilize a quasi-experimental one group pretest-posttest design to determine the effects of the Good Behavior Game (GBG) on behavioral disruptions and noncompliance in third-grade students. A pretest was going to be conducted using frequency data for every time a student exhibited disruptive or noncompliant behavior to determine baseline behavioral data. Then, the GBG intervention would be implemented for a four-week timeframe. Finally, at the conclusion of the study, a posttest was supposed to be conducted in which frequency data would be again collected for every time a student exhibited disruptive or noncompliant behavior in order to determine if the frequency of the disruptive and noncompliant behaviors declined. However, due to the school closure that was caused by the pandemic, the researcher was unable to collect the posttest data. Therefore, only the pre-intervention and during-intervention data was able to be collected. Instead of comparing pretest data to posttest data for an A-B-A design to determine if the GBG had an impact on behavior, the researcher changed the design mid-study

and compared pre-intervention and during-intervention data for an A-B design to determine if the GBG had an impact on behavior.

### **Implications of Results**

The results of this study do not support the use of the Good Behavior Game as an effective tool in decreasing noncompliance and disruption in third-grade students. The results supported the original hypothesis that the Good Behavior Game will have no significant impact on the frequency of behavioral disruptions and noncompliance of third-grade students. Initially, the students seemed to enjoy the game and were excited about it. However, as the game continued, students seemed to begin to lose interest in participating in the game and the rewards earned during the game. Certain teams kept winning, while other teams struggled to win a round due to continual poor behavior of certain students. Additionally, on occasion, there was conflict if certain students lost a point for their team because it was a recurring issue. This also caused students to lose interest in trying to win the Good Behavior Game because they felt that they would never win. Furthermore, it was occasionally challenging for the classroom teacher to conduct the GBG and collect data while also teaching at the same time. Based on the data, the implementation of the Good Behavior game did not decrease student's negative behaviors. Moreover, while the results were not significant, the number of inappropriate behaviors was actually higher during the intervention than during the pretest phase of the study.

However, one should not overgeneralize the results on this study and make the assumption that the GBG could never have the desired positive effect on student behavior. It is certainly possible that the GBG could produce positive results with a different age group, demographic, or group of students. It should also be noted that students are motivated by different things; some are more extrinsically motivated while others are intrinsically motivated.

While students were able to select the rewards that they thought they may want to earn, it is also true that interests can change rapidly and that the rewards used may not have been as motivating as they were thought to be. The fact remains, however, that with the small middle class, third-grade sample used in this study, there was no discernible benefit gained from the use of the Good Behavior Game.

Even though the Good Behavior Game may not have had an impact on the behaviors of these third-grade students, the root cause for conducting this study is still valid. As expounded in research previously reviewed, there is a relationship between student behavior and academic success. Therefore, the results of this study highlight the need for expanding upon the strategies, tools, and techniques teachers can implement to positively affect student behavior. Behavior modification strategies must continue to be improved upon and refined in order to positively affect the behaviors of students. As cultural values and motivators continue to change over time, so must the methods by which we manage student behaviors.

### **Theoretical Consequences**

Based on the findings of this study, there needs to be more funding allocated toward research for developing effective behavior management or modification programs and changing the cultural view/mission of schools towards prioritizing students' emotional, social, and behavioral growth as these are critical to student success. This study did not find the GBG as an effective method of modifying student behavior and decreasing negative behavior in third-grade students. However, a different method of positive reinforcement could be a more effective method of shaping student behavior. It is possible that new or additional programs would need to be created to address student behavior and to meet the needs of at-risk students who do not respond to conventional or typical behavior systems used in schools today, like the GBG.

## **Threats to Validity**

All studies suffer from threats to the validity of the study. In particular, those threats are divided into threats involving external validity and threats involving internal validity. In terms of this study, the threats to external validity involve the ability to generalize the results of this study to another similar population of interest. This study has low generalizability due to the small sample size used. The sample lacks diversity because participants were all 8 or 9 years old, mostly white, coming from the same rural area in the Mid-Atlantic region of the United States, and mostly middle class. A large part of this was due to the non-random convenience sampling model that was used in the study. The participants or sample used in the study were from the researcher's own co-taught classroom. Greater generalizability would have occurred if the sample selected was more varied demographically, socioeconomically, by location, age, race, and/or ability-level. As it is, these groups have the potential to respond differently to the administered treatment. Having a random sample would have increased this.

Additionally, with regard to threats to the internal validity, another threat is how successful the different teachers and aides were at implementing the treatment with fidelity. As the implementation phase progressed, some may have not given rewards immediately to students or stretched the time of the game too long, which would eventually affect student buy-in and motivation. Furthermore, how motivating the rewards of the Good Behavior Game were for the students playing would affect the validity. If the rewards were not motivating for the students, then that would affect the validity of the study.

Other threats to internal validity are outside factors including other interventions taking place at the same time as this study. Observed differences on the dependent variable are supposed to be a direct result of manipulation of the independent variable, not some other

variable. During the course of the study, some students were receiving outside counseling services from private practitioners, one student started medication for ADHD, and other students were part of either the anxiety or coping strategies group that the school psychologist held weekly. Other students had a “lunch-bunch” with the school counselor on a few occasions, as well. In addition, there was a school-wide PBIS initiative that was being implemented during the time of this study which incorporated another reward system and incentives. Furthermore, during the time of the study, the COVID-19 pandemic was just beginning to spike. This could have certainly impacted some students during the intervention period and been a factor not related to the independent variable that could have affected some of the students’ behavior. Additionally, during the study, observation was conducted across a range of classroom activities including reading workshop, writing workshop, math, read aloud, transition times, bathroom breaks, hallway lines, guidance lessons, and various other activities held during the school day. Pre-intervention data and during-intervention data was not collected in a way that took this into account. Observation periods captured a wide range of activities and those activities didn’t necessarily match up from pre-intervention to during-intervention data collection sessions. Moreover, observation times during the pretest and during the intervention phases of the study differed as well. The time in which observations were conducted differed from day to day and activities to activity to keep the GBG spontaneous, as the directions of the game called for. This means neither the classroom activities observed, nor the duration of the observations were structured so that the study was comparing the same amounts of time and activities between the pre-intervention and during-intervention phases. This all could have impacted the results of the study. Timing and type of activity could be other variables that would affect student behavior in addition to the independent variable. The study was not conducted in a highly controlled

environment, and therefore, there were rival explanations that influenced the outcome of the study not due to the independent variable.

### **Connections to Previous Studies and Existing Literature**

This study was designed using theories and research conducted by many different experts in the area of classroom behavior and behavior modification in the educational setting. The GBG, according to Clair et al. (2018), is one of the most researched inter-dependent group contingency interventions. Additionally, according to research by Ialongo et al. (2019), the GBG intervention results in significant reductions in aggressive, disruptive, and off-task behavior. After reviewing the research, the methods of the study including the design, instrument for data collection, and procedures utilized within the study all closely aligned with or mirrored those delineated within previous studies. For example, the class participating in this study was divided into teams and given a set of rules to follow during portions of the day. The teams were given “penalty” points for inappropriate behavior, and teams won when they ended the time period with the most points left over. Additionally, before beginning the implementation of the Good Behavior Game, the rules and procedures of the game were taught to students and the rewards utilized were developed as a class. However, despite aligning the methods of the study with those of other successful studies, this study did not get the same results. Whereas, those studies saw a decline in negative student behavior, this study saw an increase in inappropriate behavior frequency over a shorter number of minutes of observation during the intervention, although not at a statistically significant level. When comparing this study to the other studies, it should be noted that one of the studies combined the Good Behavior Game with another behavioral intervention called Promoting Alternative Thinking Strategies (PATHS) and that the other studies differed demographically with the sample used in this study. The other sample

populations used in previous studies also included kindergarten through fifth grade students and about half were male and half were female, similar to this study. However, the other sample populations used in previous studies had a higher percentage of African American students and a higher percentage of students receiving free or reduced meals. This differs significantly from this study as most students were white and from a middle to upper-middle class household.

### **Implications for Future Research**

Future research could be conducted on strategies, tools, and techniques teachers can implement to positively affect student behavior. This research should have a control group. Additionally, this research should have consistency in the amount of time spent in observation as well as in the activities that occur during all observation phases. Positive reinforcement strategies must continue to be improved upon and refined in order to effectively modify the behaviors of students. These behavior modification techniques and strategies should be studied in a variety of different settings with populations that contain varying demographics. Schools and students across the United States, and the world, are extremely diverse and in age, gender, race, ability, customs, values, socioeconomic status, and other demographic factors. Therefore, a method that works for some students may not work for others. It is plausible that the GBG could be effective with a different sample of students. However, because one method of behavior modification will not work for everyone, new or alternate programs would need to be developed and researched. These methods should be compared to determine their effectiveness at addressing student behavior and meeting the needs of at-risk students who do not respond to conventional or typical behavior systems used in schools today. This will ensure that there is a method or strategy that every teacher can turn to that will be effective when dealing with their particular students'

challenging behaviors in the classroom. These, then, can be used in classrooms to promote positive behavior and academic success.

## **Conclusion**

This study was developed after a review of literature, which showed a clear need for strategies, techniques, or programs which reduce maladaptive behaviors in the classroom as these behaviors affect student success both in the short-term and long-term academically and socially. Although this study did not result in statistically significant evidence to support the use of the Good Behavior Game to reduce negative behavior in third-grade students, it does however, suggest that further research may lead to more advantageous outcomes. Additional research will, hopefully, help teachers have more tools and strategies to rely on when trying to mitigate the effects of negative behavior and to promote positive behavior within the classroom.

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# **Appendix**

## **Frequency Behavior Data Collection Instrument**

### **Frequency Data Sheet**

Student/Group: \_\_\_\_\_ Target Behavior(s): \_\_\_\_\_

• [View Details](#) | [Edit](#) | [Delete](#) | [Print](#)

Operational Definition of Behavior 1: \_\_\_\_\_

[View Details](#) | [Edit](#) | [Delete](#)

Operational Definition of Behavior 2: