

EFFECTIVENESS OF THE GOOD BEHAVIOR GAME IN ADDRESSING THE MALADAPTIVE BEHAVIOR OF YOUNG STUDENTS

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ABSTRACT

This action research project sought to review the relevant literature and determine what interventions an educational institution would find suitable to reshape a student's maladaptive behavior into behavior that is not detrimental to the classroom environment. Over the course of a year-long observation period, four students served as a target and control group for determining the effectiveness of The Good Behavior Game (GBG), a game in which students work as a group to complete a goal, scoring points for uncooperative behavior. The GBG was found beneficial for decreasing maladaptive behavior in preschool students, yet was determined ineffective at addressing maladaptive behavior in students who have a "Very Likely" Autism Spectrum Disorder (ASD) probability and are identified as requiring substantial support according to the Gilliam Autism Rating Scale, GARS-3.

KEYWORDS

Maladaptive Behavior, Good Behavior Game, Remediation Strategies, Intervention, Behavioral Evaluation, Autism Spectrum Disorder.

1. INTRODUCTION

In a perfect world, every student would be an exemplar of behavior and commitment, fully dedicated to the task of acquiring the educational skills that they will need to perform at their highest levels. In reality, however, students bring into the classroom their outside experiences, loaded with difficulties or learned behaviors that may imbue the student with behaviors that are not conducive to the learning environment desired in a typical school classroom. When this is the case, the student's peers may find themselves distracted by outbursts or misbehavior which, in turn, deprives them of the valuable time that would be otherwise spent learning (Ervin, et al., 2018). In addition, the student demonstrating said outbursts or ill behavior is depriving themselves of their educational opportunity, finding themselves ejected from the classroom or suspended from school altogether (Leaf, et al., 2023). "Disruptive student behavior can have a negative impact on everyone in the school—the students exhibiting the behaviors, their peers, and their teachers" (Ervin, et al., 2018). In this environment, the teacher or school administration might feel obliged to intervene, possibly even to call upon professional intervention in the form of a behavioral specialist. Developing an action research plan will assist the teacher in developing an implementation plan, learning what the academic literature recommends, and procuring the data necessary to determine if the behavior can be mediated by the school or if it is required to seek the assistance of a behavior specialist.

2. MALADAPTIVE BEHAVIOR AMONG YOUNG LEARNERS

When a student's behavior is deemed excessively disruptive to the classroom environment it will limit the potential for the transmission of educational content, thus restricting the ability of peers to gain equitable access to the education that they are at school working hard to obtain. Specific examples of maladaptive behavior in the classroom are described in the research of Wilcox, et al. (2022) as problems paying attention in class, failing to form good relationships with peers, not sitting quietly when expected to do so, jumping out of the seat in sudden outbursts, and continued aggressive or disruptive classroom behavior. This should not imply, however, that the student demonstrating the provocative behavior be continually removed from the classroom, a response that would deprive the student of their opportunity at an equal education while also doing nothing to improve the behavior of the difficult student. Intervention would be the preferable means of managing the situation, behavioral intervention strategies, such as the Good Behavior Game (GBG), a whole-class activity centered around rewarding good behavior, may provide a suitable answer (Ervin, et al. 2018).

2.1. Gather Evidence

The author of this paper has currently been involved in this exact predicament; at the author's school, a student, a child is continually disruptive, disrespectful of all teachers and school administration, and inclined to corral other students into disruptive behavior. The problem is ongoing and detrimental to providing her peers with a beneficially equitable learning experience. The school administration has thus found itself tasked with the difficult decision to consult with the student's parents and encourage them to agree to a request for professional observation by a behavioral specialist. To assist the school administration in its endeavor, the author engaged in active research to determine, with specific respect to the student in question, what academic research has determined successful in similar scenarios.

The author gathered data through a multi-faceted process of data collection: 1) journals were kept, documenting the behavior of the student with special attention paid to outbursts or lack of self control or self governance; 2) regular consultation or interviews were held with colleagues, and the student's parents, keeping all parties informed of the in-class observations and how they compared with, and impacted the other students in the classroom; 3) academic journals were researched in order to obtain a more comprehensive understanding of when and why outside, professional assistance should be obtained; 4) a clear and concise determination of desired outcomes were developed by the school administration (including this paper's author) which stated what behavioral benchmarks are required from the student to maintain an equitable classroom learning environment; 5) an action plan was devised and enacted, one that took into consideration all the variables listed above, after which the outcomes were documented, analyzed, and evaluated so that all parties could decide to proceed with, refine, or terminate the intervention based on the desired outcomes of the action plan.

2.2. Purpose

The purpose of this action research was to determine a form of effective implementation that would improve upon maladaptive behavioral traits, and at what point outside specialists and intervention should be sought in an attempt to evaluate the student's behavior and determine if behavioral assistance is deemed necessary or professionally prescribed. It is a complicated determination for school staff and administration as most educators are trained in their specific fields of study; teaching, management, or operations. The average school teacher or administrator has not received the requisite education in behavioral psychology to diagnose when a student's

behavior warrants professional consultation, yet the school is obliged to become involved in order to maintain a beneficial learning environment for all involved parties; students and staff. It is for this reason that active research should be applied to hypothesize an action plan that will create a framework for a more beneficial outcome, one that takes into account the needs specific to the student (determined through in-class observation and journaling), a respect for the ethical boundaries of all involved parties, as well as utilizes the findings in academic literature. This concern for ethical considerations was stressed by Fisher and Bloomfield in their explanation of action research, “Upholding the four main ethical principles of autonomy, beneficence, non-maleficence, and justice are crucial to ensure that participants provide voluntary consent without coercion” (Fisher and Bloomfield, 2019). In this way, a teacher or school administrator not formally educated in behavioral psychology can make a well-informed and data-driven conclusion on how best to proceed with an intervention strategy.

2.3. Research Question(s)

When a school encounters a student who exhibits maladaptive behavioral tendencies for their age, the teacher or administration might be inclined to simply remove the student from class, sending them to time-out, detention, or possibly even suspension from school. Ervin, et al. (2018), recognized that this reaction is not beneficial in improving the student's maladaptive behavior and could exacerbate the undesirable tendencies of the student, possibly turning to violence or abuse in a desperate attempt at attention seeking. While professional, outside intervention, i.e., behavioral specialist, behavioral psychologist, or paraprofessional aide, can assist in these matters, Leaf, et al. (2023), argued that a preventative approach should first be attempted due to the potential for a complete eradication of disruptive behavior through intervention. In light of this position, the following research question will guide the action research study: How will behavioral testing and class-wide behavioral intervention strategies improve a student’s behavior?

Table 1. Research Questions.

Problem	Purpose	Research Question
Students’ behavior has become disruptive enough that it has been deemed to be depriving the other students of the class of equitable access to education while also limiting the disruptive students of their educational potential.	To ascertain through colleague interviews and academic research findings what intervention should be sought and what ethical boundaries need to be respected throughout the intervention.	How will behavioral testing and class-wide behavioral intervention strategies improve a student’s behavior?

This research sought to define the problem mentioned above, review the relevant academic literature, and determine at what point an educational institution would be advised to warrant a student's behavior excessively detrimental to the classroom environment. Once a reasonably suitable amount of data had been gathered, an action research plan was devised with the desired outcome of classroom behavior that does not infringe upon the educational equity of the classroom. The desired outcomes met the approval of the student's parent/guardian, school administration, and professional assistants while maintaining the ethical boundaries of all parties involved.

2.4. Literature Review

Not all maladaptive behavior exhibited by students falls within the spectrum of average student behavior (Leaf, et al., 2023) and may be early indicators of a disability. As has been mandated by the federal government, "child-find" activities for children who demonstrate signs of disability should be conducted by teachers in the early years of compulsory education in order to locate and support students as early as possible (Gilliam, 2023). It is for this reason that a literature review was conducted to help teachers better decide what intervention should be employed, or when to consult psychological or behavioral professionals to observe, examine, and/or intervene with a student who appears to exhibit maladaptive behavioral tendencies for their age. Two assessments, administrable by common educators, were found to be effective for achieving this purpose; the Early Screening Project, by Walker, Severson, and Feil (2023), and the Gilliam Autism Rating Scale, Third Edition, by James Gilliam (2023). More on these assessments will be discussed later in this paper.

2.5. Common Themes

Common themes such as forms of intervention, indicators of maladaptive behavior, ethical concerns in behavioral intervention, and the importance of behavioral specialist intervention, especially for students with pervasive developmental disabilities (PDD), were found to tie the research together. Walker, et al. (2023), Early Screening Project, constructed a manual for accurately determining when students are demonstrating internalizing or externalizing behavioral difficulties. Gilliam, (2023) provides a comprehensive tool for screening students who may fall on the autistic spectrum, as well as cautions when interpreting the results. Wilcox, et al. (2022) expound on the benefits of the GBG, as well as the usefulness of the Teacher Observation of Classroom Adaptation-Revised, which measures students' performance in accepting authority, social participation in class, concentration, and aggressive/disruptive behavior. What will follow is a synthesis of the themes and pertinent information in determining suitable interventions for maladaptive students, as well as the cautions and ethics surrounding the issue.

3. INDICATORS OF MALADAPTIVE BEHAVIOR

According to Ervin, T., et al. (2018), "Approximately three to four students in an average classroom engage in disruptive behaviors that interfere with normal academic and social development...upward of 62% of educators reporting increases in challenging student behavior that interferes with classroom instruction." Research describes this disruptive behavior as the following: difficulties paying attention, being not ready to learn the subject matter, aggressive/disruptive behavior, socializing inappropriately, being physically aggressive with classmates, not sitting quietly, poor learning, early and continuing classroom aggressive and disruptive behavior, jumping out of their seat, difficulty accepting authority, lack of social participation in class, poor concentration, and aggressive behavior (Wilcox, et al., 2022), inappropriate responses to disruptive behavior (Ervin, et al., 2018), having tantrums, using obscene language, exhibiting painful shyness, and finally setting fires or vomiting after eating (Walker, et al., 2023). Naturally, most of these behaviors range on a spectrum anywhere from manageable to a possible indicator of developmental disability, thus, for a teacher to be capable of safely responding to these behaviors and accurately determining a reliable intervention, training, and/or professional guidance from a behavioral specialist is recommended (Leaf, et al., 2023).

3.1. Teacher Intervention

Research recommends various forms of intervention, all of which take place in the classroom, and the majority of which are conducted by all students, regardless of behavioral ability. These exercises focus on positive reinforcement, observation-based learned behavior, and team building. One of the exercises described by Ervin, et al. (2018), as well as Wilcox, et al. (2022), is the Good Behavior Game (GBG). Developed by Barrish, Saunders, and Wolf in 1969, the GBG teams small groups of students together for various activities. Students are awarded points for inappropriate behavior with the goal of completing an assignment with the lowest number of points. In the early stages of the game the winning team might be awarded trinkets, however, as the game—students experience with the game—proceeds, more intrinsic awards may be granted such as extra reading time (Wilcox, et al., 2022).

3.2. Behavioral Specialist Intervention

It is recommended that teachers and administrators utilize caution when resorting to pursuing specialist intervention; a behavioral psychologist, educational diagnostician, autism specialist, speech-language pathologist, or a similarly trained professional (Gilliam, 2023). Students who receive extracurricular training or intervention are at risk of being targeted by peers for harassment and are even at risk of developing PTSD from the experience (Leaf, et al., 2023). Despite the risk, for students who demonstrate behaviors with indicators of developmental disabilities such as Autism Spectrum Disorder (ASD), research shows that they benefit most from receiving early, intensive intervention in a comprehensive program (Leaf, et al., 2023). The research demonstrated in the literature reviewed makes it clear that there is a place for both teachers and trained behavioral specialists to assist students with maladaptive behavioral traits.

3.3. Favorable Outcomes

Fortunately for all involved parties; teachers, administrators, specialists, and parents, the outcomes of behavioral intervention are positive and many forms of intervention have been found by researchers to be effective. For example, research indicates the previously mentioned GBG to be beneficial in decreasing maladaptive behaviors. Moreover, observational learning, such as teacher-student modeling or video modeling, can "influence the observer's future behaviors." (Ervin, et al., 2018). Likewise, for students with ASD, functional analysis—utilizing function-based replacement behavior to correct problem behaviors—has proven successful in helping individuals navigate social situations that might otherwise be difficult or stress-inducing for them (Leaf, et al., 2023). As is evidenced by the above findings, there is a multitude of interventions that can be incorporated into a teacher's curriculum, interventions that are supported by years of research to decrease and make manageable, behaviors that might otherwise lead to a student being expelled from the classroom; a last resort which will only harm a student's academic success without addressing the underlying issues that have induced their inappropriate behavior.

3.4. Ethics

In regards to mental and behavioral disorders, popular culture has been undergoing a change in its stigmatization of people who struggle with or receive treatment for, said disorders. This is reflected in the professional world as well; according to research conducted by Leaf, et al. (2023), "...in 1999 there were only 30 Board Certified Behavior Analysts (BCBAs) and Board-Certified assistant Behavior Analysts (BCaBAs) in the world; as of October 2019 there are over 39,000." Individuals who receive care for their disorders, however, have not been without complaint. Leaf, et al. (2023), in their research on behavioral intervention for individuals with ASD noted,

"...complaints [by consumers] range from the alleged abusiveness of behavioral intervention to negative side effects of behavioral intervention (e.g., PTSD)." They argue that there is a need for greater consumers of ASD services to address concerns and for interventions to be modified to better suit the consumers' needs.

Paramount to success in decreasing and improving classroom behavior is the involvement and cooperation of parents and guardians. Many issues, such as abuse, touching of private parts, nightmares, or other sleeping problems, that may not be apparent in the classroom are engaged in outside the classroom or at home. While parents might be reticent to divulge this information, cooperation with teachers and administrators can provide the onus to push for intervention (Walker, et al., 2023). Regular communication between educators and parents/guardians is also necessary to maintain proper ethical concerns, i.e. that all parties communicate and are in agreement as to the intervention that the student will be engaged in.

4. BEST-PRACTICE SOLUTION AND INTERVENTION

Currently, at JST International School (pseudonym), Akashi, Japan (where the author is employed) some students are engaging in inappropriate behavior that is not in accordance with their peers. These students demonstrate difficulty following instructions, following the guidance of their peers, sitting for even a short period, leaving and entering the classroom at will, and acting violently toward peers and teachers alike, often unprovoked. In addition, they are prone to outbursts that are unwarranted for the situation. Following the instruction of Fisher and Bloomfield (2019), the teachers and administration have been keeping a journal of their inappropriate behaviors, as well as their responses to praise or admonitions. The JST staff has been in communication with parents and is of the conviction that the students are not demonstrating indications of behavioral disability, with the exception of one student who will be referred to as, "Ni" for the purpose of protecting her identity. This conclusion was reached on the premise that the students do not demonstrate autistic or attention deficit tendencies when engaged in activities of their own desire and engage well socially with other children—except for a small proclivity for violence demonstrated by Ni. Based upon our observations, we, the staff of JST International, engaged in action research to test and determine classroom interventions that would best serve these students without drastically altering the curriculum.

The intervention began by utilizing the aforementioned behavioral assessments. First, the Gilliam Autism Rating Scale (Gilliam, 2023) was conducted to better identify whether or not there are indicators of Autism Spectrum Disorder (ASD) present. After this, we proceeded with the Early Screening Project (Walker, et al., 2023) with specific regard to the Aggressive Behavior Scale (for Externalizers) and the Social Interaction Scale (for Internalizers), to better understand their behavioral tendencies against the backdrop of professional research. Both of these assessments have been determined to be administrable by educators with no special certifications or clinical qualifications. Lastly, we constructed class-wide activities that incorporated the GBG and continued to journal in order to track improvement, or lack thereof, and to see where we could alter the intervention to better exploit the attributes of the game that provide improvement. Our desired outcome was, in conjunction and with the support of their parents, to see an improvement in their classroom involvement and attention to lessons, and eradication of irrational, violent responses to admonitions. Fortunately, the findings from the literature review demonstrated that, with intensive and well-conducted intervention, students are "...significantly less likely to have a diagnosis of conduct disorder, to have been suspended from school, and to need or receive mental health services relative to controls" (Wilcox, et al., 2022).

4.1. Methodology and Design

The intended intervention and data collection were ethnographic in design, relying on observation, journaling, interviews, and focus groups with school staff and family members of the student, and were not dependent on a predetermined outcome other than improvement. Fisher, et al. (2019), defined a qualitative study as one where the researcher uses "purposive sampling" to gain an in-depth understanding of a subset of a population. This is compared to a quantitative study which makes generalizations from a large population or dataset. The focus of this action research was to direct attention to disruptive students, implement a preventative approach to behavioral education through class-wide activities, include action-based replacement behaviors, and determine if improvements in behavior can be obtained without the need for specialist intervention; thus, we chose an ethnographic, qualitative approach to our methodology.

4.2. Population, Sample, and Professional Practice/Workplace Setting

While the above-mentioned students were the focus of this particular research action plan at JST International, intervention techniques that were found to be beneficial could be again implemented with future students, or implemented by the research community at large. With the implementation of interventions, such as the GBG, an activity that rewards good behavior, and observational learning, the act of learning positive behaviors by observing others acting out specific examples of these behaviors (Leaf, et al., 2023), the desired outcome is that improvements would be seen, not only in the main subject of the study, but in other students as well. As previously discussed, the interventions were conducted by, or involved the entire class; e.g. one goal was learning how to safely and effectively communicate wants and needs, but not in a vacuum, as the entire classroom was active in the learning process. To make any research meaningful, however, a control is required so that any behavioral change can be determined against it. In the case of this study, the control will take the form of three students, Yu, Ma, and Te (pseudonyms were used to protect their identities), the data collected pertaining to the four students' responses to the GBG, as well as by comparing the target subject's behavioral tendencies to that of her peers.

4.3. Data Collection Plan

Stahl and King, in their research on *Expanding Approaches for Research* (2019), provide an excellent framework for qualitative research, and it is this framework that this action plan was built upon. The first source of data collected consisted of field notes, journals, and meeting minutes in which the behavior of the subjects was discussed and noted. The results of the behavioral assessments provided the second source of data. The third source of data came from a combination of field notes and journaling throughout the intervention, as well as from follow-up behavioral examinations that were conducted upon the annual termination of the observation period. The triangulation of these data provided a thorough, trustworthy examination of the target student, as well as the three control subjects. The timeline for this action research project was one year. Once the annual behavioral assessments were conducted and an evaluation of the data had been synthesized, a decision was made as to the need for professional behavioral specialist intervention. Naturally, the desired outcome was that such assistance wouldn't be necessary, however, in the case of the target student, Ni, it was agreed upon by the staff of JST International and the mother of the target student that an outside behavioral professional be invited to attend classes for a two-day period and prescribe a clinical evaluation of the student, her maladaptive behavioral tendencies, and the likelihood that she may be on the Autistic spectrum and require specialized support.

4.4. Data Analysis Plans

Due to the nature of the proposed research plan and desired interventional outcomes—that of improved classroom behavior, attention, and participation among the subjects of the study—it was concluded that a qualitative data analysis method would be most suitable in providing a comprehensive synthesis of the gathered data. The methodology utilized within this qualitative framework consisted of content analysis, comparative analysis, and thematic scanning for patterns in the data. Thematic scanning resulted in the recognition of themes in the data, such as triggers for the subjects' maladaptive behavioral outbursts. Content analysis utilized these themes or patterns to construct relationships, categories, and possible connections between these themes (Fisher & Bloomfield, 2019). Lastly, a comparative analysis embellished upon the resulting connections and relationships in the data from which meanings and conclusions could be derived. Another attribute of the data analysis used was Grounded Theory; solution-focused data accumulation and analysis via interviews, observation, and participant feedback (Azulai, 2021). Concerns about meanings, values, and beliefs held by the subject were noted and incorporated into the data analysis.

5. FINDINGS

After a period of 12 months of monitorization, the student serving as the focus of this study, Ni, had 45 recorded occurrences of maladaptive behavior exceeding what is considered acceptable for class standards at the educational institution where the study took place. This compares to the control subject Yu, with 5 recorded occurrences of maladaptive behavior, subject Ma, with 5 recorded instances, and control subject Te, with 6 recorded occurrences of maladaptive behavior. The focus subject, Ni, had on average one occurrence every four and a half days that was deemed worthy of being recorded as an occurrence outside of what is acceptable for classroom behavior, while the control subjects all exhibited occurrences on average of once a month for the first six months, and none at all after the initial six month period in which the Good Behavior Game (GBG) was employed, except for control subject Te, who exhibited one final occurrence in the seventh month of this study. This decline in maladaptive behaviors over six to seven months until behaviors were considered negligible and in line with normative student behavior was attributed to the GBG, as well as age—all of the control students were between the ages of four and five years old when the study began and had progressed in both their English communication abilities and their capacity for sociological awareness between the ages of four and five years old. By comparison, the focus subject, Ni, showed no decline in the rate of occurrences throughout the 12-month period, with a slight increase demonstrated in the 12th month. One notable occurrence observed in the twelfth month of the study was the striking of a teacher in the head as an attention-seeking behavior due to the teacher providing attention to another student and requesting that student Ni wait until the teacher was available to address her needs. Due to this behavior, as well as other recorded violent outbursts, the parent has been informed and in conjunction with the school, outside clinical specialists have been arranged to visit the school and observe Ni's behavior. The parent will then be given the choice of pursuing outside clinical assistance to address Ni's behavioral tendencies.

5.1. Assessments

As previously mentioned, the focus subject of this study, as well as the three control subjects, all received an entry assessment, and an exit assessment which consisted of the Gilliam Autism Rating Scale to better identify whether or not there are indicators of Autism Spectrum Disorder (ASD) present (Gilliam, 2023), as well as the Early Screening Project (ESP) (Walker, et al., 2023), with specific regard to the Aggressive Behavior Scale (for Externalizers) and the Social

Interaction Scale (for Internalizers), to better grasp the subjects' behavioral tendencies against the backdrop of professional research. It is worth restating that both of these assessments have been determined to be administrable by educators as they were both recommended by the authors of the assessments to be used and employed by teachers without holding specific licensure to do so. Both of these assessments are to be used as professional, psychological research-backed guidelines and not for any clinical evaluation. The results of the initial assessments were as follows; focus subject Ni, scored 93% on the Gilliam Autism Rating Scale, and demonstrated a "Very Likely" probability on the Autism Spectrum Disorder (ASD) scale with a Level 2 DSM-5 severity level requiring substantial support. On the Early Screening Project assessment, Ni scored in the 99th percentile for maladaptive behavior, an "Extreme" risk status, in the 5th bracket for externalizers (highest), and 3rd bracket for internalizers (medium). Control subject Yu, scored 7% on the Gilliam Autism Rating Scale, with a "Very Unlikely" ASD scale probability. On the Early Screening Project assessment, Yu scored in the 84th percentile, at "Low Risk" for maladaptive behavior, in the 1st bracket for externalizers (lowest), and 3rd bracket for internalizers (medium). Control subject Ma, scored 30% on the Gilliam Autism Rating Scale, with a "Very Unlikely" ASD scale probability. On the Early Screening Project assessment, Ma scored in the 98th percentile, "Extreme Risk" for maladaptive behavior, in the 3rd bracket (medium) for externalizers, and in the 1st bracket (lowest) for internalizers. Lastly, control subject Te, scored 30% on the Gilliam Autism Rating Scale, demonstrating a "Very Unlikely" ASD scale probability. On the Early Screening Project assessment, Te scored in the 69th percentile, "No Risk" for maladaptive behavior, and did not register in any bracket for the presence of externalizers or internalizers.

After the 12-month period of the study had concluded, both of the exit assessments, the Gilliam Autism Rating Scale and the Early Screening Project were administered once more. The results were as follows; focus subject Ni, scored 98% on the Gilliam Autism Rating Scale, demonstrating a "Very Likely" ASD scale probability with a Level 2 DSM-5 severity level requiring substantial support. On the Early Screening Project assessment, Ni scored in the 99th maladaptive behavior percentile, at "Extreme Risk," in the 5th bracket (highest) for externalizers, and the 3rd bracket (medium) for internalizers. Control subject Yu, scored 1% on the Gilliam Autism Rating Scale, a "Very Unlikely" ASD scale probability. On the Early Screening Project assessment, Yu had dropped to the 50th percentile for maladaptive behavior, "No Risk," and no longer demonstrated the presence of externalizers or internalizers. Control subject Ma, scored 25% on the Gilliam Autism Rating Scale, with a "Very Unlikely" ASD scale probability. On the Early Screening Project assessment, Ma's maladaptive behavioral score declined into the 69th percentile, "No Risk," and while he remained in the 3rd bracket (medium) for externalizers, he no longer registered a score on the internalizer ranking. Lastly, control subject Te, scored 28% on the Gilliam Autism Rating Scale, a "Very Unlikely" ASD scale probability. On the Early Screening Project assessment, Te scored in the 50th percentile, "No Risk" for maladaptive behavior, and once again did not register in any bracket for demonstrating externalizers or internalizers. A comparison chart is provided below summarizing the results.

Table 2. Comparing entry and exit assessment results.

Study Participant	Gilliam Autism Rating Scale Entry Assessment Results	Gilliam Autism Rating Scale Exit Assessment Results	Early Screening Project Entry Assessment Results	Early Screening Project Exit Assessment Results
Focus subject, Ni	93% (ASD Very Likely)	98% (ASD Very Likely)	99% (Extreme Risk)	99% (Extreme Risk)
Control subject, Yu	7% (ASD Unlikely)	1% (ASD Unlikely)	84% (Low Risk)	50% (No Risk)
Control subject, Ma	30% (ASD Unlikely)	25% (ASD Unlikely)	98% (Extreme Risk)	69% (No Risk)
Control subject, Te	30% (ASD Unlikely)	28% (ASD Unlikely)	69% (No Risk)	50% (No Risk)

In accordance with these findings, it can be ascertained that the control subjects demonstrated similar findings with a decline in maladaptive behavior after a year's exposure to the Good Behavior Game (GBG), whereas the focus subject, Ni, demonstrated higher indicators of the presence of ASD, as well as higher occurrences of externalizers (aggressive behaviors), and internalizers (social interaction abnormalities) according to the ESP, and a higher maladaptive behavior score in both the entry and exit assessments. It is per these findings that the GBG was decided upon as the best practice activity to address and correct maladaptive behaviors in a holistic manner that could be conducted and incorporated into class activities and would benefit the entire student body, not only the subjects that served as the focus of the study. However, the GBG does not appear suitable for decreasing maladaptive behavior in students whose outbursts may be attributed to Autistic behavioral disorders.

6. CONCLUSIONS

The GBG is a positive means to encourage students with occasional maladaptive behavioral traits to recognize their unfavorable behavioral tendencies and motivate them to exert greater self-control, and to act in ways that are more socially acceptable by their peers and the standards set by an educational institution. When the GBG is participated in at least two or more times a week for a duration of six months a decline has been noted in the occurrences of maladaptive behaviors demonstrated by behavioral-typical students who, on occasion, demonstrate difficulty with self-restraint and self-control. Therefore, the GBG is found to be effective for addressing and correcting the maladaptive behavioral tendencies of behavior-normative students. However, the GBG does not prove effective for students who register "Very Likely," DSM-5 Severity Level 2 or 3 on the autistic spectrum following the GARS-3 assessment and demonstrate occurrences of maladaptive behavior exceeding that of accepted norms, behaviors which may adversely affect the safety of classroom peers. Furthermore, in the case of the focus subject of this study, there were noted observances of the GBG provoking unfavorable behavior from the focus student, Ni, as the game offered opportunities for negative attention-seeking behavior; in each occurrence, the destruction of the task at hand was sought by the test subject to redirect attention from the group activity onto herself, even at the detriment of her group's score and success in task-completion. This study functioned largely as a case study, with the focus primarily on one student's maladaptive behaviors, and with three other students serving as control subjects. Future, large-scale research on the effectiveness of the GBG for decreasing maladaptive behaviors is needed to determine if the outcomes are in line with the finding of this study, or if contrary outcomes are observed when the subjects tested are in greater numbers, include a wider range of age groups,

and are derived from differing educational and socioeconomic backgrounds. A study of this kind would also benefit from the involvement of clinical psychiatrists, their observing of students' behaviors in typical classroom activities and how these behaviors compare to that of what is observed during participation in the GBG would contribute greatly to the determined effectiveness of the GBG in addressing unfavorable classroom and sociological behavior among learners in an education setting.

6.1. Reliability, Validity, and Ethics

The qualitative methodology employed in this action research proposal, focusing on implementing a form of class-wide behavioral intervention, and then examining the results to see how they compare to the subject's behavior before, and after the intervention had been implemented, determines that the validity of the data would depend upon four fundamental criteria; reliability, credibility, confirmability, and transferability. The results of the intervention were determined consistent with the data, as recorded in journals, meeting minutes, and test results. Triangulation, as an examination of a multitude of data, written, observed, and synthesized from literature, provides the creditability that was required for such action research. The results were based upon subject data, with no bias from the researchers (Courtney, 2021). Lastly, the results should be transferable to other populations of students who demonstrate similar maladaptive behavioral traits.

All participants in the interventions were treated equally, all as autonomous individuals, and precautions were taken to see that no harm came to any individuals, subjects, or peers. Multiple interviewers were present during interviews and the administration of tests to ensure that interviewers remained impartial and ethically minded. All interventions, likewise, have had multiple teachers involved and participating, ensuring that boundaries, both physical and emotional, were respected by administrators and social peers. Finally, should the participant or parent/guardian, at any time, have requested that the intervention and study be ceased, these concerns would have been discussed and respected—no such requests were made. In this manner, the three ethical principles laid out in The Belmont Report (Department of Health, Education, and Welfare, 1979), respect for persons, beneficence, and justice, served as ethical guideposts that ensured the subjects were treated respectfully, equally, and that no harm came to them.

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