

Georgia State University

## ScholarWorks @ Georgia State University

---

Communication Sciences and Disorders Faculty  
Publications

Department of Communication Sciences and  
Disorders

---

Winter 2014

### Using the Good Behavior Game to Promote Studio Skills in Elementary Art

Sarah A. Falconer

Ann Cale Kruger

*Georgia State University*, [ackruger@gsu.edu](mailto:ackruger@gsu.edu)

Follow this and additional works at: [https://scholarworks.gsu.edu/epse\\_facpub](https://scholarworks.gsu.edu/epse_facpub)



Part of the [Educational Psychology Commons](#), and the [Special Education and Teaching Commons](#)

---

#### Recommended Citation

Falconer, S. A., & Kruger, A.C. (2015). Using the Good Behavior Game to promote studio skills in elementary art. *Ubiquity: The Journal of Literature, Literacy, and the Arts, Research Strand*, 1, 70-96. [http://ed-ubiquity.gsu.edu/wordpress/wp-content/uploads/2015/05/Falconer-\\_Kruger\\_1\\_1\\_Final\\_3.pdf](http://ed-ubiquity.gsu.edu/wordpress/wp-content/uploads/2015/05/Falconer-_Kruger_1_1_Final_3.pdf).

This Article is brought to you for free and open access by the Department of Communication Sciences and Disorders at ScholarWorks @ Georgia State University. It has been accepted for inclusion in Communication Sciences and Disorders Faculty Publications by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact [scholarworks@gsu.edu](mailto:scholarworks@gsu.edu).

*Ubiquity: The Journal of Literature, Literacy, and the Arts,*  
*Research Strand, Vol.1 No.1, Winter 2014, 70-96*  
*Ubiquity:* <http://ed-ubiquity.gsu.edu/wordpress/>

**Using the Good Behavior Game to Promote Studio Skills in Elementary Art**

© Sarah A. Falconer and Ann C. Kruger

*Georgia State University*

Correspondence concerning this article should be addressed to Sarah A. Falconer, 175 Fenwyck

Commons Fayetteville, GA 30214

Contact: [sjones76@student.gsu.edu](mailto:sjones76@student.gsu.edu)

**Abstract**

The purpose of this study was to answer two questions: Does the use of the Good Behavior Game in an art education setting improve desired artistic behaviors (technique and studio practice)? Is more improvement evident with the use of tangible art supply rewards or with special art activities as rewards? Desired artistic behaviors were significantly improved in the group that received the tangible art supplies as a reward compared to the control group. No difference between the two intervention groups could be detected and thus the relative effectiveness of reward type could not be determined here. This study is the first to investigate the use of the Good Behavior Game in an elementary art setting and concludes that the game is beneficial for maintaining, if not improving, desired artistic behaviors.

*Keywords:* Art education, good behavior game, choice-based education

*Ubiquity: The Journal of Literature, Literacy, and the Arts, Research Strand, Vol.1 No.1, Winter 2014*

### **Using the Good Behavior Game to Promote Studio Skills in Elementary Art**

The arts are vital in the lives of children. Involvement in the arts enhances personal development as well as the creativity and innovation needed in the 21<sup>st</sup> century workplace (National Art Education Association, 2013). The first and sometimes only access to an education in the arts is in an elementary school. One challenge for teachers in the elementary art classroom is to support students to develop skills that are foundational to arts learning. This challenge includes supporting on-task behaviors and eliminating distracting behaviors, allowing students the time and attention appropriate to learning. It also includes cultivating skills specific to the art classroom, such as the respectful and careful use of materials. The latter was the focus of the present study.

The Good Behavior Game is a well-established technique to manage behavior, especially in the academic classroom. Typically, the Good Behavior Game uses rewards to reduce the frequency of undesired behaviors that interfere with learning (such as leaving one's seat or talking out of turn). However, the Good Behavior Game was tested in this study, for the first time, on its ability to improve arts learning skills highlighted in *Studio Thinking: The Real Benefits of Visual Arts Education* (Hetland, Winner, Veenema, & Sheridan, 2007). Teaching in the visual arts extends beyond sensorimotor skills; it leads to multiple ways of thinking. Hetland et al. (2007) detail these cognitive processes: they include developing craft, engaging and persisting, envisioning, expressing, observing, reflecting, stretching and exploring, and understanding the art world. The first skill, developing craft, is the focus of this study.

We tested the effectiveness of two types of reward in the Good Behavior Game compared to a no-intervention condition to enhance the development of craft. Teachers typically use tangible rewards (e.g., prizes, toys) in the classroom (Hoffmann, Huff, Patterson, & Nietfeld,

2009) to reinforce positive behaviors. In this study we compared the reward effectiveness of objects (art materials) with activities (choice-based art projects) to enhance craft in the art room.

### **The Good Behavior Game**

The Good Behavior Game is an effective way to influence behavior in the academic classroom; it reduces disruptive behaviors in a group setting by providing reinforcement contingent upon group execution of desired behaviors (Leflot, van Lier, Onghena, & Colpin, 2010; McCurdy, Lannie, & Barnabas, 2008; McGoey, Schneider, Rezzetano, Prodan, & Tankersley, 2010). Roughly 77% of individual problem behaviors receive peer reinforcement (McCurdy et al., 2008). In the Good Behavior Game, reinforcement for appropriate group behaviors is an excellent option for reducing these individual problem behaviors (Barrish, Saunders, & Wolf, 1969; Fishbein & Wasik, 1981). Commonly used reinforcements in the Good Behavior Game are those that occur naturally in a classroom environment, such as access to special projects and extra recess time (Barrish et al., 1969; Fishbein & Wasik, 1981). Other reinforcements such as money and candy also have been used (Barrish et al., 1969).

Most studies of the Good Behavior Game are focused on general education academic classroom settings. The game has been used effectively in math and reading classes (Barrish et al., 1969) and in history classes, from kindergarten through high school (Kleinman and Saigh, 2011; McGoey et al., 2010; Tanol, Johnson, McComas, & Cote, 2010). It also has been implemented successfully in an urban elementary lunchroom setting (McCurdy et al., 2008) and in a suburban elementary library setting (Fishbein & Wasik, 1981).

The Good Behavior Game has limitations. It can be difficult for a teacher to properly implement the game, as it requires awareness of all behaviors occurring in the classroom (Barrish et al., 1969). Effectiveness of the game depends on clarity in the definitions of desired

behaviors (McCurdy, Lannie & Barnabas, 2008). Using special projects as reinforcements in the game consumes large amounts of a teacher's time and creativity. Investigations of the game have not controlled the types of academic activities used (McGoey et al., 2010) nor manipulated the length of observations (Leflot et al., 2010). Despite these limitations, researchers have consistently found the Good Behavior Game effective in reducing disruptive and off-task behaviors and increasing desirable on-task behaviors (Harris & Sherman, 1973; Lannie & McCurdy, 2007; Ruiz-Olivares, Pino, & Herruzo, 2010; Saigh & Umar, 1983).

Fishbein and Wasik (1981) tested improvements in the Good Behavior Game in an elementary library setting. The students helped create the rules they would follow to receive reinforcement. The rules were stated in a positive manner; students received points for on-task behavior rather than for off-task behavior (Fishbein & Wasik, 1981). Thus, teams with the highest score (i.e., most positive behaviors) won. This is in contrast to standard formats in which teams with the lowest points (least negative behaviors) win. In Fishbein and Wasik (1981) on-task behavior increased, off-task behavior decreased, and the students' behavior in their regular classroom improved as well. Fishbein and Wasik (1981) suggest using this form of the Good Behavior Game in special classes like music, art, and physical education to improve behavior.

### **Choice-Based Education**

In choice-based education the teacher shares control of the classroom with the students; students are expected to seek out knowledge, attain deeper understanding, and make judgments about their work on their own (Brown, 2008). Providing only one lesson for an entire group of students does not allow for satisfaction of individual curiosities, interests, and personalities (Hetland et al., 2007). Students with choices explore topics that excite them (Andrews, 2010); this promotes appropriate behaviors, reduces challenging behaviors, and increases motivation

(Green, Mays, & Jolivette, 2011). The rewards that were tested in the present study (the choice of art activity versus the choice of an object) were motivated by ideas articulated in choice-based art education.

Students in the art classroom need to learn about art history and about the proper use of tools and techniques for creating successful artwork. This learning should be student-centered rather than teacher-centered for best results (Andrews, 2010; Hathaway, 2009; Rufo, 2011; Werth, 2010). Choice-based curricula introduce students to desired artist behaviors: playing with materials; dreaming and mentally planning; conceiving and expanding ideas for art making; risking false starts, abandoning failed attempts; using materials in traditional and idiosyncratic ways; combining materials and genres; completing several pieces in a short amount of time or work for a prolonged amount of time; turning mistakes into ideas for new projects; expressing thoughts in artwork (Hetland et al., 2007). A choice-based atmosphere encourages the natural learning styles of children (Werth, 2010) and may be ideal for older elementary students (4<sup>th</sup> and 5<sup>th</sup> grade) who are becoming more aware and critical of their artistic abilities. Allowing them to make choices about their artwork may provide them with more confidence and more willingness to participate in the art making process (Rufo, 2011).

To create a successful choice-based learning environment, several stations should be available for students to access. Stations provide students with the opportunity to choose materials that are appropriate for their desired outcome and use them in ways that may not be traditional. The goal of incorporating centers in the art room is not necessarily for students to produce long-lasting products (although sometimes this does occur); rather, the point is for students to explore the materials and techniques that are of interest to them (Werth, 2010).

The choice-based art room can be considered complete with the setup of drawing, painting, collage, and sculpture centers. Adding clay, printmaking, fiber arts, book arts, digital arts, mask making, puppetry, architecture, and murals are also excellent options when the time and materials are available. When stations are first introduced, students need to know three things: what types of things they will find in that station, how to use them, and how to properly put them away. It is important to begin stations with simple materials. If students are doing a good job managing the materials they are given, additional materials can be made available. At each station, activity menus should be provided to the students. These are directions and information about artists, materials, or techniques that are written on posters or stored in pockets (Gardner, 2011). Menus are important to have at each station, as they provide students with any information or directions needed to work at the station (Douglas & Jaquith, 2009).

Although a choice-based art room is designed for students to explore and control their own learning, teacher-delivered whole group mini-lessons can be a successful way to quickly introduce students to a new artist, material, or technique. These sessions typically last about five minutes, and students do not have to use the new information right away; it can be saved for a later date. If one-on-one instruction is needed, teacher-delivered individual lessons also may be provided (Hathaway, 2009).

Teachers often use tangible rewards to increase desired behaviors (Hoffmann et al., 2009), but the effect of both tangible and intangible rewards on intrinsic motivation and on creativity is controversial (Boggiano & Ruble, 1979). For example, one recent study compared the effectiveness of tangible versus social rewards on children's willingness to eat vegetables (Cook, Chambers, Añez, Croker, Boniface, Yeomans, & Wardle, 2011) and found them equally effective when compared to a no-reward condition. In the current study, we directly compared



the effectiveness of a delayed tangible reward (choice of an art supply that the student could keep) versus a delayed activity reward (choice of an art activity; the student could not keep the art supplies). This was motivated by the paucity of literature directly comparing the two and by the emphasis in choice-based education on chosen activities in a scaffolded learning environment as educationally beneficial and motivating. In the current study, the activity reward was the only choice-based activity available to the students; the art room experience was otherwise teacher-led.

## **Method**

### **Research Questions and Hypotheses**

We have found little literature that appertains to the use of the Good Behavior Game in an elementary art setting. Two research questions were addressed.

(1) Does the use of the Good Behavior Game in an art education setting improve desired artistic behaviors? We tested this by comparing the improvement in specific studio skills outlined in Table 1 over time in the no-intervention group (Class C) and in the intervention groups (Classes A and B).

(2) Is more improvement evident with the use of tangible art supply rewards or with special art activities rewards? Class A worked toward a chance to participate in a free choice art activity that occurred at the end of the week, and Class B worked to win a tangible art supply that was presented at the end of the week.

Our first hypothesis was that the use of the Good Behavior Game would in fact improve studio skills with the students (Classes A and B would show more gains than Class C). Our second hypothesis was that rewarding students with art activities would be more effective than rewarding them with tangible art supplies (Class A would show more gains than Class B).

**Participants**

All students in three 5<sup>th</sup> grade classrooms at an urban elementary school in the southeastern United States participated in this study during the 2012-13 school year. According to school records, the school population was 96% African American and 4% European American; 77% of the student population qualified for the federal free or reduced lunch subsidy (School Profile, 2008). Each fifth grade classroom had approximately 20 students in it, and the fifth grade classes were not different from the total school population or from each other demographically, academically, or behaviorally. There were seven tables in the art classroom, with two to three children per table.

**Procedure**

This study involved the observation of student work for the appearance of one studio habit of mind: developing craft (Hetland et al., 2007). Developing craft includes technique and studio practice. Technique is defined as using the materials provided in a safe and appropriate manner to create artwork (as demonstrated by the art teacher for all three classes before beginning). For the purpose of this study, safe handling included using the tools as demonstrated, not striking other students with the tools or leaving one's seat with the tools without permission. The importance of safe handling was reiterated throughout the study for all activities.

Studio practice is defined as properly caring for tools, materials, and space. This includes keeping tools and materials intact, not throwing tools and materials, and properly putting them away after use (this could include putting them in specially located storage bins or washing them). Properly caring for the space includes students cleaning up after themselves (throwing away trash, properly storing materials, and cleaning their tables if needed). See Table 1 for an outline of the targeted skills.

Table 1

*Developing Craft*

---

Category	Behavior
Technique	Using materials in a safe and appropriate manner to create artwork.  Safe handling includes using tools for their demonstrated purpose, not striking others students with the tools, not leaving one's seat with the tools.
Studio Practice	Properly caring for tools, materials, and space  Keeping tools intact, not throwing tools or materials.  Properly putting away tools and materials after use.

---

The first author and the school's Curriculum Support Specialist were trained to observe target behaviors by scanning all tables in 60-second intervals and then recording students' target behaviors. If each student at a table was exhibiting one of the targeted behaviors, the table

received one point for that interval. Training continued until there was 90% agreement. During the experiment the first author recorded all behaviors, and the Curriculum Support Specialist independently coded 20% of the study's observation opportunities, distributed across conditions and over time. Reliability was excellent; there was 100% agreement for the pretest and Days 1- 5 (Cohen's kappa=1.0) and 97% agreement on the posttest (these data was not included in the analyses; see below).

**Pretest Procedure.** Classes were randomly assigned to one of three conditions by drawing straws. At the beginning of the study all participating students (Classes A, B, and C) were randomly assigned to seats on the first day. (The majority of published studies on the Good Behavior Game include random assignment of students to teams based on seating.) Students were required to sit in the same seat each time, and a seating chart was created to check compliance throughout the study. There were two to three students at each of seven rectangular tables. Thus, the class was divided into 7 teams, 1 team per table, marked by colors. During the lesson, at each observation opportunity, if the coder observed every student at the table exhibiting one of the desired behaviors, she recorded one mark for that team.

**Intervention Procedure.** During the intervention phase, Classes A, B, and C met for a total of five times. Each class lasted 45 minutes; roughly 25 minutes of this time was devoted to observation. Classes met during the scheduled art time (once a week for 45 minutes). In Classes A and B, at the beginning of the period, students were informed that they would be playing a game and were instructed on the rules. The game requires that the students exhibit desired studio behaviors, which were discussed prior to the start. A visual reminder of these desired behaviors was posted for the students to view at all times. The target behaviors of the students were observed in all three classes, but only Classes A and B were playing the Good Behavior Game.

To properly use the time sampling method, the IntervalMinder application for iPhone was used. This application allows the user to set the desired interval length and choose the type of notification to receive at the end of each interval. For the present study, a beep tone was used. Both observers had access to this application and used earbuds for privacy.

Whichever team had the most points at the end of the class period was the day's winner. By winning the game, students received participation in a free choice art activity (Class A) or a tangible art supply (Class B), both at the end of the week. If there was a tie, more than one team was able to win the game. Class C served as the control group and did not participate in the Good Behavior Game.

The method used to carry out the Good Behavior Game in this study replicates the standard method used in several other studies. This includes transparency about the goals and rules of the game and the careful training of the desired behaviors. It uses a team approach to leverage peer reinforcement of desired behaviors. In a study by Kleinman and Saigh (2011), classroom rules were posted, and students were divided into teams. The teacher stated that he would put a mark on the board after each rule infraction. Teams with fewer points won the game. In another study by Barrish et al. (1969), the class was divided into two teams to play a "game." With each occurrence of an unwanted behavior, a mark was given to that team on the board. Again, the team with fewer points won the game. In yet another study conducted by Harris and Sherman, (1973), the Good Behavior Game began by creating teams and stating the rules of the game, again with marks accumulating on the board for undesired behaviors.

**Intervention Classroom Activities.** In the intervention groups, Day 1 began by introducing students to the rules of the Good Behavior Game. This includes reiterating how each team would receive points for exhibiting the desired behaviors for the day. Desired behaviors

were detailed throughout the class. In all three classes we introduced students to the life and work of Georgia O’Keeffe. Students participated in a discussion about the subject of O’Keeffe’s artwork, discussed the elements and principles evident and their opinions about it.

Next, the students gathered around the demonstration table. The teacher demonstrated how to use leaves to draw from observation and create a layered design of several leaves on the paper. Students had to draw from observation, they were not allowed to trace. The teacher also demonstrated how to overlap leaves to create a sense of depth. Students were given a piece of paper and sent back to their tables to begin creating their leaf sketches.

Observation began at this time. To earn points, students were required to do the following: Stay seated, keep their pencils and erasers to themselves (the tools of the day), fill their paper up, show evidence of overlapping (at least two leaves must overlap), and they had to draw their leaves from observation and not trace. At the end of the period, the winning table was told that they would participate in free choice art time (Class A) at the end of the week or that they would receive a tangible art supply (Class B) at the end of the week.

During Days 2-5, class began by re-introducing students to the rules of the Good Behavior Game. There was a review of the life and work of Georgia O’Keeffe and of procedures from the previous class. Next, students gathered to view a demonstration of the technique for the day. After the demonstration, students were sent back to their seats to carry out the steps in the printing process.

Students had the rest of the class period to create their stamps, or print their stamps depending on the day. Students were expected to keep their materials to themselves (pencils, erasers, Styrofoam) and remain in their seats. Students also were expected to trace their drawings completely, and then raise their hands for the teacher to remove their drawing for them. They

were then expected to trace over their drawing on the Styrofoam one more time. Students were able to earn points for exhibiting these desired behaviors throughout the length of the working time. At the end of each period, the winning table was told that they would participate in free choice art time (Class A) at the end of the week or that they would receive a tangible art supply (Class B) at the end of the week.

During the intervention phase of the study, Class C participated in the same lesson and activities, except for the Good Behavior Game.

**Posttest Procedure.** Two weeks after the completion of the five lessons in the intervention phase, the two observers repeated the procedure used at pretest, marking the targeted behaviors by the teams in Classes A, B, and C during a regular art lesson without the Good Behavior Game being used.

### **Treatment Fidelity**

The Curriculum Support Specialist completed the treatment integrity form for 24% of the implementation class meetings. She recorded that the teacher properly introduced the students to the Good Behavior Game, introduced the rules of the game, announced the beginning of the game, properly recorded instances of behaviors after each interval, announced the winners of the game, reviewed the game with students, and provided rewards to the winners of the game 100% of the times observed.

### **Social Validity**

Students in the intervention groups (Class A and Class B) completed a survey after the posttest day. The majority of students strongly agreed that they liked the Good Behavior Game, that the Good Behavior Game improved their studio behaviors in art, that they would like to play the Good Behavior Game in other classes, and that they stayed on task more while playing the

Good Behavior Game. Students in Class A agreed somewhat that the Good Behavior Game improved the studio behaviors of their classmates in art, but Class B disagreed. Both classes somewhat agreed that their classmates stayed on task more while playing the Good Behavior Game (Tables 2 and 3).

Table 2

*Class A: Social Validity Survey Percent Agreement*

Questions	<i>n</i>	Strongly Agree	Agree	Somewhat Agree	Disagree	Strongly Disagree
I like the Good Behavior Game.	11	73	9	9	0	9
The Good Behavior Game improved my studio behaviors in art.	11	64	18	9	0	9
The Good Behavior Game improved the studio behaviors of my classmates in art.	11	18	0	36	18	27



I would like to play the Good Behavior Game in my other classes.	11	55	18	9	0	18
I stayed on task more when I was playing the Good Behavior Game.	11	64	9	0	9	18
My classmates stayed on task more while playing the Good Behavior Game.	11	9	0	45	9	36

Table 3

*Class B: Social Validity Survey Percent Agreement*

Questions	<i>n</i>	Strongly Agree	Agree	Somewhat Agree	Disagree	Strongly Disagree
I like the Good Behavior Game.	14	86	7	0	0	7

---

The Good Behavior Game improved my studio behaviors in art.	14	29	14	29	0	29
The Good Behavior Game improved the studio behaviors of my classmates in art.	14	7	14	14	14	50
I would like to play the Good Behavior Game in my other classes.	14	71	7	7	14	0
I stayed on task more when I was playing the Good Behavior Game.	14	57	21	14	0	7
My classmates stayed on task more while playing the Good Behavior Game.	14	36	0	36	0	29

---

**Results**

Each table could earn one point per observation interval if all students at the table were exhibiting a desired skill at that time. We calculated the total possible points a team could earn each day by counting the number of observation intervals directed at that table on a given day. The performance by the student teams in the three classes was calculated as a percentage: the number of points earned divided by the total possible points on each day of the study. These data are represented in Table 4. Generally students in all three groups performed well, earning on average no less than 85% of the total possible points on any given day during the study. However, there was considerable variability in performance over time within groups. Unfortunately, students did not sit with their assigned teams during posttest, the only time that occurred during the study. This contaminates the posttest data and makes it impossible to compare the performance of teams on that day to their performance on other days. Therefore, only the data from the pretest and intervention (Days 1-5) are reported here. We will use the data collected on the last day of the intervention, Day 5, as the outcome measure for this study. Thus, we will test the effect of the intervention while the game was still being played (Day 5) rather than the effect after a delay (at posttest).

Table 4

*Percentage of Possible Points Earned by Teams*

<b>Group</b>	<b>Pretest</b>			<b>Day 1</b>			<b>Day 2</b>		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Class A	7	100.00	0.00	7	89.43	8.04	7	95.86	6.01
Class B	5	89.20	9.86	7	100.00	0.00	6	82.83	12.73
Class C	5	85.00	7.18	5	91.60	9.13	6	81.83	6.33
<b>Group</b>	<b>Day 3</b>			<b>Day 4</b>			<b>Day 5</b>		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
Class A	7	86.29	9.18	7	85.86	15.46	7	90.57	13.36
Class B	6	100.00	0.00	7	92.29	13.17	7	96.14	7.08
Class C	6	69.67	9.54	6	82.83	8.28	6	80.67	13.51

Our first hypothesis was that the Good Behavior Game would improve students' technique and studio practice. To test this, we conducted an Analysis of Covariance (ANCOVA) on the effect of Group (treatment, control) on the outcome measure (percentage of possible points earned on Day 5), controlling for pretest performance (percentage of possible points earned on the pretest). Results supported the first hypothesis; a main effect for Group was found,  $F(1, 13) = 7.7, p = .02, \eta^2 = 0.37$ , observed power = 0.73. This indicates that students in the treatment condition (Classes A and B) earned more points over time for the targeted skills than did students in the control condition (Class C). See Table 5.

Table 5

*Tests of Between-Subjects Effects, Dependent Variable = Day 5 % Correct*

Source	Type III	<i>df</i>	Mean	<i>F</i>	<i>p</i>	Partial	Observed	
	Sum of		Square			Eta	Power	
	Squares					Squared		
Intercept	Hypothesis	924.405	1	924.405	7.170	.018	.340	.702
	Error	1797.068	13.939	128.923				
Pretest	Hypothesis	7.319	1	7.319	.062	.808	.005	.056
%								
Correct								
	Error	1546.931	13	118.995				
Group	Hypothesis	919.799	1	919.799	7.730	.016	.373	.729
	Error	1546.931	13	118.995				

Our second hypothesis was that art activity rewards would be more effective than tangible art supply rewards in improving craft. To test this, we conducted pairwise comparisons (Least Significant Difference) after the ANCOVA above and found that there was no support for the hypothesis. There was no significant difference on the outcome measure between Class A ( $M = 90.04$ ,  $SD = 5.32$ ) and Class B ( $M = 94.89$ ,  $SD = 5.30$ ),  $p = .57$ . Class B had a significantly better performance on the outcome measure than the control group, Class C ( $M = 73.56$ ,  $SD = 6.58$ ),  $p = .02$ . There was no significant difference between Classes A and C,  $p = .11$ . Thus, although the intervention condition was more successful than the control condition in improving targeted behaviors (supporting our first hypothesis), this was no difference between the two reward types (failing to support our second hypothesis).

### **Discussion**

Prior to this study, there was little available literature on the Good Behavior Game in the elementary art setting. This study addresses that gap and builds on the research literature in several fields, including classroom management, art education, and choice-based education, to test an intervention to improve students' practice of foundational arts-related skills in the elementary art room. Our first hypothesis was that the use of the Good Behavior Game would improve technique and studio skills. Our second hypothesis was that rewarding students with art activities would prove more effective than rewarding them with tangible art supplies. Our first hypothesis was supported. Art-related behaviors improved in the intervention condition compared to the control condition. The second hypothesis, that activity rewards would be more effective than tangible rewards, was not supported, as there were no significant differences detected between the two reward groups. One explanation for this finding is that the activity

reward group, Class A, attained a perfect score at pretest, making it impossible for them to improve over time or to show superior change compared to another group. Another limitation of the method used here is the small number of teams in each of the three groups; this may have made it more difficult to detect group differences. Increasing the number of participating teams and/or the number of observations may result in enhanced power.

Art teachers often spend large amounts of time addressing unwanted behaviors, leaving them little time to teach technique and skills. More research like the present study should be forthcoming since the Good Behavior Game is a promising tool. It requires minimal preparation, and it successfully modifies behavior, making the classroom more manageable for the teacher. A well-managed classroom can support students' engagement with the artistic goals of the curriculum.

We found that tangible rewards are effective in increasing art-related behaviors; this finding may be useful to art teachers, regardless of the number of behaviorally challenging students in their classrooms. Tangible rewards can motivate students to accomplish the skills needed for success in the art room. Cook et al. (2001) found tangible and intangible rewards to be equally effective and superior to no reward in influencing children's consumption of vegetables. Similarly, in the present study, the reward condition was significantly more effective than the control, and the two reward types did not differ from each other in effectiveness. There may have been no difference between the reward conditions in the present study because the functions of the rewards were similar. That is, the students in the tangible rewards condition could immediately use their supplies to engage in activities similar to the activity rewards. For example, the reward of a drawing pencil may not be sufficiently different from the reward of a drawing activity. For future studies, the types of materials provided as rewards and the types of

art activities used as rewards should be studied systematically to more carefully discern their effectiveness.

In the future, carrying out this study with more participants, with varying age groups and varying rewards, will help determine the scope of the effectiveness of the Good Behavior Game in an art education setting and clarify which age groups prefer which type of reward. Future research efforts to support effective instruction in the arts will make a contribution to this essential component of children's education.



**References**

- Andrews, B. H. (2010). Student ownership: Learning in a student-centered art room. *Art Education, 63*, 40-46.
- Barrish, H. H., Saunders, M., & Wolf, M. M. (1969). Good behavior game: Effects of individual contingencies for group consequences on disruptive behavior in a classroom. *Journal of Applied Behavior Analysis, 2*, 119-124.
- Boggiano, A. K., & Ruble, D. N. (1979). Competence and the overjustification effect: A developmental study. *Journal of Personality and Social Psychology, 37*(9), 1462-1468.
- Brown, J. K. (2008). Student-centered instruction: Involving students in their own education. *Music Educators Journal, 94*(5), 30-35.
- Cook, L.J., Chambers, L.C., Añez, E.V., Croker, H.A., Boniface, D., Yeomans, M.R., & Wardle, J. (2011). Eating for pleasure or profit: The effect of incentives on children's enjoyment of vegetables. *Psychological Science, 22*, 190-196.
- Douglas, K. M., & Jaquith, D. B. (2009). *Engaging learners through artmaking: Choice-based art education in the classroom*. New York, New York: Teachers College Press.
- Fishbein, J. E., & Wasik, B. H. (1981). Effect of the good behavior game on disruptive library behavior. *Journal of Applied Behavior Analysis, 14*, 89-93.
- Gardner, H. (2011). Promoting learner engagement using multiple intelligences and choice based instruction. *Adult Basic Education and Literacy Journal, 5*(2), 97-101.
- Green, K. B., Mays, N. M., & Jolivet, K. (2011). Making choices: A proactive way to improve behaviors for young children with challenging behaviors. *Beyond Behavior, 20*(1), 25-31.
- Harris, V. W., & Sherman, J. A. (1973). Use and analysis of the "good behavior game" to reduce disruptive classroom behavior. *Journal of Applied Behavior Analysis, 6*, 405-417.

- Hathaway, N. (2009). Ten teaching and learning strategies in a “choice based” art program. *Arts and Activities, 144*(1), 36-37, 53.
- Hetland, L., Winner, E., Veenema, S., & Sheridan, K. M. (2007). *Studio thinking: The real benefits of visual arts education*. New York, New York: Teachers College Press.
- Hoffmann, K.F., Huff, S. D., Patterson, A.S., & Nietfeld, J. L. (2009). Elementary teachers’ use and perception of rewards in the classroom. *Teaching and Teacher Education, 25*, 843-849.
- Kleinman, K. E., & Saigh, P. A. (2011). The effects of the good behavior game on the conduct of regular education New York City high school students. *Behavior Modification, 35*, 95-105.
- Lannie, A. L., & McCurdy, B. L. (2007). Preventing disruptive behavior in the urban classroom: Effects of the good behavior game on student and teacher behavior. *Education and Treatment of Children, 30*, 85-98.
- Leflot, G., van Lier, P. A. C., Onghena, P., & Colpin, H. (2010). The role of teacher behavior management in the development of disruptive behaviors: An intervention study with the good behavior game. *Journal of Abnormal Child Psychology, 38*, 869-882.
- McCurdy, B. L., Lannie, A. L., & Barnabas, E. (2008). Reducing disruptive behavior in an urban school cafeteria: An extension of the good behavior game. *Journal of School Psychology, 47*, 39-54.
- McGoey, K. E., Schneider, D. L., Rezzetano, K. M., Prodan, T., & Tankersley, M. (2010). Class wide intervention to manage disruptive behavior in the kindergarten classroom. *Journal of Applied School Psychology, 26*, 247-261.

National Art Education Association (2013, March). Arts education: Creating student success in school, work. Life. Retrieved from

[http://afa.3cdn.net/8e3a2547433204e8e8\\_x0m6bny11.pdf](http://afa.3cdn.net/8e3a2547433204e8e8_x0m6bny11.pdf)<sup>1</sup>

Rufo, D. (2011). Allowing artistic agency in the elementary classroom. *Art Education*, 18-23.

Ruiz-Olivares, R., Pino, M. J., & Herruzo, J. (2010). Reduction of disruptive behaviors using an intervention based on the good behavior game and the say-do-report correspondence.

*Psychology in the Schools*, 47, 1046-1058.

Saigh, P. A., & Umar, A. M. (1983). The effects of a good behavior game on the disruptive behavior of Sudanese elementary school students. *Journal of Applied Behavior Analysis*, 16, 339-344.

School Profile. (2007-2008). (withheld for anonymity)

Tanol, G., Johnson, L., McComas, J., & Cote, E. (2010). Responding to rule violations or rule following; A comparison of two versions of the good behavior game with kindergarten students. *Journal of School Psychology*, 48, 337-355.

Werth, L. (2010). Beyond the art lesson: learning centers. *Arts and Activities*, 148(1), 22-23, 53.

**Author Bio:** Amber Falconer is a student in the Ph.D. program in the Educational Psychology Department at Georgia State University. She has master's degree in Educational Psychology as well as a bachelor's degree in art education. She has been working in the field of art education for seven years.

**Author Bio:** Ann Cale Kruger is a developmental psychologist on the faculty in Educational Psychology at Georgia State University. Her research investigates the functions of discourse, relationships, and thought in the development of cultural knowledge. Dr. Kruger also is a member of the research faculty in the GSU Center for Research on School Safety where she directs Project PREVENT, an intervention to promote the psychological health of middle grade girls.