Motivating Students Using Positive Reinforcement

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Motivating Students Using Positive Reinforcement

by

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Master of Science in Education
Motivating Students Using Positive Reinforcement

by

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Table of Contents

Chapter 1: Introduction ....................................................................... 1

Chapter 2: Literature Review ............................................................... 7
    Behavior Modification in the Classroom ....................................... 7
    The Importance of Positive Reinforcement .................................. 11
    The Use of Positive Reinforcement .......................................... 14
    Relationship between Positive Reinforcement and Student Motivation ...... 19
    Positive Reinforcement and Learning ........................................... 21

Chapter 3: Applications and Evaluation ................................................ 25

Chapter 4: Results ........................................................................ 29

Chapter 5: Conclusions and Recommendations ....................................... 33

References ...................................................................................... 38

Appendices .................................................................................... 43

Appendix A – Statement of Informed Consent for Parents .......... 43
Appendix B – Statement of Informed Consent for Minors .............. 44
Appendix C – Reward System Data Sheet ................................... 45
Chapter 1
Introduction

Statement of the Problem

The purpose of my paper was to explore behavior modification by using rewards to encourage positive, observable behavior changes in my students. Teachers have an opportunity to positively impact their students’ behavior, in addition to their education. I wanted to see if the idea of behavior modification was an effective method for teaching and encouraging students age-appropriate behaviors and social skills. I researched the use of rewards and positive reinforcement with regards to behavior modification by creating a classroom behavior management plan called “Marbles for Manners”. It was my intention that this reward system would positively reinforce students who used appropriate manners while interacting with others. For the purpose of this study, manners that could be objectively measured through verbal phrases such as “please”, “thank you”, “excuse me”, and “I’m sorry” were assessed.

Background of the Problem

One aspect of teaching is educators’ abilities to effectively manage their students’ behaviors. Many teacher education programs expose
preservice teachers to numerous strategies for managing students' behaviors because the most challenging aspect of teaching continues to be classroom management and discipline (Yost & Mosca, 2002). According to Witzel and Mercer (2003), “The area of behavior interventions in classrooms receives more attention than many other aspects of schooling” (p. 89). This is not surprising as teachers are expected to deal with discipline problems that were once a cause for suspension or expulsion from school since more and more students are being included in public school settings, in part due to the Individuals with Disabilities Education Act (Quinn et al., 2001).

Strong classroom management skills aid in teachers' abilities to successfully teach students with various needs; however, teachers struggle with managing their students' behaviors. Witzel and Mercer (2003) point out that classroom management is one of the most common problems facing teachers because disruptive students take up valuable learning time. Students with disruptive, defiant, and disrespectful behaviors often make it difficult for teachers to teach and students to learn. Educators who have students with problematic behaviors in their classrooms become extremely frustrated. These individuals often come to feel that they are ineffective at
working with students which is one cause of teacher attrition (Witzel & Mercer, 2003).

Another area teachers struggle with is whether or not students should be rewarded for behaviors that are expected of them. Some educators believe that it is not their responsibility to provide incentives for students; they feel that this is the job of parents. However, research in the area of behavioral skills training claims that feedback in the form of positive reinforcement is essential to teaching individuals appropriate behaviors and expectations (Miltenberger, 2008). Witzel and Mercer (2003) note that, “The most controversial issues in behavior management have been the use of rewards to motivate and teach students to follow classroom rules and routines and to complete academic assignments” (p. 88). The appropriate use of positive reinforcement and behavior modification are important for success in the classroom, as frequent reprimands, low expectations, and infrequent praise often result in students who exhibit challenging behaviors (Morgan, 2006). Educators can use strong classroom management skills to end, or at the very least avoid, an increase in problematic behaviors.
Significance of the Problem

All of my students were classified as having special needs and were placed in my learning resource classroom due to cognitive and/or behavioral deficits that required specialized support from a special education teacher. Many of my students had a difficult time appropriately interacting with adults and peers, especially in the area of manners. These students often required numerous verbal prompts and reminders from adults working with them to use manners. Unfortunately, the previous approach of verbally prompting my students to use appropriate manners did not have the intended positive effect of improving their social interactions.

Rationale

Through the use of positive reinforcement and rewards, I believe that students would be more motivated to display appropriate social skills when verbally interacting with adults and peers. It was my intention that “Marbles for Manners” would teach my students the importance of manners while encouraging them to treat others and themselves with respect.

One of my goals as a special education teacher of students with cognitive and behavioral disabilities is to teach my students skills that will help them become contributing members of society. I feel manners and
respect are extremely important qualities to posses. It was my objective that “Marbles for Manners” would encourage teamwork and cooperation as my students would be working together to earn their rewards.

This study allowed me to see if positive reinforcement and rewards affect students’ behaviors. If “Marbles for Manners” had a positive impact on my students by motivating them to use manners, even after the rewards were no longer in place, I could use this type of behavior management plan to teach and reinforce other social skills my students are lacking.

Definition of Terms

Behavior - What a person says or does.

Behavior modification - The consistent application of positive or negative consequences to reinforce the occurrence of a desirable behavior and/or to reduce the occurrence of an undesirable behavior.

Classroom management - A set of skills needed by a teacher to plan, implement, and maintain a learning environment in which students learn decision-making skills needed to be responsible for their own learning and conduct.

Manners - Polite ways of behaving or acting through the use of verbal phrases such as “please”, “thank you”, “excuse me”, and “I’m sorry”.
Motivation - A driving force that encourages an action or behavior to occur.

Positive reinforcement - The presentation of a reward immediately following a desired behavior intended to make that behavior more likely to occur in the future.

Reward - Something that is given in return for doing something else.

This action research project explored the theory of behavior modification through the use of rewards to promote positive behavioral changes in students with special needs. A classroom behavior management plan was created to observe the effectiveness of positive reinforcement on influencing students’ behaviors. Chapter two will provide a review of literature that contains the theoretical and practical findings with regards to the use of behavior modification.
Chapter 2

Literature Review

Behavior Modification in the Classroom

Behavior modification focuses on behaviors and behavior changes. Behaviors are what a person does or says. The purpose of behavior modification is to help change behaviors that have a social impact on one’s life while improving a specific aspect of that person’s life (Miltenberger, 2008). According to Mather and Goldstein (2001), “All behavior follows a set of consistent rules. Methods can be developed for defining, observing, and measuring behaviors, as well as designing effective interventions” (p. 96).

Behaviors have one or more dimensions that can be measured. These dimensions include the frequency or number of times a behavior occurs, the duration or how long a behavior occurs, and the intensity or physical force involved in a behavior (Miltenberger, 2008).

Behavior modification is a field of psychology that analyzes and modifies human behaviors (Miltenberger, 2008). It is the consistent application of positive or negative consequences to reinforce the occurrence of a desirable behavior and/or to reduce the occurrence of an undesirable behavior. As stated by Miltenberger (2008), analyzing a behavior means to
determine the relationship between the environment and that behavior to better understand why a person behaved the way he or she did, and modifying a behavior means to create and put into place procedures to help people change that behavior.

Four major figures in psychology were influential in the development of the scientific principles on which behavior modification, a theory of psychology that has been around since the early 1900’s, is based. The first major contribution of behavior modification was Edward Thorndike’s development of the law of effect, in 1911, which states behaviors that generate a positive effect on the environment are more likely to occur in the future (Miltenberger, 2008). An example of the law of effect pertaining to education is students receiving credit for doing their homework. This theory implies that students who consistently earn credit for completing their homework are more likely to continue this behavior.

In 1913, John Watson started a movement called behaviorism. Watson believed that observable behaviors were an appropriate subject matter of psychology and that all behaviors were controlled by outside events (Miltenberger, 2008). Behaviorism can be witnessed in schools when students who live in abusive and/or unstructured environments misbehave because
they have not been exposed to or taught socially acceptable behaviors by their parents. These students' undesirable behaviors are often a result of negative, unhealthy events that take place in their homes.

In the mid-1920’s, Ivan Pavlov’s experiments discovered the basic process of respondent conditioning (Miltenberger, 2008). Respondent conditioning, also known as classical conditioning, pairs a stimulus and response that occurs naturally with another stimulus to elicit a response that does not occur naturally. This theory is demonstrated in the classroom when teachers use the statement, “give me five”. This specific behavior management technique is used to quickly and quietly cue students to stop what they are doing. Students are expected to give the teacher their undivided attention while he or she speaks to the class. Teachers who implement this technique have conditioned their students to behave in a specific manner which is unrelated to the usual meaning of the statement.

B. F. Skinner is considered to be one of the most influential figures in the development of behavior modification (Labrador, 2004). During the 1930’s, Skinner expanded the field of behaviorism first developed by Watson by laying out the principles of operant condition which claims that the
consequence of a behavior controls the future occurrence of that behavior (Miltenberger, 2008).

Skinner’s work has influenced the field of education, as well as the field of psychology. He believed that positive reinforcement was more effective than punishment when trying to change and establish behaviors. Through his work, Skinner identified five main obstacles to learning. These obstacles are a fear of failure, the task is too long and complicated, the task lacks directions, clarity in the directions is lacking, and there is little or no positive reinforcement (Frisoli, 2008). Skinner also recognized that people can be taught age-appropriate skills using the following techniques. These techniques are giving the learner immediate feedback, breaking tasks down into small steps, repeating the directions as many times as possible, working from the most simple to the most complex tasks, and giving positive reinforcement (Frisoli, 2008).

Behavior modification is used in many areas to assist in changing people’s problematic behaviors. These behaviors are considered to be socially unacceptable and inappropriate for one’s age and/or ability. Additionally, these behaviors are often disruptive to one’s life. Miltenberger (2008) noted that, “A wealth of research in behavior modification demonstrates that these
behaviors often can be controlled or eliminated with behavioral intervention” (p. 11).

One field that consistently uses behavior modification is education, especially in the areas of classroom management and teaching students with special needs. The field of developmental disabilities has received more behavior modification research than any other area (Miltenberger, 2008), as individuals with disabilities often have behavioral deficits that are able to be overcome with the use of behavior modification.

Behavior modification continues to play a major role in special education. It is used to create effective teaching methods and to control problematic behaviors such as not complying with school and/or classroom rules. It is also used to improve inappropriate social behaviors including temper tantrums, interrupting, and difficulty sharing. Furthermore, behavior modification is used to improve functional skills deficits pertaining to personal hygiene and toileting, promoting self-management, and training teachers (Miltenberger, 2008).

*The Importance of Positive Reinforcement*

The use of positive behavioral interventions, supports, and services for students with special needs who exhibit challenging behaviors has been
emphasized with the reauthorization of the Individuals with Disabilities Education Act of 1997 (Chitiyo & Wheeler, 2009). According to Chitiyo and Wheeler (2009), educators can teach students appropriate behaviors by establishing classroom routines, modeling desired behaviors, and building naturally occurring reinforcement aimed at displaying positive behaviors and improving the classroom environment through the use of positive reinforcement. The use of positive reinforcement as an effective, high-impact strategy for improving students’ behaviors has been supported by documented research for a variety of school circumstances for both individual students and groups of students (Wheatley et al., 2009).

In today’s schools, many teachers send students to the office for displaying attention-seeking and/or avoidance behaviors as opposed to behaviors that are considered to be violent or aggressive. The majority of school-based disciplinary referrals comprise of behaviors that are disruptive and distractive in nature rather than behaviors that are considered to be more severe (Wright-Gallo, Higbee, Reagon, & Davey, 2006). Wright-Gallo et al. (2006) indicated that decreasing disruptive behaviors is extremely important because this is often the primary reason students are placed in special education settings outside the general education classroom. In order for
teachers to shape their classroom environment, they need to manage and change their students’ inappropriate behaviors by implementing consequences (Mather & Goldstein, 2001).

It is important for teachers to establish a classroom environment where all students feel safe, comfortable, and welcome. According to Conroy, Sutherland, Snyder, Al-Hendawi, and Vo (2009), “Creating a positive and engaging classroom atmosphere is one of the most powerful tools teachers can use to encourage children’s learning and prevent problem behaviors from occurring” (p. 18). This tone can be established by teachers’ reactions to students’ behaviors. Students are more likely to behave in predictable ways in order to gain their teachers’ attention (Conroy et al., 2009). Teachers can capitalize on this by providing positive attention through feedback to promote desired behaviors. Furthermore, when teachers are able to avoid using negative attention by ignoring students’ problematic behaviors the likelihood of these undesired behaviors continuing decreases (Conroy et al., 2009).

Many students with special needs have emotional and/or behavioral disorders which can lead to disruptive behaviors. These students often enter the classroom environment with negative interactions that have long been
established (Conroy et al., 2009). It is possible for one student’s problematic behaviors to influence the teacher’s interactions with all students in the classroom; however, changing these negative interactions between student and teacher into positive behaviors, attention, and communication can dramatically improve the climate of the entire class (Conroy et al., 2009).

Interactions between teachers and students can have a broader impact than the immediate classroom environment. Research conducted by Benedict, Horner, and Squires (2007) stated that academic failure, social rejection, drug abuse, and criminal activity in adulthood are all examples of potential long-term, negative consequences of students’ problematic behaviors. Teachers have the opportunity to utilize positive reinforcement to help reduce the frequency of negative interactions and possibly reduce the likelihood of these long-term outcomes.

The Use of Positive Reinforcement

Teachers often focus on students’ misbehavior, rather than on the reduction or termination of that behavior, which can cause further disruption in the classroom, according to Mather and Goldstein (2001). They suggested that behavior modification techniques do not fail; instead, they are applied inefficiently or inconsistently which can lead to less than desired results.
Mather and Goldstein (2001) also stated that behaviors are maintained, changed, or shaped as a result of the consequences of those behaviors, and with the appropriate set of consequences, all students are able to function more effectively. Educators can use the following multi-step process outlined by Mather and Goldstein (2001) to manage their students’ behaviors using consequences. The first step is to define the problem by count or description. The second step is to change the behavior by developing a behavior management plan. The third step is to identify an effective reinforcer, and the last step is to apply the reinforcer on a consistent basis in order to change the behavior.

According to Mather and Goldstein (2001), reinforcement and punishment follow a clear set of basic principles. These principles are reinforcement or punishment should always follow a behavior as quickly as possible, reinforcement or punishment should be appropriate for the behavior and be important to the student, and multiple reinforcers or punishments are more valuable than single reinforcers or punishments. Research has shown that both reinforcement and punishment can be used to effectively reduce undesired behaviors in the classroom; however, reinforcement is much more successful in teaching students alternative
behaviors that are considered to be more appropriate and desirable (Mather & Goldstein, 2001).

Positive reinforcement is often used to effectively teach students age-appropriate behaviors and social skills when these behaviors and skills are lacking, as these deficits can create disruption in the classroom. Positive reinforcement is the presentation of a reward immediately following a desired behavior intended to make that behavior more likely to occur in the future. Research conducted by Conroy et al. (2009) found that teachers can improve their overall classroom environment, in addition to increasing positive interactions with students by effectively implementing positive reinforcement, including praise.

Praise is a specific type of positive reinforcement many teachers regularly use in their classrooms when interacting with students. According to Conroy et al. (2009), many teachers consistently utilize praise to increase the occurrence of their students’ use of positive social and academic behaviors. They further stated that although praise seems to be a simple strategy that teachers can implement themselves, it is actually a complex reciprocal process that involves both the teacher giving the praise and the student(s) receiving the praise.
It is important for teachers to understand how praise can be properly implemented into their classroom management systems. Conroy et al. (2009) found that in order for praise to effectively increase students' behavior, it should contain specific statements about the appropriate behavior students displayed, be contingent upon a desired behavior, provide frequent praise when students are learning a new skill, and decrease the amount of praise given once the skill has been mastered. Additionally, praise should be initiated by the teacher, focus on students' improvement and effort, be sincerely delivered with an affirmative and natural voice, be appropriate for students' ages and abilities, and not be competitive or comparative across students. Lam, Yim, and Ng (2008) further pointed out that students' individual and cultural differences, as well as the different conditions under which prior praise has been given to them influences the effectiveness of teachers' use of praise.

In order for teachers to successfully change their students' problematic and disruptive behaviors, it is important for students to understand and accept the reward(s) used to reinforce desired behaviors. Infantino and Little (2005) remarked that, “Students and teachers need to agree mutually upon incentives that are realistic and deliverable from a teacher’s viewpoint, so that
students can strive to achieve these, rather than aim for incentives that are unlikely to be delivered” (p. 504). Research has shown that students prefer to receive private praise as opposed to praise in front of peers when they produce quality work and/or display appropriate behaviors (Infantino & Little, 2005). The reason students prefer this type of positive reinforcement is because they do not like to be singled out (Infantino & Little, 2005). One way teachers can suit this preference is to use group praise and/or rewards.

Strong classroom management skills, such as creating a structured setting where clear rules, expectations, and predictable routines are established, are necessary for a well-run, productive classroom environment. These skills are directly tied to student involvement and academic achievement which makes them an important element of teaching (Reinke, Lewis-Palmer, & Merrell, 2008). However, there are many obstacles that make it difficult for educators to provide consistent routines, procedures, and expectations, in addition to high-quality, uninterrupted instruction. Research has shown that 17% of classroom teachers lose up to four hours of teaching time per week due to students’ disruptive behaviors (Briesch & Chafouleas, 2009). Briesch and Chafouleas (2009) identified four main reasons teachers are unable to implement effective interventions in their research. The first
reason is that it is difficult for teachers to find the time and resources. The second reason is that teachers have an entire classroom to manage which makes it difficult to consistently reinforce all instances of desired behaviors. The third reason is the risk that the teacher becomes the stimuli for the desired behavior. This means students will only display that behavior when their teacher is present. The last reason is that the locus of control is taken away from students which reduce the chances of promoting life skills and independence. In other words, intrinsic motivation is lacking as students do not feel they are in control of their behaviors.

In order for teachers to successfully change their students’ undesired behaviors, it is important for them to understand the limitations of positive reinforcement in order for successful interventions and management systems to be put into place. Research has demonstrated that consultation, support, and training provided to teachers can lead to an increase in teacher use of effective classroom management strategies which helps to produce positive student outcomes (Reinke et al., 2008).

Relationship between Positive Reinforcement and Student Motivation

Educators who effectively use praise to reinforce desired behaviors foster intrinsic motivation in their students (Willingham, 2006). Lepper,
Corpus, and Iyengar (2005) defined intrinsic motivation as, “…the desire to engage in behaviors for no reason other than sheer enjoyment, challenge, pleasure, or interest” (p. 184). This research states that teachers can improve their students’ motivation to behave appropriately through the use of positive reinforcement.

A study by Wheatley et al. (2009) evaluated a behavior management plan, called the Lunchroom Praise Note System, intended to improve students’ behaviors in unstructured settings through a formal praise system. The unstructured settings included lunchrooms, hallways, playgrounds, and school buses. This plan comprised of three steps: teaching appropriate behaviors, allowing students to practice behaviors, and implementing a praise system for appropriate behaviors. This plan also attempted to increase the intrinsic motivation for students to behave appropriately.

The results of the study, which examined approximately 200 students, found a sizeable reduction in inappropriate student behaviors (Wheatley et al., 2009). Specifically, the amount of litter in the lunchroom decreased by 94%, inappropriate sitting, as measured by the study, decreased by 64%, and instances of running decreased by 75%. Additionally, their research showed that decreases in the amount of inappropriate behaviors in an unstructured
lunchroom setting can lead to less disruptive behaviors in structured classroom settings during periods immediately before and after lunch.

Wheatley et al.’s (2009) study demonstrated that formal praise systems are able to enhance intrinsic motivation to improve students’ behaviors. It is of particular note that the successes were obtained in an unstructured setting with relatively few adults supervising a large number of students. Wheatley et al. (2009) further stated that research has provided evidence that these types of programs are just as effective in common areas where large groups of students gather, as well as in smaller, more structured classroom settings.

Positive Reinforcement and Learning

School districts are struggling to close the achievement gap that exists between groups of students as required by the No Child Left Behind Act of 2001 (Lannie & McCurdy, 2007). Schools and teachers are experiencing greater pressure to improve student performance on state assessments in order to receive necessary federal funding for programs. The No Child Left Behind Act was signed into law on January 8, 2002, and since then, most school boards have worked to advance student performance by aligning state and federal proposals in order to improve student achievement, develop
stronger public schools, and create a more prepared teacher workforce (Illinois State Board of Education, n.d.).

Many educators do not have the skills necessary to effectively manage their classrooms (Lannie & McCurdy, 2005). These teachers are often in need of high-impact strategies that are more conducive to learning while improving their students’ behaviors (Wheatley et al., 2009). According to Lannie and McCurdy (2007), strong classroom management skills are an essential component of effective teaching. A study by Moore Partin, Robertson, Maggin, Oliver, and Wehby (2010) determined that the delivery of praise as positive reinforcement for students’ appropriate behaviors can lead to a decrease in students’ inappropriate behaviors, as well as an increase in their appropriate behaviors. This study also found that students were given more opportunities to correctly respond to academic demands due to fewer distractions in the classroom.

In a study conducted by Lannie and McCurdy (2007), positive reinforcement was formalized into a game that recognized occurrences of desired behaviors. This study took place in a high-poverty urban elementary school. The participants of this study consisted of 22 students in a general education classroom. Some of the parents of students in this classroom had
previously requested that their children be transferred to another classroom due to the teacher’s poor classroom management skills.

Lannie and McCurdy’s (2007) study measured the amount of time the students were on-task, as well as the amount of disruptive behaviors the students displayed. At the beginning of the study, the classroom teacher was given formal training on how to implement an empirically-based behavior management plan, the Good Behavior Game. Afterwards, the teacher implemented the game during one academic period where the students were reminded of the good behavior required by the game. The students were split into teams, and each team’s occurrence of disruptive behaviors was measured. The teams that had less than a predetermined number of disruptive behaviors were rewarded.

The results of this study found that students’ on-task behaviors increased by nearly 35%, and students’ disruptive behaviors decreased by approximately 25% (Lannie & McCurdy, 2007). These results showed that students’ behaviors can improve with the use of effective behavior management plans that appropriately use positive reinforcement. Not only did students’ behaviors improve in this study, their on-task behavior also increased. As stated in the research, gains in these two areas could lead to an
improvement in teacher instruction and student achievement which appears to be the goal of most, if not all, behavior management systems.
Chapter 3

Applications and Evaluation

Introduction

The purpose of this study was to explore behavior modification by using rewards to encourage positive, observable behavior changes in middle school students with special needs in a district-based special education classroom. Another purpose of this study was to determine the effects positive reinforcement and rewards have on behavior modification. This study helped to analyze the impact reward systems have on influencing students' behaviors.

Participants

The participants of this action research project included six sixth grade students, seven seventh grade students, and one special education teacher in a middle-class suburban middle school located outside Binghamton, New York. There are approximately 3,950 students in the district and approximately 1,000 students in this school. The participants in this study were classified as having special needs and Individualized Education Plans. All participants had cognitive and/or attention deficits that required specialized support in a learning resource classroom. All 13 students in this
setting were asked to participate in this study. The students were in one of four learning resource periods. The students attended one period of learning resource every day for forty-two minutes. The participants were divided into four groups based on when they attended learning resource: Group A, Group B, Group C, and Group D. Group A was made up of three sixth grade students all classified as having learning disabilities, while Group B consisted of three seventh grade students all classified as Other Health Impairment due to the diagnosis of Attention Deficit Hyperactivity Disorder. Group C was made up of four seventh grade students. Three of these students were classified as Other Health Impairment because of Attention Deficit Hyperactivity Disorder, and one student was classified as Learning Disabled. Group D comprised of three sixth grade students who were all classified as having learning disabilities.

Procedures of Study

I began this study by collecting data, for three consecutive days, to get a baseline of my students’ use of manners. Manners that could be objectively measured through verbal phrases such as “please”, “thank you”, “excuse me”, and “I’m sorry” were assessed. The data provided me with a frequency count of the number of times I had to prompt my students to use these
specific manners while interacting with others. After I collected this data, I taught three lessons about manners. The first lesson was a read aloud of a children’s book about manners, the second lesson was a role play activity where my students practiced using appropriate manners, and for the third lesson my students created manners posters.

Once we finished these three lessons, I introduced “Marbles for Manners” to my students. The class earned a marble every time a student used good manners without adult prompting. Only manners that could be objectively measured through verbal phrases were reinforced. Once the jar was filled, the class earned a reward of their choice. After four weeks of implementing “Marbles for Manners”, I again collected data, for three consecutive days, to see if there was a change in the number of times I had to prompt my students to use manners while interacting with others.

Instruments for Study

Prior to the start of this action research project, students and their parents each signed a form giving their consent to participate in this study (see Appendix A and B). The data collected before and after the reward system was implemented, through direct observation of students’ use of manners, was recorded in tables (see Appendix C). The frequency count of
the number of times I had to prompt my students to use manners before the reward system was compared to the frequency count of the number of times I had to prompt my students to use manners after the reward system to understand the effectiveness of rewards regarding behavior modification.
Chapter 4

Results

_Pre Reward System_

Prior to starting the classroom behavior management plan, “Marbles for Manners”, students’ use of manners that could be objectively measured through verbal phrases such as “please”, “thank you”, “excuse me”, and “I’m sorry” were assessed, for three consecutive days, during students’ learning resource periods. Each student attended one period of learning resource every day for forty-two minutes. The participants in Group A were three sixth grade students all classified as having learning disabilities, and the participants in Group B were three seventh grade students all diagnosed with Attention Deficit Hyperactivity Disorder. The participants in Group C were four seventh grade students. Three of these students were diagnosed with Attention Deficit Hyperactivity Disorder, and one student was classified as Learning Disabled. The participants in Group D were three sixth grade students who were all classified as having learning disabilities. The results of the data collected showing the number of times students were prompted to use these specific manners while interacting with others are reported in Table 1.
Table 1

Pre “Marbles for Manners” Data

<table>
<thead>
<tr>
<th></th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Group B</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Group C</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>Group D</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>7</td>
</tr>
</tbody>
</table>

According to Table 1 above, Group A required the least amount of prompting to use verbal manners while interacting with others with a total of five prompts over three days, while Group B required the most amount of prompting with a total of 15 prompts. The number of prompts ranged from zero to six, per learning resource period, with one learning resource period requiring zero prompts. On average, a group required nine prompts to use appropriate manners over three days.

Post Reward System

After implementing “Marbles for Manners”, for four weeks, students’ use of manners was again assessed for three consecutive days. The same verbal phrases that could be objectively measured were recorded. The results of the data collected showing the number of times students had to be
prompted to use these manners while interacting with others are reported in Table 2.

Table 2

<table>
<thead>
<tr>
<th>Group</th>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group A</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Group B</td>
<td>2</td>
<td>3</td>
<td>3</td>
<td>8</td>
</tr>
<tr>
<td>Group C</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>Group D</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

According to Table 2 above, Group A required the fewest number of prompts to use verbal manners while interacting with others with a total of one prompt, while Group B required the greatest number of prompts with eight total over three days. The number of prompts ranged from zero to four, per learning resource period, with two class periods needing zero prompts. On average, 4.75 prompts, over three days, were necessary for a group to use appropriate manners.

Comparison of Pre and Post Data

The data collected both before and after “Marbles for Manners” was compared to determine if there was a change in students’ use of manners. A comparison of the pre and post data is reported in Graph 1.
Graph 1 above shows that the number of prompts required to use appropriate manners while verbally interacting with others decreased for each group after “Marbles for Manners” was conducted. Group A required 80% fewer prompts, and Group B required 47% fewer prompts. Group C required 22% fewer prompts, while Group D required 57% fewer prompts. Group B demonstrated the greatest amount of improvement with seven fewer prompts after the completion of the reward system, while Group C had the least amount of improvement with two less prompts. The number of learning resource periods, for Group A, where students did not require any prompts doubled from one to two after implementing “Marbles for Manners”.
The purpose of this action research project was to examine behavior modification through the use of a classroom behavior management plan that promoted positive, observable behavior changes in students with special needs. I wanted to determine if the use of rewards and positive reinforcement was an effective method for teaching and encouraging students to display age-appropriate behaviors and social skills, more specifically manners. By analyzing the results of this study, I have drawn some conclusions about the effectiveness of the reward system.

When observing the data, it is clear that students' use of manners in all four groups improved after implementing the reward system. Although students continued to require prompts to use appropriate manners while interacting with others, each of the four groups required fewer prompts after the reward system was no longer in place. Overall, the total number of prompts for all the participants decreased by 47% after the reward system was conducted. This finding is consistent with current research in the area of behavior modification and positive reinforcement. Research shows that students' problematic and inappropriate behaviors can be controlled or
eliminated through the use of behavioral interventions such as the classroom behavior management plan developed for this study.

Several conclusions can be drawn by analyzing the results of the data. This study suggests that a focused, organized, and detailed behavior management plan that consistently utilizes positive reinforcement can influence students' behaviors in a desired manner. This was demonstrated by an overall improvement in students' behavior as their use of manners increased as the need for prompting to use these manners decreased. Research also shows that this type of positive effect is applicable to other behaviors and settings.

A comparison of the pre and post reward system data shows that the number of learning resource periods in which no prompts were required for students to use appropriate manners doubled after the reward system was implemented. During these specific learning resource periods, students did not display any behaviors that required prompting to utilize appropriate manners. This finding indicates that when teachers are able to eliminate the number of disruptive, undesired behaviors in their classrooms more quality time can be devoted to student learning. This correlates with the current research on behavior management systems that incorporate positive
reinforcement. Studies show that as students’ desired behaviors improve their on-task behaviors increase, which often leads to an improvement in teacher instruction and student achievement.

Another conclusion that can be drawn from this study is that behavior management plans utilizing positive reinforcement can be an essential component of effective teaching by allowing educators the ability to highlight, emphasize, and increase desired behaviors. This finding aligns well with the current research on classroom management. Research indicates that a well-run, productive classroom environment is directly linked to student involvement and academic achievement.

Several limitations should be noted when reviewing this study. First, the classroom behavior management plan created for this study only looked at data of students’ use of manners before and after the reward system was put into effect. Both the pre and post data were collected for three consecutive days. Further studies should consider collecting this data for a longer period of time, in addition to during the actual implementation of the reward system to provide a greater understanding of its long-term effects on students’ behaviors.
The second limitation was only one type of data was collected and analyzed. In future studies, researchers should consider creating a survey to give to students asking their opinions about manners both before and after the reward system. Students could also be asked to write journal entries about their personal experiences with manners and interacting with others throughout the study. These additions would provide the researchers with more information regarding the effectiveness of behavior management plans, in addition to students' attitudes and motivation regarding manners and reward systems.

Another limitation of this study was the way the participants were grouped and compared. Students were placed into groups based on when they attended learning resource. Next time, researchers may want to group students based on gender, grade, and/or disability. Students could continue to be categorized by their learning resource period; however, data for each individual student could be collected as opposed to only collecting whole group data. This would allow for more thorough comparisons to be made, as well as provide a clearer representation of which students or types of students are most likely to improve as a result of the reward system.
I learned that behavior modification and positive reinforcement can motivate students to display age-appropriate behaviors and social skills. As a result, I developed a classroom behavior management plan that positively reinforced my students to use appropriate manners while interacting with adults and peers. Prior to implementing this reward system, I taught three lessons about manners, in addition to collecting data to get a frequency count of the number of times I had to prompt my students to use manners. After implementing this reward system, I again collected the same data. The pre and post data were compared to each other to see if there was a change in my students’ behavior.

I found that my students’ manners improved through the use of behavior modification and positive reinforcement. This finding reinforces what most educational and psychological research states about the effectiveness of behavior management systems on teaching students age-appropriate behaviors and social skills. As a result of this study, I will continue to use positive reinforcement with my students to aid in teaching them appropriate skills they need to be successful, contributing members of society.
References


Appendix A

Statement of Informed Consent for Parents

Dear Parent/Guardian,

As part of my master’s degree program at The College at Brockport SUNY, I will be conducting a research study over the next couple of months. The purpose of this study is to examine how positive reinforcement influences students’ behavior. It is my intention that this experience will help me better understand how students are affected by the use of positive reinforcement, more specifically rewards.

This six week study will start when we begin our Manners unit. Throughout this unit, I will collect data pertaining to students’ use of manners. All information will remain confidential, and no actual names will be shared in this research study. All information will be kept in a locked filing cabinet and shredded at the end of this study.

Although all students will participate in the Manners unit, your child’s participation in the data collection is purely voluntary and completely up to your discretion. I do not foresee your child being harmed in any way by participating in this study. Furthermore, your child’s grade will not be affected by your decision to have him/her participate in the data collection. Your child is free to drop out at any time during this study. If this should happen, please contact me at your earliest convenience and I will properly dispose of your child’s information. If you agree to allow your child to participate in this research study, please sign and return the bottom portion of this form to me.

I have included my contact information as well as my college advisor’s information. Please feel free to contact either one of us if you have any questions or would like further information regarding this study. I truly appreciate your support and look forward to working with your child.

Sincerely,

Jennifer Diedrich
Vestal Middle School
jldiedrich@vestal.k12.ny.us
(607) 757-2333

Dr. Thomas Allen
The College at Brockport SUNY
trallen@brockport.edu
(585) 727-9777

I understand the information provided in this form and agree to allow my child to participate in this research study. I am 18 years of age or older. All questions about my child’s participation in this study have been answered to my satisfaction.

Child’s Name: ________________________________

Parent’s Signature: __________________________ Date: _______________
Appendix B

Statement of Informed Consent for Minors

Dear Student,

This letter is to let you know about a research study I am going to be doing in our classroom as a graduate student at The College at Brockport SUNY. The reason I am doing this research is because I would like to learn more about rewards and how they affect students' behavior.

It is your choice if you want to participate in this study. It is okay if you decide you do not want to participate. If you decide you want to participate, but later change your mind, that is okay. If you participate in this study all of your information will be kept confidential, which means I will not use your name in my research paper.

Your parent or guardian has given me permission to allow you to take part in this research study; however, it is up to you to decide if you would like to participate. If you want to participate in this study, please write your name and date on the lines below and return it to me.

Thank you,

Mrs. Diedrich

Yes, I would like to participate in Mrs. Diedrich's research study, and I give her permission to write about my participation in her research paper.

Name: ____________________________ Date: ___________

Signature of Witness 18 Years or Older: ______________________ Date: ___________

44
Appendix C

Reward System Data Sheet

Pre “Marbles for Manners” Data

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Post “Marbles for Manners” Data

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