cTHE EFFECTS OF POSITIVE REINFORCERS ON THE ACADEMIC BEHAVIOR OF MILDLY DISABLED MIDDLE SCHOOL STUDENTS

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Abstract

The purpose of this experimental quantitative research was to examine the effects of positive reinforcers on the academic behavior of mildly disabled middle school students. The lack of intrinsic student motivation was a factor that negatively impacted the number of homework assignments submitted by mildly disabled students. Teachers in this study have also had difficulty with extrinsically motivating students to submit homework assignments. This research project explored the use of positive reinforcers on mildly disabled students who participate in Learning Strategies classes. This research project was intended to enrich the body of research as it relates to student intrinsic and extrinsic motivation.

Dedication

This dissertation is dedicated to my family and friends who stood by my side while I struggled through this journey.

Acknowledgements

I would like to begin by thanking Dr. Jim Mirabella for being my mentor and committee chairperson. Without his knowledge and vision, I would not have been able to accomplish this goal. I would like to thank Dr. Mirabella once again for being my friend. It is rare to find a person that takes the time to learn who you are as a person. I appreciate our relationship that has soared beyond the boundary of education.

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I would like to pay tribute to my mother, Mersel, my father, Julius I, and my sister, Marva. Thank you for raising me with Christian values and for the determination to accomplish goals with iron-will and class. One of my life-long goals is to make all of you proud of me. I hope that I have accomplished that.

Finally, I would like to thank God for blessing me, even when I did not deserve it. Thank You for Your protection. I ask that You continue to allow me to touch the lives of others, to help them to accomplish their educational goals, and to allow them to see You through me.

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CHAPTER 1. INTRODUCTION

Introduction to Problem

Mildly disabled children at a middle school in northeast Florida have difficulty completing homework assignments. The National Institute of Mental Health (1993) defined a learning disability as a disorder that affects people's ability to either interpret what they see and hear or to link information to different parts of the brain. These limitations can show up in many ways – as specific difficulties with spoken and written language, coordination, self-control, or attention. The institute also indicated that these difficulties extend to schoolwork and can impede learning to read or write, or to do math.

Ensuring that children with disabilities receive an appropriate education is a serious issue. In some cases, school districts have been negligent in providing appropriate education to disabled children, which has resulted in litigation. Therefore, agencies have intervened to serve as advocates and to protect these individuals. The United States Department of Education (2004) has developed laws to protect disabled children. The Individuals with Disabilities Education Act (IDEA) of 1990 was developed to protect individuals with disabilities. It was created to (a) provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities, (b) provide clear, strong, consistent, enforceable standards addressing discrimination against individuals with disabilities, (c) ensure that the federal government plays a central role in enforcing the standards established in this Act on behalf of individuals with disabilities, and (d) invoke the sweep of congressional authority, including the power to enforce the fourteenth amendment and to regulate the commerce,

in order to address the major areas of discrimination faced day-to-day by people with disabilities.

Title I of the Elementary and Secondary Education Act of 1965 requires school districts to include the state assessment scores of disabled students into the adequate yearly progress of the school. Finally, elements within the No Child Left Behind Act ensure that schools are held accountable for educational results so that the most appropriate education is provided to every student. Furthermore, NCLB indicates that disabled children are indeed a part of the school success in terms of adequate yearly progress.

Consequences exist for public schools that neglect disabled children, such as receiving low overall school grades from the state. All of these laws ensure that all students with disabilities have access to, participate in, and make progress in the general curriculum. Therefore, efforts should be made to motivate disabled children to achieve because all students are capable at learning at some level.

Background of the Study

Though this study focused on the academic behavior of mildly disabled children, all of them have the capacity to learn and succeed academically. Indeed, there are laws in place to protect and accommodate the needs of mildly disabled children. However, these laws and accommodations do not address strategies on how to motivate these children. A general lack of effort in terms of submitting homework assignments has been observed by the researcher for most mildly disabled children in his school, and has been an ongoing behavior for several years. Not completing homework ultimately leads to poor academic performance. However, the root cause is believed to be a lack of motivation.

Students' lack of motivation and academic underachievement are not situations that should be taken lightly. There are general behaviors that are prevalent in children who are considered as underachievers. Whitley (2001) indicated the following general characteristics of individuals who are underachievers. He indicated that (a) underachievers are bright; yet, they do not put out effort necessary for success, (b) underachievers lack persistence even when they want to do well, (c) underachievement is a chronic problem and will not just go away by itself, (d) underachievement usually occurs in more than one area of life, (e) underachievers do not do ordinary tasks, (f) underachievers lack self-discipline, (g) underachievers fail to accept responsibility for themselves, (h) underachievers do not sacrifice for the future, (i) underachievers are dependent in their work, (j) underachievers fear feelings of personal responsibility, (k) underachievers make excuses that keep them irresponsible, (l) underachievers lie to themselves and others, (m) underachievers lack self-mastery, and (n) underachievers lack insight and self-knowledge.

Tabassam and Granger (2002) stated that "Compared to non-disabled peers, students with learning disabilities tend to have a less positive self-concept, lower self-efficacy, and a more negative motivational pattern. Lavoie (2005) was questioned about what to do when dealing with a student with Attention Deficit Disorder (ADD), average IQ, and absolutely no intrinsic motivation. Lavoie responded by stating that "Firstly, the goal he's working toward must be attractive for him. Secondly, the amount of effort he needs to expend must be realistic. Lastly, he must be confident that he will attain the goal" (p.1). The researcher has found this behavior to be common, not only among those with ADD, but with most mild disabilities.

The concept of the completion of homework assignments also affects the way that it is assigned in this study. Many philosophies exist in the middle school in this study as it relates to the amount of homework teachers should assign. Glenchur (2003) indicated the following regarding assigning homework:

> The recommended length of homework assignments varies by grade and by each school. Some schools have no homework, and others initiate homework as early as kindergarten. Some teachers let students begin homework in class and are thus available to guide them if help is needed. (p. 288)

Homework assignments in the researcher's study are consistent with Glenchur's statement. More specifically, homework assignments vary by grade, some teachers do not assign homework, and some teachers allow students to begin homework in class.

There is limited current research to answer the question "How much homework is enough?" Glenchur (2003) indicated that "One rule of thumb for daily homework is 10 minutes multiplied by the grade level…" (p.288). Westchester Institute for Human Services Research (2002) has studied the effects of homework and recommends moderation and flexibility. Regarding the amount of homework assigned to middle school students, their findings showed that (a) homework somewhat improves performance until assignments exceeded 1 to 2 hours and (b) an appropriate number of assignments for seventh and eighth graders is three to five assignments per week. Each of those assignments should total 45-75 minutes.

Based upon the researcher's 4 years of experience as an Exceptional Student Education Instructor, there are different factors that motivate students who possess Specific Learning Disabilities (SLD) versus those who possess Other Health Impairments

(OHI). Students who are Specific Learning Disabled have difficulty with processing academic material. This learning deficit affects the way these students process words and mathematical calculations. These students tend to be motivated by extrinsic rewards such as free activity period, movie and popcorn days, or pizza parties.

Students who are Other Health Impaired have difficulty with behavior. These behaviors include the inability to stay focused, restlessness, and aggressive verbal or physical behaviors. These students tend to be motivated by the privilege of being able to self-initiate and go to a time-out or cool-down area when agitated. These students also favor being able to stand up next to their seat versus sitting for long periods of time. Similar to SLD students, OHI students also enjoy the extrinsic rewards of free activity periods, movie and popcorn days, and pizza parties.

Statement of Problem

The problem is that mildly disabled middle school students in this study are not motivated to complete homework assignments. The primary consequence of this problem is that this negative academic behavior lowers students' grades in core academic courses. Core academic courses are defined as Language Arts, Social Studies, Math, and Science. A secondary consequence of this behavior leads to students being retained. The researcher believes this negative academic behavior is due to a lack of motivation in these students.

Purpose of Study

The purpose of this study was to examine the effects of positive reinforcers on the academic behavior of mildly disabled middle school students who participate in Learning Strategies classes. The effects were determined by comparing pre-intervention data

against post-intervention data as they related to the number of missed homework assignments. This research project was also intended to enrich the body of research as it relates to student intrinsic and extrinsic motivation.

Rationale

The rationales behind conducting this study were (a) reducing the number of missed homework assignments could increase overall grades and decrease the probability of them being retained, (b) completing homework assignments could increase exposure to standards-based competencies, (c) by completing homework assignments, students help the district to enhance the No Child Left Behind (NCLB) initiatives, and (d) by completing homework assignments, students could help their school by performing well on the Florida Comprehensive Assessment Test (FCAT), which could maintain the overall school grade of "A" issued by the state.

Research Question

This study answered the following research question:

Can positive reinforcers impact the academic behavior of mildly disabled students who possess Emotional Handicaps (EH), Speech or Language Impairments (SI), Specific Learning Disabilities (SLD), Educable Mental Handicaps (EMH), and Other Health Impairments (OHI) which include Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD)?

This study contains the following hypotheses.

Null Hypothesis One-A

There will be no difference in the number of missed homework assignments submitted by mildly disabled students before reinforcement begins versus 1 week after positive reinforcers have been introduced.

R*esearch Hypothesis One-A*

There will be a difference in the number of missed homework assignments submitted by mildly disabled students before reinforcement begins versus 1 week after positive reinforcers have been introduced.

Null Hypothesis One-B

There will be no difference in the percentage of missed homework assignments submitted by mildly disabled students before reinforcement begins versus 1 week after positive reinforcers have been introduced.

R*esearch Hypothesis One-B*

There will be a difference in the percentage of missed homework assignments submitted by mildly disabled students before reinforcement begins versus 1 week after positive reinforcers have been introduced.

Null Hypothesis Two-A

There will be no difference in the number of missed homework assignments submitted by mildly disabled students before reinforcement begins versus 4 weeks after positive reinforcers have been introduced.

R*esearch Hypothesis Two-A*

There will be a difference in the number of missed homework assignments submitted by mildly disabled students before reinforcement begins versus 4 weeks after positive reinforcers have been introduced.

Null Hypothesis Two-B

There will be no difference in the percentage of missed homework assignments submitted by mildly disabled students before reinforcement begins versus four weeks after positive reinforcers have been introduced.

R*esearch Hypothesis Two-B*

There will be a difference in the percentage of missed homework assignments submitted by mildly disabled students before reinforcement begins versus four weeks after positive reinforcers have been introduced.

Null Hypothesis Three-A

There will be no difference in the net gain of homework assignments missed by students who possess the disabilities of OHI versus SLD 4 weeks after positive reinforcers are introduced.

Research Hypothesis Three-A

There will be a difference in the net gain of homework assignments missed by students who possess the disabilities of OHI versus SLD 4 weeks after positive reinforcers are introduced.

Null Hypothesis Three-B

There will be no difference in the percentage of missed homework assignments by students who possess the disabilities of OHI versus SLD 4 weeks after positive reinforcers are introduced.

Research Hypothesis Three-B

There will be a difference in the percentage of missed homework assignments by students who possess the disabilities of OHI versus SLD 4 weeks after positive reinforcers are introduced.

Description of Variables

The first variable that was addressed in this study was homework non-submission rate. Data were collected regarding each students assignments for the week and whether the assignment was missed. Homework is an assignment that is specifically designed to be completed at home. A missed assignment is defined as a student who does not submit an assignment whatsoever and the teacher reports this as missing. The total missed assignments are the number of missed assignments per week by a given student. The percentage of missed assignments was calculated by the number of assignments missed divided by the total number of assignments assigned for a given student.

The second variable that was addressed in this study was student disabilities. The only disabilities that will be tested specifically are Other Health Impairments (OHI) and Specific Learning Disabilities (SLD). The total number of students in this study was 41. Due a lack of a significant presence of Emotionally Handicapped (EH) and Educable Mentally Handicapped (EMH) students in the sample, four and two students respectively, these disabilities will not be tested in isolation.

The third variable that was addressed in this study was timing. A reinforcement may be effective only as a novelty or it may be effective longer-term, and so the impact of reinforcements will be evaluated 1 week and 4 weeks after the introduction of positive reinforcers. It is important to note that when dealing with students who are non-disabled, 4 weeks may not seem like a long period of time; however, when dealing with disabled students, 4 weeks could appear to be significant. For the purpose of this study, the 1-week evaluation period will be referred to as "short term" and the 4-week evaluation period will be referred to as "longer term".

The last variable that was addressed in this study was the existence of positive reinforcers. Barker, Kreider, Peissig, Sokoloff, and Stansfield (2005) defined positive reinforcer as an appetitive event whose presentation follows an operant response. The authors also indicated that the positive reinforcer increases the likelihood of that behavior occurring again under the same circumstances. Positive reinforcers introduced in this study included gift packages containing candy, stickers, supplies, and gift certificates to restaurants. Data were collected before and after positive reinforcers were introduced to the classes.

Definition of Terms

The key terms utilized throughout this study are defined below.

A learning disability is defined as "any of various conditions that interfere with an individual's ability to learn and so result in impaired functioning in language, reasoning, or academic skills and are thought to be caused by difficulties in processing and integrating information" (Miriam-Webster Online, 2005).

Academic behavior is defined as the completion or non-completion of homework assignments.

Educable Mentally Handicapped is defined as:

A student who is mildly impaired in intellectual and adaptive behavior and whose development reflects a reduced rate of learning (State Board of Education Rules, 2005, p. 111).

Emotional Handicap is defined as:

> A condition resulting in persistent and consistent maladaptive behavior, which exists to a marked degree, which interferes with the student's learning process and which includes but is not limited to any of the following characteristics: (a) an inability to achieve adequate academic progress which cannot be explained by intellectual, sensory, or health factors, (b) an inability to build or maintain interpersonal relationships with peers and teachers, (c) inappropriate types of behavior or feelings under normal circumstances, (d) a general pervasive mood of unhappiness or depression, or (e) a tendency to develop physical symptoms or fears associated with personal or school problems (State Board of Education Rules, 2005, p. 114).

Motivation is defined as the force that energizes, directs, and sustains behavior (Scholl, 2002).

Other Health Impairment is defined as:

> Having limited strength, vitality or alertness, including heightened alertness to environmental stimuli, that results in limited alertness with respect to the

> educational environment that: (a) is due to chronic or acute health problems such as asthma, attention deficit disorder or attention deficit hyperactivity disorder, diabetes, epilepsy, a heart condition, hemophilia, lead poisoning, leukemia, nephritis, rheumatic fever, and sickle cell anemia and (b) adversely affects a child's educational performance (Education Commission of the States, 2004, p. 25).

Barker, Kreider, Peissig, Sokoloff, and Stansfield (2005) defined positive reinforcer as an appetitive event whose presentation follows an operant response. The authors also indicated that the positive reinforcer increases the likelihood of that behavior occurring again under the same circumstances.

Speech and language impairments are defined as disorders of language, articulation, fluency or voice which interfere with communication, preacademic or academic learning, vocational training, or social adjustment (State Board of Education Rules, 2005, p. 111).

Specific Learning Disabilities are "a set of heterogeneous psychological processing disorders manifested by significant difficulties in the acquisition use and use of language, reading, writing, or mathematics" (State Board of Education Rules, 2005, p. 115).

Participants

The students who participated in this study possess mild disabilities and were heterogeneously served in one of the four Learning Strategies classes at the middle school. Those disabilities include Emotional Handicaps (EH), Speech or Language Impairments (SI), Specific Learning Disabilities (SLD), Educable Mentally Handicaps

(EMH), and Other Health Impairments (OHI) which include Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD). Learning Strategies classes provide students with skills necessary for test-taking, organization, and strategies to enhance confidence in academics. This course is also designed to enhance the probability of students completing classroom and homework assignments.

Assumptions of the Study

This study involved the following assumptions. The researcher assumed that the four classes used in this study were reasonably representative of Exceptional Student Education (ESE) resource classrooms in this school district. Mildly disabled students in this district are heterogeneously grouped and assigned to classrooms based upon core academic course availability. It was also assumed that Language Arts, Social Studies, Math, and Science content areas would be comparable prior to and after the positive intervention was introduced. Also, while it might be expected that homework assigned by teachers would lighten as the school year draws to a close, but it was not the case here, as evidenced by the data shown in Appendix D; thus it can be assumed that the timing of the study is not a factor.

Limitations of Study

This study took place in a middle school in northeast Florida. The participants were all of the students in the school who participated in the Learning Strategies classes. There were approximately 41 participants enrolled in the four Learning Strategies classes. The children possessed mild disabilities and were heterogeneously mixed within the four Learning Strategies within this school. The students were also placed in one of the four

course sections by the school scheduler according to the availability of their core academic courses on each grade level.

Another limitation in this study was student and teacher absenteeism, which hindered data collection times. Teacher absenteeism was a concern because the researcher needed to collect data regarding missed homework assignments. This was important in order to distribute the positive reinforcers on schedule to properly motivate students to perform. Though absenteeism as a concern that potentially affected all students, it affected a few in this study. These absences were a result of personal illness or suspensions for disciplinary reasons.

The final limitation in this study was cited as the way that some teachers assigned homework. Some teachers assigned homework daily, while others occasionally skipped days of assigning homework. All teachers involved in this study assigned homework on a weekly basis. While there was daily inconsistency by the way that teachers assigned homework, students received assignments every day from at least one teacher. Therefore, the daily expectation of completing homework assignments remained intact. Additionally, data during this study were collected on a weekly basis, which minimized the limitation.

CHAPTER 2. REVIEW OF LITERATURE

In the era of school reform, there is much speculation as to whose responsibility it is to motivate children to perform. The researcher has heard conversations where principals have blamed teachers, parents, and students for lack of achievement. Teachers have blamed principals, parents, and students. Parents have also blamed principals, teachers, and students. Through all of this controversy, students are the only ones who have remained silent. All of these stakeholders play a role in the academic behavior and achievement of students. However, students should be ultimately held responsible for being intrinsically motivated to learn and perform.

This review of literature will begin by exploring motivational theory. Then the importance of homework will be explored. Next, the role of the principal as it relates to the academic achievement of students will be analyzed. The role of the teacher in homework completion will be outlined. Finally, parental role in homework completion will be examined.

The areas of this review of literature were selected for the following reasons. First, in order for the researcher to effectively address motivation and positive reinforcers, motivational theories that are applicable to the study must be explored. Second, the importance of homework must be identified because it plays a major role in this study. Students' behavior regarding the completion of homework assignments is the variable that was measured. Third, the role of the principal will be examined because he or she is the leader of the school. The principal's behaviors and decisions could play a role in the behaviors of children as it relates to homework completion. Next, the teacher is the individual who works directly with students to help them achieve on a daily basis.

It is critical to examine how their behavior affects student academic behavior regarding the completion of homework assignments. Finally, the parental role in homework achievement will be explored because they are the most important piece of this puzzle. Children spend the majority of a 24-hour day at home. Principals and teachers have little control over what children accomplish academically once they leave the school grounds. Parents are responsible for managing student academic behaviors such as studying, organization, and time management away from school. Ideally, principals, teachers, and parents should work together to provide the support and resources for mildly disabled children to achieve academically.

Motivation Theory

One cannot discuss motivating mildly disabled children without acknowledging the classical research that sets the foundation for this study. Though several theorists have conducted research toward motivating and managing adults (Likert, 1967; McGregor, 1960; Mayo, 1933; Vroom, 1964), this study will focus on the basic theories of motivation as it applies to individuals of all ages. Classical motivation theory can also provide insight as to why mildly disabled children are not completing homework assignments.

Abraham Maslow (1954) spent many years gathering research on human behavior. From this research, he developed a hierarchy of human needs. Those needs are as follows: (a) Physiological Needs address hunger, thirst, and bodily comforts, (b) Safety Needs address a state of being out of danger, (c) Belongingness and Love needs address a state of being affiliated with others and to be accepted, (d) Esteem Needs

address the need to achieve, to be competent, and to gain approval and recognition, and (e) Self-Actualization Needs the need to find self-fulfillment and realize one's potential.

The very presence of mild disabilities could affect children from becoming self-actualized or completing homework assignments as displayed at the top rung of Maslow's hierarchy of human needs. The specific need in this case could fall under the category of Esteem needs, which precedes the Self-Actualization need. One of the most unique characteristics of Maslow's hierarchy is that he believed that one cannot progress to the next level of the hierarchy unless the preceding level has been fulfilled, thus, hindering the progression of mildly disabled children to top of the hierarchy or Self-Actualization level.

Alderfer (1972) also developed a hierarchy of motivational needs. Alderfer believed that needs were comprised of three levels: (a) Existence, which includes all of the various forms of material and psychological desires, (b) Relatedness, which involves relationships with significant others, and (c) Growth, which produces the desire to for an individual to make creative and significant contributions to himself and others in society. In this case, the researcher has witnessed the negative impact of mild disabilities on the self-esteem of children. Similar to Maslow's (1954) Esteem Needs, Alderfer's Relatedness level affects the children's relationships with their peers. The researcher has also witnessed adults who belittle mildly disabled children because of their difficulties with academics. This behavior presents itself in the form of jokes, isolation, and stereotyping. The negative behavior projected at the children prohibits them from reaching Alderfer's Growth level and interferes with positive academic behavior. Needless to say, motivation in these situations is greatly diminished.

Motivation, in general, is comprised of two factors: intrinsic and extrinsic. The researcher hopes that mildly disabled children in this study will eventually develop into intrinsically motivated students who desire to complete homework assignments for the satisfaction of learning itself. Harlow, Harlow, and Meyer (1950) are generally recognized for making the first attempt to distinguish between intrinsic motivation and externally rewarded behavior. Their work analyzed the behaviors of rhesus monkeys after being given a puzzle to solve. Because the monkeys solved the puzzle without the researchers providing an extrinsic reward, they believed that the monkeys completed the task for the satisfaction of learning itself. If a reward had been provided as a result of having solved the puzzle, the experiment would have been classified as an example of extrinsic motivation.

A possible outcome of the researcher's study is to see if positive reinforcers can condition mildly disabled students to complete homework assignments to the degree that this behavior becomes more consistent over time. Important classical research has been dedicated to examining this phenomenon. Pavlov (1927) developed the theory of classical conditioning. His primary research focused on the digestive process of animals. While experimenting with dogs, he specifically studied the relationship between salivation and digestion. By applying a stimulus, he was able to make them salivate whether they were in the presence of food or not. He essentially conditioned the dogs to expect to receive meals when they heard a dinner bell. Skinner (1953) developed the theory of operant conditioning. This theory essentially attempts to guide the behavior of an organism by offering reinforcers as an incentive to increase or decrease specific

behaviors. Skinner stated that "the behavior is followed by a consequence, and the nature of the consequence modifies the organism's tendency to repeat the behavior" (p. 1).

The aforementioned classic literature addresses theories that are applicable to motivating children in this study. However, questions remain as to how motivation can be accomplished in the classroom. Honolulu Community College (n.d.) described five general principles of motivation that can be applied to any learning situation. They are the following: (a) The environment can be used to focus on the student's attention on what needs to be learned, (b) Incentives motivate learning, (c) Internal motivation is longer lasting and more self-directing than is external motivation, which must be repeatedly reinforced by praise or concrete rewards, (d) Learning is most effective when and individual is ready to learn, that is, when one wants to know something, and (e) motivation is enhanced by the way in which the instructional material is organized.

Dembo and Eaton, (2000) provided the following regarding student motivation, which provided insight relating to student motivation:

> One of the major differences between successful students and less successful students is that successful students know how to motivate themselves even when they do not feel like performing a task. Less successful students have difficulty controlling their motivation. As a result, less successful students are less likely to complete a task and are more likely to quit or not complete a task proficiently. (p. 476)

Although the researcher's study will utilize extrinsic rewards as a means of motivating mildly disabled children to complete homework assignments, Rehmke-Ribary (n.d.) cited the following reasons why these methods are harmful: (a) extrinsic rewards

do not produce permanent changes, (b) extrinsic rewards reduce intrinsic interest, (c) the use of extrinsic rewards by parents is related to less generous and less intrinsically motivated behaviors by their children, and (d) extrinsic rewards can be controlling.

Rehmke-Ribary (n.d.) did not support the use of extrinsic rewards to motivate children. Unfortunately, many of the mildly disabled children in this study have not fully developed a sense of intrinsic motivation. Mildly disabled students have difficulty becoming motivated to complete homework assignments because of their disabilities. Their disabilities result in frustration, which leads to withdrawal. This factor causes these students to be less successful academically than those who do not possess mild disabilities. The researcher believes the introduction of extrinsic rewards via the classical conditioning and operant conditioning modalities could facilitate the completion of homework assignments by these children.

The Importance of Homework

As indicated earlier, the researcher believes that all children have the capacity to learn and achieve academically. The researcher has observed that certain children with disabilities are not necessarily less able to achieve than those who do not have disabilities. Rather, their lack of success comes from a lack of motivation to complete homework assignments. Skollingsberg (2003) utilized a five-factor self-report questionnaire that measured intrinsic and extrinsic orientation in the classroom between learning disabled and gifted students. In this study, he indicated that motivation is an integral feature of human personality and is expressed through a person's behavior. He also believed that motivation is essential to the educational process, as no learning can take place without students being motivated to do so.

The researcher has observed that a common misconception among mildly disabled children is the belief that by simply attending class, reading aloud with an instructor and peers, and reviewing concepts in class will yield academic success. Bryan and Burnstein (2004) indicated that homework problems among students with learning disabilities can be attributed to causes of students' characteristics such as poor motivation, problems in listening comprehension, and lack of organizational skills. McMullen (2005) believed the following regarding students who possess disabilities and organizational skills.

> A primary problem faced by students with learning disabilities in middle school, inclusive settings is students' lack of classroom organizational behaviors. Many of these individuals do not bring necessary materials to class, begin class on task, complete class work, copy homework assignments, or turn them in. (p. 1)

These specific behaviors negatively impact the chances of student success as it relates to homework completion. Furthermore, their unwillingness to make a reasonable attempt to complete homework assignments contributes to academic underachievement.

Corno & Jianzhong (2004) stated the very essence of what the researcher believes about homework. They summarized that "Homework is the quintessential job of childhood. Homework creates a situation where the child must complete assigned tasks under minimal supervision and after a little initial training. Doing well on that job gets one further along in school" (p. 227). Bempechat (2004) believed that homework played a critical, long term role in the development of children's achievement motivation and develops strategies for coping with mistakes, difficulties, and setbacks (p. 189). Jet (2004) indicated that "Homework helps children learn good habits and attitudes. It can

teach children to work by themselves and encourage discipline and responsibility. Children who do more homework, on average, do better in school" (p.1). Mildly disabled students who do not complete homework assignments do so, in many cases, by choice. This is considered as a primary negative academic habit. Dembo and Seli (2004) stated that, "students' failure to change negative academic habits includes: (a) students believe they can't change, (b) they don't want to change, (c) they don't know what to change, or (d) they don't know how to change" (p. 2).

Homework is a tool that provides mildly disabled children with the opportunity to reinforce concepts that have been presented to them in the classroom. It is the practice field that prepares children for performance. It also provides a situation where children have extended time to complete assignments and receive assistance if necessary. It is critical for mildly disabled children to understand that though society is tolerant of these behaviors while they are children, they will not be tolerant when they grow to become adults. Employers who expect results do not retain those who are unwilling to perform. Unfortunately many disabilities that employers recognize are those who are physically disabled or those who are visibly recognizable (i.e.. physically handicapped, wheelchair-bound, or blind). Even in these extreme cases, these individuals, as adults, have demonstrated the will to work. Mildly disabled children must learn to develop and exhibit skills to survive and provide for themselves.

The Role of the Principal in Academic Behavior and Achievement

The principal is a primary stakeholder in student academic achievement. He or she establishes the foundation and culture in the school and establishes how learning will take place. The principal establishes the foundation and culture through leadership

behaviors. Most importantly, the behavior of the principal indirectly drives student behavior and achievement through teachers. Therefore the impact of this role must be explored to obtain an understanding of how their efforts are allocated toward assisting mildly disabled students in homework completion.

There are many opinions regarding the role of the school principal. Some researchers have similar opinions regarding the responsibilities of this role while other's views contradict one another. Shellard (2003) believed that the leadership role of the principal lies specifically in instructional leadership. The principal should make specific recommendations to improve curriculum and instruction. He or she should have skills in observation, analysis, and improvement of teaching as well as assist in aligning curriculum with standards using standards-based assessments. Principals should also serve as a resource for teachers needing assistance with unit-development, lesson planning, lesson delivery, and effective instructional techniques. Ediger (2002) also believed that the role of the principal is to improve the curriculum in the school setting. This is done by guiding teachers to determine the best objectives possible for pupil achievement. Ediger also believed the principal should select valid and reliable student assessment procedures.

Although it has been stated that the school principal's primary role is to serve as instructional leader, Williams (2003) has a different perspective. Successful principals in his study spent more time on being supportive and operated within the policies of the district. The study also found that the principal's leadership role was centered on working with personnel inside and outside the school setting, working with faculty to develop goals, establishing expectations, and promoting appropriate changes. It is

important to note that this study indicated that a role conflict is apparent among principals and discrepancies exist regarding the actual time that principals allocate for leadership activities.

Sergiovanni (2001) also has a more diverse perspective of the leadership role of the school principal. He believes that schools require leadership in seven key areas: instruction, culture, managerial, human resources, strategy, external relations, and micropolitical. Specific internal principal leadership roles involve responsibilities such as ensuring appropriate instruction, supervising curriculum, managing the school budget, managing safety and security, managing transportation, promoting the vision of school goals, and hiring, firing, inducting, and mentoring new teachers and administrators. External principal leadership responsibilities involve representing the school in the community, managing public relations, recruiting students, and serving as an advocate for the school's interest.

Significant research exists on the leadership behaviors of the school principal regarding the impact on student achievement as a whole. Gawerecki (2003) examined the impact of principal leadership on student academic achievement at the middle level. She used an explanatory case study of one principal on a middle level school where the principal was considered an exemplary leader by a national study of leadership in middle level schools. Gawerecki found that the principal's transformational leadership behaviors of empowerment, charismatic leadership, providing intellectual stimulation, being an appropriate model, and maintaining high performance expectations serve as a foundation for all leadership behavior. She also noted that these combined leadership behaviors characterize an effective school that fosters student learning.

Gawerecki (2003) indicated that maintaining high performance expectations was a key leadership behavior in the middle school environment. Marek (1999) found similar results on the elementary level. She investigated the leadership behaviors of three elementary principals in high-poverty schools that contributed to achieving and sustaining academic success in Texas. The study focused on two questions: (a) What are the leadership behaviors exhibited by principals to achieve academic success? (b) What are the leadership behaviors exhibited by principals to sustain academic success? Marek found that principals realized that academic expectations of students were low. Principals also recognized the need for faculty to raise the expectations of academic success for all students; thus, the leadership behavior was simply to communicate an expectation of excellence throughout the school.

Knezek (2001) examined how principal supervisory leadership behaviors are related to two factors: a) how leadership behaviors affected student performance in reading and b) how principal leadership behaviors differed between high and low performing schools. Principals' leadership behaviors affecting student reading in high performing schools that were not present in low performing schools were creating a collaborative environment, giving feedback on instruction, establishing formal supervision, knowledge of curriculum and instruction, knowledge of individual students, and developing school-wide programs. Prevalent behaviors in low performing schools were identified as teachers possessing high levels of autonomy, principals' insufficient handling of student behavior, poor resource allocation, poor school-wide assessment techniques, and a lack of meaningful professional development activities.

Other researchers sought to identify a prevalent leadership style or behavior versus a set of behaviors. Simpson (2002) studied the leadership behaviors, policies and practices of ten principals of schools where students were achieving at higher levels than predicted by principals on the third grade Illinois Standards Achievement Test in mathematics and reading. Her study posed two main questions: (a) Is there a leadership style that is prevalent amongst those principals whose students achieve a higher than predicted ISAT score who also come from low socioeconomic backgrounds in the Chicago Public School District 299? (b) What instructional leadership policies and practices exist in schools with higher than expected third grade achievement among students who come from low socioeconomic backgrounds in Chicago Public District 299? Simpson found that teamwork was the style of leadership that prevailed in schools where students scored higher than predicted on the third grade ISAT. She also found that the instructional leadership policies and practices that exist in schools with children from low socioeconomic backgrounds displayed teamwork.

Prater (2004) identified the relationships between the principal's managerial leadership, instructional leadership, and transformational leadership behaviors and student achievement in 131 public high schools. Prater found that principal leadership behaviors that promoted instructional and curriculum improvement influenced student achievement. However, the principal's ability to identify a vision had the greatest impact on student achievement.

Some of the literature that describes the role of the school principal appears to focus on the school principal as an instructional leader. Other researchers express a more comprehensive view of what encompassed this leadership role. It is difficult to decipher

the comprehensive duties of the school principal when most do not agree on successful leadership behaviors. This could be where the chaos begins as leadership behaviors of principals are evaluated in current research. What is certain is that, based upon the research, principals exhibit various leadership behaviors to enhance student academic behavior and achievement as a whole. This is accomplished through vehicles such as curriculum instruction, managerial leadership, transactional leadership, and transformational leadership. Furthermore, there is no information in the research where principals direct energy toward motivating mildly disabled or non-disabled children to complete homework assignments. Therefore, it is assumed that principals play more of an indirect role in this endeavor.

The Role of the Teacher in Homework Completion

Outside of the parental figure, teachers have the most frequent interaction with students. Teachers can provide extrinsic motivators to encourage children to perform academically. However, when teachers have placed countless hours into motivating children and they do not perform, the result among students is frustration. This is the case with teachers in this study as it relates to homework completion. Dembo and Eaton (2000) stated that despite teachers' good intentions, students vary greatly in their willingness to change their academic behavior and become more self-regulatory learners. Some students change their learning and study habits immediately, others take weeks, and still others never change (p. 486).

Brooks (2001) stated the following regarding the role of the teacher in the learning environment.

I believe that the mindset of the effective educator is motivated to help all

> children feel special and appreciated. We can accomplish this by being empathetic, by treating students in the same ways that we would like to be treated, by finding a few moments to smile and make them feel comfortable, by teaching them in ways that they can learn successfully, by taking care to avoid any words or actions that may be accusatory, by minimizing their fears of failure and humiliation, by encouraging them, and by recognizing their strengths. (p. 9)

One of the first steps for teachers to enhance the positive academic behavior of completing homework assignments is to get parents involved. Curriculum Review (2003) suggested that teachers should develop assignments that specifically involve parents. Teachers should tell parents what they are planning to do by sending a note or message home by a parent liaison or volunteer. Feldman (2004) outlined steps that teachers can take to maximize the benefits that students receive from homework. Feldman suggested that teachers (a) assign homework regularly and consistently, (b) communicate the homework policy by sending it home for parents to read, sign, and return, (c) build in flexibility by assigning homework on weekends to take advantage of peer and parental help, (d) make the homework count by giving credit when students turn it in, (e) make homework varying and interesting, (f) find the appropriate level of difficulty, (g) give feedback, (h) involve parents, and (i) do not assign homework as a punishment.

Sue (2005) provided teachers and parents with strategies for motivating student with disabilities. The strategies included (a) building on prior knowledge, (b) praising and recognizing all efforts and attempts at improving, (c) providing opportunities of peer

mentoring, (d) allowing the use of graphic organizers, (e) providing immediate feedback, (f) encouraging independence, (g) focusing on students abilities, (h) providing opportunities of risk-taking in learning, (i) providing children an opportunity for feedback, and (j) providing opportunities for students to experience success daily.

Teachers develop a series of best practices of teaching and learning through experience. It is beneficial for them to retain information related to these practices to enhance the academic performance of their students. Young (2002) developed a list of best practices that teachers utilized to increase the number of homework assignments submitted by students. Strategies involved (a) distributing a weekly syllabus on paper or electronically, (b) having students develop a place for daily homework assignments such as a spiral notebook or an English response journal, (c) developing parent/teacher teams via introductory coffee hours, open houses, parent conference nights, and team newsletters and meetings, and (d) having a homework packet that is given to parents. Trissler (2005) conducted a study that analyzed the results of focus groups, questionnaires, writing prompts, and a teacher questionnaire, to gain insight into student attitudes toward homework. The study revealed that students responded more favorably to homework involving worksheets and hand-on projects.

Teachers also have the ability to display creativity while trying to motivate students to practice positive academic behaviors. Garcia and De Caso (2004) conducted as study that introduced a motivational instructional program to students with disabilities. The purpose of the program was designed to increase the writing ability of disabled children and encourage the belief that their academic success depends on their personal effort. Curriculum Review (2004) showcased a social studies teacher who utilized

positive reinforcement every week with a Friday Sofa Award. The award entailed the privilege of sitting and working on a comfortable couch that she moved into the classroom. Personalized award certificates and a speech to the entire class about the student's work is presented as well. The author indicated that presenting these awards kept students motivated who might otherwise have put less effort into the class. Matheson and Shriver (2005) examined the effects of command training with teachers on students' compliance rates and academic engagement. Teachers in the study were taught how to provide effective commands, which also included verbal praise. When verbal praise was initiated, there was increase of academic engagement by the students.

As indicated earlier, teachers in general, struggle to motivate children to develop positive academic behaviors. However, they do play a more direct role in student motivation and achievement than principals since they can implement strategies directly to students to increase performance. Therefore, they have more control over the possibility of mildly disabled students' ability to complete homework assignments.

The Parental Role in Homework Completion

Aside from the teacher directly influencing mildly disabled students to complete homework assignments, the parental role is the most important piece of this puzzle. The hands of the school principal and the teacher are tied. They cannot make children perform if they do not have the desire to do so. Principals and teachers can reward students for completing homework assignments, however, parents have a more profound ability to punish students who do not perform. Most importantly, parents need to understand that education begins in the home. Principals and teachers need parents to

reinforce positive academic behaviors at home and to ensure that children complete homework assignments.

There are ways that parents can assist principals and teachers and ensure that children complete homework assignments. Chase (2002) indicated the following.

> When schools and families work together to aid in learning, student achievement soars. Test scores, attendance, homework, and report cards all improve measurably. It is not enough to tout family values. Educators must also value families by involving them in their children's education. (p. 5)

Boers (2002) listed several behaviors teachers need from parents. Two items addressed are parental monitoring of homework and increasing their parenting and study skills. With regard to monitoring homework, these activities involve checking every night to see what teachers assigned for homework, checking to see if the homework was completed, guiding their children through their homework each night, and spending time with their children reviewing concepts from past homework assignments. Regarding the increase of parenting and study skills, these behaviors involved establishing study times and places, having study materials at home, and teaching and promoting study skills.

Vuco (2004) outlined specific methods to assist teachers with homework completion. First, parents should hover nearby in an inconspicuous manner to ensure that homework is being completed. Second, parents should inform the teacher of negative homework patterns that are witnessed, especially before a long-term assignment. Third, parents should explain to the teacher which portions of the homework assignment the student was incapable of completing. Finally, parents should set a good example by being honest about the help that was provided to the student.

Parents also can also effectively assist mildly disabled children with completing homework assignments. Cancio, West, and Young (2004) conducted an experimental study that taught the parents of students with emotional and behavioral disorders how to facilitate the use of a homework program. The program was designed to get parents involved with assisting their child with completing math homework assignments and increasing math academic achievement. The students ended with a mean average of 100% homework completion and 96% to 100% accuracy during the intervention phase. The National Association of Secondary School Principals (2005) also outlined steps that parents can take to help their children with homework. They are listed as the following: (a) show that education and homework are important, including providing suitable study space, materials and resources, and setting a good example, (b) monitor assignments, including asking about the school's homework policy and looking over completed assignments, (c) provide guidance, including helping the child get organized, and watching for frustration, and (d) talking with teachers to resolve problems, including telling the teacher of parent concerns. Van Voorhis (2001) conducted a quasi-experimental study that involved interactive science homework assignments. More specifically, the assignment was designed to see if parental involvement with middle school students' homework assignments would promote student achievement. The results reported high levels of parental involvement for those who participated in the experiment.

The goal of helping a mildly disabled child is to facilitate the learning of becoming self-sufficient. When children become organized, they become confident, which results in enhanced academic performance. Thomsen (2001) discussed how she

prepared her son with a learning disability to take over the responsibility of completing his own homework. Her child went through the common phase of disorganization and losing important items related to homework. She and her husband initially assisted their child on a daily basis by monitoring the child's every move. Eventually, they trained their son to seek help only when he had questions regarding the homework. This type of organization and parental involvement is essential when working with disabled children.

The following displays a contrasting viewpoint of increased homework completion based on parental involvement. Jianzhong and Corno (2003) conducted a study that examined the relationship between family help and homework management strategies reported by middle school students. One question posed by the authors was "What are the relations between family homework help and student achievement?" Results showed no difference in achievement between middle school students who said they had help from homework from parents and those who did not.

During this researcher's experience, he has witnessed several parents stretch the boundaries of the issue of homework. At times, parents of disabled children will go to great lengths to save their children from failure. Orlans (2000) cited the problem of affluent parents who do their student's homework and demand grade changes from teachers through inappropriate emails and phone messages. This behavior is not uncommon among parents. Rather than work with the teacher to help the child develop accountability and strategies to succeed, teachers are often challenged to confront this behavior.

Summary

Motivating mildly disabled middle school students is a challenging task. While principals, teachers, and parents, become frustrated with this process, it is easy for any of these parties to place the blame on others. Principals are frustrated because standardized test scores and annual yearly reporting of progress threaten their very existence. Teachers are frustrated because their performance is constantly scrutinized, they absorb parental complaints, and are held accountable for children who are not motivated to learn. Parents are frustrated because they do not know how to help their children. Children are frustrated because their disabilities cause frustration. All of these stakeholders must unite. A solid system of achievement must be put into place to ensure success. It is difficult to articulate any one system because each child is different. However, the system begins with communication that involves telephone calls, letters, e-mail, and conferences. Communication and acceptance of responsibility by principals, teachers, parents, and children is essential to ensure that mildly disabled children complete homework assignments and perform up to their fullest potential.

CHAPTER 3. METHODOLOGY

This chapter describes the methodology used to measure the impact of positive reinforcers on the number of missed homework assignments of mildly disabled children. It will begin by addressing the purpose of the study, the research foundations, and the research designed to be utilized. This will be followed by a description of the sample, the intended data collection procedures, and the operationalization of relevant constructs. The chapter will conclude with a discussion of the data analysis techniques utilized in the study.

Purpose of the Study

The purpose of this study was to examine the effects of positive extrinsic reinforcers on the academic behavior of mildly disabled middle school students who participate in Learning Strategies classes.

Research Foundations

Children go to great lengths to keep from completing homework assignments. The researcher has tried to motivate students during his professional career as an Exceptional Student Education teacher. He has contacted the parents of many of the participants in an effort to decrease the number of missed homework assignments on multiple occasions. Students have displayed such behaviors as misrepresenting the truth, forging progress reports, and hiding or destroying report cards as a means of keeping parents and teachers from knowledge pertaining to missed homework assignments and overall poor academic performance. Killoran (2003) stated that "Trying to get students to complete their homework is one of the most frequent and frustrating behavior problems for educators. (p. 1).

Another misleading student behavior witnessed by the researcher has been described by Whitley (2001). The author has described this type of individual as a Con Artist. He stated the following regarding these students:

> The Con Artist type may be the most difficult of all underachievers for parents and teachers to understand. These are the youngsters who seem to have a great deal of charm for their age, especially around adults. They know how to make people like them and how to appear warm, poised, and confident. They seem to have so much going for them, except the ability to work. Parents and teachers mistakenly focus on the charm and social ease of these youngsters as valuable, positive gifts and not symptoms of what is wrong with these individuals (p. 105).

During the researcher's tenure of working with mildly disabled children, it has been difficult to determine when such behaviors are present. This student behavior is a factor that drove this study.

Research Design

A one group pre-test/post-test design (i.e., a pre-experimental research design) was used to examine the effects of positive reinforcers on the academic behavior of mildly disabled middle school students. More specifically, this study was classified as experimental because of the integration of extrinsic rewards that impacted student behaviors. The outcome was measured by utilizing data regarding the number of missed homework assignments collected prior to and after the intervention of positive reinforcers.

In this research design, students participated by completing homework assignments in Language Arts, Social Studies, Math, and Science courses. Prior to this

experiment, the researcher explained the premise of the incentive program to the students. The incentive program involved a weekly participation prize, a weekly bonus drawing prize, and a grand prize at the end of the school year.

First, a participation reward was presented to all students at the end of each week for completing at least three homework assignments. This reward included a package containing candy, stickers, and school supplies. The distribution of a participation reward ensured that students received something for completing a minimum number of homework assignments. This process also reduced frustration if a student did not win the weekly bonus prize.

Second, participants were eligible for a bonus prize from a drawing at the end of each week. The weekly bonus drawing prizes consisted of gift certificates to a movie theatre or a pizza restaurant. The movie theatre gift certificate consisted of two tickets, popcorn, soft drinks, and candy from the concession stand. The pizza restaurant gift certificate allowed students to receive a large pizza and four large drinks for the family.

Students earned tickets for the weekly bonus drawing by meeting the following criteria: One ticket was issued for three completed homework assignments, three additional tickets were issued for completing four homework assignments, and five additional tickets were issued for completing five or more homework assignments per week. The total possible number of tickets earned each week equaled nine (nine opportunities to win), which were entered into the drawing. This procedure increased the participants' chances of winning the weekly bonus prize. The incremental increase in possible tickets earned was designed to further motivate students to complete homework assignments.

Finally, the three students who acquired the most tickets at the end of the school year, with parental permission, were presented with the grand prize of a gift certificate for a family outing to a well-known restaurant for food and video games.

Students were regularly reminded of the benefits of completing homework assignments. During this study, every Monday students were reminded regularly of the following benefits of completing homework: a) reducing the number of missed homework assignments could increase overall grades and decrease the probability of them being retained, b) completing homework assignments could increase exposure to standards-based competencies, c) by completing homework assignments, students help the district to enhance the No Child Left Behind (NCLB) initiatives, and d) by completing homework assignments, students could help their school by doing well on the FCAT, which could maintain the overall school grade of "A" issued by the state.

Sample

The theoretical population of this study consisted of mildly disabled middle school students. The sample selected for this study was all students enrolled in learning strategies courses at the researcher's school. The school chosen had the largest population of mildly disabled students in this region and had a very diverse population of families represented. As the study focused on the students themselves and not the school, the choice of school was assumed not to be a factor since it is so diverse in a populous city. The Learning Strategies course was designed for children who possess mild disabilities and are pursuing a standard diploma. The course met every school day, and the instructors worked with the students across all subjects in the curriculum, with the focus on being a better student. The course provided students with the necessary

organizational skills, test-taking skills, and effective study techniques to succeed in standard courses. Standard courses were Language Arts, Social Studies, Math, and Science. All students enrolled in the Learning Strategies courses were seventh and eighth graders. Permission was granted by the school board to conduct the study and parents were contacted by phone to give their child rewards with all being in the affirmative.

Since the data collection process was a routine procedure of the instructor, no student names or student numbers were utilized, and the name of the school and the district was not mentioned, no parental consent was needed.

Data Collection Procedures

Each week, three Learning Strategies instructors received weekly reports from general education teachers regarding the number of missed homework assignments in Language Arts, Math, Science, and Social Studies courses. Examples of the data collection documents are located in the appendix A and B of this study. The collection of data needed for this study was already a weekly function of the researcher's job. This was a mandatory process at the school.

The process assisted Learning Strategies instructors to help children complete homework assignments. If there were any additional information required from general education teachers, it was collected during planning periods or before school hours. This process ensured that there was no interference during school instructional time.

The data collection process involved pre-intervention data and post-intervention data. Once the intervention took place, all data collected 4 weeks prior was considered as pre-intervention data. This information was be considered as a baseline behavior pattern (number of missed homework assignments) from the participants prior to the

intervention. After the data were collected, the researcher recorded the number of missed homework assignments from their core academic courses on a spreadsheet. Other information to be recorded on the spreadsheet included the student participation number, Language Arts missed assignments, Math missed assignments, Social Studies missed assignments, Science missed assignments, total number of missed assignments, the student's primary exceptionality, the total number of assigned assignments, and the percentage of missed assignments.

The post-intervention data occurred after the incentive program was introduced. During this stage, the researcher recorded the same data information as previously collected for each participant during the pre-intervention data on a spreadsheet. Data were analyzed on a weekly basis for prize distribution purposes.

After reviewing the data, the weekly participation incentives and tickets were awarded during the following week. Students wrote their names on the back of the tickets and placed them in a bag. After the tickets were collected, the bag was shaken, a ticket was drawn, and the weekly bonus prize was awarded to the winning participant. The researcher collected data on the total number of tickets that students acquired until the end of the school year. The three students who had the most tickets at the end of the year were awarded grand prizes.

As indicated earlier, data were collected for 4 weeks after the intervention. At the end of the four week post-intervention period, the researcher determined if there was a difference in the number of missed homework assignments. This information allowed the researcher to answer the research question and hypotheses outlined in this study. The researcher did not inform the students as to when the experiment ended. However, the

researcher continued with the incentive program through the end of the school year and awarded the grand prize to reduce the probability of students reverting back to negative academic behaviors.

Operationalization of Study Constructs

This section addresses the variables used in this project, the survey instruments that were used for data collection, and justification for the instruments selected.

Dependent Variable

The dependent variable that was addressed in this study is homework non-submission rate. Data were collected regarding each students assignments for the week and whether the assignment was missed. Homework is an assignment that was specifically designed to be completed at home. A missed assignment is defined as a student who did not submit an assignment whatsoever and the teacher reports this as missing. The total missed assignments are the number of missed assignments per week by a given student. The percentage of missed assignments will be calculated by the number of assignments missed divided by the total number of assignments assigned for a given student.

Independent Variables

The first independent variables that were addressed in this study were student disabilities. The only disabilities that were tested specifically were students with Other Health Impairments (OHI) and Specific Learning Disabilities (SLD). Due a lack of a significant presence of Emotionally Handicapped (EH) and Educable Mentally Handicapped (EMH) students in the sample, four and two students respectively, these disabilities were not tested in isolation.

The second independent variable that was addressed in this study was timing. A reinforcement may be effective only as a novelty or it may be effective long-term, and so the impact of reinforcements was evaluated 1 week and 4 weeks after the introduction of positive reinforcers.

The last independent variable that was addressed in this study was the existence of positive reinforcers. Barker, Kreider, Peissig, Sokoloff, and Stansfield (2005) defined positive reinforcer as an appetitive event whose presentation follows an operant response. The authors also indicated that the positive reinforcer increases the likelihood of that behavior occurring again under the same circumstances. Positive reinforcers introduced in this study will be gift packages containing candy, stickers, school supplies, and gift certificates to restaurants. Data were collected before and after positive reinforcers are introduced to the classes.

Confounding Variables

Student and teacher absenteeism are confounding variables that could affect this study. Students have three days to complete missed homework assignments if they are absent. Teacher absenteeism is also a confounding variable as teachers may be absent due to illness, emergencies, or training. These factors could affect the timeliness of data collection and slows the process of prize distribution.

Method of Analysis

This section will outline the steps that were taken to analyze the data after they were collected.

Number of Missed Homework Assignments

The weekly data collected by the learning strategies teachers in this study were the number of missed homework assignments and the total number of assignments given by Language Arts, Social Studies, Math, and Science teachers. The number of missed homework assignments and the percentage of missed homework assignments as a result of introducing positive reinforcers were calculated as well. Since the majority of students in this study possess the disabilities of OHI and SLD, an analysis of the net gain of missed homework assignments and the percentage of missed homework assignments prior to and after the introduction of positive reinforcers were analyzed between these two groups. Examples of the data collection documents are illustrated as the following:

Data Collection Instrument A

TEAM CONSULTATION DATE: __1/12/06___

TEACHERS PRESENT: ___Teacher_____, ____Teacher_____, ___Teacher_____

___Teacher___, ____Teacher_____

Doe, John – SLD – Learning Strategies (5th period – Teacher)

LA – 79% average, missing vocabulary 6 study guide

MA – 75% on unit test for covering and surrounding

S.S. – 85% on chapter 2 test missing 2 HW assignments: #6, #12

SCI – missing 3 homework assignments

Doe, Jane – OHI

LA – missing vocabulary 6 study guide

MA – 12% on unit test

S.S. – "F" average, 6 zero's CW, no HW turned in

SCI – missing 4 HW assignments

Data Collection Instrument B

Student: _____ Team: _____Nitro_____

SUBJECT	ASSIGNMENTS COMPLETED? Yes/No If not, please list.	REFERRALS Or Behavior Issues	QUESTIONS/ CONCERNS?	TEACHER SIGNATURE
Language Arts	No. Missing exercises 1 and 2 in literature book.	No	None	
Math	Missing 3 worksheets and all warm-ups.	No	None	
Science	Power Point Final due Thursday	No	No	
Social Studies	Missing chapter 5 Reading Study Guide and 2 homework assignments	Yes. Multiple tardies to class.	No	
P.E./ Electives	Yes	No	No	

Student Accommodations: **_X__** Repeat, clarify, and summarize directions, ___ Extended time for assignments/ tests, ___ Use proximity control, ___ Peer assistance, ___Allow use of calculator for assignments, **_X_** Adult guidance assistance, ___ Allow verbal responses and/or tape answers, Preferential seating away from distractions, ___ Prompt student to keep assignment/homework log, **_X_** Sign planner daily, ___ Weekly progress reports, ___ Allow alternate methods of assessing mastery as needed.

Data Collection Instrument C

Participant #	L.A. Missed	Math Missed	S.S. Missed	SCI Missed	Total Ass.	% Missed	P.E.
1	5	5	6	4	30	66	OHI
2	4	3	2	1	20	50	SLD
3	1	2	2	2	10	70	OHI
4	3	0	1	1	15	33	SLD
5	0	0	0	0	10	0	OHI
6	2	8	0	0	17	59	SLD
7	3	0	0	1	25	16	EH
8	1	1	1	0	12	25	SI
9	2	1	1	5	9	100	EMH
10	0	3	0	0	6	50	SLD

Note. The abbreviations in Data Collection Instrument C represent Language Arts missed assignments, Mathematics missed assignments, Social Studies missed assignments, Science missed assignments, Total missed assignments, Percentage of missed assignments, and Primary Exceptionality respectively. This instrument also only reflects 10 participants as an example of how data was collected. The actual number of participants is 41.

This study will seek to test the following hypotheses:

Null hypothesis One

There will be no difference in the number of missed homework assignments submitted by mildly disabled students immediately after positive reinforcers have been introduced.

R*esearch hypothesis One*

There will be a difference in the number of missed homework assignments submitted by mildly disabled students 1 week after positive reinforcers have been introduced.

Null hypothesis Two

There will be no difference in the number of missed homework assignments submitted by mildly disabled students 4 weeks after positive reinforcers have been introduced.

R*esearch hypothesis Two*

There will be a difference in the number of missed homework assignments submitted by mildly disabled students 4 weeks after positive reinforcers have been introduced.

Null hypothesis Three

There is no difference in the net gain of homework assignments missed by students who possess the disabilities of OHI versus SLD 4 weeks after positive reinforcers are introduced.

Research hypothesis Three

There will be a difference in the net gain of homework assignments missed by students who possess the disabilities of OHI versus SLD 4 weeks after positive reinforcers are introduced.

Null hypothesis Four

There will be no difference in the percentage of missed homework assignments by students who possess the disabilities of OHI versus SLD 4 weeks after positive reinforcers are introduced.

Research hypothesis Four

There will be a difference in the percentage of missed homework assignments by students who possess the disabilities of OHI versus SLD 4 weeks after positive reinforcers are introduced.

Paired and Independent Sample Tests will be utilized to compare the pre intervention data against post intervention data by individual student.

CHAPTER 4. DATA COLLECTION AND ANALYSIS

This chapter presents the findings of this study. The purpose of this study was to gain insight into the effectiveness of the use of positive reinforcers on the academic behaviors of mildly disabled middle school students. More specifically, this study was designed to measure the effect of positive reinforcers on the number of missed homework assignments submitted by mildly disabled students. This research project was intended to enrich the body of current research in the continuing investigation of student extrinsic motivation and the effect that positive reinforcers have on student academic behavior.

In this study, a quantitative pre-experimental design was used to ascertain the effect of using positive reinforcers on the academic behavior of students. In such an experimental design, the research study was designed in such a way as to establish a cause-and-effect relationship between variables. In this study, each of the four Learning Strategies classes was assigned to the experimental method of positive reinforcement. Students in these classes were heterogeneously grouped and assigned to classrooms based upon core academic course availability.

Students who participated in this study received positive reinforcers which included packages containing candy, stickers, and school supplies on a weekly basis. Second, participants were also eligible for prizes from a drawing at the end of each week based upon the number of completed homework assignments. The weekly bonus drawing prizes consisted of gift certificates to a movie theatre or a pizza restaurant. Finally, the three students who missed the fewest number of homework assignments, with parental permission, were presented with the grand prize of a gift certificate for a family outing to a local, well-known restaurant for food and video games.

Results

The following research question guided the review of literature, the methodology used to collect and analyze the data, and the presentation of the finding that resulted from the study.

Research Question One: Can positive reinforcers impact the academic behavior of mildly disabled students who possess Emotional Handicaps (EH), Speech or Language Impairments (SI), Specific Learning Disabilities (SLD), Educable Mentally Handicaps (EMH), and Other Health Impairments (OHI) which include Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD)? Several hypotheses were tested in support of this research question.

Hypothesis One-A: There is no difference in the mean number of missed homework assignments submitted by mildly disabled students before reinforcement began versus 1 week after positive reinforcers have been introduced.

A Paired Samples t-Test was conducted to test this hypothesis (Tables 1a and 1b).

Table 1a

H1a) Paired Samples t-test for Change in Number of Missed Assignments (Short Term)

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Avg Missed Pre	4.2134	41	2.21399	.34577
	#Missed Post Week 1	2.34	41	2.128	.332

Table 1b

H1a) Paired Samples t-test for Change in Number of Missed Assignments (Short Term)

Paired Samples Test

		Paired Differences				
		Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
Pair	Avg Missed Pre # Missed Post Week 1	1.87195	1.84571	.28825	6.494	.000

With a p-value of .0000 which is less than .05, the null hypothesis is rejected. The mean number of missed homework assignments submitted by mildly disabled students significantly decreased from an average of 4.21 per week prior to positive reinforcers being introduced to an average of 1.87 1 week after positive reinforcers were introduced.

Hypothesis One-B. There is no difference in the mean percentage of missed homework assignments submitted by mildly disabled students before reinforcement began versus 1 week after positive reinforcers have been introduced.

A Paired Samples t-Test was conducted to test this hypothesis (Tables 2a and 2b).

Table 2a

H1b) Paired Samples t-test for Change in Percent Missed Assignments (Short Term)

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pct Missed Pre Intervention	51.3024	41	24.44190	3.81718
	Pct Missed Week 1 Post	26.9805	41	24.22740	3.78368

Table 2b

H1b) Paired Samples t-test for Change in Percent Missed Assignments (Short Term)

Paired Samples Test

		Paired Differences				
		Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
Pair 1	Pct Missed Pre Intervention – Pct Missed Week 1 Post	24.32195	23.03347	3.59722	6.761	.000

With a p-value of .0000 which is less than .05, the null hypothesis is rejected. The mean percentage of missed homework assignments submitted by mildly disabled students significantly decreased from 51.3% during the 4 weeks prior to reinforcement versus 24.32% 1 week after positive reinforcers were introduced.

Hypothesis Two-A: There is no difference in the mean number of missed homework assignments submitted by mildly disabled students before reinforcement began versus 4 weeks after positive reinforcers have been introduced.

A Paired Samples t-Test was conducted to test this hypothesis (Tables 3a and 3b).

Table 3a

H2a) Paired Samples t-test for Change in Number of Missed Assignments (Longer Term)

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Avg Missed Pre	4.2134	41	2.21399	.34577
	# Missed Post Week 4	1.83	41	1.843	.288

Table 3b

H2a) Paired Samples t-test for Change in Number of Missed Assignments (Longer Term)

Paired Samples Test

		Paired Differences				
		Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
Pair 1	Avg Missed Pre - # Missed Post Week 4	2.38415	1.94221	.30332	7.860	.000

With a p-value of .0000 which is less than .05, the null hypothesis is rejected. The mean number of missed homework assignments submitted by mildly disabled students

significantly decreased from an average of 4.21 per week prior to positive reinforcers being introduced to an average of 2.38 4 weeks after positive reinforcers were introduced.

Hypothesis Two-B. There is no difference in the mean percentage of missed homework assignments submitted by mildly disabled students before reinforcement began versus 4 weeks after positive reinforcers have been introduced.

A Paired Samples t-Test was conducted to test this hypothesis (Tables 4a and 4b).

Table 4a

H2b) Paired Samples t-test for Change in Percent Missed Assignments (Longer Term)

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pct Missed Pre Intervention - Pct Missed Week 4 Post	51.3024	41	24.44190	3.81718
		23.6585	41	23.94120	3.73899

Table 4b

H2b) Paired Samples t-test for Change in Percent Missed Assignments (Longer Term)

Paired Samples Test

		Paired Differences				
		Mean	Std. Deviation	Std. Error Mean	t	Sig. (2-tailed)
Pair 1	Pct Missed Pre Intervention – Pct Missed Week 4 Post	27.64390	23.78466	3.71454	7.442	.000

With a p-value of .0000 which is less than .05, the null hypothesis is rejected. The mean percentage of missed homework assignments submitted by mildly disabled students significantly decreased from 51.3% during the 4 weeks prior to reinforcement versus 23.66% 4 weeks after positive reinforcers were introduced.

Hypothesis Three-A: There is no difference in the average net gain of missed homework assignments submitted by students who possess the disabilities of OHI versus SLD 4 weeks after positive reinforcers have been introduced.

An Independent Samples t-Test was conducted to test this hypothesis (Tables 5a and 5b).

Table 5a

H3a) Independent Samples t-test for Difference in Change in Missed Assignments (OHI versus SLD)

Group Statistics

OHI/SLD	N	Mean	Std. Deviation	Std. Error Mean
Net Change Missed OHI	9	-8.00	4.873	1.624
Net Change Missed SLD	26	-7.23	5.881	1.153

Table 5b

H3a) Independent Samples t-test for Difference in Change in Missed Assignments (OHI versus SLD)

Independent Samples Test

t-test for Equality of Means

		t	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Net Change Missed	Equal Variances Assumed	-.352	.727	-.769	2.186
	Equal variances Not assumed	-.386	.704	-.769	1.992

With a p-value of .727 which is greater than .05, the null hypothesis is not rejected. There is insufficient evidence to conclude a difference in the improvements regarding

missed homework assignments for OHI versus SLD students 4 weeks after positive reinforcers were introduced.

Hypothesis Three-B: There is no difference in the change in mean percentage of missed homework assignments submitted by students who possess the disabilities of OHI versus SLD 4 weeks after positive reinforcers have been introduced.

An Independent Samples t-Test was conducted to test this hypothesis (Tables 6a and 6b).

Table 6a

H3b) Independent Samples t-test for Difference in Change in Percent Missed Assignments (OHI versus SLD)

Group Statistics

OHI/SLD	N	Mean	Std. Deviation	Std. Error Mean
Net Change Pct Missed OHI	9	-20.8633	12.39355	4.13118
Net Change Pct Missed SLD	26	-24.0042	17.64859	3.46117

Table 6b

H3b) Independent Samples t-test for Difference in Change in Percent Missed Assignments (OHI versus SLD)

Independent Samples Test

t-test for Equality of Means

		t	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Net Change Missed	Equal Variances Assumed	.491	.626	3.14090	6.39244
	Equal variances Not assumed	.583	.567	3.14090	5.38947

With a p-value of .626 which is greater than .05, the null hypothesis is not rejected. There is insufficient evidence to conclude a difference in the improvements regarding the percentage of missed homework assignments for OHI versus SLD students 4 weeks after positive reinforcers were introduced.

CHAPTER 5. RESULTS, CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter explores the results and conclusions of the statistical analysis, along with any limitations of the study which were encountered. Additionally, recommendations for further research studies on the subject matter are offered.

Results

The purpose of this study was to gain insight into the effectiveness of the use of positive reinforcers on the academic behaviors of mildly disabled middle school students. More specifically, this study was designed to measure the effect of positive reinforcers on the number of missed homework assignments submitted by mildly disabled students. This research project was intended to enrich the body of current research in the continuing investigation of student extrinsic motivation and the effect that positive reinforcers have on student academic behavior.

This study sought to answer one research question: Can positive reinforcers impact the academic behavior of mildly disabled students who possess Emotional Handicaps (EH), Speech or Language Impairments (SI), Specific Learning Disabilities (SLD), Educable Mentally Handicaps (EMH), and Other Health Impairments (OHI) which include Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD)? To answer this question, several hypotheses were tested.

Hypothesis One-A: There is no difference in the number of missed homework assignments submitted by mildly disabled students before reinforcement began versus 1week after positive reinforcers have been introduced. The null hypothesis was rejected, and findings showed the number of missed homework assignments submitted by mildly

disabled students significantly decreased from an average of 4.21 per week prior to positive reinforcers being introduced to an average of 1.87 1 week after positive reinforcers were introduced. The use of positive reinforcers significantly reduced the number of missed homework assignments by mildly disabled students in the short term.

Hypothesis One-B. There is no difference in the percentage of missed homework assignments submitted by mildly disabled students before reinforcement began versus 1 week after positive reinforcers have been introduced. The null hypothesis was rejected, and findings showed the percentage of missed homework assignments submitted by mildly disabled students significantly decreased from 51.3% during the 4 weeks prior to reinforcement versus 24.32% 1 week after positive reinforcers were introduced. The use of positive reinforcers significantly reduced the percentage of missed homework assignments by mildly disabled students in the short term.

The combination of Hypotheses One-A and One-B shows an immediate impact of positive reinforcement on the academic behavior of mildly disabled students. After 4 years of teaching the mildly disabled children, the researcher has regularly witnessed children working for a desired reward, such as movie and popcorn days in the classroom. Even consistent non-performers were often swayed toward these short-term goals. Thus it was not surprising to see the results corroborate his experience. It lends credence to the notion that even the mildly disabled can be motivated to learn for a short-term goal, as the attention span required is not too great.

Hypothesis Two-A: There is no difference in the number of missed homework assignments submitted by mildly disabled students before reinforcement began versus 4 weeks after positive reinforcers have been introduced. The null hypothesis was rejected,

and findings showed the number of missed homework assignments submitted by mildly disabled students significantly decreased from an average of 4.21 per week prior to positive reinforcers being introduced to an average of 2.38 4 weeks after positive reinforcers were introduced. The use of positive reinforcers significantly reduced the number of missed homework assignments by mildly disabled students in the longer term, so it appears that the effects of the reinforcement do not subside quickly.

Hypothesis Two-B. There is no difference in the percentage of missed homework assignments submitted by mildly disabled students before reinforcement began versus 4 weeks after positive reinforcers have been introduced. The null hypothesis was rejected, and findings showed the percentage of missed homework assignments submitted by mildly disabled students significantly decreased from 51.3% during the 4 weeks prior to reinforcement versus 23.66% four weeks after positive reinforcers were introduced. The use of positive reinforcers significantly reduced the percentage of missed homework assignments by mildly disabled students in the long term, and interestingly the percentage missed was actually lower after four weeks than after 1 week.

The combination of Hypotheses Two-A and Two-B shows a more long-term impact of positive reinforcement on the academic behavior of mildly disabled students. These results were rather surprising since it was not common for the researcher to see his mildly disabled students remain motivated for any length of time. Four weeks may not be long-term to fully-functional children, but to mildly disabled children, it is virtually long term. Previous efforts at his school to retain student focus long term and establish a sense of urgency toward their academics as an entire group have been unsuccessful. Even parents have been seen trying to reward children with video game systems, four-

wheel motorcycles, money, clothes, and vacations. What makes this study different is that the aim was on completing homework assignments, which are in the students' control, while past efforts were focused on improving grades, which requires a greater commitment to studying and in which the results are not in the students' control.

Hypothesis Three tested the difference in the impact of positive reinforcement on the academic behavior of OHI versus SLD students. There was insufficient evidence to reject the null hypothesis, as the improvement in performance was not significantly different for the two groups, although both groups enjoyed a significant improvement. The researcher fully expected to see a difference in how the two groups responded to positive reinforcement since OHI students historically possessed more difficulties both academically and behaviorally; it wouldn't have been surprising to see a greater improvement for the SLD students than for the OHI students. Since the two groups had similar improvements, in makes one wonder how different the learning disability truly is across these groups. These children are classified with several different types of learning disability and yet the simplest positive reinforcement works in virtually the same manner regardless.

Reflecting on the results of the hypothesis tests, the answer to the research question is that positive reinforcers can impact the academic behavior of mildly disabled students who possess Emotional Handicaps (EH), Speech or Language Impairments (SI), Specific Learning Disabilities (SLD), Educable Mentally Handicaps (EMH), and Other Health Impairments (OHI) which include Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD). Yet, the findings of the three hypotheses do raise questions regarding mildly disabled children's ability to learn. A

learning disability is defined as "any of various conditions that interfere with an individual's ability to learn and so result in impaired functioning in language, reasoning, or academic skills and are thought to be caused by difficulties in processing and integrating information" (Miriam-Webster Online, 2005). The results from the aforementioned hypotheses clearly indicated that since mildly disabled students reduced the number and percentage of missed homework assignments both short and long-term, significant learning took place. If the various conditions possessed by mildly disabled students in this study truly interfered with their ability to learn, how were they able to achieve these results? Do these children possess these disabilities to the extent to which parents and doctors claim? Have these children been told they possess these disabilities in the past, and have therefore, utilized them as crutches or a pass for mischief? Is the assessment used to classify a child as mildly disabled accurate? This is not to say that these disabilities do not exist, however it raises questions as to the frequency of these disabilities with children as a whole. While these questions cannot be answered by this study, they certainly have been given justification for further investigation.

Pre-intervention data revealed that the number of homework assignments missed by the group of 41 participants over the 4-week period was 691. Post intervention data over the 4-week period revealed the number of missed assignments had been decreased to 396. This equated to a significant difference of 295 missed assignments between pre and post intervention methods and an overall decrease of 57%. Based upon the pre and post intervention data and the findings in the hypotheses, this experiment clearly illustrated the short-term and longer-term impact of positive reinforcers on the academic behavior of mildly disabled students who possess Emotional Handicaps (EH), Speech or Language

Impairments (SI), Specific Learning Disabilities (SLD), Educable Mentally Handicaps (EMH), and Other Health Impairments (OHI) which include Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD).

Limitations of the Study

The first two limitations impacted the methodology of this study regarding the prize distribution to the participants and timely collection of data. The first limitation in this research occurred when several students were absent from school due to illness or suspended from school for disciplinary reasons. This caused the researcher to fall behind schedule when he was unable to collect data regarding missed homework assignments. This limitation was rectified when students returned to school and made up the appropriate work. Students were provided with one day to make up homework assignments for each day they were absent. Despite this limitation, students were still eligible to receive participation prizes in a timely manner. Naturally, it would have been more helpful if students had been present so data collection and prize distribution could have been expedited on schedule.

The second limitation occurred when teachers were absent from school or training seminars. This limitation also slowed the data collection process and kept students waiting for the distribution of participation incentives. Data were collected when teachers returned and some students became frustrated in the process, possibly skipping an assignment as a result, although this cannot be proven to be the cause.

The final limitation in this study was the inability of the researcher to gain direct access to teacher's grades. Having direct access to grades would have been helpful to measure the overall impact of the student's improved academic behavior. Though it was

discovered that positive reinforcers did have an overall impact on the short term and long-term academic behaviors of mildly disable students, it would have been interesting to have access to their overall academic performance as well. To achieve better grades, students must develop positive academic behaviors with regard to completing homework assignments in order to succeed academically. This study supports the idea that positive reinforcers can improve study habits but it is ultimately unknown if these behaviors can improve overall grades.

Conclusions

The literature outlined the role of the teacher in this intricate process. Curriculum Review (2003) suggested that teachers should develop assignments that specifically involve parents. Feldman (2004) outlined steps that teachers can take to maximize the benefits that students receive from homework such as assign homework regularly and consistently, communicate the homework policy by sending it home for parents to read, sign, and return and build in flexibility by assigning homework on weekends to take advantage of peer and parental help. Sue (2005) provided strategies such as providing opportunities of peer mentoring and providing opportunities for students to experience success daily. These strategies, unfortunately, do not help children when they are at home and unsupervised by principals and teachers.

Completing homework assignments is a process of practicing and reinforcing skills that will enhance the absorption of academic material, student grades, and test scores, thus, creating academic success. The development of stronger parent relationships with their children regarding the expectations of the completion homework assignments is where efforts should begin. Since principals and teachers are not in the

home with students, homework completion is the primary responsibility of parents and students. This practice is simply an exercise of leading by example. It should begin with parents initiating and maintaining contact with teachers in an effort to monitor what and when assignments are due. The researcher has observed that successful mildly disabled students have parents who are visible.

Based upon the findings of this study, it appears as though mildly disabled children may respond to the same reinforcers as non-disabled children. This leads one to wonder why more traditional methods to reinforce these children have not been attempted. There were data to reflect the students' inability or unwillingness to complete homework assignments. Perhaps parents could place more emphasis on helping these children to develop more consistent practices of completing homework assignments in the early years with the assistance of reinforcers.

Recommendations for Future Research

As indicated earlier, there is no current research that investigates the specific area of how to motivate mildly disabled children. It would be interesting to see similar research conducted in the area of motivating mildly disabled children on the lower grade school levels of Kindergarten through second grade when study habits are being formed and on the high school level when peer pressure is overwhelming and may make any motivation efforts useless. It is important to assist those groups to develop successful academic behaviors and contribute to the greater body of knowledge in these areas as well.

It would also be interesting to see a study conducted to measure how learning disabilities are assessed versus how children respond to motivational techniques. A

research methodology displaying a proactive versus a reactive approach to investigating this subject may prove to be beneficial and reveal critical information as well. As indicated earlier, these findings do not support or assume that these disabilities do not exist. However, questions arise as to the severity and frequency of these disabilities within these students.

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APPENDICES

APPENDIX A: CONSULTATION FORM

TEAM CONSULTATION DATE: _____

TEACHERS PRESENT: _____, _____, _____

_____, _____

Doe, John – SLD – Learning Strategies (5th period – Teacher #1)

LA

MA

GEO

SCI

Doe, Jane – OHI

LA

MA

GEO

SCI

Smith, John – EH

LA

MA

GEO

SCI

Smith, Jane - OHI

LA

MA

GEO

SCI

APPENDIX B: ACCOMMODATIONS AND TEACHER INPUT FORM

Student: _____ Team: _____

SUBJECT	ASSIGNMENTS COMPLETED? Yes/No If not, please list.	REFERRALS Or Behavior Issues	QUESTIONS/ CONCERNS?	TEACHER SIGNATURE
Language Arts				
Math				
Science				
Social Studies				
P.E./ Electives				

Student Accommodations: ___ Repeat, clarify, and summarize directions, ___ Extended time for assignments/ tests, ___ Use proximity control, ___ Peer assistance, ___Allow use of calculator for assignments, ___ Adult guidance assistance, ___ Allow verbal responses and/or tape answers, Preferential seating away from distractions, ___ Prompt student to keep assignment/homework log, ___Sign planner daily, ___ Weekly progress reports, ___ Allow alternate methods of assessing mastery as needed.

APPENDIX C: DATA COLLECTION FORM

Participant #	L.A. Missed	Math Missed	S.S. Missed	SCI Missed	Total Ass.	% Missed	P.E.
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
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32							
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39							
40							
41							

Note. The abbreviations in Data Collection Forms represent Language Arts missed assignments, Mathematics missed assignments, Social Studies missed assignments, Science missed assignments, Total missed assignments, Percentage of missed assignments, and Primary Exceptionality respectively.

APPENDIX D: WEEK ONE MISSED HOMEWORK DATA – PRE-INTERVENTION

Participant #	L.A. Missed	Math Missed	S.S. Missed	SCI Missed	Total Ass.	% Missed	P.E.
1	1	3	2	1	8	88	OHI
2	1	3	2	1	8	88	SLD
3	1	3	0	1	8	63	SLD
4	1	1	0	0	8	25	SLD
5	0	0	1	1	7	29	EH
6	1	0	1	1	7	43	SLD
7	2	3	1	1	8	88	SLD
8	2	0	2	0	7	57	SLD
9	2	1	2	3	13	62	SLD
10	2	2	1	3	8	100	EH
11	2	2	1	2	8	88	SLD
12	1	0	0	0	7	14	SLD
13	1	0	1	1	7	43	SLD
14	2	5	3	2	13	92	OHI
15	0	0	0	0	6	0	SLD
16	1	2	2	1	8	75	SLD
17	1	1	0	1	6	50	SLD
18	0	0	3	0	6	50	OHI
19	1	1	1	2	7	71	SLD
20	1	2	1	2	8	75	OHI
21	2	5	0	0	13	54	SLD
22	2	6	0	1	13	69	SLD
23	1	3	2	1	8	88	SLD
24	1	3	1	1	8	75	EH
25	1	0	1	1	7	43	SLD
26	1	1	0	1	7	43	SLD
27	0	1	1	0	8	25	OHI
28	1	0	3	1	6	83	SLD
29	1	1	2	1	6	83	OHI
30	1	1	1	2	7	71	OHI
31	1	3	1	1	6	100	EMH
32	0	1	1	0	6	33	OHI
33	0	0	0	0	7	0	EMH
34	1	1	0	1	7	43	OHI
35	1	1	3	2	7	100	SLD
36	1	3	1	1	8	75	SLD
37	0	1	1	2	8	50	SLD
38	0	1	0	0	7	14	SLD
39	0	4	0	0	13	31	SLD
40	1	1	0	0	7	29	SLD
41	0	1	0	1	8	25	EH

APPENDIX D: WEEK TWO MISSED HOMEWORK DATA – PRE-INTERVENTION

Participant #	L.A. Missed	Math Missed	S.S. Missed	SCI Missed	Total Ass.	% Missed	P.E.
1	1	1	2	1	9	56	OHI
2	0	3	1	0	7	57	SLD
3	1	3	1	1	7	86	SLD
4	0	1	0	1	9	22	SLD
5	0	0	2	1	7	43	EH
6	1	0	0	0	7	14	SLD
7	3	1	0	1	9	56	SLD
8	0	1	1	0	7	29	SLD
9	1	2	1	1	9	56	SLD
10	2	3	1	3	9	100	EH
11	2	3	1	2	9	89	SLD
12	1	0	0	0	7	14	SLD
13	0	0	1	0	9	11	SLD
14	1	3	1	2	9	78	OHI
15	0	0	0	0	10	0	SLD
16	1	2	2	0	7	71	SLD
17	0	1	1	1	6	50	SLD
18	0	1	5	0	10	60	OHI
19	1	1	2	0	7	57	SLD
20	1	3	1	1	7	86	OHI
21	1	2	0	0	9	33	SLD
22	1	4	1	1	9	78	SLD
23	1	2	1	1	7	71	SLD
24	0	3	0	1	7	57	EH
25	0	0	1	1	7	29	SLD
26	1	0	0	1	7	29	SLD
27	0	0	1	0	9	11	OHI
28	1	0	2	0	10	30	SLD
29	1	2	2	1	10	60	OHI
30	1	1	0	1	7	43	OHI
31	2	1	5	1	10	90	EMH
32	2	1	2	0	10	50	OHI
33	0	0	0	0	6	0	EMH
34	1	2	2	1	7	86	OHI
35	1	1	3	2	7	100	SLD
36	1	3	0	2	7	86	SLD
37	1	1	1	1	7	57	SLD
38	0	0	0	0	7	0	SLD
39	0	1	0	0	9	11	SLD
40	1	0	3	0	7	57	SLD
41	0	1	0	1	9	22	EH

APPENDIX D: WEEK THREE MISSED HOMEWORK DATA – PRE-INTERVENTION

Participant #	L.A. Missed	Math Missed	S.S. Missed	SCI Missed	Total Ass.	% Missed	P.E.
1	2	1	2	1	9	67	OHI
2	1	3	4	1	10	90	SLD
3	0	6	0	0	11	55	SLD
4	2	0	1	1	8	50	SLD
5	0	0	1	0	6	17	EH
6	3	0	4	0	9	78	SLD
7	0	2	1	0	9	33	SLD
8	0	1	1	0	7	29	SLD
9	1	3	1	1	9	67	SLD
10	2	2	1	3	8	100	EH
11	2	1	1	2	8	75	SLD
12	1	0	0	0	7	14	SLD
13	1	0	1	0	6	33	SLD
14	1	4	2	0	9	78	OHI
15	0	0	0	0	12	0	SLD
16	1	2	2	0	10	50	SLD
17	1	2	1	1	6	83	SLD
18	0	0	5	1	12	50	OHI
19	1	0	0	0	6	17	SLD
20	0	2	1	1	10	40	OHI
21	0	3	0	1	9	44	SLD
22	1	4	2	0	9	78	SLD
23	1	3	3	1	10	80	SLD
24	0	2	1	1	10	40	EH
25	1	0	2	0	6	50	SLD
26	1	1	0	1	6	50	SLD
27	0	0	1	1	9	22	OHI
28	2	3	1	1	12	58	SLD
29	3	2	0	1	12	50	OHI
30	1	0	0	1	6	33	OHI
31	2	0	1	1	12	33	EMH
32	1	3	2	0	12	50	OHI
33	0	0	0	0	6	0	EMH
34	1	0	0	0	6	17	OHI
35	2	1	2	2	7	100	SLD
36	1	3	2	1	10	70	SLD
37	1	1	3	1	10	60	SLD
38	0	0	0	0	6	0	SLD
39	1	2	0	0	9	33	SLD
40	0	1	2	2	7	71	SLD
41	2	0	0	1	8	38	EH

APPENDIX D: WEEK FOUR MISSED HOMEWORK DATA – PRE-INTERVENTION

Participant #	L.A. Missed	Math Missed	S.S. Missed	SCI Missed	Total Ass.	% Missed	P.E.
1	1	1	2	1	8	63	OHI
2	1	3	4	1	10	90	SLD
3	0	0	1	1	7	29	SLD
4	0	0	1	1	5	40	SLD
5	0	0	1	0	6	17	EH
6	0	0	4	1	9	56	SLD
7	0	1	2	0	8	38	SLD
8	0	1	1	2	6	67	SLD
9	1	1	1	3	9	67	SLD
10	1	1	1	1	5	80	EH
11	1	1	1	1	5	80	SLD
12	1	0	0	1	6	33	SLD
13	0	0	1	1	7	29	SLD
14	1	3	1	2	9	78	OHI
15	0	0	0	0	10	0	SLD
16	1	2	2	0	10	50	SLD
17	1	1	0	1	6	50	SLD
18	2	1	4	1	10	80	OHI
19	1	1	0	0	6	33	SLD
20	1	2	1	1	10	50	OHI
21	0	1	0	1	9	22	SLD
22	1	1	1	2	9	56	SLD
23	1	3	3	2	10	80	SLD
24	1	3	0	1	10	50	EH
25	0	1	0	0	6	17	SLD
26	1	1	0	1	6	50	SLD
27	0	0	1	0	8	13	OHI
28	3	2	2	1	10	80	SLD
29	2	2	3	1	10	80	OHI
30	1	0	0	0	6	17	OHI
31	1	0	4	1	10	60	EMH
32	1	1	1	0	10	30	OHI
33	0	0	0	0	6	0	EMH
34	1	1	1	0	6	50	OHI
35	1	1	2	2	6	100	SLD
36	1	3	2	1	10	70	SLD
37	1	3	2	1	10	70	SLD
38	0	0	0	0	6	0	SLD
39	0	1	1	0	9	22	SLD
40	1	1	2	2	6	100	SLD
41	0	0	0	0	5	0	EH

APPENDIX D: WEEK ONE MISSED HOMEWORK DATA – POST-INTERVENTION

Participant #	L.A. Missed	Math Missed	S.S. Missed	SCI Missed	Total Ass.	% Missed	P.E.
1	2	1	0	0	6	50	OHI
2	1	1	2	2	10	60	SLD
3	1	0	0	0	7	14	SLD
4	0	0	0	0	7	0	SLD
5	0	0	0	1	8	13	EH
6	1	0	3	0	9	44	SLD
7	0	1	2	1	6	67	SLD
8	0	0	0	1	6	17	SLD
9	2	0	1	2	13	38	SLD
10	1	0	1	2	7	57	EH
11	2	1	0	1	7	57	SLD
12	0	0	0	1	7	14	SLD
13	0	0	0	0	8	0	SLD
14	1	2	2	1	16	38	OHI
15	0	0	0	0	7	0	SLD
16	0	2	0	1	10	30	SLD
17	0	0	0	0	5	0	SLD
18	0	0	2	0	7	29	OHI
19	0	0	0	0	8	0	SLD
20	1	3	0	0	10	40	OHI
21	0	0	2	0	16	13	SLD
22	1	0	0	0	16	6	SLD
23	0	3	1	1	10	50	SLD
24	1	3	0	2	10	60	EH
25	0	0	0	0	5	0	SLD
26	0	2	0	2	8	50	SLD
27	1	1	1	1	6	67	OHI
28	0	0	1	0	7	14	SLD
29	3	1	1	0	7	71	OHI
30	0	1	0	0	8	13	OHI
31	0	1	0	0	7	14	EMH
32	0	0	0	0	7	0	OHI
33	0	0	0	0	8	0	EMH
34	1	2	0	0	8	38	OHI
35	1	1	0	2	10	40	SLD
36	0	3	2	2	10	70	SLD
37	0	0	1	0	10	10	SLD
38	0	0	0	0	8	0	SLD
39	1	0	0	0	16	6	SLD
40	0	0	0	1	6	17	SLD
41	0	0	0	0	7	0	EH

APPENDIX D: WEEK TWO MISSED HOMEWORK DATA – POST INTERVENTION

Participant #	L.A. Missed	Math Missed	S.S. Missed	SCI Missed	Total Ass.	% Missed	P.E.
1	2	0	0	1	7	43	OHI
2	0	2	3	2	10	70	SLD
3	0	0	0	0	7	0	SLD
4	1	1	1	1	7	57	SLD
5	0	0	0	0	8	0	EH
6	1	0	3	0	8	50	SLD
7	0	1	1	0	7	29	SLD
8	0	0	0	1	8	13	SLD
9	2	1	1	2	13	46	SLD
10	2	0	0	3	7	71	EH
11	2	0	0	3	7	71	SLD
12	0	0	0	1	8	13	SLD
13	1	0	0	0	8	13	SLD
14	1	1	3	2	13	54	OHI
15	0	0	0	0	8	0	SLD
16	0	3	2	1	10	60	SLD
17	0	0	0	0	6	0	SLD
18	2	0	3	0	8	63	OHI
19	0	0	0	1	8	13	SLD
20	1	1	0	1	10	30	OHI
21	0	1	0	0	13	8	SLD
22	1	0	1	2	13	31	SLD
23	1	3	0	0	10	40	SLD
24	0	3	0	2	10	50	EH
25	0	0	2	0	6	33	SLD
26	1	2	0	2	8	63	SLD
27	0	0	0	0	7	0	OHI
28	2	0	1	0	8	38	SLD
29	0	1	3	1	8	63	OHI
30	1	1	0	0	8	25	OHI
31	0	1	3	0	8	50	EMH
32	1	0	2	0	8	38	OHI
33	0	0	0	0	6	0	EMH
34	0	2	0	0	8	25	OHI
35	2	1	1	2	8	75	SLD
36	0	3	2	2	10	70	SLD
37	0	1	1	0	10	20	SLD
38	0	0	0	0	8	0	SLD
39	0	0	0	0	13	0	SLD
40	2	0	0	1	8	38	SLD
41	0	0	0	2	7	29	EH

APPENDIX D: WEEK THREE MISSED HOMEWORK DATA – POST-INTERVENTION

Participant #	L.A. Missed	Math Missed	S.S. Missed	SCI Missed	Total Ass.	% Missed	P.E.
1	1	2	1	1	6	83	OHI
2	0	2	2	1	11	45	SLD
3	0	0	0	0	9	0	SLD
4	0	1	0	0	7	14	SLD
5	0	0	0	1	8	13	EH
6	1	0	3	1	9	56	SLD
7	0	1	2	0	6	50	SLD
8	0	0	0	1	7	14	SLD
9	1	1	1	1	12	33	SLD
10	1	0	0	1	7	29	EH
11	2	0	1	3	7	86	SLD
12	0	0	0	0	7	0	SLD
13	0	0	0	0	9	0	SLD
14	0	1	0	2	12	25	OHI
15	0	0	0	0	8	0	SLD
16	0	2	1	2	11	55	SLD
17	0	2	0	0	5	40	SLD
18	0	0	1	1	8	25	OHI
19	0	2	0	1	7	43	SLD
20	0	1	2	0	11	27	OHI
21	2	0	0	0	12	17	SLD
22	1	0	1	0	12	17	SLD
23	0	2	1	0	11	27	SLD
24	0	2	0	2	11	36	EH
25	0	0	0	0	5	0	SLD
26	1	2	0	2	7	71	SLD
27	0	0	0	0	6	0	OHI
28	2	0	2	0	8	50	SLD
29	3	1	1	0	8	63	OHI
30	1	1	0	2	7	57	OHI
31	0	1	3	0	8	50	EMH
32	1	0	2	0	8	38	OHI
33	0	0	0	0	9	0	EMH
34	0	0	0	1	7	14	OHI
35	1	1	1	2	7	71	SLD
36	0	3	2	0	11	45	SLD
37	1	2	1	0	11	36	SLD
38	0	0	0	0	7	0	SLD
39	0	0	0	0	12	0	SLD
40	0	0	1	1	7	14	SLD
41	0	0	0	2	7	29	EH

APPENDIX D: WEEK FOUR MISSED HOMEWORK DATA – POST-INTERVENTION

Participant #	L.A. Missed	Math Missed	S.S. Missed	SCI Missed	Total Ass.	% Missed	P.E.
1	1	0	0	0	6	17	OHI
2	0	1	1	1	10	30	SLD
3	0	0	0	0	8	0	SLD
4	0	0	0	0	7	0	SLD
5	1	0	0	1	5	40	EH
6	0	0	3	0	8	38	SLD
7	1	0	0	0	6	17	SLD
8	0	0	0	0	7	0	SLD
9	0	1	3	1	8	63	SLD
10	0	0	0	1	7	14	EH
11	2	1	1	2	7	86	SLD
12	0	0	0	0	7	0	SLD
13	0	0	0	0	6	0	SLD
14	0	1	1	0	8	25	OHI
15	0	0	0	0	8	0	SLD
16	0	1	1	0	10	20	SLD
17	0	0	0	0	6	0	SLD
18	0	0	0	0	8	0	OHI
19	0	0	0	1	6	17	SLD
20	0	2	0	0	10	20	OHI
21	1	0	0	0	8	13	SLD
22	1	0	1	0	8	25	SLD
23	0	3	1	0	10	40	SLD
24	0	3	2	0	10	50	EH
25	0	0	0	0	6	0	SLD
26	1	2	0	1	6	67	SLD
27	0	0	0	0	6	0	OHI
28	1	0	1	0	8	25	SLD
29	0	1	1	0	8	25	OHI
30	1	1	0	0	6	33	OHI
31	1	1	0	1	8	38	EMH
32	0	0	2	1	8	38	OHI
33	0	0	0	0	6	0	EMH
34	0	3	0	1	6	67	OHI
35	1	1	1	2	7	71	SLD
36	0	3	2	1	10	60	SLD
37	0	2	0	0	10	20	SLD
38	0	0	0	0	6	0	SLD
39	0	0	0	0	8	0	SLD
40	0	0	0	1	7	14	SLD
41	0	0	0	0	7	0	EH