EFFECTS OF MODELING AND TIME-OUT TECHNIQUES ON DISRUPTIVE CLASSROOM BEHAVIOUR AMONG SECONDARY SCHOOL STUDENTS IN OTUKPO, BENUE STATE, NIGERIA

BY

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DECLARATION

I hereby declare that the work in this thesis titled Effects of Modeling and Time-out Techniques on Disruptive Classroom Behaviour among Senior Secondary School students in Otukpo, Benue State, Nigeria, was carried out by me in the Department of Educational Psychology and Counseling. The information derived from the literature has been duly acknowledged in the work and a list of references provided. No part of this thesis was previously presented for another degree in this or any other institution.

_____ _____

Veronica Anyebe Date

CERTIFICATION

This thesis entitled EFFECTS OF MODELING AND TIME-OUT TECHNIQUES ON DISRUPTIVE CLASSROOM BEHAVIOUR OF SENIOR SECONDARY SCHOOL STUDENTS IN OTUKPO, BENUE STATE, NIGERIA by Veronica ANYEBE meets the regulations governing the award of the Degree of Doctor of Philosophy, in Educational Psychology of the Ahmadu Bello University, Zaria, and is approved for its contribution to knowledge and literary presentation.

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DEDICATION

This study is dedicated to my husband, Steve Ogwu Anyebe, who put in his all for this programme, and to my children; Ocholohi Florence Aduku and Abel Anyebe Ogwu.

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ABSTRACT

This study investigated the Effects of Modeling and time-out techniques on disruptive classroom behavior among secondary school students in Otukpo, Benue State, Nigeria. Seven (7) research questions and seven (7) null hypotheses were formulated to guide the study. The pre-test post-test quasi experimental design was employed and used for this study. The population of this study comprises of 470 identify students with disruptive classroom behavior from Senior Secondary School II. The sample size of 60 students with high incidence of disruptive classroom behavior as indicated by their scores on the instrument tagged Veiga's Disruptive Behaviour Scale Professed by Students was used to select the subjects through purposive sampling technique. The research questions were answered by the use of descriptive statistics. The research hypotheses were tested using paired sample t-test, independent t-test and analysis of variance at 0.05 alpha level of significance. The findings revealed that: modeling technique is effective in reducing disruptive classroom behavior among secondary school students ($p = 0.000$), time-out technique is effective in reducing disruptive classroom behavior among senior secondary school students ($p = 0.000$), comparing the two techniques, both are effective ($p = 0.343$), significant difference did not exist between male and female students exposed to modeling technique on disruptive classroom behavior ($p = 0.915$) and time-out technique ($p = 0.988$). Age was not a significant factor in the effectiveness of modeling ($p = 3.107$) and time-out ($p = 0.727$), on disruptive classroom behavior. It was recommended among others that teachers, school psychologists, counselors should be exposed to modeling and time-out techniques in readdressing disruptive classroom behavior among senior secondary school students.

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OPERATIONAL DEFINITION OF TERMS

Disruptive classroom behaviour: Behaviour exhibited by students during learning activity that significantly interrupts the teaching and learning process such as out of seat, talking out, eating, side talk.

Modeling: Technique of showing students an acceptable behaviour with the intention that the students will observe and imitate.

Time-Out: Technique whereby a student is removed from desiring situation or activity to a less desirable place or activity for a brief period of time because the student has behaved in an unacceptable way.

Age: Students' measured years from the date of birth

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The major aim of education as spelt out in the fourth edition of the Nigeria National Policy on Education is the acquisition of appropriate skills, social abilities and competences as equipment for the individual to live in and contribute to the development of the society (Federal Ministry of Education, 2004 and 2007). To achieve this, students have to enjoy learning. Some children unfortunately do not enjoy academic activities because of one problem or another. Some impediments to healthy flow of teaching and learning could be traced to students' personality, classroom environment, or even a teacher's personality and methodology. In most cases students displaying disruptive classroom behaviours often face disciplinary consequences which sometimes result in removal from school through suspension or even expulsion. Instead of receiving help from teachers and relevant others some are stigmatized or called names or totally ignored. The result of this is that some students do not enjoy schooling while others withdraw at the slightest opportunity. The disruptive students most times stretch teachers' patience and confidence especially during class activities (Dunbar, 2004). In any form, classroom behaviour challenges affect the smooth running of any normal class activity.

The development of citizenship skills, conformity to social rules and norms, co-operation and positive style of social interaction has been a traditional and valued education objective in Nigeria (Federal Republic of Nigeria, 2004, 2007). For example , the school report requires, under social behavior that form teacher assesses and rates the extent to which the following social competency skills have appeared in the student; punctuality,

attentiveness, initiative, perseverance, carrying out assignments, organizational ability , neatness, politeness, honesty, self-control, spirit of co-operation, obedience, sense of responsibility, public speaking, (Benue State Senior Secondary Academic Dozier, 2013).

For any meaningful learning to take place, teachers have to learn to manage or modify classroom disruptive behaviours and at the same time provide the learners with a suitable framework for gainful social interaction. This is why behaviour is a matter of concern to all school psychologists and teachers because behaviour to some extent determines good or bad school performance. This being the case, it is necessary for teachers to know and understand how to alter unacceptable behaviours for purpose of gainful academic exercises.

In Nigeria, the schools and teachers respond to these classroom problems differently. These responses include; corporal punishment, time-out, withdrawal of privileges and suspension from school (Nakpodia, 2010). Sometimes parents or guardians are invited for dialogue, the offenders are made to pay for destroyed properties and in extreme cases expulsion is the verdict. The fact that there are still students exhibiting disruptive and other challenging behaviors in the classrooms despite the above measures means that there is an urgent need to examine other ways of dealing with classroom challenging behaviours. This is for the obvious fact that these students constitute a nuisance for themselves, fellow students, teachers and the management of schools. In some situations, teachers simply avoid these students or have very little to do with them. Other teachers are ignorant of the fact that these students need help while other teachers are actually at a loss as to what to do with them or how to help them.

Conditions outside the school, according to Brophy (2010) can influence a student's behaviour in school. All children develop certain behaviour before they begin school. Some of these behaviours could be unacceptable in school environment. Instead of schools to consider how to manage, decrease or eliminate the behaviours in such a way that the student's dignity is ensured, stigmatization or corporal punishment is often used. Many children on the other hand do not show behaviour problems until they get to school. Rosenberg, Wilson and Sindelar (1992) see the possibility of the school being the cause of this. An ecological approach to understanding behaviour includes the assumption that all aspects of a child's environment are intermingled. Changes in one element of the ecology have implications for the others. For example, success or failure in school affects behaviour at home and in the community. Below average intelligence and inadequate academic achievement are characteristic of pupils with behaviour problem. Conduct problem, low intelligence and achievement; provide gloomy elements for adulthood (Brophy & Good, 1995).

The knowledge of behaviour modification techniques is therefore very important for every teacher because it enables the teacher to cope or help students with behaviour challenges. The modification of unacceptable behaviour is a crucial aspect of teaching because if classroom control is weak or inadequate, effective teaching and learning cannot take place. Again, human interaction and communication may not be operating at their optimal levels. A classroom climate under this circumstance can easily degenerate (Cope, 2000). This therefore necessitated the need to examine the efficacy of other methods of coping, or modifying these classroom behaviour problems for better and enhanced teaching and learning atmosphere. Modeling acceptable behaviours for the students could be all that

is needed for a complete turnaround for some of the target students. Giving 'target' students series of 'talks' on dangers of disruptive behaviours and how to overcome withdrawal tendencies could bring about what conventional measures could not achieve. Because these talks are meant to be orientations and educative, devoid of threats and punishments the method could bring about desired changes. Other methods include the use of incentives for approved behaviours.

Modeling or observational learning is effective as a method of learning such behaviours as self-assertion, helping others, empathic behaviours, moral judgment, and many other interpersonal skills. Modeling is also effective in eliminating or reducing such undesirable behaviors as uncontrolled aggression, weight problems and single phobias.

Time-out is taking a disruptive child from a desirable action or environment to a less desirable place; Time-out gives a student a chance to calm down. It is an effective non-violent way to shape behavior. In time-out, the student sits in solitude for a few moments with no attention of any sort whether negative or positive from the teacher or relevant others. It provides the student the opportunity to cope with frustration and modify his/her behavior that is inappropriate or unacceptable. According to Spencer (n.d), time-out works out best with teens and adolescents. Time out is more effective with adolescents because children lack the ability to exercise self-control and reasoning skills. Again, it is best to use time-out for early adolescents because pre-schoolers and nursery children usually find it hard to sit still. According to Spencer (n.d), trying to make a child stay in one place for a certain period of time can easily disintegrate into a chase scene. Sometimes a little quiet time alone is all that is needed for a student to switch gear and become amicable again.

1.2 Statement of the Problem

Every class is often confronted with students who engage in behaviours that are disruptive to educational process. Students may be late for class, leave early, talk inappropriately, or even sleep during class. If ignored or handled poorly, even a single act of incivility can have a long term impact on classroom atmosphere. Disruptive students make the teachers' work an uphill climb. The individuals exhibiting disruptive behavior most times have their learning disrupted, their social acceptance as well as their opportunities for general inclusion into the larger group hampered. Extreme challenging behaviors may be dangerous and life threatening (Dunbar, 2004). It could also result in anti- social behavior in later life. It could also lead to truncated academic career and social problems like low self- esteem, membership in deviant gangs, substance abuse, truancy and delinquency. Persistent and prolonged anti- social behaviours have also resulted in high level social incompetent individuals who eventually are incapable of dealing with group situations appropriately and effectively (Dunbar, 2004; Cope, 1999; Mather & Goldstein, 2001).

Dealing with classroom behaviour challenges like disruptiveness while teaching has often taken reasonable time of teachers. Some teachers sometimes had their lessons interrupted or even cancelled due to one disruptive classroom behaviour or another. Teachers react differently to these behaviours. While some punish the target students by sending them out for 'a time-out', others may have the students kneel down or stand for some time, others would have the child flogged, and still some teachers would simply ignore the students. Despite these various measures of handling classroom challenging behaviours, these problems still persists. It is against this background that this study

investigated the efficacy of modeling and time-out techniques on disruptive classroom behaviour among senior Secondary School Students in otukpo, Benue State, Nigeria.

1.3 Objectives of the Study

The general objective of this study was to find out the effects of modeling and time–out techniques on disruptive classroom behaviour among secondary school students in Otukpo.

The specific objectives of the study were:-

1. To determine the effect of modeling technique on disruptive classroom behaviour among senior secondary school students in Otukpo.
2. To determine the effect of time-out technique on disruptive classroom behaviour among senior secondary school students in Otukpo.
3. To compare the effect of modeling and time-out techniques on disruptive classroom behavior among Senior Secondary School Students.
4. To determine the effect of modeling technique on classroom disruptive behaviour among male and female secondary school students.
5. To determine the effect of time out technique on classroom disruptive behaviour among male and female secondary school students.
6. To determine the effect of modeling technique on classroom disruptive behaviour among secondary school students of different age groups.
7. To determine the effect of time out technique on classroom disruptive behaviour among secondary school students of different age groups.

1.4 Research Questions

The following research questions were raised to guide this study:-

1. What is the effect of modeling technique on disruptive classroom behaviour among Senior Secondary School Students?
2. What is the effect of time-out technique on disruptive classroom among Senior Secondary School Students?
3. What is the difference in the effect of modeling and time-out techniques on disruptive classroom behavior among Senior Secondary School Students?
4. What is the effect of modeling technique on classroom disruptive behaviour of male and female Senior Secondary School Students?
5. What is the effect of time out technique on disruptive classroom behaviour of male and female Senior Secondary School Students?
6. What is the effect of modeling technique on classroom disruptive behaviour among Senior Secondary School Students of different age groups?
7. What is the effect of time-out technique on classroom disruptive behaviour among Senior Secondary School Students of different age groups?

1.5 Research Hypotheses

The following hypotheses are formulated to guide the research

1. There is no significant effect of modeling technique on disruptive classroom behaviour among Senior Secondary School Students.
2. There is no significant effect of time-out technique on disruptive classroom behaviour among Senior Secondary School Students.

3. There is no significant effect between modeling and time-out techniques on disruptive classroom behavior among Senior Secondary School Students.
4. There is no significant effect of modeling technique on disruptive classroom behavior of male and female senior secondary school students.
5. There is no significant effect of time-out technique on disruptive classroom behavior of male and female Senior Secondary School Students.
6. There is no significant effect of modeling technique on disruptive classroom behaviour among Senior Secondary School Students of different age groups.
7. There is no significant effect of time-out technique on disruptive classroom behaviour among Senior Secondary School Students of different age groups.

1.6 Basic Assumptions

The basic assumptions for this study are:

1. Modeling technique may help to reduce disruptive classroom behaviour among Senior Secondary School Students.
2. Time-out technique may help to reduce disruptive classroom behaviour of Senior Secondary School Students.
3. Differences may not exist in the effectiveness of modeling and time-out techniques in reducing disruptive classroom behaviour among Senior Secondary School Students.
4. Modeling technique may help to reduce disruptive classroom behavior among male and female secondary school students.

5. Time-out technique may help to reduce disruptive classroom behaviour among male and female Senior Secondary School Students.
6. Modeling technique may help to reduce disruptive classroom behaviour among Senior Secondary School Students of different age groups.
7. Time-out technique may help to reduce disruptive classroom behaviour among Senior Secondary School Students of different age groups.

1.7 Significance of the Study

Classroom behaviour problems are a principal source of stress to teachers. They affect a teacher's ability to function effectively. These behaviours sometimes significantly interfere with the child's own learning and that of others in the class. These children have a tremendous risk of school failure and adult lives characterized by violence, abuse, loneliness, and anxiety.

Failure to address misbehavior compromises the learning environment whereby academic activities are interrupted, curriculum content not covered, teacher's authority undermined, and most importantly, decreased opportunities to learning. In the light of the pressure disruptive classroom behaviour places on teachers and the students, it is important to examine appropriate ways of responding to these problems thereby enhancing the learning environment.

This work attempted to examine the efficacy of modeling and time- out techniques in modifying challenging disruptive classroom behaviours. If the treatment proves effective, then teachers would add it to their repertoire of behaviour management techniques for enhanced teaching and learning activities.

This study will add to knowledge especially to the theory building on behaviour modification techniques with regards to modeling and time-out. It will help students to learn appropriate ways of expressing their emotions. As they learn these strategies and practice them, they will be able to adjust appropriately to classroom and general academic environment. This will improve their social skills tremendously.

The teachers will benefit from this study because disruptive classroom behaviour is one of the basic barriers that teachers in the field encounter in the course of their duties. It will be of benefit to teachers in the management of disruptive classroom behaviours because it will reveal the type of disruptive classroom behaviours often manifested by Senior Secondary School students and the appropriate interventions that can be applied in modifying them. Most teachers are aware that they are models for the students but they don't know how to use it as a formal technique for behaviour change. They also send students out of the class and other academic activities as punishment without monitoring for effect.

Schools' counselors and psychologists will benefit from the study because it would increase their intervention repertoire. The school management will gain from the study because of the systematic procedure for the use of behaviour management techniques of modeling and time-out in reducing classroom disruptive behavior such as fighting, bullying, talking out of turn, coming late to and leaving the class early, nose making, roaming about in the class and so on.

Parents generally will be exposed to other behaviour management techniques other than caning and insulting. Following this study, they can use these techniques to inculcate and train their children in appropriate behaviour pattern.

Other stakeholders in education and the general society as well as future researchers will use it as reference material.

1.8 Scope and Delimitation of the Study

The scope of this study was on the effect of modeling and time-out techniques on disruptive classroom behaviour among secondary school students in Otukpo metropolis. The study was also delimited to all disruptive SS 2 students with disruptive behaviour. The treatment period was six weeks.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter reviewed the key variables of the study under the following subheadings:

- Conceptual Framework
- Disruptive Classroom Behaviour
- Behaviour Modification
- Modeling Technique
- Time-out Technique
- Theoretical Framework
- Review of Related Previous Studies
- Summary of Reviewed Literature

2.2 Conceptual Framework

The flow chart of key variables (Figure 2.1) showing the various unacceptable classroom behaviours that could be labeled (disruptive) and the behaviour modification techniques used to reduce their manifestation.

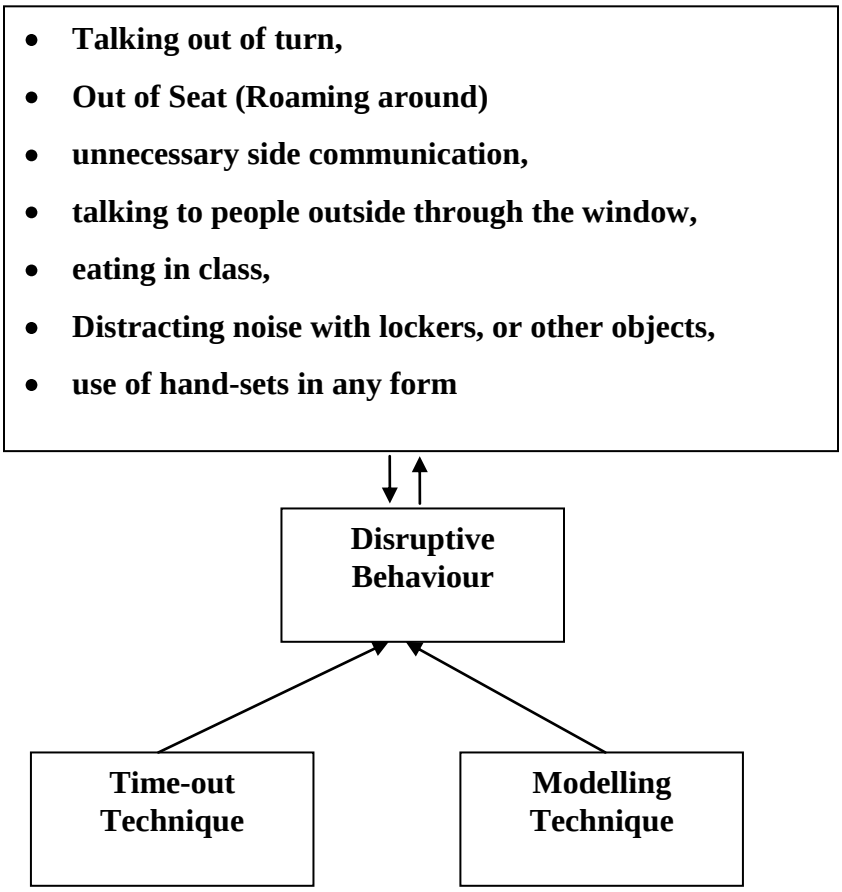


Figure: 2.1: Conceptual Framework
Source: Researcher's Concept

2.3 Disruptive Classroom Behaviour

Behaviour refers to activities or actions of man or animals. Some of these activities can easily be observed while others are not directly observed but can be inferred from observable actions. The first category is referred to as overt behaviour for example talking, looking, dancing, walking, writing, eating, singing, jumping, while the second category is

referred to as covert behaviour feeling, thinking , seeing , understanding , listening etc. Psychology aims at studying these activities in an objective manner despite the difficulties associated with covert behaviour. For instance, it is not possible to see what one is thinking or how one feels about a situation but these can be inferred through one's speech , facial expression and so on (Martin & Pear, 2007).

Behaviour may also be defined as the response of an organism to the surroundings. A cat stalking at rat crouches lower to the ground and suddenly springs at the prey, displays an example of an animal behaviour. Also a pupil opening the page of his text book on seeing his teacher enter the classroom displays an example of pupil behaviour in a classroom setting (Nwachukwu, 1997).

Every form of behavior, simple or complex, is a reaction to stimuli. A stimulus is any change in some aspects of the organism's environment. Stimuli come from both living and non-living part of an organism. They are both physical and chemical in nature. Light, heat, sound and pressure are some of the physical sources of stimuli common to most surroundings. Man is the only specie of animal that has the ability to describe stimuli, to analyze his response to them and pass on detailed information about his environment to fellow human beings. Lower animals do not yield such information.

In broad term, behaviour can be seen as the general exhibition of one's inner tendency to proof existence that may be acceptable or rejected within the society. That is, the activities or expressions that someone puts up in reaction to an event. Even inaction is also a way of expressing feelings.

2.3.1 Concept of Disruptive Classroom Behaviour

Disruptive classroom behaviour is one major problem that teachers face today. That one or more students in a class who for whatever reason will not behave acceptably to allow for effective teaching are the bane of every teacher in secondary school today. There is no rigid criterion or definition of disruptive behaviour. This is because what one teacher considers as disruptive may not be seen as such by another. But basically, behaviour is defined as acceptable or not in a social context, and is also shaped by the broader environment in which people interact with each other. Miltenberger (2008) have developed a definition of challenging behaviour that has become widely used in the context of learning. It is "behaviour of such intensity, frequency and duration that the physical safety of the person or others is likely to be placed in serious jeopardy or behaviour that is likely to seriously limit or delay access to, and use of ordinary facilities". To Kelly (2013), Disruptive classroom behaviour basically refers to a situation where a student or students engage in behaviour that substantially or repeatedly interrupts either the teacher's ability to teach or students' learning**.**

In general terms, teachers accept that challenging behaviour in the school context encompasses behaviour that: interferes with the learner's own and or others' learning. Behaviour that challenges the day to day functioning of the school or class, it could also be such behaviour that challenges the right of staff and pupils to a safe and orderly environment. Such behaviour usually has a duration, frequency, intensity or persistence that is beyond the normal range of what schools tolerate; and is less likely to be responsive to the usual range of interventions used by the school for pupil misbehaviour. A perusal of the behaviour records of most junior and senior secondary schools will provide clear

examples of different types of challenging behaviour which are displayed by children. These include:

Aggressive behaviour, which can include pushing, punching, kicking, biting, scratching and threatening behaviour; disruptive behaviour, which can include screaming, tantrums, verbal abuse, non co-operation, running or wandering around, side talking, late coming.

Destructive behaviour, which can include destruction of property and the environment; Withdrawn behaviour, which can include failure to respond, or avoidance of people or activities; stereotypical behaviour, particularly in children with learning disabilities and autistic spectrum disorders, which can include rocking, repetitive vocalizations, ritualistic hand movements; and self-injurious behaviour, including head banging, scratching and poking.

The classroom extends to any setting where a student is engaged in work toward academic activity or satisfaction of program-based requirements or related activities. Examples of disruptive behavior in the classroom include, but are not limited to:

- Making loud and distracting noises
- Monopolizing classroom discussions
- Talking when the teacher or others are speaking
- Inappropriate or inordinate demands for time and attention
- exhibiting erratic, irrational behaviour
- persisting in speaking without being recognized
- behavior that distracts the class from the subject matter or discussion
- refusal to comply with rules or instruction

- repeatedly leaving and entering the classroom during class without authorization
- making hostile remarks to or about other students in the class, other groups of people or the teachers.
- making physical or verbal threats to the class member or members during instructional period.
- targeting individuals with disparaging comments because of their participation during lessons.

2.3.2 Causes of Classroom Disruptive Behaviour

Work Difficulty: A student's school day is largely comprised of academic demands. These demands sometimes give rise to problem behaviors. Some times some work is too difficult and beyond a student's skill repertoire. For example, Kern, Gallagher, Staroska, Hickman & George (2006) conducted a comprehensive functional assessment of a student with developmental disabilities who engaged in high rates of aggressive and disruptive behavior. The assessment implicated difficult work as an antecedent to problem behavior. When changes were made to his curriculum that eliminated difficult academic tasks, problem behavior decreased to near-zero levels.

In some instances, assessment information may reveal that the academics are accurately matched to a student's skills, but the length of the assignment exceeds a student's endurance. This is often noticed during double lessons and also in the junior primary classes whose attention span are very short. Research has shown that decreasing the overall task length, or offering periodic breaks, can successfully reduce problem behaviors (e.g., Dunlap, Kern-Dunlap, Clarke & Robbins, 1991).

Mode of Task Completion: The mode required to complete a particular task also has been shown to have a relation to problem behavior. Several studies have illustrated that assignments requiring a great deal of written output can cause difficulties for students (Kern, Childs, Dunlap, Clarke & Falk, 1994).

Incorporating Student Interests: Many of our students do not understand the relevance of some of the subjects they are taught. This often leads to lack of interest in some subjects. In short, many of the tasks required of students throughout the school day are viewed by them as mundane or irrelevant, resulting in disengagement and other problems like inattention or outright disruptions, Clarke, Dunlap, Foster-Johnson, Childs, Wilson & White (1995) in a research with a student with disruptive classroom behavior noted that problem behavior frequently occurred during handwriting activities, when copying passages from handwriting book. The handwriting activity was modified so that he copied instructions from preferred video games rather than passages that were meaningless to him. The task modification resulted in decreases in problem behavior and increased work productivity.

Scheduled Attention*:* In addition to academic and other types of demands, problem behaviors sometimes occur as a means for a student to gain attention. A student's problem behavior may serve to obtain or prolong engagement with an activity.

Task Difficulty: Assigning work that exceeds students' skill level is a common cause for off-task and problem behaviors. Center, Deitz, and Kaufman (1982) demonstrated the importance of this critical classroom feature in a study with a class of 15 boys (aged 8–12 years) with behavior disorders. They found that when there was a mismatch between the students' instructional levels and the difficulty of a task, inappropriate behavior was higher.

This finding has been confirmed numerous times across various populations and ages (Davis, Lane, Sutherland, Gunter, Denny & Pickens 2004).

Opportunities to Respond: When students are passive listeners most of the time problems like disruptiveness are bound to arsie. "Opportunities to respond" refers to opportunities in which students have to actively respond to academic material or requests (i.e., reading aloud, writing answers to a problem, answering a question or responding to a teacher's cue, writing a response). Increased opportunities to respond have been associated with improved academic performance, higher levels of student task engagement, and lower levels of disruptive behavior (e.g., Carnine, 1976;West & Sloane, 1986). In a study Sutherland, Alder and Gunter (2003) increased the number of teacher-presented opportunities to respond from 1.7 per minute during a baseline phase to 3.5 during an intervention phase in a class of nine students (aged 8–12 years) with emotional and behavioral disorders. The increase in opportunities to respond was associated with higher correct responding, lower disruptive behavior, and increased on-task behavior.

Classroom Seating Arrangements*:* The way students' desks are arranged in the classroom also can serve as an antecedent strategy to promote desired behavior. Schools especially public schools today lack basic infrastructure including seats and lockers. It is common to see desks in clusters or in groups without defined arrangements that follow a more traditional "row" pattern. The implication of this is side discussions and other disruptive activities because of the proximity to one another by the learners. However, research has indicated that when students' desks are arranged in rows, students are more on-task, talk out less, complete more work, and are generally more engaged with tasks (e.g., Bennett & Blundell, 1983; Wheldall & Lam, 1987). For instance, Wheldall, Morris,

Vaughan and Ng (1981) alternated the seating arrangements from groups of students seated at tables to students seated in rows for two classes of 10- and 11-year-old students, and observed higher levels of on-task behavior. In fact, improvements were strongest for students who showed lower initial levels of on-task behavior. Wheldall and Lam (1987) found similar improvements in on-task behavior and reduced levels of disruption with three classes of students with behavioral disorders and learning disabilities when seated in rows instead of at tables. Further, Bennett and Blundell (1983) found marked increases in the quantity of work completed and slight improvements in the quality of work completed when two classes of 10- and 11-year-old students were seated in rows as opposed to groups. Note, however, that a semicircle or a horseshoe arrangement may prevent disruption.

2.3.3 Characteristics of Children Manifesting Disruptive Classroom Behaviour

Children labeled as ‘disruptive’ display a wide variety of characteristics ranging from behavioural excesses to lack of a sufficient behavioural repertoire. They are often labeled with names by different professions. Teachers call them problem children, stubborn, naughty, and rude. Social Workers see them as ‘socially maladjusted, psychologists refer to them as emotionally disturbed, law enforcement agents call them delinquents. According to Graubard (1973) in Gunter and Alder (2003), ‘many behaviourally disordered children have short attention spans, oppose authority, fight more frequently than the average child, have substantial fears and phobias, and avoid structured learning situations’. Some, however, may display exactly the opposite characteristics.

In the classroom, these problems are manifested in one or some of the instances below:

a) Fighting—biting, hitting, kicking and the use of abusive language. These are manifested in the classrooms, games' fields and hostels.

b) Being moody or unhappy in instances where other children are excited.

c) Unable to build or maintain satisfactory relationships with peers and teachers.

d) Display of hyperactivity such as running about, climbing objects, having difficulty with sitting still, a general inability to attend to a meaningful activity for a reasonable period of time.

e) Impulsiveness—having problem with waiting for turns.

f) Overly dependent on teachers or pees. Lacks self confidence, thus hardly attempts a new task as a result of lack of initiatives.

g) Truancy: keeps away from class or school at the slightest opportunity. Often full of excuses for not submitting work on time and failure to do class work

A general categorization of these problems could be seen below;

Gross Motor: getting out of seat, standing up, running around, hopping, skipping, jumping, walking around or moving chairs.

Object Noise: tapping pencil or other objects, clapping, tapping feet, rattling or tearing paper, throwing things on others' property, pushing with desk, throwing objects at others.

Contact: hitting, kicking, shoving, pinching, slapping, striking with objects, throwing objects at people, poking with objects, biting, pulling hair, or patting.

Verbalization: carrying on conversation with peers when it is not permitted. Answers teachers without raising hand or without being called on; making comments or calling out remarks when no questions are asked, attracting teachers' attention for

no serious reason, crying, screaming, singing, whistling, laughing, feigned coughing or blowing loudly. Sometimes these responses may be directed to peers or even at the teacher.

Turning Around: these could be turning the head or body to look at another person, showing objects to mate(s) or attending to another peer in a deliberate deviant manner.

Others include ignoring teachers' questions or command, acts contrary to instructions such as playing with writing materials when supposed to be writing, copying note during mathematics lesson; generally, such a student is always involved in inappropriate behaviors. Other students are always mouthing objects such as pencils, biting fingers especially the thumb.

2.4 Behavior Modification

Behaviour modification is the use of empirically demonstrated behaviour change techniques to increase or decrease the frequency of behaviours such as altering an individual's behaviours and reactions to stimuli through positive or negative reinforcement of adaptive behaviour or the reduction of behaviour through its extinction, punishment or satiation (Martin & Pear, 2007). The technique is based on the principles of learning theory which maintains that several behaviour is an outcome of learning. In using this technique, any behaviour can be modified with respect to its frequency, duration, or intensity. Behaviour modification is a comprehensive approach that can be applied to behaviours that occur too often (behavioural excesses), too infrequently (behavioural deficits), and with behaviours that are both observable (overt) and those that are not directly evident (covert). Most behaviour modification programs currently in use are those based on Applied

Behaviour Analysis (ABA), formerly known as the experimental analysis of behaviour which was pioneered by B.F. Skinner.

For effective use of the technique, the behaviours to be changed are understood within a specific context, (McIntosh & Av- Gay, 2007; Waguespack, Vaccaro & Continere, 2006). One of the simplest yet effective methods of functional behavioural assessment is called the "ABC" approach, where observations are made on the Antecedents, Behaviours, and Consequences (Roberts, 2001). The term functional assessment refers to the broad range of procedures aimed at identifying antecedents and consequences associated with behavior (Gresham, Watson & Skinner, 2001). Functional assessment techniques include indirect methods of assessment, direct descriptive assessment, and experimental functional analysis. Indirect methods of assessment and direct descriptive assessment are correlational in nature and do not allow for causal inferences. Experimental functional analysis refers to the systematic manipulation of environmental events under tightly controlled experimental conditions to test hypothesized functional relationships (Iwata, Dorsey, Slifer, Bauman, & Richman, 1982). Most often, experimental functional analysis research has focuses on identifying consequent events that maintain behaviour. In other words, "What comes directly before the behaviour?" What does the behaviour look like?" and "What comes directly after the behaviour?" To answer these questions, enough observations are made of the target behaviour, and patterns are identified or established. If there are consistent antecedents or consequences, an intervention or treatment is targeted towards those to increase or decrease in the target behaviour.

Behaviour modifiers employ a variety of evidence-based techniques. Behaviour modification techniques can be used in all levels or context. For example, giving specific

setting or events for a behaviour, a behaviour modifier may develop a neutralizing routine to eliminate that setting. If a behaviour pattern has a specific antecedent, or trigger, then an antecedent control strategy can be developed to train new behaviour in the presence of the trigger, (McIntosh & Av- Gay, 2007; Waguespack, Vaccaro & Continere, 2006). If problem behaviour readily occurs because it achieves some function, then an alternative behaviour can be instructed and trained to occur in the context of the trigger.

In behaviour modification theory, all behaviour is defined as being externally controlled by aspects of the environment. In this sense, both inside and outside of our body constitutes an environment (Skinner, 1957, Nord & Peter, 1980). The heart races and adrenaline increases as the central nervous system reacts to the "environment" of the body. Therefore, anything a person does, from snoring to talking, can be target for behaviour modification.

Classical conditioning also referred to as respondent or Pavlovian conditioning modifies the occurrence of a behavior by pairing two stimuli together to produce a similar response to both. In the famous example, Ivan Pavlov paired an unconditioned stimulus (meat powder that cued salivation in a dog) with a neutral stimulus (a bell, which normally would not stimulate salivation). Eventually, the bell became a conditioned stimulus once the dog learned to salivate solely by the sound of the bell.

The theory of operant conditioning, originally put forth by B.F. Skinner (1953), offers a different method for modifying behaviour. In contrast to classical conditioning, which focuses on reflexive or involuntary behaviours, operant conditioning modifies voluntary or learned behaviours. Operant conditioning emphasizes antecedents (events that occur prior to behaviour and consequences (events that occur after the behaviour) both of which affect the

probability that the particular behaviour will occur. Whereas antecedents provide a cue for behaviour to occur, behaviour is believed to be governed primarily by the consequences of the behaviour (Nwoke, 2004). That is, the probability of a behaviour taking place in the future is determined by what happens after the behaviour has occurred. If the consequences of the behaviour are desired by the individual, then he or she is more likely to perform the behaviour in the future. If the consequence is undesired, then it is less likely that the behaviour will occur again. There are two categories of consequences within operant conditioning; reinforcement and punishment. Consequences are reinforcing if they increase the likelihood of behaviour's occurrence in the future; alternatively, consequences are punishing when they reduce the probability of future occurrence.

The basic rationale for behavior modification technique which should serve as a guide to any behavior modifier as outlined by some psychologists (Skinner, 1968; McIntosh & Av-Gay 2007) includes:

- Disruptive behaviour or maladaptive behavior, like well adapted behavior is not inborn but learnt and therefore could be unlearned and substituted by the teaching and learning of appropriate behavior.
- The teacher can teach new behavior just as new skills are taught. The assumption here is that social behavior like academics is susceptible to being changed by the manipulation of the child's environment.
- Irrespective of other causes of the undesired behavior, such as poor home relationships, inadequate neurological functioning, the behavior can be brought under control or effectively changed by modifying the immediate environmental conditions

such as classroom events so as to elicit desired behavior and by systematically changing the consequences which follow it.

- The knowledge of behavior modification techniques gives the teacher confidence on taking up responsibility for teaching new behaviours as these are defined as being within his or her central role as a psychologist and counselor.
- The teacher can ameliorate the problem of disruptive behavior and inefficiency in an effective way without delay. Even if other causes are identified and established, the child has still to be taught and the educational needs attended to.
- It is possible for disruptive behavior whether of academic or social nature to be changed in a child's most natural educational environment such as the normal class group. This way, there would be no need to recourse to provisions outside the school which in most cases are more disruptive to the child's life. Armed with the knowledge of the various techniques, the committed teacher would just bring the learner's behavior under the control of reinforcers that exist in the child's most natural educational environment.
- The emphasis of behavior modification is on what children actually do 'here and now' rather than on some assumptions about what they may or may not do. The child's behavior is a cue for educational action which draws from already existing desired responses.
- It can encourage positive thinking about a learner because it focuses on desired behavior in a context of praise and success instead of focusing on failure and misbehavior in a context of criticism.

- It should lead to a restructuring of the classroom environment so that the child and even the teacher are given clear and immediate feedback about the result of performance and behaviour.

Looking at these rational, the importance of behaviour modification cannot be over emphasized. Therefore, behavior modification technique should be seen as an important teaching technique which should be part of every teacher's repertoire. When used systematically and consistently they can be effective in changing many problem behaviors exhibited by atypical as well as normal children. In the ordinary school, they are useful in developing and maintaining productive teaching and learning environments. When this is achieved, the children who apparently have difficulty in structured schools would experience educational gains.

2.4.1 Behavior Problems

When we talk of behavior problems, we are talking of a negative, abnormal, deviation from what is supposed to be. According to Ogbue, Obani, and Abosi (1987), it is a deviation from the expected appropriate behaviors of a given age or group which significantly interferes with the child's growth and development and those of other people. Solity (1992) summed it as any behavior of a learner that interferes with his or her learning and which also directly or indirectly interferes with the learning of others in the same class. Such learners cause disruptions of lessons or peace by their actions. Kirk (2009) saw it as deviation from age appropriate behavior which significantly interferes with the child's own growth and development or the lives of others. Montgomery (2004), who saw it as a behaviour disabilities, defined it as 'a variety of excessive, chronic, deviant behaviours ranging from impulsive and aggressive to depressive and withdrawal acts which violates the perceiver's

expectations of appropriateness and which the perceiver wishes to see stopped'. Behaviour problem is highly situational, it must be defined in terms of the actual behaviour, the setting in which it occurs and the reaction of people around. This is because what might be disturbing to one group or a teacher may be acceptable by another. Even though the definition like most definitions vary from teacher to teacher and from culture to culture, such behaviors as distrust, stealing, lying, cruelty to others, inability to accept authority identity, are generally termed as misbehavior and generally unacceptable.

Though everyone exhibits behavioural excesses or lack of appropriate behavior at various times, behavior problems are such deviations which are frequent, consistent, intense and public. Again there is often a tendency to assume that all behavior problems consist of behavioral excesses such as acting out, aggressive behavior. However research by Quay, Morse & Cutler (1966) in Thomas and Leslie (2007), using a checklist of behavior problem originally developed by Peterson (1961) in Dante (1991), identified three separate types of behavioral inadequacies (conduct problems, personality problems and inadequacy – immaturity).

> *The first dimension is composed of aggressive, hostile, and contentious behavior which has been labeled at various times as conduct problems, unsocialized aggression or psychopathy. The second dimension represents anxious, withdrawn introvertive behavior and has been labeled personality problem or neuroticism. The third dimension involves preoccupation, lack of interest, sluggishness, laziness, daydreaming and passivity*

Generally, behavior problems could be social or emotional. Children with emotional problems are often withdrawn from people no matter the environment. Mentally, they are healthy. In the classroom, they constitute no problem; don't disturb others, and generally,

they are passive participants in class activities. Following this, they are often neglected by teachers and peers. Their help seeking behavior is often very poor and this affects their academic achievement. Other children with behaviour problems are often restless, always having conflicts with other children around them including their teachers. Some of them are disruptive in order to gain attention of teachers whether positively or negatively. Anti social behaviors like cultism, drug peddling, armed robbery is often their trades. Most times teachers and peers often avoid them wishing to have nothing to do with them.

In the classroom, children with behavior problems especially disruptive ones are of concern to the teachers because their behaviors often interfere with the comfort of and adjustment of other children (Solity, 1992). It affects their interpersonal relationships with other children and their educational output. This work therefore, is set to find ways of improving the behaviour of such students so that they can benefit from group gains while allowing the teachers and their mates enjoy healthy environment.

2.4.2 Identification of Behavior Problem

There is no absolute criterion for identifying a student as behaviour disrupter, just as different people interpret behaviour differently. Basically the labeling of a child as disruptive are often made on the basis of teacher observation and teacher report data, in combination with information on school performance, most notably academic achievement, (Lilly,1979) in Miller (2003). For a behavior to be labeled as a problem it should be frequent, persistent and intensive. The following are some of the ways one can identify behavior problems in the classroom.

- Observation**.** This involves systematic watching for the patterns of the behavior in question (Martin & Pear, 2007). Observation allows a teacher to understand the

type of behavior, the gravity of it and the frequency of occurrence (Martin & Pear, 2007). For effective study of a behavior, observation should be systematic and should focus on a particular aspect, for example hitting aspect of aggression. This would allow for detailed study. Because some behaviors are provoked by moods and environment, observation must be in different setting so as to draw an accurate conclusion. At best, observation should be on one child at a time though some research works have shown that a group can be observed effectively (Harrop, 1983; Qurich, 1995). One way to be effective in observation is through the use of behavior checklist. This is a list containing behaviors. In using this, the observer will simply check whether the behavior in question is present or not, for example, Unfriendly, impatience, generally moody or unhappy, complains of sickness in the event of assignments, lacks self confidence, and keeps away from others. The use of such list would help an observer know the frequency of manifestation (Martin & Pear, 2007). This could be achieved through the use of a rating scale like 'very frequent', 'frequent', and sometimes ',' seldom' and 'never occurs'. In determining the degree of frequency, a rating scale can also be useful, for example 'mild', 'severe', 'very severe'.

- Psychiatric method**:** This approach of diagnosing behavior problem especially emotional one emphases the control of the underlying etiology as necessary for determining the existence of a problem. The contention here is that overt behavior alone is not a sufficient indicator; the psychic factor that causes overt behavior determines whether a child is emotionally disturbed. For instance, a child according to Newcomer, (1981), might be withdrawn and uncooperative in the school because

of physical illness or because others appear menacing, only the latter state indicates emotional disturbance. Here a child's perception of others as menacing may signify psychotic delusions or aggressive reaction to rejecting parents.

- Informal observation consists of watching individual exhibit typical behaviors during ordinary daily activities. This could be conducted in a contrived situation where the individual is not aware of the observation, for example observing a child at play through a one way mirror; or in a natural setting, as observing a subject in a group such as classrooms. Informal observation is relatively unstructured procedure designed to provide an impression of the child's general behavior. It involves neither precise counting of specific maladaptive behaviors nor elaborate record keeping. The observer usually relies on experience to formulate opinions about appropriateness or otherwise of a child's behavior. Clinical interview is a technique employed by this method. Here older children who have adequate cognitive and linguistic development are engaged in sessions of discussion with the therapist who encourages the childto talk about self. Emphases are placed on eliciting the child's fantasies and free associations to discover his or her underlying personality structure. During discussions, other techniques could be employed such as asking a child to draw or describe pictures, to give wishes or favorite television show. With younger children, the child is encouraged to engage in symbolic play activities and asked questions about the play. Response to such questions will bring out hidden feelings. Clinical interviews also involve parents. Parents provide the family dynamics; the child's history and teachers make input concerning the child's behaviors as regards to school and class work.

- Psychological methods**;** the major goal of this method is to make a differential diagnosis among disturbed conditions. The difference between psychiatric and psychological methods is that the latter places greater emphasis on the use of objective criteria for diagnosis. This is because psychologists are trained to administer and interpret psycho educational tests. Thus, identification of a disturbed state is largely dependent on the child's performance on a standardized test battery such as; intelligence, perceptual motor development, auditory sensitivity and visual acuity, oral language development, academic achievement and personality development. Psychologists use the measures of these tests to ensure that a child's odd or inappropriate behaviors are not caused primarily by conditions other than emotional disturbance such as mental retardation, brain damage, visual impairment or aphasia. These tests are used to gather clinical data on emotional disturbance. For instance, a child's performance on an individual intelligence test such as the WISC, 1948; Wechsler, 1991), may reveal a pattern of subtest strength and weaknesses that suggest emotional pathology. Scattered or significant inconsistency in subtest performance is generally interpreted as indicative of emotional instability. Depressed scores in specific sub-tests such as arithmetic and digit span are viewed as indicative of extreme anxiety.
- The use of perceptual motor, oral language and academic achievement tests has also yielded clinical interpretation. For example, The Bender Visual –Motor Gestalt Test Welerder (1950) in Shneidman (1998), is a perceptual motor instrument that measures a child's ability to draw geometric designs depicted on nine cards. The scores from this may be used as psychodynamic constructs like aggression, hostility

and passivity. Unusually small drawings are associated with constrictive, fearful personalities, whereas excessive large figures are indicative of a tendency towards mania. A careless, slap- dash reproduction of each symbol suggest impulsiveness just as slow, laborious rendering is typical of obsessive – compulsive tendency. Heavy dark pencil lines may be regarded as representing hostility, just as light drawing suggests passivity and indecisiveness. Personality test is the most important diagnostic index of emotional disorder. The instrument is usually in two principal categories; non projective and projective. The non projective tests have objective formats. They contain items that elicit specific responses, For instance, the child might be required to answer 'yes' or 'no' to a series of questions or statements like 'do you like school'? Or 'I have trouble making friends' Scoring and interpreting these tests are standardized, for example, a positive response on certain number of items suggest that the respondent has certain types of personality problems. The instruments are usually paper and pencil tests and may be administered to groups as well as to individuals. Some of the instruments include; California Tests of Personality – California Test Bureau; The Thomas Self – Concept Values Test – Educational Service Company, The Money Problem Checklist – Psychological Corporation, Eysenck Personality Inventory – Educational Testing Service

- Projective tests: this has a subjective format and ambiguous stimuli that can be interpreted in a variety of ways. They do not elicit responses that can easily be recognized as correct or incorrect. Instead they tap the child's opinions, beliefs, attitudes and feelings that typify his or her conscious and unconscious personality

characteristics. Some popular projective measures are; sentence completion (Ronde, 1957. Rotter, 1950) in Wechsler (1991)–the child is required to complete the sentence stems. For example, 'my brother is …..' or 'my problem is…..' presumably, the child will reveal inner feelings about brother or life.

- Figure drawing: the figure drawn would provide an index of the child's self perception. Thematic Apperception Test (Murray, 1943) in Wechsler (1948). The test contains sets of 30 pictures made up of males and females in various situations. The child is shown a set of ten pictures and asked to make up stories about each of them. The stories will project the feelings of the subject; the stories so told about the figures and the events represent the child's attitudes towards such events.

Scoring or the criteria for analyzing each story include;

A – The types of individuals the child identifies with, for example, sad, happy or rejected.

B – The need the key figure or hero manifests, for example high achievement, rebellion or love.

C – Environmental influences, for example economic deprivation, hostile forces, unhappy home.

D – The interaction between the hero's needs and external pressures such as rebellion against unsympathetic authority figures, lack of opportunity that restricts achievement.

E - The outcome, such as victory, defeat, withdrawal.

Child's Apperception Test (Bellac, 1954) in Wechsler (1991), this is a modification of the Thematic Apperception Test: It uses ten animal pictures as stimulus cards for children between 3 to 10 years. The children are to generate stories from the pictures.

Clinical school psychologists use tests results and clinical judgment to determine whether a child's behavior is severe enough to warrant labeling behavior disordered and to formulate treatment plan. While clinical psychologists are concern with diagnosing pathological conditions, the school psychologists focus on finding causes of disabilities that result in children's school adjustment and achievement problem.

- Behavioral Approach**:** This approach is based on measurement of the extent to which a child's behavior deviates from established norms. It emphasizes the specific maladaptive behavior displayed by a child and not on the emotional conditions that may or may not cause such behaviors. This is because the approach believes that maladaptive behavior is the important consideration and their measurement must take place in the child's natural environment, in the place where the problems are occurring. In school, the environment is often the classroom. The technique is basically formal observation and detailed record keeping. The child is observed in class on a daily basis for a fixed period of time and an 'incidence record' is kept of the maladaptive behaviors during that time. This way, the type and frequency of behaviour is objective. This approach is useful and handy for school teachers who desire to eliminate deviant behaviours in their learners.
- Teachers' Ratings**:** Though teachers do not observe and record specific data for their learners but they do formulate impressions about each child in the class. This teachers' method, often subjective and highly informal, are extremely useful index

of emotional disturbance. This is because teachers are exposed to their students for long period of time on daily basis. This places them in better positions to know the children so well as to pass reliable judgment on them.

In addition to teachers' informal criteria for judging when children's deviant behaviors are sufficiently persistent, intense as to indicate emotional disturbance, some formal criteria have been proposed as indices for teachers' identification of emotional disturbance. This includes Gropper (1968) in Dente and Toth (1991), thirteen principal areas that teachers must consider.

- Attention to classroom activities (inattention, day dreaming, withdrawal).
- Physical activities (restlessness, hyperactivity, noise making).
- Reaction to tension (emotional upsets).
- Appropriateness of behaviour (telling tales, collecting objects).
- Meeting work requirements (self-criticism, giving up, not working).
- Interest in work (playing).
- Getting along with others (name-calling, fighting, and passivity).
- Consideration for group needs (impatient with others, interrupting others, talking out loud).
- Response to teacher requirements or instructions (arguments, rudeness, disobedience).
- Degree of independence (seeking praise, attention, support, favor).
- Regards for school rules and conventions (swearing, smoking)
- Regard for general rules (truancy, tardiness, destroying property).
- Integrity (cheating, tatting, stealing).

Studies of children reveal that all children engage in some of these behaviours at some time. But Newcomer (1981) observed that how a teacher determines whether or not a child is emotionally disturbed or how disruptive is a question of degree. Cooper *et al.* (1987) provide some criteria by which teachers may judge the severity of each child's problem. They include:

- Intensity – does the activity disrupt the child's other activity?
- Appropriateness- Is the behavior a reasonable response to the situation?
- Accessibility of circumstances- Is there an obvious reason for the behaviour.
- Comparison with maturity level of the child/class- Is the behaviour commonly exhibited in class?
- Duration – How long does it last?
- Frequency – How often does it occur?
- Manageability – Is the behavior influenced by management efforts?
- Contagion- do other children copy the behaviour?

The use of these criteria can help a teacher come up with objective degree of a child's behaviour as to whether it is normal or problem that can be handled in the classroom, or a condition that is serious enough to attract referral to experts.

- Peer Rating**:** peer perception is an important source of data in predicting emotional disturbance. Moreno (1953) originated the practice of measuring students' attraction towards their peers through sociometrics. This method evaluates each child's social position, provides a graphic representation of the class social structure through the sociogram.

- Self Rating- These are indices that provide information about an individual's self concept. There are basically two types of self-rating. They are; the ideal self-scale or the characteristics that one would have if one were perfect and the real self or the individual with all flaws exposed. The discrepancy between these indices shows the gaps between what an individual wants to be and what he or she perceives as truth. This is not a very reliable scale but generally, persons who display negative self concept usually have problems of some type; these may be severe adjustment problems; or temporary reactions that exist at the time of the rating. Positive self ratings however do not imply mental health since they may be distorted by conscious or unconscious interference. Such distortions are seen when positive self ratings conflict with negative peer ratings. When positive self-rating coincides with positive peer ratings, the probability is that the individual is psychologically healthy.

2.4.3 Behavior Modification Techniques

Behaviour modification uses some techniques or procedures. Below are some of them that could be commonly used in educational practices.

- **Ignore and reward behavior**: - This is a situation where an inappropriate behavior is ignored by the teachers, parents or authority figures. For instance, in a classroom, a child that is found of shouting out answers to questions instead of raising up hand is ignored by the teacher and opportunity to answer the questions given to one who sought to answer the question through the process of raising hand and waiting to be asked. When the ignoring persists, the shouting out would reduce and eventually stop.

- **Systematic desensitization:** - This is a process that involves controlled exposure to a feared stimulus (Wortman *et al*., 1999). Here, an individual learns a new behavior in response to previous stimuli. The technique is based on the principle that anxiety and relaxation are incompatible (Wortman *et al.,* 1999). The idea is that if a person can be taught to relax when confronting a fear, he or she will learn to overcome that anxiety.

  Punishment: - The most common approach people use to reduce undesired behaviours, particularly in others, is punishment. This consists in applying a contingent event to a behavior that results in a decrease in the probability of the behavior. To McDaniel (1980), Punishment is a penalty for doing something wrong.

  There are two types of punishment, positive and negative. Positive punishmentis a contingent event whose onset or increase results in a decrease in the probability of the behavior it is contingent upon. Disapproval, criticism, pain, and fines are common forms of positive punishment. Negative punishment on the other hand, is a contingent event whose offset or decrease results in a decrease in the behavior it is contingent on. This generally consists of taking away something that is reinforcing from a person when he misbehaves.

As a behavior change procedure, punishment has many disadvantages and possible bad side effects: For instance, punishing an undesirable behaviour does not necessarily result in desirable behaviours. For example, punishing a child in a classroom for throwing things during self-work time does not necessarily result in the child shifting to working alone. Perhaps self-work behaviours are not in the child's repertoire. Punishment may condition reactions such as fear, anxiety, or hate to the people who administer the punishment or the situations in which it occurs. Thus children may fear their parents, students may dislike

school, criminals may resent society, and workers may not fully cooperate with their foreman. Related to this is that the person may learn to escape or avoid these people or situations, resulting in such possibilities as a school phobia or an increase in absenteeism from work. Attempted punishment of an escape or avoidance response may rather increase the strength of the avoidance. The punished person may spend some time making up excuses and passing the blame to others. The punishing agents may act as models for instance, for aggressive behavior. Children may model after their parents and learn to hit people when mad for example (Bandura, 1967). Workers may model their supervisors and become overcritical of the errors of their subordinates. Again, punished people may become generally less flexible and adaptable in their behaviours.

In some cases, punishment may just lead to the suppression of the target behaviour and when this happens, suppression may be of short duration, and when the punishment is removed, the behavior may reoccur. Punishment can involve presentation of an unpleasant consequence or the loss of a pleasurable consequence following the occurrence of the undesirable behavior. Punishment is designed to reduce the probability that the behavior that precedes it will reoccur. Although punishment is an efficient way of changing behavior, it can become seductive and reinforcing for classroom teachers and can be overused (McDaniel, 1980). The greatest problem with punishment is that it does not provide an appropriate model of acceptable behavior. Furthermore, in many classrooms, punishment is accompanied by an emotional response from the teacher. Although most teachers consider punishment as involving a reprimand, time-out, or loss of an activity such as recess, in many classrooms, physical punishment designed to embarrass children into submission is still used, even though it has a high emotional cost. Shea (1987), made a strong case for minimizing the

use of punishment, especially more severe punishment, such as embarrassment or spanking, because these interventions are likely to erode self-esteem and further impair an already strained teacher-student relationship. When punishments are used, these guidelines should be followed:

- All students are aware of which behaviors are punished and how they are punished.
- Appropriate models for acceptable behavior are provided.
- Punishments are offered immediately, consistently, and fairly.
- Punishments are offered impersonally.
- A natural or logical consequence should be used as often as possible. .
- The student being punished must understand the relationship between his or her behavior and the punishment.

Loss of the privilege during which the inappropriate behavior is exhibited is fair. Warning, nagging, threatening, and debating, however, should be avoided. In other words, act, don't debate. Punishment can exert a complex, negative effect in the classroom and on teacher student relationships. Furthermore, when less punishing interventions are combined with positive reinforcers, they tend to be effective in the long run. Personal hostility from teachers and punishments in an atmosphere containing minimal positive reinforcement and emotional warmth are unproductive. To be effective, punishment must be related in form to the misbehavior. It must be consistent, fair, and just; must be delivered impersonally; and must not involve the assignment of extra work that is unrelated to the act for which the student is being punished. Opportunities must also be offered for the student to exhibit and receive reinforcement for more appropriate behavior. Reprimands are the most frequent punishment used by teachers. Contacting parents, losing privileges, and time-outs come next

in frequency. Students respond well to short reprimands followed by clear, directed statements. Effective reprimands are specific, they do not humiliate the child, are provided immediately, and are given with a firm voice and controlled physical demeanor. They are often backed up with a loss of privilege, including a statement encouraging more appropriate behavior. Attempt to describe the behavior that is observed, rather than how you feel about the behavior. Instead of telling a student that he or she is rude for interrupting, make a statement such as, "You have interrupted me three times. I will answer your question as soon as I finish the explanation.'" This should be delivered in a calm way and in a way that does not embarrass the child in the presence of others.

Despite all these, punishment has some advantages: it usually will suppress the target behavior immediately, may help to protect the environment by immediately stopping a behavior and may discourage the behavior in other children if they observe a peer's behavior being punished.

Three Keys to using Punishment Effectively in the classrooms are; timing, intensity, and consistency. The punishing procedures should be initiated as soon as possible after the disruptive behavior is exhibited and should be as closely related to the misbehavior as possible. This is because if punishments are too mild, they will not be effective and may slowly habituate the child to tolerate or adapt to more intensive or lengthy punishments. If too intense, however, punishments are not only abusive but likely to create other problems. To be effective, punishments must be consistent and predictable. Following the use of punishment, return the child to the situation without expecting overt guilt, make efforts to reassure or reinforce the child as soon as he or she shows improvement in such behaviour. A consistent schedule of punishments should also be used. A continuous schedule of

punishment for a specific targeted behavior is best. Finally, it is valuable to attempt to find out what drives the misbehavior and work toward managing the environment to minimize causative factors. This is because children who experience learning difficulty (LD) may misbehave out of frustration. This may also be the case for children who experience anxiety or depression. By identifying the child's goals and misbehavior, a teacher can present more appropriate opportunities and methods to reach the child's goals. When used appropriately, punishment can make a positive difference; however, punishing interventions should always follow efforts at using reinforcing interventions to model and shape appropriate classroom behavior.

Punishment, Impact and Alternatives

Some stake holders in education and theorists like the behaviourists reflect little confidence in the effectiveness of punishment. There are also doubts about the efficacy of removing positive reinforcement. Punishment is not seen to be a solution, although it should be noted that it is a very widely used strategy in our schools. Although many people use it for short-term goals, its long-term objective is social control.

Punishment is a dead-end since its effects run straight into the teeth of major educational goals. If one gets a child to sit quietly or read because they are afraid not to do so, one is a long way from achieving the oft-stated goals of self-discipline and self-directed learning.

The observation that nearly all antisocial adults have previously shown poor behaviour as children motivates the political will to empower public services, and in particular education, to promote social and emotional well-being of children and young people (Montgomery, 2004).

Worse than not being fair to the learner who is, after all, doing what circumstance produce, punishment disrupts further progress, the harmful effects of punishment can be hard to eliminate (Vargas, 2009).

Thorndike's law of effect states that the likely recurrence of a response is generally determined by its consequence or impact upon the individual whether that is positive (rewarding) or negative (punishing). A negative response weakens reinforcement and makes the recurrence of behaviour less likely.

The Premack Principle is a useful means by which teachers can determine whether a response will be a positive reinforcer or not. The principle, described earlier, states that low probability behaviour can act as a punishment (Premack, 1959, 1971). In a primary school setting, the punishment for a high probability behavior of calling out during story time could be the low probability behaviour of sitting on a seat away from the rest of the group. The Premack Principle does not consider the efficacy of negative reinforcement or punishment in the sustained modification of behaviour or in creating the right environment for learning.

In Skinner's postulation (1948), he describes a utopian society where human behaviour is scientifically controlled by a benign government. In this fictional account, he expresses his then thoughts and explicit claims that a science of human behaviour can reveal the means to control human behaviour. However, it is clear that there is no such overarching science that can be so deterministic of the individual will and that governmental, authoritarian, religious or political control of behaviour is limited. However, the role of positive reinforcement is explored, and the need to be cautious of any system of negative reinforcement (punishment) is considered. Providing that the rewards are appropriate, the evidence arising from the work of psychologists suggests that positive reinforcement changes

behaviour, yet the evidence to the contrary is not as convincing. The operant conditioning terminology for discussing such factors is clear: positive reinforcement is a consequence of an action that removes or reduces an aversive stimulus, this intervention is used in escape or active avoidance training. The rewarded behaviour results in the removal of the subject from that something, noting that either way, the effect is that the unpleasant something is no longer present (Baucum, 1996 in Miltenberger, 2008). When interpreting Thorndike's laws on conditioning, the second part of the law of effect implies positive punishment is one where a consequence is the introduction of an aversive stimulus; negative punishment is the removal of an appetitive stimulus (removing a reward). 'Negative punishment procedures such as time-out and response cost, which do not involve the application of aversive events, are much acceptable and more commonly used than positive punishments (Miltenberger, 2008).

At the absolute level, the spectrum of activity that is the opposite to positive reinforcement stretches from the vicarious experience of someone else losing their positive reinforcement through to simulated drowning and near-death torture. It is within that spectrum that teaching and learning place reliance upon punishment to control behaviour and enable learning.

From the perspective of social behaviour theory, negative motivations exist; these provide reasons not to imitate someone. Like most traditional behaviourists, Bandura sees positive reinforcements as motivators, but unlike most radical behaviourists, he suggests that there are mechanisms of punishment that have a positive influence upon behaviour and learning. But like most traditional behaviourists, Bandura says that 'punishment in whatever form does not work as well as reinforcement and in fact, has a tendency to backfire on us' (O'Mahoney, 2003). His theories describe three aspects of punishment: previous experience

of punishment; the promise of punishment (threat); and vicarious punishment. Vicarious punishment results when we see others punished for the same actions, that is, through observational learning (Obiekeziel & Odomelan, 1998).

If an unwanted behaviour is punished, the rate of responding in that way to the stimulus (environment or opportunity) will be reduced but that reduction tends to be temporary. It is true that the effect of any reinforcement are only temporary, but intermittent reinforcing can maintain higher rates of response more consistently than intermittent regimes of punishment can reduce the unwanted behaviour (Walters and Grusec,1978).

2.5 Modeling Technique

Modeling is a Teaching therapeutic technique in which a teacher or therapist or model perform an activity that the students have previously found difficult to perform and encourages it be copied (Bandura, 1971).

Most human behaviours are learned observationally through the process of modeling. In modeling, one person, while observing another behavior, forms an idea on how the particular behaviour is performed, codes the information in his or her memory and later uses this coded information as a guide in his or her attempt to perform the behaviour like the observed model. This phenomenon involves four element processes according to Bandura (1971). This includes: Attentional, Retention, Reproduction and motivational processes.

Sometimes the subject may not have to perform the response he observes or be reinforced for making it, for him or her to learn the new behaviour. All that is required is that a situation resembling the one observed by the subject presents itself several weeks, months or years later, and the subject using the information already coded in memory

through observation, produces a response resembling the one observed in the original situation (observational learning).

Role-playing can sometimes be combined with modeling to deal with stressful situations. In role-playing the client is instructed to act out his or her behaviours in a particular situation to enable the therapist identify the maladaptive elements in his or her responses .The therapist then model the appropriate behaviour as the client watches. Then the client incorporates this new behaviour in his or her repertoire and then begins its practice (Qurich, 1995). This helps to improve the client behavioural competencies. Assertiveness training also combines modeling and role-playing techniques. In assertiveness training, clients are trained to comfortably express negative emotion, such as resentment, by being assertive rather than passive or aggressive. Modeling can either be participant or symbolic.

Participant Modelling

In participant modeling a client watches a therapist model a particular behaviour (demonstrative). The client is then encouraged to practice the modeled behaviour with the therapist in a kind of joint performance and eventually graduate to or become part of the ultimate behaviour. As the treatment progresses, the subject gains more confidence in performing the task and the therapist gradually withdraws her or his supportive co-performance until the client is able to enact the modeled behaviour alone and without assistance.

Symbolic Modelling

In symbolic modeling, the client models the appropriate behaviour by observing on television, films or other visual media or by listening to verbal descriptions. Both children

and adult acquire social, vocational and recreational skills through symbolic modeling. In today's world of advanced communication technology, symbolic modeling is fast taking over the function previously performed by parents, teachers and traditional role models.

Since symbolic modeling has tremendous multiplicative powers, parents, and even the state have a responsibility to ensure what people listen to, read and watch, are in the interest of the people and the society. In the context of this study, modeling involves imitating a desirable behavior and eliminating the undesirable behavior.

Bandura's Contemporary Model of Observational Learning

Observational learning, also called imitation or modeling is learning that occurs when a person observes and imitates someone else's behavior. The capacity to learn behavior patterns by observation eliminates tedious trial-and error learning. In many instances, observational learning takes less time than operant conditioning. Since his early experiments, Bandura (1986) has focused on the specific processes that are involved in observational learning. These include attention, retention, motor reproduction, and reinforcement or incentive conditions.

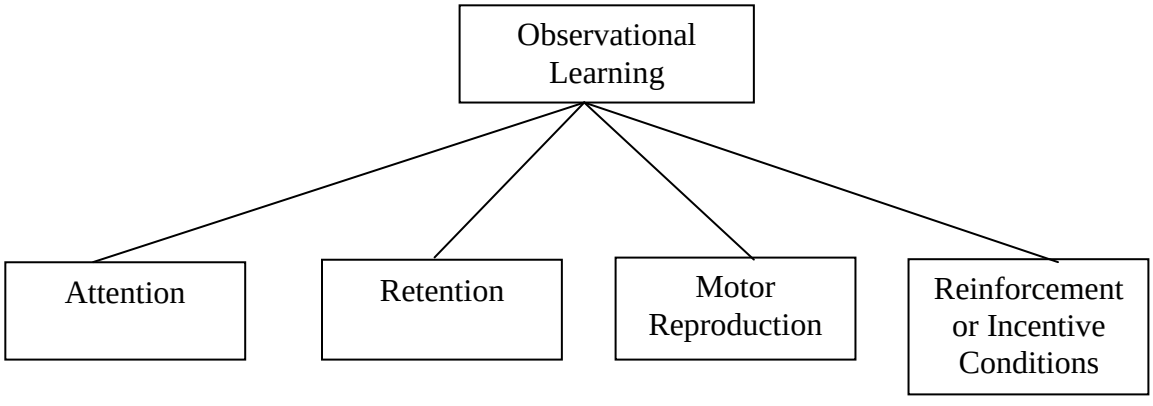


Figure 2.2: Process of Learning by Observation

- **Attention:** Before students can imitate model actions, they must attend to what the model is doing or saying.
- **Retention:** To reproduce a model's actions, students must code the information and keep it in memory so that it can be retrieved.
- **Motor Reproduction:** Children might attend to a model and code in memory what they have seen but, because of limitations in their motor ability, not be able to reproduce the model's behavior.
- **Reinforcement or Incentive Conditions:** Often children attend to what a model says or does, retain the information in memory, and possess the motor skills to perform the action, but are not motivated to perform the modeled behavior.

This theory is significant to this study in the sense that students imitate the behavior of others by the processes of attention, retention, motor reproduction and reinforcement that is, behavior can be acquired using modeling.

Modeling is a therapeutic technique based on observational learning. A behaviour is modeled to an individual allowing the person to see and recreate the modeled behaviour. Modeling involves a change in a person's behavior as a result of observing the behaviour of another person, the model. According to Bandura (1970), behaviour is strengthened, weakened, or maintained by watching the outcome of modeling of behaviour by others. When a person imitates the behaviour of another, modeling has taken place. It is a kind of vicarious learning by which direct instruction does not necessarily occur (although it may be a part of the process). Thus a way of initiating behaviour, particularly with a child, is to have the person observe someone doing the desired behaviour and encourage imitation of

the behaviour. In a classroom, a teacher who praises one student for a particular behaviour may find other students imitating the behaviour.

Many social responses are learned through observing the behaviour of others. Through modeling, observation, and then imitation, children develop new behaviors, (Bandura, 1973).

Modeling as a therapy is based on social learning theory and emphasizes the importance of learning from observing and imitating role models, and learning about rewards and punishments that follow behaviour. The technique has been used to eliminate unwanted behavior, reduce excessive fears, facilitate learning of social behaviour, and many more. Modeling could be used either to strengthen or to weaken previously learned behaviours.

Modeling has been used effectively to treat individuals with anxiety disorders, post-traumatic stress disorder. Specific phobias, eating disorders, attention-deficit hyperactivity disorder, and conduct disorder. It has also been used successfully in helping individuals acquire such social skills as public speaking or assertiveness. The effectiveness of modeling has led to its use in behavioural treatment of persons with substance abuse, who frequently lack important behavioural skills. These persons may lack assertiveness, including the ability to say “no,” they may have thought patterns that make them more susceptible to substance abuse.

Several factors increase the effectiveness of modeling therapy in changing behaviours, be it disruptive or of deficit in nature, in other words, modeling would be very effective if:

- The model is highly skilled in enacting the behaviour; is likable or admirable: is the same sex and age; and is rewarded immediately for the performance of the particular behaviour.
- The target behavior is clearly demonstrated with very few unnecessary details; is presented from the least to the most difficult level of behaviour: and several different models are used to perform the same behaviour(s) (Woollard, 2010).

Types of Modeling

Modeling can be done in several or different ways such as live modeling, symbolic modeling, participant modeling, or covert modeling.

Live Modeling: This is the act of watching a real person; usually the therapist, a teacher or others perform the desired behaviour that the client or a learner should learn. For example, the therapist might model approved manner of seeking a teacher's attention or a teacher may model the proper way of sitting in the class facing the chalk board.

Symbolic Modeling: This is a situation whereby a model could be snapped or video taped demonstrating the desired behaviour. Other examples of symbolic models include photographs, Picture books, and plays. A common example of symbolic modeling is a book for children about going to the hospital. It is intended to reduce a child's anxiety about hospitals and operations. With child clients, cartoon figures or puppets can be used as the models. In a classroom, pictures of students properly dressed in their correct uniforms could be on display and constantly shown to the students to emulate.

Self-Modeling: is another form of symbolic modeling in which clients are video taped performing the target behaviour. The video is then replayed and participants can observe their behaviours and how they appear to others. For example, public speaking is one of the

most common feared situations in some adult population. A law student who is afraid of having to present argument in a courtroom might be videotaped speaking to classmates who are role-playing the judge and members of the jury. The student can then review the video tape and work on his or her speech problem or other aspect of performance that he or she would like to change. The same can be applied for a trainee teacher during micro teaching exercise.

Participant Modeling, here the therapist models anxiety-evoking behaviours for the client, and then prompts the client to engage in the behaviour. The client first watches as the therapist approaches the feared object, and then he or she approaches the object in steps or stages guided by the therapist's encouragement and support. This type of modeling is often used in the treatment of specific phobias. For example, a person who is afraid of dogs might be asked to watch the therapist touch a pet or a dog. Or perhaps accompany the therapist on a brief walk with a dog. Then with the therapist's encouragement, the client might begin by touching or holding a stuffed dog, then watching a live dog from a distance, and then perhaps walking a small dog on a leash, and eventually by degrees, touching and petting a live dog.

Covert Modeling: In covert modeling, clients are asked to use their imagination, visualizing a particular behaviour as the therapist describes the imaginary situation in detail. For example, a child may be asked to imagine one of his or her favorite cartoon characters interacting appropriately with other characters, or asked to imagine an admired person in his or her life performing a behaviour that the client wishes to learn. For example, a person may greatly admire his or her sister for the way she handled the challenges of moving from home to a boarding school or vice versa. If the client is worried about the

challenge of a new situation (changing school, class, street or home) the therapist may ask him or her to imagine how the sister approached the new situation, and then imagine self acting likewise with courage and wisdom.

Models in any of these forms may be presented as either a coping or a mastery model. The coping model is shown as initially fearful or incompetent and then is shown as gradually becoming comfortable and competent, performing the feared behavior. A coping model might show a small child who is afraid of stepping into a river, for example. The little boy or girl watches smaller children of about the same age having fun playing along the edge of the river (Woollard, 2010). Gradually the child moves closer and closer to the water and finally follows one of the other children into the river. The mastery model shows no fear and is competent from the beginning of the demonstration. Even when he or she makes a mistake, he still maintains confidence. Having the model speak his or her thoughts aloud is more effective than having a model who does not verbalize. As the models speak, they show the client how to think through a particular problem or situation. A common example of this type of modeling is sports or cooking instruction. A golf or tennis professional who is trying to teach a beginner how to hold and swing the club or racquet will often talk as they demonstrate the correct stance and body movements. Similarly, a catering teacher will often talk to students in a cooking class while he or she is sorting out the ingredients for a dish, preparing a sauce, kneading dough, or doing other necessary tasks. The model's talking while performing an action also engages the client's sense of hearing, taste, or smell as well as sight. Multisensory involvement enhances the client's learning, (Collins, 1982).

According to Bandura (1977) any behaviour is strengthened, weakened, or maintained by the modeling of the behaviour by others. That is to say that when a person imitates the behaviour of another, modeling has taken place. It is a kind of vicarious learning by which direct instruction is sometimes not necessarily issued. For example, an athlete's violent outbursts on the football field can serve as a model which a high school player might imitate, although the high school player is not being directly instructed on how to have a violent outburst.

The most two important factors which contribute to effectiveness of modeling are the importance or prestige of the model and the model's similarity to the student. A teacher has much prestige in the classroom and so as to who should be the most effective model, it ought to be the teacher, and this is done consciously or unconsciously. Peers also serve as effective models due to similarity. Depending on their prestige in the classroom, peer models can be very powerful (Collins, 1982). Looking at the types of models above, one can see that models do not have to be "live" People all the time.

Just about any type of behaviour can be modeled. Modeling has been shown to be especially effective in the development of social skills (i.e., saying "please" and "thank you," helping others, etc.), appropriate classroom behavior such as staying on task, working quietly and work skills like taking initiative. In the same vein, inappropriate behavior can also be modeled. Peers often serve as such models; gang staring, cheating, and name calling are often modeled by students. Adults, too, often serve as models for inappropriate or undesirable behaviours such as swearing, fighting and smoking. In a theory of imitation, Miller and Dollard (1941) in Miller (2005) explained that, ‘for any learning to occur, observers must be motivated to act’.

To use modeling effectively, you must determine whether a child has the capacity to observe and then imitate the model. In classroom settings, a student's response to modeling is influenced by three factors: (1) the characteristics of the model (e.g. is the student (model) liked and respected? (2) the characteristics of the observer (e.g. is this child capable of observing and imitating the behaviour), and (3) the positive or negative consequences associated with the behaviour. Children are more likely to respond to teacher modeling when they view their teachers as competent, nurturing, supportive, fun, and interesting. Children are also more likely to imitate behaviours that result in a positive consequence. Younger children have been reported as more frequently imitating others than older children (Bandura, 1969). Children consistently model someone whom they value or look up to. They also imitate the behavior of a same-sex child more often than that of a different-sex child. They model someone whom they perceive as successful and socially valued regardless of whether the teacher perceives that child as successful or socially valued. Finally, if a child observes a model being reinforced or punished for certain behavior, this influences the likelihood that the child will then model that behavior and vice versa. Modeling is a powerful tool, an indispensable aspect in learning and other areas, for example it could be used for phobia (Bandura & Blanchard, 1969). When teachers are cheerful and enthusiastic, their attitudes are contagious. When they are respectful of students, students respect each other; when teachers are patient, fair, consistent, and optimistic, their students exhibit these traits as well. Teacher behaviour sets the tone for the classroom environment.

Modeling can decrease behaviours. For example when a teacher redirects a student from an inappropriate to an appropriate behaviour, other students learn through their peer

model what is unacceptable behavior. The problem with modeling is that it is a relatively short-term to behavioural change, some modeling sessions take longer periods than others. Imaginary, for example, requires more sessions than in vivo (real-life) treatments. In vivo, cases that take place outside the therapist's office requires longer time periods for each session. Other considerations; include the nature of the client's problem, the client's willingness to do homework, the client's financial resources and the presence and extent of the client's support network. The therapist's length of experience and personal style also affect the length of therapy.

Modeling or observational learning is effective as a method of learning such behaviours as self-assertion, helping others, empathic behaviours, moral judgment, and many other interpersonal skills. Modeling is also effective in eliminating or reducing such undesirable behaviors as uncontrolled aggression, weight problems and single phobias. The expected outcome is that clients will be able to use their new behaviours outside the treatment setting, in real-life situations. This result is called transfer of training, generalization, or maintenance. Homework is the most frequently used technique for transfer of training. Homework may represent a contractual agreement between the therapist and the client in which the client gives a report on his or her progress at each meeting.

To ensure that generalization occurs and that clients will use their new skills, several "transfer enhancers" are used to increase the likelihood of successful transfer of training. Transfer enhancers according to (Miller & Dollad, 1941) in Miller (2005) include:

- Giving clients appropriate rationales and concepts, rules, or strategies for using skills properly.

- Giving clients ample opportunity to practice new skills correctly and successfully.
- Making the treatment setting as much real-life like as possible.
- Giving learners opportunities to practice their new skills in a variety of personal and interpersonal settings.
- Giving learners adequate external social reinforcement and encouraging internal self-reinforcement as they use their skills with success in real-life.

2.6 Time-out Technique

Time-out (or time-out from reinforcement) is the punishment procedure in which the punishment is a period of time during which reinforcement is not available. Time-out was first defined by Fester and Skinner (1957) in Ellis (2003) as a signaled extinction period; it had been described by Skinner years earlier as a consequence for incorrect responses on a matching-to-sample task (Skinner, 1950). By the mid-1960s, time-out had emerged as a subfield within aversive control (punishment) (Azrin & Holz, 1966 in Holth, 2005). In his concept of time-out (Leitenberg, 1965 in Mather and Goldstein, 2001), observed that time-outs can serve aversive functions—at least under some circumstances. Time-out from reinforcement excludes children from the opportunity to participate with others and receive any kind of positive reinforcement (Walker & Shea, 1991). From a behaviorist perspective; time-out is defined as a behavior reduction procedure or form of punishment in which students are denied access to all opportunities for reinforcement, contingent upon their displaying inappropriate behaviour (Alberto & Troutman, 2006). Thus, a behavior is reduced by withdrawing the opportunity for reinforcement for a period of time following the occurrence of the behavior (Nelson & Rutherford, 1983).

The specific function or functions of time-out therefore depend upon the establishing operations and contextual factors at work in the current environment. Time-out and time - in are interdependent: The time-out is defined as aversive in relation to time- in contingencies, and time -in contingencies are defined as reinforcing in relation to time-out contingencies.

Types of time-out

1. **Planned Ignoring** is the simplest form of timeout and involves the systematic withdrawal of social attention for a predetermined time period upon the onset of mild levels of problem behavior. Planned ignoring can be a powerful tool for educators with particular students who find social attention, especially with adults, as reinforcing. In its simplest form, the teacher does not interact with the student who is engaging in what Latham (2000), denotes as "junk" behavior (i.e., behavior that does not pose an imminent threat to personal or material safety).

Ideally, the recommended classroom-based approach to Planned Ignoring is to integrate the procedure with the reinforcement of another student who is demonstrating the desired behavior in such a manner that the student presenting the "junk" behavior can see or hear this reinforcement occurring (e.g., praising a child nearby for his attention to his assignment) Upon cessation of the junk behavior (e.g., off task) by that same student, the teacher would then provide social praise to that student for the demonstration of the desired behavior. Latham (2000) describes this procedure as "Pivoting." The key is that no interactions in the form of teacher comments or body language are provided to the student concerning the junk behavior. Rather, exclusive reinforcement of the desired behavior is used once that behavior is demonstrated. One of the practical difficulties in employing "planned

ignoring" (particularly if it is not implemented in context of the pivoting technique just described) is that some students' misbehavior will likely escalate when teacher attention is withdrawn.

Additionally, some teachers can find Planned Ignoring difficult to implement on a consistent basis as it can be difficult and feel unnatural to not react to a student's misbehavior (e.g., "nipping it in the bud" before it grows any further).

2. **Withdrawal of Materials** is another example of timeout in its simplest form. The teacher simply removes the materials that the student is using upon the occurrence of the inappropriate behavior (e.g., removal of a toy for a young child equipment or materials needed to complete an assignment for an older student) It is important for the teacher, as well as the other students, to ignore the student of concern for the period of time in which the materials are removed from the student. If, as previously noted, the principle of time-in is reinforcing, this procedure can easily be integrated into classroom settings and can be effective if the activity or materials that are removed have value to the student.

Contingent Observation or Non-exclusion Time-out — the student is removed from the reinforcing activity, but is still allowed to observe the activity. For example, in a classroom or science lab, a student continues to disrupt the class by poking a neighbour and talking during a class project despite attempts from the teacher to encourage the student to stop and focus on the task at hand. The teacher directs the student to a time-out area in the classroom where the student is able to listen to the discussion, but not allowed to participate for a period of time (Erford, 1999). "Sit and watch." "Cool down" and "penalty box on the playground" are all variations of contingent observation. Yeager and McLaughlin (1994)

stated that although instructional activities are interrupted when contingent observation is used, a student may learn appropriate ways of behaving through imitation because they can still observe classroom activities. Hence, this is often considered to be the least restrictive form of time-out a teacher can implement (Alberto & Troutman, 2006).

3. **Exclusion Time-out —** the student is excluded from the reinforcing activity and is not allowed to participate or observe the activity. For example, if the student continues to talk while in contingent observation time-out, maybe, yells, throws a pencil and disrupts the class activity. The teacher asks the student to leave the time-out area and go to another supervised area until the student demonstrates appropriate behaviour and is ready to return to class.

4. **Seclusion Time-out —** the student is removed from the reinforcing activity area, placed in a separate room and is supervised during the entire seclusion time-out, (Mace & Heller, 1990). For example, a student brandishes an object that could hurt someone around the room or the class menacingly. The student threatens other students and is in danger of hurting self or others. The student is moved to a time-out room that is safe after disarming him, where he or she is constantly supervised.

5. **Suspension and Expulsion —** these interventions are recognized as extreme forms of time-out. Their applications are usually carried out by management of schools and governing board of schools.

In general, for time-out to be effective the following guidelines by Essa (2000), Gartell (2001) must be observed.

- ❖ Students should be separated from reinforcement,
- ❖ The time should be short,

- Confrontation should be avoided,
- Verbal interaction should be limited, and

A time-contingent release should be provided. Time contingent release refers to the amount of time and the contingencies (e.g. sitting quietly) required in earning release. These contingencies should be explained and provided to the child prior to entering time-out. The length of time-out is also critical in determining effectiveness. A 4-minute time-out was found to be significantly better than a 10-second or 1-minute time-out among a group of elementary school students (Hobbs, Forehand, & Murray, 1978). Long periods of time-out constitute seclusion and lose their punishing value. It is also important for the time-out activity to be less reinforcing than the setting or activity from which the child is being removed.

Mace and Heller (1990) observed that if a particular activity the child is leaving is non-reinforcing, this child may in fact learn to misbehave as a means of going off to 'time-out' so as to do something else or simply to avoid the non reinforcing activity. Work should not be missed due to time-out as much as the teacher can help it. Time-out should be boring, uninteresting, and something the child places last on his or her list of chosen school activities. The effectiveness of time-out depends on a number of factors, including the child, ability to apply the intervention consistently, the child's understanding of the intervention, the rules governing the intervention, characteristics of the time-out area, duration of time-out, and the ability to evaluate the effectiveness of time-out quickly. If time-out does not work in the first few interventions, an alternative strategy should be considered. Eight parameters that define effective use of time-out articulated by Scarboro, and Forehand (1975) include;

- A warning that time-out may come should be offered.
- The child should be consistently removed and placed in time-out when the behaviour reoccurs.
- A specific location should be defined for time-out.
- A specific duration for time-out should be set.
- The consistent schedule for time-out use should be defined.
- A defined behaviour should lead to time-out.
- Clear contingencies should be defined for the child to be released from time-out.

Time-out can be effective in typical classroom settings because it restores order by removing the child who is disrupting the class, by reducing the opportunity for peer approval that maintains some children who disrupt, by reducing the opportunity for students to manipulate situations, and by allowing the student to demonstrate appropriate behaviour before exiting time-out. In elementary classroom settings, time-out should be from 2 to 5 minutes. If the pupil is not cooperative, an additional minute should be added. Teachers should not force resistant students into time-out but should seek help from the principal or other school personnel. Finally, as soon as possible after time-out is over, something positive in the student's behaviour should be reinforced. Essa (2000) observed that there are many things a teacher can do to minimize the need to use time-out. For instance; ensuring that classroom activities are more reinforcing than time-out, providing students with ample but not excessive opportunities to comply, Provide disruptive students with additional positive consequences for not requiring time-out in a given time span.

Guidelines for Effective use of Time-Out

Wilhoit (2000) maintained that the following are guidelines for effective use of time-out: -

1. Obtain Parent or Guardian Permission to Use Time-Out. Schools may want to consider obtaining written consent from parents or caregivers before using seclusionary time-out as an intervention. The discussion of the time-out should include the specific procedures that will be used, including the circumstances leading to the use of time-out and its effect on the student's behavior. Communication should be made with the parents or caregivers whenever exclusionary time-out has been used as a form of intervention.
2. Only Use Time-Out as One Component of an Extensive Array of Behavior Interventions. Time-out, and especially exclusionary time-out, should never be used in isolation as the only behavior intervention being applied. Time-out is only one component of an effective behavior change strategy, and seclusionary time-out is near the end of the spectrum of more restrictive approaches to reducing undesired or challenging student behavior. Time-out must always be used in conjunction with an array of positive reinforcement, and time-out may be implemented on several levels, with the most restrictive version being seclusionary time-out. Procedures should be designed to teach students how to appropriately take a time-out, through role playing and modeling, with a clear understanding of what behaviors can lead to time-out and how the student can avoid this procedure. Seclusionary time-out should only be used when other less restrictive interventions have been attempted and documentation

verifies they have been ineffective. Most often when other less extreme procedures are used appropriately, it is not necessary to use seclusionary time-out.

3. Do not engage in Power Struggles with Students. Forcing a student through physical means to take a seclusionary time-out should be avoided. When you engage in physical power struggles with a student, it becomes a no-win situation. It has been documented that this typically leads to an escalation of the situation and can also lead to injury of students and staff. If a student is posing physical danger to self or others, a plan of action should be in place and staff should be properly trained on its implementation.

4. Avoid Excessive Use of Time-Out. Children should not be secluded in a time-out setting for more than 5-10 minutes at a time, depending on the age of the child, and never more than 15 total minutes. Repeated applications of time-out that exceed 15-minute maximum would not meet these guidelines. The appropriateness of time-out for children and youth at each end of the age spectrum (3-21) is questionable and should be avoided. The continued use of seclusionary time-out must be based on data supporting its effectiveness in reducing a student's inappropriate behavior, and if this data does not exist, the use of this procedure should not be implemented. If a student is using seclusionary time-out as a way to escape or avoid instruction as determined by a functional behavior assessment (FBA), time-out will not be effective.

5. Never Lock a Student in a Closed Setting and Maintain a View of the Student at All Times. Students should never be placed in a time-out setting secured with locks or

latches or in a fully enclosed area that prevents staff observation and access to the student.

6. Maintain Thorough Written Records. Detailed written records should be kept of use of seclusionary time-out, including the student's name, date, time and incident; prior interventions used length of time-out and results.

7. Assess When Time-Out is not working. Functional behavior assessments (FBA) should be performed whenever data indicated that time-out is not effective.

Again Nelson (1997) gave the following as factors to be considered

1. A warning signal indicating that time-out is imminent if the pupil doesn't alter his/her behavior.
2. A brief verbalized explanation of why the student is being given a time-out if the student did not alter behavior after warning signal was given.
3. Provide instruction to the student in taking time-out.
4. The location in which time-out is taken· Contingent observation- requires the student to remain in a position to observe the group without participating or receiving reinforcement for a specified period· Exclusionary- denies access to reinforcement by removing a student from an ongoing activity· Seclusionary- removes the student from the instructional setting as a means of denying access to reinforcement
5. The duration of time-out
    - Brief (e.g., 1-5 minutes) time-outs are as effective as longer time-outs if the student hasn't been exposed to long time-outs first.
    - Durations longer than 15 minutes should not be employed.

- A nonverbal signal indicating the beginning and end of time-out may be used if students have been taught to respond to it.

6. Requirements for release from time-out.

- Completion of the specified duration of time-out (contractual fulfillment).
- Appropriate behavior during time-out (contractual fulfillment).
- End of 15 minute maximum duration of time-out (implement alternate intervention if time-out has not been effective at this point).

How should time-out be implemented?

1. Identify reinforcers maintaining the undesired behavior before treatment.
2. Conduct a functional assessment to identify the function of the target (undesired) behavior.

- Behavior has two functions: to obtain something the student wants (e.g., teacher or peer attention), or to escape or avoid something he doesn't want (e.g., undesired task) rules/regulation.
- If time-out serves either of these functions, it will not have the desired effect on behavior (e.g., If the student is able to escape an undesired academic activity by going to time-out, behavior resulting in time-out will continue. Time-out also will not be effective if it provides an opportunity to engage in behavior that is self reinforcing [e.g., self-stimulation]).

Specify in advance the behaviors which will result in time-out.

Use less intrusive behavior reduction procedures first (i.e., differential reinforcement, extinction, verbal aversive, response cost).

3. These less intrusive procedures should have been documented as ineffective before time-out is used.

4. Develop a written statement of how time-out is to be implemented.

5. If seclusionary time-out is used, the following requirements should be met:

    - The time-out room should be at least 6' x 6' or larger and based upon the age and size of the student.
    - The room should be properly lighted and ventilated.
    - The room should be free of objects with which the student could harm himself.
    - A staff person should be able to see and hear the student in time-out at all times.
    - The area should never be locked.
    - Use of a fully enclosed area limits staff observation and access to student.
    - Confinement in a small area may lead to an escalation of student behavior.
    - At no time shall a student be placed in a locked area alone.

8. Keep written records of each occasion when time-out is used including:

    - Student's name and date
    - Episode resulting in time-out
    - Time of entry into and release from time-out
    - The location of time-out (contingent observation, group separation, exclusion)
    - The student's behavior in time-out

9. Always differentially reinforce desired student behavior in time-in environment (classroom or instructional setting).

10. Evaluate procedures if time-out duration exceeds 15 minutes.

11. Evaluate the effectiveness of the procedures if time-out is not having the desired impact on student behavior (collect and chart data on the frequency of the target behavior).

How may time-out be abused?

1. Time-out is overused due to lack of appropriate, proactive, instructional program.
2. The time-in environment (Classroom or instructional setting) is not sufficiently reinforcing
    - Should give four times as much a positive reinforcement as reductive consequences.
    - Should have a systematic behavior support plan for teaching and reinforcing a replacement behavior that serves the same function as the undesired behavior.
3. Time-out is applied inappropriately.
    - Time-out is the only, or nearly the only, behavior reduction procedure used.
    - Time-out is applied too late when the student is out of control.
    - Teacher escalates student behavior by lecturing student when in time-out.
4. The teacher does not enforce time-out contingencies.
    - Student is able to avoid time-out by arguing or refusing to take time-out.
    - Teacher is unable to direct physically mature students to utilize time-out if they refuse (Consider age appropriateness).
    - Teacher is inconsistent in following through with time-out after warning (i.e., Using time-out after three (3) warnings, five (5) warnings, etc.)
    - Solution is to teach students to take time-out:

- Use systematic teaching procedures (e.g., Model, role play, practice and feedback).
- Hold time-out training sessions at other occasions than when time-out is needed: reinforce successive approximations.
- If the teacher is unable or unwilling to enforce time-out, he or she should consider alternate behavior reduction procedures.

5. The effectiveness of time-out is not evaluated
    - Use the Time-out Record to monitor the use and results of time-out. If time-out is used excessively (for example, 3 or more times a day for several consecutive days with a single student) the effectiveness of time-out needs to be evaluated and the individual behavior management plan for that student needs to be adjusted.

Bezt (1994) emphasizes that time-out fails to teach desirable behavior and should be reserved for use only when a child is wildly out of control or is a threat to other children. There is speculation that time-out may be hurtful in a number of ways. Readdick and Chapman (2000) pointed out that if the child perceives it as a punishment, time-out can have serious side effects that are commonly associated with punishment, including increases of other maladaptive behaviors and withdrawal from or avoidance of the adults administering time-out. In addition, given their social inexperience, young children tend to internalize negative labels, see themselves as they are labeled, and react accordingly (Readdick & Chapman, 2000).

Furthermore, Harris (1985) pointed out that when procedural time-out is experienced as an aversive consequence by the subject and results in reduction or suppression of the target behavior, then time-out is properly classified as a punisher. In

fact, time-out is typically defined or classified as a punishment procedure based on the assumption that it will be experienced as aversive by the subject and reduce the frequency of a behavior. Harris describes how time-out may function as a negative reinforcer or escape procedure even when a validated reinforcement procedure exists in the time-in environment.

Hannon (2002) a kindergarten teacher who decided against using time-out after years of incorporating this technique in her classroom states that,

> *Not relying on time-out has been both frightening and a relief…belatedly; I have realized and deeply regret how much time was wasted in time-out by children misled by my lack of clarity. I see now how important it is that I discuss and model my expectations for appropriate behavior with children. Many of the children benefit from well-timed and clear discussions or demonstrations concerning developmentally appropriate behavior. When we have a bad day, the fault is often due to inappropriate expectations or insufficient preparation on my part* (p. 113).

The use of time-out procedures is a topic of major importance to teachers of behaviorally disordered students. A survey of special education teachers (Zabel, 1986), identified variables associated with use of time-out. Among those variables were restrictiveness of placement and age of child. Teachers of self-contained special educational classrooms reported using time-out more frequently than did teachers of resource rooms. Teachers of younger children reported using the technique more frequently than did teachers of older children and youth. Respondents to Zabel's survey reported that they used the time-out procedure about five times per week and that, on average, each child remained in time-out for 12 min. Verbal and physical aggression was the two behaviors most frequently reported to result in time-out. About half of respondents

reported that they kept a log of their use of time-out, and less than a quarter of the sample reported that their school had written guidelines for the use of time-out procedures.

Zabel (1986) discussed the use of time-out intervention as appearing to lessen as students get older, perhaps because teachers have more sophisticated, language-based interventions for use with older students. Also, as students get older, the question of physical persuasion for those who might refuse to go to time-out must be considered in light of both possibility and appropriateness.

Gartrell (2001) believed that time-out, when used as discipline, is one of a group of techniques that still rely on blame and shame to bring a child's behavior back into line. Referring especially to preschoolers, Gartrell (2001) offers five reasons why time-out is an undesirable practice: (1) the imposed external control of the time-out inhibits a child's ability to build internal controls and may cause a child last feelings of being ineffectual, (2) the child placed on a time-out chair does not have personal needs met, including the need to develop alternative strategies, (3) the time-out diminishes the child's developing self-worth and self-confidence, and may cause others to view the child as a trouble maker, (4) the young child has difficulty understanding the relation of actions to consequences and may feel bewildered by the time-out experience, and (5) opportunities for learning valuable lessons in social relationships are lost during the period of isolation; and humiliation from the time-out may diminish the value of adult follow-up.

2.7 Theoretical Framework

2.7.1 Stimulus, Response and Consequence (by Edward Thorndike)

Edward Thorndike summarized his findings in a set of 'laws'. These are extensive and diverse in the degree of importance and the impact upon pedagogy arising from them.

The basis of Thorndike's approach to problems of behaviour lies in the belief that human behaviour can be analyzed and studied in terms of stimulus – response and measures of the strength, endurance and re-establishment of the stimulus – response connection. Learning by this is the establishment of the bond between stimulus and response. The theory contends that humans only differ from other animals in their greater capacity to make the connections between their response and the consequences (Woollard, 2010). The first principle he developed suggests that responses to stimulation that are closely followed by satisfaction will become firmly attached and therefore more likely to reoccur when the situation is repeated. Conversely, if the stimulation is followed by discomfort, the connections to the stimulation will become weaker, and the behaviour or response is less likely to occur when the situation is repeated. The law of effect states that the likely recurrence of a response is generally determined by its consequence or impact upon the individual with regards to whether that is rewarding or punishing. A positive consequence strengthens reinforcement, while a negative response weakens reinforcement. An act which results in discomfort tends to be disassociated from the situation, so that when the situation recurs, the act will be less likely to recur. The greater the satisfaction or the greater the discomfort experienced, the greater the degree to which the stimulus –response association will be strengthened or weakened.

After further research studies Thorndike proposed the law of effect that added the idea that while reward responses always strengthen the bond between a stimulus and a response, the effect of punishment responses is less predictable; sometimes they weaken the association, but sometimes they do not. In other word, 'we reward appropriate behaviour, and ignore inappropriate behaviour'. But the degree to which we can ignore some behaviour in the classroom is left out in the theory.

Thorndike's law of exercise or repetition maintains that the more responses to a stimulus that are reinforced, the longer and the more sustained the connection will be. That is 'practice makes perfect'. In a later revision of the law, Thorndike clarifies that repetition in itself does not make perfect, but practice that provides the learner with informed feedback about progress and performance could be valuable in strengthening the stimulus-response connection and thus increasing the frequency of response. Thorndike's law of readiness asserts that, before learning takes place, the learner has to be ready to learn. This involves meeting basic needs of the learner, (making sure the learner is not hungry, thirsty, stressed, and uncomfortable). It could also be in terms of cognitive abilities such as an appropriate repertoire of responses, motivation to response, sensitivity to the stimulus or readiness for action. Further, a series of stimulus- response connections can be chained together if they belong to the same action (reaction) sequence. One response causes the stimulus for the next, and the learning pattern is established because the learner is ready or prepared by having exercised the Reponses previously. This process of chaining is an important strategy for developing complex learning patterns.

The law of recency states that the most recently reinforced response is the one that is likely to determine the recurrence of a response to a particular stimulus. For example, during the previous weeks a pupil has responded differently to the challenge of adding two digits:

- ❖ Taking counters, making two piles and counting the total:
- ❖ Using fingers and counting on from the first digit: and
- ❖ Drawing dominoes of the numbers and counting the total number of dots.

Each has received similar rewards for correct answers, either intrinsically by the knowledge of being correct or extrinsically by the praise, smile, tick or token coming from

the teacher. All being equal, the most recent reinforced response will make that response more likely in the future. In the classroom, differentiated reinforcement exists and when one arithmetic method receives more reinforcement than another, the law of effect determines future responses. In other words, the method of carrying out a calculation will be the one that gives the right answer and therefore the one that gives the most immediate response.

Other factors of influence will be the response from the teacher or others in the classroom. Wesley Becker in Woollard (2010) identified four forms of social reinforcement: verbal, facial, proximity and touch. The use of touch, and even proximity in some circumstances, is to be used with caution in the school environment. All four are identified as powerful reinforcers, and today much use is made of verbal praise and visual approval (smiling, winking, laughing, nodding, etc.). Becker identifies a difference between judgmental praise such as good, well done, cool or neat, and evaluative praise where the teacher is seen to take the time to identify how or in what way the work is praiseworthy. In assessment for learning, it is giving feedback that clearly states both the progress being made and the attainment being achieved that best supports learning. In the same line, Donald MacMillan in Woollard (2010) writes: 'Describe the behaviour and indicate that you appreciate it…… you not only compliment the child but you carefully point out precisely what he has done to warrant the praise- hence it is educational (1973:182).

Other Thorndike's subsidiary laws that have important implications for learning and behaviour include; 'law of primacy', this is interpreted as 'what is learned first is learned best'. The 'law of multiple responses suggests that if a response fails to produce satisfaction, another response will be triggered until success results and learning becomes possible, but complementary. The law of response analogy considers that a learner's response to a novel

situation is determined by innate tendencies to response. The law of response analogy also indicates that features in similar situations will encourage response if responses have been rewarded in the past. The law of 'set' states that an individual's total attitude or disposition affects response rates and thus learning in general.

Thorndike noticed in animal behaviour that they could become capable of ignoring some aspects of a problem and responding to others-thus the law of selectivity response. The law of associative shifting applies when a learned pattern of response to a given stimulus is transferred, by association, to another stimulus. The law of spread effect indicates that each stimulus-response relationship is not an isolated event, but the association and reward mechanism can have an influence upon other actions that occur at the same time. Finally, the law of intensity relates to the vividness of the stimulus-response-consequence experience-the degree to which the process impacts upon the senses.

Examining this theory to disruptive classroom behaviour, it is easy to apply its principle of condioning to any disruptive behaviour. Through conditioning a learned disruptive behaviour can be unlearned through effective use of appropriate technique like modeling or time-out.

2.7.2 Operant Conditioning (by B .F. Skinner)

Operant conditioning theory by B.F.Skinner postulates that behaviours occur but it is the behaviours that receive positive reinforcement or some form of tangible or intrinsic rewards that are repeated. Reward is also called the reinforcing stimulus, or reinforcer, and has the effect of increasing the operant behaviour. Skinner's basic principle of operant conditioning is that a response followed by a reinforcer is strengthened and is therefore more likely to occur again. The principles are:

- ❖ The reinforcer must follow the response:
- ❖ The reinforcer must follow immediately (timing is important);
- ❖ The reinforcer must be impactful (magnitude is important);
- ❖ The reinforcer must be consistent; and
- ❖ The reinforcer must be contingent on the response.

In his series of experiments, he confirmed that when a reinforcer is removed, the behaviour reduces and eventually will stop (other than as part of random actions) (Skinner 1950). This is called extinction. The important aspect of operant conditioning is that when the reinforcer is reintroduced, the resulting behaviour pattern is quickly established. And this in turn forms the basis of schedules of reinforcement.

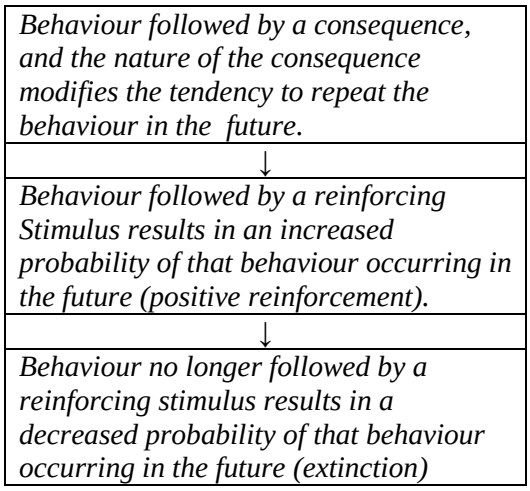


Figure 2.3: Operant conditioning

Skinner (1950) reiterates that in studying behaviour or learning, one should not and need not be concerned with the mechanics (biological or biochemical) of learning but with the physical and verbal consequences of experience. Following his experiments with pigeons he confirmed that behaviours of animals can give insight to concepts like emotion.

In simple operant conditioning, conditioning of behaviour occurs when the behaviour becomes associated with a reward. Interventions are designed to increase or decrease the target behaviour by making the association between wanted behaviour and reward stronger. Following this, Woollard (2010), points out that proactive behaviour modification is based upon interventions that avoid the use of aversive consequences but rather such that involves teaching new and more appropriate behaviours that are incompatible with the unwanted behaviour. For example, a child seeking attention by wrong doing is discouraged by rewarding attention seeking that is associated with academics or other social achievement. So to reduce an inappropriate behaviour, an appropriate incompatible behaviour must be taught as the alternative. Interventions that could increase appropriate behaviours include;

- Rewarding (praise, celebration and approval);
- Modeling,
- Shaping;
- Observation charts;
- Token economy; and
- Self-monitoring /sanctuary. Interventions used to decrease behaviours include:
- Extinction,
- Reinforcing incompatible behaviour;
- Self-monitoring; and
- Shaping

Without conditioning behaviour does not occur with an increased frequency.

Unconditioned behaviour ⟶ No increased frequency

For example, pecking the floor

With conditioning, behaviour occurs with an increased frequency.

Conditioned stimulus ⟶ increased frequency

For example, peaking a lever ↗

Release of food.

Figure 2.4: The process of operant conditioning

In another situation, a pigeon learning to peck a disc when it appears and then receiving an edible reward; the response rates can be measured. The rate of response varies and can be enhanced by differential reinforcements. However, as the pigeon becomes less hungry there appears to be a change in the pattern of response. The pigeon can and does respond on occasions just as quickly but there is a higher level of latency of response.

In a classroom situation, a learner continues to respond to the lesson experiences but with increasing amounts of latency as the reward for response (whether physical, tokenized or intrinsic) diminishes.

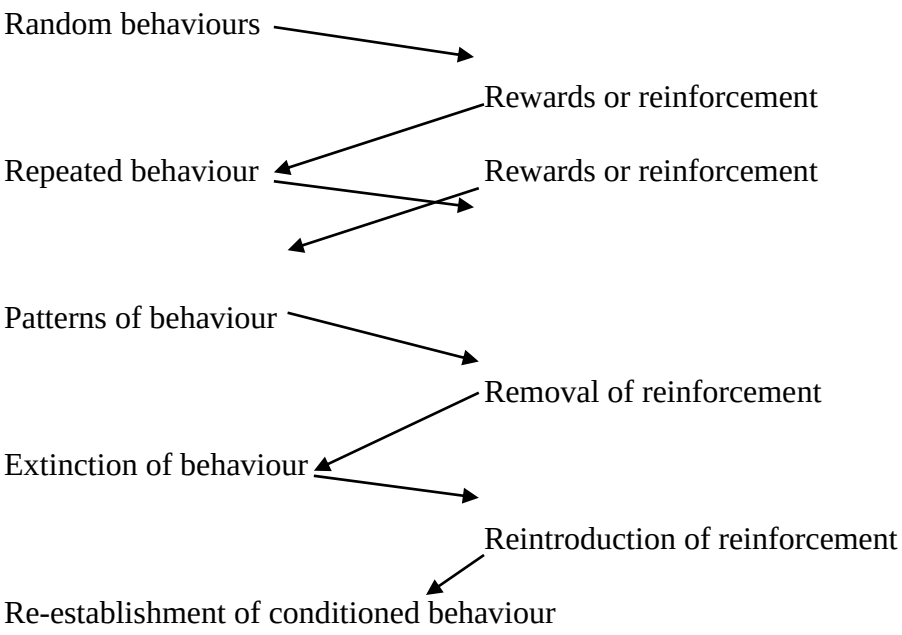


Figure 2.5: Steps to conditioning

In establishing or learning new behaviours or responses, the steps move from random behaviours being selected through positive reinforcement with rewards building to patterns of behaviours. In the absence of reinforcement, extinction of responses may occur. The reintroduction of reinforcement causes the return of the behaviour patterns. The way in which reinforcement is managed is called scheduling.

Following series of experiments, Skinner established that conditioning could be optimized through a pattern of repeated and reduced reinforcement of the desired behaviours and that schedules of reinforcement are important component of the learning process and impact on the strength and rate of the responses. Two types of reinforcement schedules are; continuous reinforcement and partial reinforcement. In continuous reinforcement, the desired behaviour is reinforced every time it occurs. The schedule is best applied during the early stages of learning in order to establish a strong connection between the behaviour and the response. Once the connections have been made, then it is more appropriate to move to the

less resource-demanding partial reinforcement. However, reducing the rate or strength of reinforcement may lead to extinction. But in research evidence by Skinner (1953) partial reinforcement strengthens the stimulus-response condition and makes the behaviour less susceptible to extinction. That is, partial reinforcement is more effective than continuous reinforcement.

Partial reinforcement can be of several types; fixed-ratio, variable- ratio, fixed-interval and variable- interval schedules. The fixed-ratio schedule gives reinforcement after every 'x' occurrences of the behaviour and reputedly gives the most highly sustained behaviour pattern with regard to the amount of reinforcement. Variable-ratio, schedules provide reinforcement after an unpredictable number of responses- this is congruent with the busy activities of the classroom because it creates a high steady rate of responding and avoids the reward-dependency of fixed and continuous reinforcement. The "interval' of interval schedules refers to the time following the appropriate response before the rewards is given. The fixed-interval schedule causes high amounts of responding near the end of the interval, but much slower responding immediately after the delivery of the reinforcement (Dews, 1978 in Dollard, 2010).The variable-interval schedules occur when a response is rewarded after an unpredictable amount of time has passed. This schedule produces a slow, steady rate of response.

Premack (1959, 1971) in further work on reinforcement devised a principle and throws more light on the identification of appropriate and effective reinforcers. The Premack's principle states that any high probability behaviour will serve as a reinforcer for any low probability behaviour, and vice versa, low probability behaviour will act as a punishment for high probability behaviour (1959, 1971). For example, coming from school

most children would like to watch cartoon films, (a high probability behaviour); this hobby can be used as a reward for doing a low probability behaviour like finishing school take home work.

Another important element from Skinner's work relates to shaping. Shaping is a technique used by the teacher by which the learner is reinforced for showing closer and closer approximations to desired behaviour. It is an aspect of behaviour analysis that gradually teaches new behaviour through the use of reinforcement until the target behaviour is achieved (Skinner, 1953; Staats, 1963 in Woolard, 2010). Shaping is 'the process in which reinforcement is differentially applied to those responses that constitute a closer and closer approximation to the ultimate response one wishes to bring about (Wenrich, 1970). It is useful in teaching new desired behaviours that may be outside a client's normal experience or activities. For example, the learner may not have experienced 'hot seating; an activity where one person of a group (in a group work) is the focus of attention and that person both controls and responds to the questioning by the rest of the group. It is a complex scenario when met for the first time but through shaping-reinforcing prerequisite behaviours and skills- the learner can eventually play the full and proper role in the activity as either a class member or the person in the 'hot seat'. Shaping is a natural way of encouraging the learner to increase the prevalence of a clearly defined, desired behaviour because it does not overly challenge the learner to do something new; shaping is most effective for increasing positive behaviour. Extinction, in operant conditioning, is reduction of reinforcement to reduce the occurrence of behaviour.

Reinforcement theories proposes that a person can change another person's behavior by the use of reinforcement, punishment and extinction. While rewards are used to encourage

the repetition of a behaviour. Punishments are used to prevent a behaviour operant conditioning also referred to as extinction in a means to stop someone from performing a learned behaviour. This is achieved by imposing negative consequence to reduce an undesirable behaviour. In other words, punishment is imposing negative consequences to discourage an unwanted behaviour.

Again the theory suggests that an individual when given opportunity to choose response to a given stimulus will generally choose or select the response that has been associated with positive outcomes in the past. This means that responses that are followed by satisfaction will be strengthened while responses that are followed by discomfort will be weakened and possibly extinct.

It is on this premise that the researcher hoped that disruptive classroom behaviour followed by time-out consequence will be weakened and possibly replaced with acceptable classroom behaviour.

2.7.3 Psychodynamic Theory (By Sigmund Freud)

Psychodynamic theory examines how past psychological influences affect present behaviors. The theory sees behavior problem as representing activity of psychic forces. Among the exponents of the theory, Winnicott, Klien, Horney and Bowlby (Laslett, 1982) believed that behavior disorders are symptomatic of an underlying pathology which must be cured before behavior can change or improve. Psychodynamic theory accounts for behavior problem in children as a result of a failure in the child's environment during the critical period of his or her dependence upon the mother (Robert & Powers, 1990). To them, an infant's environment consists of the relationship between mother and infant, sustained and protected by the father. Winnicot in (Laslett, 1978) explained that

motherhood and infantile or infancy is a time of a mother's preoccupation with her baby. Impingement on this relationship for any reason such as mother's ill health, desertion or disruption in the parental relationship is detrimental to the infant's emotional development, a situation he described as 'original environmental failure', that pathology is primarily in the environment and only secondary in the child (Winnicot in Laslett, 1978). This theory advocates for a 'mother presence' in infancy which will allow for 'continuity of being' for a child's sound emotional development and later adjustment. The theorists maintained that unavailability of proper mother substitute to provide the bonding figure for the infant at the stage of relative dependence on a mother has often affected the emotional development of the child's subsequent personality.

From studies on causes of maladjustment, (Adejuwon, 2005; Holden 1995; Solity, 1992) it is clear that many children have not had that 'continuity of being' with a good enough mother or mother substitute. The infancy of many children with behavior problem has been a prolonged discontinuity, with series of interruptions in parental relationships which are inimical to satisfactory emotional development. In contributing to the theory, Melanie Klein (Laslett, 1987) opined that this failure of proper bonding at infancy often leads to constant anxiety and general frustrations which are often extended to subsequent relationships with others.

The theory is very important in understanding how easy it is for maladjusted children to project their hostile, aggressive feelings on other people. It is important to also understand and appreciate what these children went through or are going through. This understanding or recognition is very important because their use of defense mechanism of projection can put their relationship with a teacher to a severe test.

Just as Winnicott laid emphasizes on infantile experiences, Erickson (1965), a neo Freudian Developmental psychologist, saw the child's first developmental stage as a stage in which an infant has to resolve the conflict of 'basic trust versus mistrust'. He referred to the infant's need for consistency and continuity of relevant experiences with a mother as crucial so that the sense of identity can be established. He sees the infant's first social achievement as a willingness to let the mother out of sight without undue anxiety or rage. According to him, satisfactory emotional and social development is the success mastery of a series of developmental tasks that the success at this tasks following good mothering would lead to formation of proper identity. This is because an emerging sense of identity depends first upon the provision of good maternal care, an appropriate environment. Erikson and Winnicott explained that maladjusted children do not develop a sense of identity because of inability to experience oneness as something that has continuity and sameness and to act accordingly (Erikson, 1965). On this sense of identity depends achievement which leads to self esteem and to the individual's belief that he or she is someone who can be effective among other people who will grant him or her recognition? The missing experience of a good enough maternal care often prevents the development of a defined 'self'.

In considering this theory to disruptive classroom disruptive behaviour, it is important to put into consideration the experience shaping the student's personality. A study of the student's history could throw more light on the student's behaviour. This will provide the teacher the clue to cause of behaviour and proper technique to employ in handling the behaviour.

2.7.4 Social Learning Theory

In contrast to psychodynamic theory, Social learning theory emphasizes the effects of events in the environment in determining behavior. The theory rejects the idea of behavior being symptomatic of an underlying force, rather it emphasized that behavior is elicited and maintained by the stimuli in the environment. In its broadest sense, the theory integrates classical and operant conditioning, modeling, imitation and cognition with problems of personal and social behavior. The theory emerged from the works of people like Pavlov, Watson, Thorndike, Skinner, Bandura and a host of others.

The theory in explaining behavior problem draws attention to the learning that is acquired by children copying the behavior of models and learning by imitation (Bandura, 1977). Modeling is an indispensible aspect of learning. In a theory of imitation, Miller and Dollard (1941) explained that for any imitative learning to occur, observers are often provided with an example of the desired behavior and when positively reinforced, they perform responses that match the model's. They distinguished between two types of imitation processes; the copying and the matched –dependent behavior. In copying, an individual attempts to imitate another's behavior as closely as possible because it has cue value to him or her. Matched –dependent behavior is when an individual imitates another because he or she is rewarded for such imitative behavior. In explaining this further, Miller (2005) suggested that when a model performs an act and at the same time rewards the observer through the process of secondary reinforcement, the model's behavior acquires value for the observer. Under this circumstance, the children may imitate adults because this matching of behavior has intrinsic reinforcement value. Gewirtz and Stingle (1968), Baer and Sgerman (1964) using operant –reinforcement, observed that observers imitate

because they have previously been reinforced for matching their behavior to that of the model, even if the matching response itself may acquire secondary value. Bandura and Walters (1963) added that imitative learning can take place in the absence of reinforcement. This, to some extent, explains how children learn by witnessing or observing and imitating the behavior of adults or other children in various social situations. Through their research on the conditions which children copy and imitate the behavior of models, Bandura and Walters (1963), drew attention to the fact that a lot of children are surrounded with models that are maladjusted and equally socially handicapped, for instance, aggressive parents or parents who cannot control their feelings. They demonstrated that children's observation of model's submissive or aggressive behavior increase their repertoire of submissive or aggressive behavior. They affirmed that the children not only imitate the actual behavior they observe; their observation of submissive or aggressive behavior stimulates novel forms of these behaviors in them.

The theory explains that behavior is learnt and sustained by the use of schedules of reinforcement or rewarding of behavior by attention or gratification. It explains further that the degree of reinforcement associated with the behavior determines whether the behavior will be repeated. Reinforcing consequences serve partly as an unarticulated way of informing performers what they must do to gain beneficial results or to avoid punishing ones. Bandura (1971), summed the role of reinforcements in behavior acquisition and learning generally as;

> *Reinforcements convey information to performers about the types of responses that are appropriate; selective reinforcement directs performer's attention to correlated environmental stimuli that signify probable response consequences; previous reinforcements create expectations that motivate actions designed to secure desired rewards and*

> *to avoid injurious outcomes; punishing experiences can endow persons, places and things with fear arousing properties that inhibit responsiveness; a given history of positive or negative reinforcement can alter people's self evaluations in ways that affect their willingness to exhibit behaviors that are discrepant with their self – attitudes and the determination with which they perform them, and finally, the treatment one receives alter liking and respect for the reinforcing agent. (p.27)*

Just as children's acceptable behavior may be reinforced by attention, praise or reward, unacceptable behavior may also be reinforced. It explains that persistence of troublesome and attention seeking behavior in children is reinforced by parents' and teachers' use of a combined schedule of reinforcement. For instance, attention seeking behaviors are often ignored when they are mild but when children increase the intensity and persistence of their demanding behavior and it reaches a high pitch, they are gratified for peace to reign.

On regression behavior, which psychoanalysts account for as a retreat in times of stress to behavior which was appropriate at an earlier period of development, by reference to fixation at some stage of development, possibly, the stage at which some trauma occurred or during a stage of excessive indulgence or gratification. Social learning theory explains regression by reference to appropriate and inappropriate reinforcement of behavior (Harrop, 1987). During times of stress, behavior which is inappropriate for a child's age is reinforced in his or her comfort seeking and physical depending behavior, for example, reinforcements appropriate to a child's age, such as approval of interaction with children of same age are not adequate to sustain the age appropriate behavior. The theory also refers to the principle of observational learning to explain regression. For example, children who observe the reinforcement given to a younger child for a behavior which is appropriate for

the age, imitate the younger child's behavior in the expectation of receiving similar rewards (Wortman et al 1999).

Unlike psychodynamic theory, Social learning theory does not accept that deviant behavior is symptomatic of an underlying pathology nor the idea of symptom substitution, that is, that as a symptom is an outlet for repressed psychic forces, the treatment and removal of this symptom only blocks one outlet, leaving psychic energy free to find another. Symptom to Social learning is a behavior which dominates the hierarchy an individual has learned in response to stimuli; for example, when a behavior is eliminated through the use of behavior modification techniques, the next dominant set of responses in the hierarchy, which may be deviant or not will occur. If they are non deviant, then the elimination of unacceptable behavior has been successfully accomplished. If they are deviant, they in turn can be modified and alternative acceptable behavior elicited, shaped and strengthened.

While psychodynamic seeks the determinants of deviant behavior in unconscious forces without or with little reference to stimulus event, Freud (1949), social learning theory explains this behavior as responses to stimuli which can be manipulated. Another distinction is that social learning theory emphasis the continuity of social development. It rejects the shape theories of Freud's oral, anal, pregenital and phallic stages and Erikson's developmental task which children have to successfully accomplish during their progress to maturational levels, and similarities between individuals at the same maturational level. This situation to social learning minimizes the variability in individual behavior due to ethnic, cultural and biological differences, and does not take into account the important fact that children from different environments are exposed to different social models and their

social learning is differently reinforced. Even children from similar social and cultural backgrounds undergo different social training experiences so that there are considerable differences in the social behavior between individuals. These differences are likely to be maintained during their formative years because most children remain with their families, and the social models from which they learn for a considerable time (Morgan, King, Weisz & Schopler, 2004). Thus, social learning theory focuses attention on the differences between individuals and the continuity of development.

Bandura's social learning theory emphasizes the importance of observing and imitating the behaviours, attitudes and emotional reactions of others. Based on this, it is hoped that when proper and acceptable classroom behaviours are modeled to the disruptive students they will discard their disruptive behaviours and imbibe the new behaviours.

2.7.5 Dollar & Miller Frustration – Aggression Theory

Dollar and Miller (1989) theorized that the cause of aggression is the build up of frustration within the individual. According to this theory, frustration experience generates a drive state, whose principal means of expression was aggressive behaviour. Although suffering sometimes builds character, it may also bring out the worst. Studies in which animal experience unpleasant event reveals that those made miserable often make others miserable (Barker Kowitz, 1983, 1989) in Toth (1991).

Being blocked or shut from goal also increases people's readiness to aggressive quarrelsome. This phenomenon is called frustration – aggressive principle. Frustration creates anger, which may in some people generate aggression, especially in the presence of an aggressive cue such as gun. Like Frustration, other aversive stimuli – physical pain,

personal insult, foul odor, hot temperature, cigarette smoke and a host of others can also arouse hostility.

Social learning theory views quarreling as a learned behaviour which is subject to the "Law of learning" This theory recognizes that humans learn new dispute or quarrel skill through observation. Thus, without ever engaging directly in violent and hurtful behaviour, a young child can observe others who do so and learn the probable consequences of the actions. In this way observation of quarrels reliably increases the likelihood of quarreling in the observer's later behaviour (Triger, 1990). For example, viewing violence leads to violent play. Research has shown that viewing media violence does lead to increased expression of aggression in the viewers ,as boys imitating pro-wrestlers in television films. Since the social learning theory approach views quarrel as a learned set of behaviour, the process of reducing aggressive behaviour in individuals or in class rooms, entails changing the factors that influence its development (Bandura, 1989).

In a classroom situation, a student could exhibit disruptive behaviour following frustrations from inability to express self or from other social incompetence. A task that is not commiserating with ability could also lead to frustration which could end in disruptive tendency. Thus, in addressing disruptive behaviour in any classroom, it is important to rule out frustrating elements. To achieve this, the target student should be observed in more areas and circumstances before labeling.

2.8 Review of Related Previous Studies

Porterfield, Herbert-Jackson, and Risley (1976) and Foxx and Shapiro (1978) investigated two variations of non exclusionary time-out. Porterfield and her colleagues used contingent observation and evaluated the time-out with young children who engaged in

aggressive and disruptive behaviors in Day Care program. When a child engaged in a problem behavior, the caregiver took the child outside the play area and had the child sit on the floor and watch the other children play. After the child sat there for about a minute with no toys, activities, or interactions, the caregiver allowed the child to return to the play area. The caregiver also praised the other children for playing appropriately. The child had to sit and watch the other children play appropriately. The procedure decreased the level of disruptive and aggressive behavior of the children in the day care program. Even though subjects on this study are adolescents and the setting is in formal classroom, the same success could be achieved with the six week period of treatment.

Mathews, Friman, Barone, Ross, and Christophersen (1987) worked with mothers and their 1-year-old children. The researchers instructed the mothers to use exclusionary time-out when their children engaged in dangerous behaviors such as touching electrical cords or appliances. The mothers first made the home save by eliminating as many hazards as possible. They then used time-out and differential reinforcement when their children were playing. The mothers praised their children for playing appropriately, and when a child engaged in a dangerous behavior, the mother immediately implemented time-out. The mother shouted "no," took the child from the play area for a brief period until the child was quiet for 5 minutes. This time-out procedure resulted in a reduction in dangerous behavior for all the children. The success of time-out in home could also be recorded in classrooms. Even though, the researcher did not specify how long the mothers used the technique, it's hoped that the six weeks period of treatment in this present study will be adequate for successful result.

Rortvedt and Miltenberger (1994) used exclusionary time-out to decrease noncompliance in two 4-year-old girls. The girls often refused to comply with their mothers' requests. This made the mothers to repeat requests, threatened, scolded, or pleaded with the girls to do what had been asked. The researchers worked with each mother and daughter pair in their homes. They instructed each mother to praise her daughter when she did comply with a request and to use time-out when the daughter refused. When the mother made a request and the daughter did not comply within 20 seconds, the mother took the girl to another room and made her sit in a chair for 1 minute. After telling the child why she had to sit in the chair, the mother did not interact with her during the time-out period. If the child engaged in problem behaviors during time-out, the time-out period was extended until the child was quiet for at least two minutes. Using time-out with these two young children greatly reduced their noncompliant behavior. Even though noncompliant is the target behavior, it is the contention of this researcher that time-out can equally reduce classroom behavior.

In using time-out, Bostow and Bailey (1969) were able to modify disruptive and aggressive behavior of two retarded patient who were undergoing treatment. While one of the patients emitted loud vocal behavior the other was known for severe aggressive bouts. The use of treatment procedures reduced there behaviors drastically. To confirm that the change in behavior was due to the treatment, when treatment stopped the behavior resurfaced and when treatment were reintroduced, the condition come under control.

McQuire (2008) in studies with families who indulge in personal violence, revealed that time-out could be effectively used to reduce behavior of personal violence.

Donaldson and vollmer (2011) Using four subjects wanted to find out the difference in the effect of time-out with release and without release. In release the culprit served time-

out for a period of time while in non release, the subject served time-out for the whole period of the class lesson. Their findings revealed that both type of time-out are effective in treating problem behavior. In a study, Luiselli, Myles and Littman-Quinn (1983).used reinforcement and time-out to reduce severe aggressive and disruptive behaviors of a fifteen years old multiple impaired subject. The researcher first applied reinforcement procedure but the result revealed no change. When time-out technique was combined with reinforcement, the result was encouraging and a follow up after four months showed the problem was completely tackled. In another study, Obiyo (2010) sought to determine the effect of cooperative teaching on children with learning and behavioural problem in Agboh, Delta state of Nigeria using two groups, one research question and a hypothesis. The study used one experimental and one control group all numbering 64 subjects from primary four and five.

After a period of one term that the experimental group was taught with cooperative teaching method and the control group with conventional teaching method the results revealed that the pupils taught with cooperative teaching strategy had a significant higher achievement than the control group.

In a survey study, Mohammed (2011) identified the most classroom problem that teachers encounter. His sample was 196 public school teachers in Tafila, Jordan.

The result of the work showed that teachers encounter behavior problems (2.66) more than academic problems (3.08) from learners. The work also revealed that gender does not matter when it comes to exhibition of classroom problems. The problems ranged from classroom disruptiveness, vandalism, theft, destruction of property, failure to do home work.

Petro and Corinne (2010) in a project designed to achieve a threefold aim: firstly, to identify the various types of disruptive behaviour that occur most often among foundation

phrase learners; secondly, to find out from teachers what the causes are of disruptive behaviour amongst foundation phase learners; and thirdly, to suggest strategies that foundation phase teachers can direct towards managing disruptive behaviours. The project focused on foundation phase learners, firstly, because learners in this phase are in a developmental stage where they need to seriously master the laws of society and learn to abide by rules and behave in appropriate ways. Secondly, the developmental stage coincides with the beginning of formal school when the learning environment is structured according to the rules applicable to formal schooling. Thirdly, this stage is the appropriate time to focus on managing disruptive behaviour as a means of assisting learners to cultivate a self - disciplined lifestyle.

The researchers found that the key to addressing disruptive behaviour lies within a system theory approach which involves a shift of focus from objective to relationship and from individuals to communities. They maintained that the learner should always be viewed as part of a system, compromising a group of interrelated and dynamically interactive elements. The complete picture of the system resembles a tapestry woven from many factors (e.g. The school, learner, family and society) acting on a virtually unlimited diversity of learners. Individual behaviour should therefore always be assessed within the context in which it occurred. Their study from their observations and recommendations is founded on Ecological theory with its system analyses. Their study draws attention to the fact that every stakeholder in education and all the important others around the child contribute to the child's behaviour positively or negatively.

Many studies that have evaluated time-out procedures have incorporated a release contingency in the procedure (e.g. Bean & Roberts, 1981; Bostow & Bailey,1969; Clark &

Baer, 1973; Iwata, Rolider & Dozier, 2009), but only few studies specifically have evaluate release contingency relative to the effectiveness of time-out in general and to reductions in problem behaviour during time-out in particular (Erford, 1999; Hobbs, Forehand & Murray, 1978) studies both found release contingency time-out to be more effective than fixed-duration time-out. Unfortunately, the generality of these result is limited somewhat because both studies reported the result only as statistical tests and mean values within groups (no individual participant data were reported). Other technological or methodological limitations (e.g. all the data in the Erford study were collected by the parents, and no inter observer agreement data were reported). Preclude drawing robust conclusion about the efficacy of time-out with and without release contingencies. The difference in area of data collection and duration of treatment could make this study more generalized.

The effects of observational learning upon subsequent social and intellectual behaviors have been demonstrated amply by (Bandura, 1971; Rosenthal & Zimmeman, 1970). This research has revealed the profound influence of models upon a wide variety of behaviors that include aggressiveness, phobic reactions, grammatical structure, rule learning etc. However, the researchers were concerned about turning around the teacher's behaviour as a means of teaching the learners social skills. They sought the use of modeling procedures as a means to change teachers' behaviors. One of these was an effort to change a teacher's behavior in a natural classroom setting.

The authors were requested to consult with the teacher of a classroom for emotionally disturbed children as part of a practicum in a graduate class on behavior modification consultation. The teacher previously had requested assistance to deal with the hyperactive and disruptive behavior of two students. Even though the teacher had requested such

assistance, she refused to accept advice offered by the school counselor on one occasion and by the special education consultant on another. Two of the authors were placed in this classroom for the purpose of observing emotionally disturbed students and applying behavior modification techniques.

An initial interview with the teacher established her extreme resistance to various behavior modification plans, although she was receptive to the plan of allowing the authors to observe in the classroom and interact with the children. Instead of the behavioral techniques favored by the authors, the teacher insisted on the necessity of psychotherapy in combination with chemotherapy (Ritalin) in dealing with the disruptive students. Implicit in her recommendations was the desire to minimize direct teacher involvement in any interventions plan.

Classroom observation established that the two students were not hyperactive. Based upon this, two intervention plans were instituted. The first involved the establishment of self reinforcement contingencies for the two disruptive students. The self-reinforcement plan was successful even though it was carried out with no teacher assistance. The second intervention plan, which was the major purpose of the study, involved an attempt to use modeling procedures as a means to increase the frequency of positive pupil- teacher contacts. Specifically, the frequency of positive contingent social reinforcement was determined before and after such behaviors was modeled by the authors. The researchers modeled nurturing care contacts with the students. Whenever a student's behaviour was not appropriate, the student was reprimanded in a firm but caring tone. The teacher was encouraged to do same. After initial hesitation, the teacher complied and within a short time, the students' attitudes changed remarkably and the teacher continued in the new trend.

Though the researchers did not reveal the interval of each phase but their findings have affirmed the fact teacher have the repertoires to effect behaviour change in the classroom without the use of aversive punishment. The study also reveals the need for teachers to be knowledgeable in behaviour change techniques so as to effectively cope with classroom challenging behaviours.

O'Leary and Becker (2001) carried out an investigation on the effect of a token reinforcement programme on disruptive behavior in a public school. Their aim was:

a. to analyze the separate effects of classroom rules, educational structure, teacher-praise, and a token reinforcement program on children's disruptive behavior.
b. to determine whether a token reinforcement program used only in the afternoon had any effect on the child's behavior in the morning.
c. to determine the extent to which the effects of the token reinforcement program persisted and when token reinforcement was discontinued.

Seven members of the class from lower middle class homes who exhibited a great deal of undesirable behavior were the subjects. The result of the study revealed that disruptive classroom behavior can be reduced with treatment technique – hence the believe that the u of modeling and time-out effectively reduce disruptive classroom behavior. More so, that the research was carried out in public schools like this.

Rules, educational structures and the praising of appropriate behavior while ignoring disruptive behavior were introduced successfully but none of the procedures consistently reduced disruptive behavior. When the techniques were combined, only one student's disruptive behavior was eliminated. When the token reinforcement program was introduced, the frequency of disruptive behavior declined in five of the six remaining students. The

withdrawal of token reinforcement increased the disruptive behavior of these 5 children and its reinstatement reduced the disruptive behavior of four of them. Data indicated that although rules, educational structure and praising and ignoring had no consistent effects on behavior, token reinforcement was definitely associated with a reduction of disruptive behavior. Token reinforcement was administered only during the two hour afternoon period. Data showed that the decrease of disruptive behavior in the afternoon session did not generalize to the morning session. Based on this, the investigators pointed out that generalization is no magical process but rather a behavioral change which must be engineered like any other change attention.

The researchers did not disclose their baseline period neither did they reveal how the teacher's and students' behaviors were measured and how long the observation study lasted.

In a series of Behavior modification procedures designed by Florence Harris and her associates (Harris, Wolf & Baer 1967) at the Developmental psychology laboratory at the University of Washington; concentrated on the development of normal Preschool behavior, primarily social in nature, through the appropriate use of social reinforcement by adults and peers. They designed their procedures to eliminate crying not due to pain, tantrum, regressed crawling, isolate play, excessive aggression, too much or too little interaction to teachers or peers and ineffective communication. The basic design for extinguishing such behavior was to withhold adult and peer social reinforcement when a child with a pattern of these undesirable responses exhibited by any one of them. It also included procedures for providing peer or adult attention for the converse of appropriate behaviors. When the child plays cooperatively with the peers, interacts appropriately with the teachers or peers, or

communicates verbally or by gestures in line with his/her level of skill, social reinforcement was lavishly given.

The child's progress was measured by the percentage of time during each session as he or she exhibits inappropriate and appropriate behavior under conditions where social reinforcement is administered incorrectly (before modification) and correctly (during modification). To obtain this percentage measurement, observers recorded the presence or absence of the behavior during each successive ten second interval of the session.

These modification procedures existed by their emphasis on adult and peer social reinforcement; preschool social behavior was also tested by a reversal control technique to demonstrate that they actually do manipulate the reinforcing condition that is responsible for the child's change in behavior.

In another research Bandura and Blanchard (1969) involving 2 young girls with normal speech repertories but very low in rates of imitated verbalization. Procedure for modifying the behavior evolves the collection of several weeks of response data on the frequency of speech with self in the highest frequency. The teachers then began giving warm and intensive social reinforcement to either child every time she spoke to a teacher. This technique sharply increased the rates to talking to the teachers. In the second phase of the modification procedures, the teacher gave attention to each girl, not only when she spoke or talked to a teacher but also whenever she talked to another child. The rate of talking to other children did accelerate, but not as dramatically, while the rate of talking to teachers remained high. During a reversal period, the teachers changed their patterns of reinforcement providing attention to each girl only when she was not talking. This change reversed the girls' patterns of low rate of talking to the teacher and to other children. In the third phase of procedure, the

teachers again provided social reinforcement for speaking to a teacher but no reinforcement for speaking to other children; this brought a change in conditions that established the original modification pattern.

These research studies demonstrate that adult and peer social reinforcement effectively maintains either desirable or undesirable behavior, depending on the behaviour it is applied. Attention to appropriate behavior not only tends to reinforce that behaviour but often results in a decrease of inappropriate behavior; this is because the latter is simply incompatible with the former.

In a study, Thomas and Armstrong (1968), demonstrated that disruptive classroom behavior can not only be eliminated but can also be produced contingent on the teachers' behavior. In their study of 'Teachers attitude to children's classroom behavior', they systematically vary approving ones (verbal reprimands, physical restraint). Their subjects were middle primary school of twenty eight children. A sample child was observed every day. Both teacher and child behaviors were measured. They found that approving responses from the teacher served a positively reinforcing function in maintaining appropriate behavior, disruptive behavior increased particularly in the gross motor and noise making categories. The researchers pointed out that although a teacher's display of approval to reinforce good student behavior generally result in an increase in the frequent and duration of appropriate behavior. This finding shows that teachers must be careful to avoid attending to inappropriate behavior; for instance the teacher who handles a miscreant and tries pleasantly to get the child to stop behaving disruptively, who talks with a child pleasantly so the child understands what he was doing wrong or who pleasantly suggests an alternative activity to a child who

has been performing inappropriately is likely to find an increase in the very good behavior he had hoped to reduce.

Presland (1980) reported a case in which the behavior of a third year female student in the secondary school was treated by a teacher in a class which had been specifically set up to cope with eighteen very disruptive students. The school was a non-selective secondary school for girls. The teacher was asked to identify which of the subject's behaviors she would like to change. She selected 'dump insolence' and 'deliberate non-participation in oral lessons'. The behavior which she wished to see the subject adopt more frequently was 'taking part in lessons in a cheerful and cooperative manner'. For systematic observation, the behavior selected was 'refusing to participate in oral lessons'. The teacher taught the class for five 35-minute lessons per week and took baseline observation for two weeks. During this period, she counted the number of times such refusals took place, she used frequency recording. At the start of treatment, the teacher explained to the class that she would award points to individual pupils for good behavior, and for work well done. These points could be exchanged for later rewards which were not specified. The treatment was put into operation.

After a week, the teacher discussed with the pupils the kind of rewards they would like. It was agreed between the pupils and the teacher that when any pupil reached 30 points, a letter bse sent by the teacher to the pupil's parents, telling them how well the pupil was doing. The treatment continued through a second week. From the results during the baseline observations, the subject averaged 2.5 refusals to participate per lesson. During the first week of treatment, this dropped to an average of 0.66 refusals to participate and to zero in the second week. The teacher reported that there was a marked improvement in subject's behavior in the first week of treatment, and that during the second week she became 'a

different girl- cooperative, helpful in and out of the classroom and very happy'. In addition, other teachers commented on subject's improved behaviour.

MacMillan and Kolvin (1977) in Harrop (1983) reported a case in which an eleven-year old boy was treated by his teacher during the eight lessons per week in which she taught his class. The subject was a disruptive pupil, he would shout out, talk to his neighbors, poke and shove his classmates, and he needed constant prompting and encouragement to attend to his work. An independent observer made the observations, and recordings of the task-relevant behavior were taken once a week. Baseline observation took place during the course of three weeks, and showed subject's task relevant behavior to occur approximately 63 per cent of the time.

For a start, Social reinforcement was selected as the treatment. The teacher paid much attention as possible to the subject when he behaved appropriately following the adage, 'catch him being good', and used disapproval only when subject's behavior will not be tolerated. The practice of prompting the subject to start work again when he stopped was discontinued after two weeks of treatment. From their results, by the sixth weeks of treatment, the subject had improved by averaging 80% tax relevant behavior and the teacher reported the attention seeking in disruptive way to be very rear.

However, in the seventh and eight week, the subject's behavior and work standards decreased. From the teacher's report, this could be attributed to the slack in reinforcement. To arrest this, the teacher decided to be more specific in comments to the subject. For example being quiet, working well and so on. Again the behavior improved and task relevant behavior increased. From this study, we can see the effective use of selective use of reinforcement in treating disruptive behavior. However, in choosing a technique for treating

disruptive behavior, it should not be assumed that social reinforcement will succeed with all students.

In a study, Harrop (1983) was concerned about a subject in a class who was never involved in any form of social contact. Asked no questions, seldom spoke to other children and responded to questions with one or two word answers. The teacher observed that the subject wanted to 'join in' but didn't know how to make contact. To get the subject's measure of behavior, a record number of the times the subject spoke in the class during each day for a week were taken. The results showed that an average of five to six words were the spoken words. During this baseline period the researcher observed that the initiative to talk to somebody was made once during Art lesson in an attempt to borrow eraser from another student.

In the use of shaping, Lovaas in Child (2004) attempted to modify or improve the condition of an autistic child. In the study, Lovaas used a schedule involving food and drink as a reward. A therapist sat opposite the autistic child, who was rewarded with a spoonful of food or a drink each time an attempt is made to look in the direction of the therapist. It should be noted that an autistic child or children lack ability to symbolize and have great difficulty acquiring language. The most characteristic of autistic children is the lack of contact either with eyes or in speech, between the child and others (Child, 2004). The speech is unpaired, grossly retarded and unusual. Excessive and persistent movement like rocking in a chair and banging the head against the back of it or flapping hands with or without a piece of string are some of their characteristics. The next stage of the study involved the therapist rewarding up movements or sound even if inaudible. From here, words audible were rewarded and finally sentences. Despite the success of rewards, the researcher failed to state the period or duration

of neither the study nor the interval between each stages of the study. All the same, the study shows that even autistic condition can be modified through the use of modification techniques.

In another study involving the use of incentive to modify behaviour, Skinner (1953) studied a group of 40 inmates in Washington reform school. They included criminals like murderers, rapists. They were submitted to a schedule involving their living conditions. The incentives were leisure activities, food and living quarter; these were used for improving their behaviour and learning a trade. Offenders who sit around doing little of interest were made to live on a boring frugal diet and sleep in a dormitory. Good behaviour and learning a trade on the other hand were rewarded by better food, private quarters, colour television and a free day out. The result showed that by the time they were due out, many had learned useful skills. In comparison, most delinquents from the school get into trouble within three years of leaving the reform school. But in Skinner's sample, only 45% were in trouble within three years. A follow-up reveal that the majority engaged in gainful earnings using the acquired skills. Again, this shows the use of effective incentive in the modification of criminal behaviours.

Using time-out, Foxx and Shapiro (1978) worked with five boys with mental retardation who engaged in a variety of problem behaviors (hitting, throwing objects, yelling, getting out of seat, banging objects) in a special education classroom. The boys sat around a table where the teacher worked with them on various educational activities. The teacher delivered edible and social reinforcers to each student at intervals of about 2 minutes when the student was not exhibiting a problem behavior. During the time-in condition, each student wore a different-colored ribbon around his neck. When the student engaged in a problem

behavior, the teacher removed the ribbon and put it around her neck as a signal that time-out was in effect for that student. As long as the student was not wearing his ribbon, he could not engage in any activities and could not receive the reinforcers. The time-out lasted for 3 minutes. Use of this non-exclusionary time-out procedure resulted in decreases in problem behaviors for all five boys.

When the mother made a request and the daughter did not comply within 20 seconds, the mother took the girl to another room and made her sit in a chair for 1 minute. After telling the child why she had to sit in the chair, the mother did not interact with her during the time-out period. If the child engaged in problem behaviors during time-out, the time-out period was extended until the child was quiet for at least 10 seconds. Using time-out with these two young children greatly reduced their noncompliant behavior.

Recent research by Mattar and Gribble (2005) shows that the learning of complex behaviours can be explained with models that relate more to those of Pavlov, Skinner and Bandura than to the more recent explanations of the constructivist and social constructivists. They show that learning complex motor behaviours like riding a bicycle or swinging a golf club is based on acquiring neural representations of the mechanical requirements of movement'. Those patterns of neurons serve two purposes: they hold the memory of the visual stimulus and they also hold the precept of the physical response. For example, coordinating muscle forces to control the club will be effective on the ability of the learner observing and then copying the actions of the teacher. This is the neurological explanation of the value of modelling and shaping. Mattar and Gribble's study provides evidence that mechanisms matching, observation and action facilitate motor learning. 'Subjects who observed a video depicting another person learning to read in a novel mechanical

environment (imposed by a robot arm) performed better when later tested in the same environment than subjects who observed similar movements but no learning' (Mattar & Gribble, 2005). They show that the effect is not based on conscious strategies but is dependent upon the implicit engagement of neural systems for movement planning and control. With the above, it means when acceptable classroom behavior is properly modeled to the students as this study intends, a reduction in disruptive behavior can take place.

In a study on ''The relative efficacy of modeling, shaping and the combined procedures for modification of inappropriate social behaviour, O'Connor (1972) affirmed that modeling and shaping as a behavior modification techniques can effectively be used to eradicate social withdrawal and inappropriate social behaviour in Nursery schools children. His subjects were thirty three isolates from four nursery schools as identified by the teachers. Half of the subjects viewed a 23 minutes modeling film depicting inappropriate social behavior like talking out of turn, attention seeking and solituteness while the other half viewed a control film on the Marine land dolphin. Half of the subjects in each film condition received social reinforcement contingent upon performance of appropriate peer interaction behaviors.

The researcher made use of six trained observers who were randomly assigned to classrooms to observe the nursery schools behavior of the teacher rated isolates as well as an equal number of randomly chosen non isolates. This is to permit estimation of reliability of the teachers' ratings. The pretest period were randomly scheduled throughout the free play periods during school days consisting of 4 minutes per observational session. The study used 3 treatment condition and a control condition.

The isolates (subjects) were assigned to one of the 4 conditions of "modeling and shaping" "modeling only" "shaping" and control. The researcher made use of 4 trained 'shapers' who were assigned to each of the two shaping conditions. The findings showed that modeling was a faster modification technique than shaping and the interaction levels produced through modeling with or without the addition of shaping were more stable over time. In the post and follow up assessments, modeling subjects were still at the level of non isolates while the shaping and control subjects returned to isolate level. The researcher did not specify the duration of the study and the composition and settings of the four schools used. Though there was a follow up assessment after the post test, he did not reveal the interval or time lapse before this. Nevertheless, the study shows the effectiveness of one technique over the other. This present study also hopes to compare the two techniques of modeling and time-out for differences in effectiveness.

In a research by Lovaas (1987), a group of 40 children were ranged based on learning ability; nearly half were considered normal, 10 percent had severe learning difficulties and the rest had some learning difficulties. There was a control group of 19 autistic children. The participants of the experiment were assigned to one of two groups- the experimental group receiving the behaviour modification experience of clear instruction and reward for appropriate responses, and the control group receiving minimal treatment but acted to determine the rate of spontaneous improvement in children with autism. The allocation of children to experimental and control groups were based on convenience, but after the results, checks were made to ensure that there was not a bias that could affect the results. Pre-treatment assessments were based on a number of scales in use in the establishment: Bayley Scale (Cattell, 1960), the Stanford-Binet Intelligence Scale (Thorndike, 1972) and the Gesell

Infant Development Scale (Gesell, 1949). There were also interviews with parents and behavioral observations based on video recordings of the participants' free-play behaviour in a playroom equipped with several simple early-childhood toys. The behaviours were scored in three ways-self –stimulatory (for example, repetitive behaviours), appropriate play and recognizable word utterances. There were double-blind checks on many of these judgments.

The results of the experiment are presented statistically with pre-treatment comparisons showing with a high reliability the equivalence of the control and experimental groups. "The numbers of favorable versus unfavorable prognostic signs (directions of differences) on the pretreatment variable divide themselves equally between the groups. In short, the two groups appear to have been comparable at intake (Lovaas, 1978).

The follow-up analysis of the participants' performances indicated a strong progress made by the experimental group. In the IQ tests and placement in the schooling system, at intake, there were no significant differences, but at follow- up, the experimental group was significantly higher than the control group on educational placement and IQ test performance. In contrast, the control participants remained virtually unchanged between intake and follow-up, consistent with findings from other studies (Freeman *et al.,* 1985; Rutter, 1970). The introduction of a contingent aversive to four participants of the experimental and control groups, a shout "No" or a slap on the thigh ….resulted in a sudden and stable reduction in the inappropriate behaviours and a sudden and stable increase in appropriate behavior's (Lovaas, 1987). This research illustrates the effective application of the principles of reinforcements. The challenge to teachers is to identify strategies of teaching and imaginatively apply them to their situation. The examples include using video and using

virtual realty to promote appropriate learning, dealing with the way pupils behave in class and reflecting upon the behaviour of teachers and the impact upon learning.

In a study Paterson and Arco (2007) examined the effects of video modelling. The participants of the study were boys with autism; a characteristic of autism is repetitive actions. The study identified the impact the repetitive activities on the development of more appropriate play behaviours. Video modelling produced increases in appropriate play and decreases in repetitive play. Other reports of studies, for example, Rayner, Denholm and Sigafoos (2009) identified a range of affordances of video as the model for learners. In a study on whether video images of 'self' are more effective than similar images of the 'other' and the compromise of using the camera with the 'other' model but filmed from the position of the eyes, thus helping the learner to experience what they would see (Charlop- Christy, Le & Freeman, 2000) showed the efficacy of video was better than that of live modelling and also reflects upon the positive resource costs of video over real experience. In the study, each participant was presented with two similar tasks from his or her curriculum; one task was used for the video condition, while the other was used for the in vivo condition. Video modelling consisted of each child watching a videotape of models performing the target behaviour, whereas vivo modeling consisted of the participant observing live models perform the target behaviour. After the observations, children were tested for acquisition and generalization of the target behaviours. An important observation is that the appropriate play did not generalize from zero levels but there was the basis of 'appropriate' behaviour in their repertories. When considering practical issue of supporting adolescent learners, it is necessary to provide appropriate situations that give good role models and it is also necessary to ensure that the adolescents also possess the necessary skills and interest to carry out the

appropriate behaviors been observed. They need to have opportunities to exercise the skills in the class and outside.

In a study on effectiveness of modeling Noda and Tanaka-Matsumi (2009), evaluates the effect of a classroom-based behavioural intervention package to improve Japanese elementary school children's sitting posture in regular classrooms. As teachers, we know that creating the right context for learning is important. In some situations the learning processes are negatively impacted upon by factors that are not directly connected to the curriculum, teaching materials and actions of the teacher-these include the dress (attire) of the learners, interpersonal relationships, the quality of the décor, the location of the teaching area, distracting elements immediately outside the teaching area, etc. The posture of the learners is one of those factors. A class of slouching, disheveled and apparently disorganized and disinterested adolescents is perceived to be a very different teaching challenge to that of a group of attentive learners. The signs of attentiveness are sitting and facing the teachers, positive eye contact and little off-task and interpersonal communication. This study investigates the efforts to modify the pupils' behaviour in order to improve their preparedness for learning. Appropriate sitting posture is described with four components: feet, buttocks, back and a whole body, that is, both feet are flat on the floor; buttocks are in contact with the chair seat, the learner's back is straight up and their body is facing forwards. The teachers and assistants were trained to recognize all four components of good posture. Two pre-intervention checks were made to establish that the level of poor posture was consistent. All four aspects of posture had to be satisfied to meet the standard of appropriate posture. The conclusions of the study relate to the effectiveness of group actives to improve the children's sitting posture. Modeling specific behavioural components of good posture,

practicing them and providing students with positive feedback and reinforcement are approaches teachers can use in their classrooms.

Noda's work was carried out with 7 and 8 olds in two conventional classrooms with approximately 35 children in each class. The data on 68 children were recorded. A baseline of pupil behaviour was established showing only 20 percent of the pupils adopted appropriate postures in both classes before the intervention. This figure rose to 90 percent as a result of the intervention. A small number of children who were excluded from the data were given modified interventions with raised levels of support and reinforcement to enable them to adopt appropriate posture. The intervention package includes modeling of the appropriate behaviour by the teacher and correspondence training where the appropriate relationship (correspondence) between what the person says and what he or she does is reinforced An observation arising from this study is that the change in behaviour is accompanied by academic performance. This is in line with others (Doane, 1959; Whitman *et al.,* 1982), both showing that there is a direct and positive relationship between sitting posture and academic performance.

It can be argued that the improvement of academic performance does not arise from the change in posture but is simply a result of the attention given by the teacher to the pupils, making the pupils more responsive to all aspects of the teacher's interventions and so giving an all-round increase in performance.

A final note regarding the research by Noda is that teachers' acceptance of the intervention program proved to be excellent (Noda, 2008). The researchers also assessed the teacher acceptability of the intervention as an index of the programme's social validity. They adopted six relevant items from Witt and Martens' (1983) questionnaire to assess the

acceptability of the intervention. The most important negative aspect of the intervention was the amount of teacher time consumed by the intervention.

A lot of time was needed to understand and carry out the procedures in the posture improvement project. However, there was a maximum score given by the teachers to the overall impact of the intervention on the children.

Kniveton (1986) investigated the cumulative effect of repeated exposure to anti-social models among primary school children in Borough. The study employed experimental design. The research question and two null hypotheses guided the study. The sample comprised 48 boys ranging in age from 61 to 70 months with a mean of 65.3 months. Subjects were randomly assigned to one of three groups for the experimental groups. Subject were allowed to play in the laboratory for 15 minutes, shown the first video film, allowed to play again, given a 30 minute break, shown a second video film and again allowed to play with the control group the second video film was not shown. Data analysed using mean and standard deviation. Finding of the study have shown that young children exposure to an aggressive model will imitate aggressively. Also the result shows that the effect of watching two aggressive peer models was very different to the second group experience of observing a constructive than an aggressive model. Imitation of the second aggressive film was greater than the first. The study show that watching an aggressive model, after having first seen a constructive one, reduced the impact of the constructive model.

Bandura (1965) in his classic Bobo Doll, investigated the effect of observation learning on children's aggression. Twenty four children were expose to treatment and 24 assigned to non- aggressive model, control group. The finding of his study show that the children exposed to the aggressive model acted in physically aggressive ways than those who

were not exposed to the aggressive model. For those children exposed to the aggressive model, the number of imitative physical aggressions exhibited by the boys was 38.2 and 12.7 for girls. The results concerning gender differences strongly supported Bandura's prediction that children are more influenced by same sex models. Boys exhibited more aggression when exposed to aggressive male models than when exposed to aggressive female models. When exposed to aggressive male models, the number of aggressive instances exhibited by boys averaged 104 compared to 48.4 aggressive instances exhibited by boys exposed to aggressive female models. While the results for the girls show similar findings, the results were less drastic. When exposed to aggressive female models, the number of aggressive instances exhibited by girls exposed to aggressive male models was not much.

Ghandour (1984) investigated the effect of Television mediated aggression and real life aggression on the behavior of Lebanese children. The sample consisted of 48 boys and 48 girls of Lebanese origin who were students in elementary schools in Beirut Lebanon. After controlling for pre-experimental aggression, the subjects were randomly assigned to one of the following treatment conditions; Human film aggression, cartoon- film aggression, neutral-film aggression or real- life (act of war) aggression. The results indicated that boys as a group were more aggressive than girls and exhibited more imitative aggression after viewing both violent film and real-life violence. Girls were not more violent after viewing films on aggression but were affected by the real-life violence.

Fergusson, Boden and Horwood (2010) examined issues relating to the measurement and discriminate validity of Diagnostic and statistic manual of mental Disorder (DSM), diagnostic criteria for behavior disorder in Adolescence Conduct Disorder (CD), oppositional defiant disorder (ODD), Attention-deficit/ herperactivity disorder (ADHD). Data were

obtained from a birth control of GGS New Zealand born individual of the age of 25 years and modeled associations between behavior disorder from ages 14 to 16 years and later outcomes including crome, substance use, mental health, parenthood and partnership outcomes, and education and employment outcomes to age 28 years.

The association between behavior disorders and outcomes were adjusted for both Comorbid behavior disorder and range of confoundingfactors. The result suggest that (a) dimensional measures of behavior disorder were more strongly correlated with outcomes than categorical (SCM) measures; (b) CD,, ODD, and ADHD each had a distinction pattern of associations with longer term consequences and (c) there was no evidence to suggest that the developmental consequence of CD, ODD and ADHD differed by gender.

Moffi, Caspi, Rutter and Silva (2006), also investigated sex difference in antisocial behavior, conduct-disorder, delinquency and violence in the Denedin longitudinal study. The Sample comprise cohort of 1000 New Zealand males and females over the first two decade of life. This study found no differences in the causes of antisocial behavior between the genders.

Lumley, Mc Neil, Herschell and Bahl (2002) investigated an examination of gender differences among young children with disruptive behaviour disorder among North American school children, USA. Sample for the study were 400 Children exhibiting disruptive behavior disorder. Archival data from 149 children who were presented to an outpatient clinic for disruptive behavior were used. Measures used included the Eyberg child behavior inventory, child behavior checklist, DSM- iii-R structured interview for Disruptive Disorders, and parenting stress index. The result showed some gender differences. Male typically had higher scores than females on parent and teacher completed measured. In additon significantly more

males were reported to have conduct disorder, whereas significantly more females were reported to have developmental delays. No gender differences were found in the prevalence of ADHD or oppositional Defiant Disorder. However the result shows significantly more males than female met criteria for 2 or 3 disruptive behavior disorder.

Anderson (2010) investigated Gender Differences among Children with externalizing Behaviour Disorders in a clinic population. The objective of the study was to compare the males and females with externalizing disorders who were admitted in specialized psychiatric treatments. The sample comprised a total 9729 children of whom 2218 were female and 7511 were males. Males and females were compared with regard to age at referral, referring agents, secondary reasons for referral as indicated by referring agency, and diagnostic status. The analyses revealed several gender differences in referral patterns. A referral at ages above 42 years (32.4% and 21.7% respectively; P<0.001). Males were more frequently referred from the school sector than females (31.2% and 21.8% respectively; P< 0.0001), and exhibited more externalizing symptoms than females as indicated by their secondary reason for referral 47.8%) and 31.5% respectively; P < 0.0001). Co-occurring internalizing symptoms were relatively more frequent in females than in males (21.9% and 16.9% respectively; P< 0.001).

Nwanuo (2012) in a study, used Cognitive Modeling to treat impulsive behaviour among primary school children. Twenty underachieving participants were assigned to cognitive modeling and control groups. Instrument for data collection were Impulsive Questionnaire (IQFC) for the pupils, Impulsive Related Trait Questionnaire for teachers (IRTQFT), a checklist on Impulsiveness in children (CIIC) for parents and Achievement tests in English and Mathematics for identification and evaluation at the pre and post

treatments periods and follow-up periods. The results after a 12 session treatment show significant difference in the reduction of impulsiveness.

In a study, Reitman and Drabman (1999) illustrated how an 'ongoing data-based' monitoring of time-out use by parents enhanced the treatment of an 8-year-old boy, referred because of noncompliance in the home. Time-out was selected as the primary behavior change strategy and parents were instructed in implementing and recording each instance of time-out on a simple data form. In therapy sessions these data were reviewed and used to direct the course of treatment. Some of the benefits of the time-out record included, enabling rapid refinements in the time-out procedure by providing a feedback mechanism to the therapist, illustrating the need for adjunctive treatments and revision of case formulation, and more generally, by serving as a means of documenting treatment efficacy. This study shows that parents can be trained to use time-out to improve their children's behaviour.

Numerous studies have evaluated the use of time-out in classroom and school environments in the areas of aggression (Lucas, 2000; Mortimer et al., 1998; Wilson, Robertson, Herlong, & Haynes, 1979; Webster, 1976) and disruptive and noncompliant behavior (Mace & Heller, 1990;; Mace, Page, Ivancic & O'Brien, 1986; Rortvedt & Miltenberger, 1994; Reitman & Drabman, 1996; Yeager & McLaughlin, 1995;). The use of time-out has also been implemented in academic settings of community-based instruction (CBI) (Alberto et al., 2002), speech and language classrooms (Marrow et al., 1997), music education (Spradling, 1985), and physical education (Johnson, 1999; White & Bailey, 1990).

Whittington and Moran (1990) evaluated Peace Begins with Me (Whittington, Crites, Kreidman, Beck, 1989 cited in Whington & Moran 1990), a published prevention curriculum for use with kindergarten through sixth-grade children. Time-out was viewed as an efficient

means of providing space and time for the young child to mull over wrongdoings, refresh feelings of guilt, and ponder socially desirable responses in similar circumstances. The curriculum offers keys to attitude and behavior changes as these relate to self-esteem and self control. Children learn nonviolence and a foundation for basic coping skills and positive mental health. They integrate time-out, self-talk, empathy, gender-neutral attitudes, feelings of self awareness, assertiveness, conflict resolution, teacher or parent appreciation, and other concepts as personal tools for daily survival. Lesson topics were adapted to the developmental levels of children. The use of time-out was widespread. The study confirms that time-out, if properly implemented especially exclusionary time-out, students' disruptive behaviour can be thoroughly treated.

However, a study by Costenbader and Reading-Brown (1995) investigated the use of isolation time-out in a special education facility administered by a consortium of 26 rural school districts in upstate New York found that older students comprised the majority of students in time-out. All students were classified as emotionally disturbed (ED) by their home school districts, and all students received 100% of their education in special classes. Students were placed in this facility by their home school districts only after less restrictive intervention strategies for controlling behaviors had been tried and failed. This facility represented the most restrictive school-based placement in the six-county area. Students in this special education facility were divided into a Lower School, consisting of grades K-6, and an Upper School, consisting of grades 7-12.

Information used in the study was taken from computer data routinely gathered to monitor the use of isolation time-out rooms in the special education facility over one academic year. Three infractions-talking, failures to follow directions, and students electing

to take a voluntary time-out period accounted for 70% of all incidents. Only 1% of all time-outs were reportedly caused by aggressive physical conduct. These findings showed that students can be trained to take time-out as an approved classroom behaviour skill. When voluntary time-out is properly inculcated in students, the learning environment or atmosphere will conducive for both students and teachers.

Zabel (1986) in a study found that younger students experienced the time-out procedure more frequently than did older students. In contrast, Costenbader and Reading-Brown (1995) found that older students in the more restrictive placement are spending more time in time-out for more separate behavioral incidents than are younger students. The differential use of voluntary timeout best accounts for this. Although 22% of the timeouts experienced by older students were voluntary, less than 1% of those taken by younger students were self-determined

Stage and Quiroz (1997) examine 99 studies that use multi-component interventions like group contingencies, social problem solving, and time-out into one treatment. The results of their analysis indicate that a combination of none or two treatments is very effective in reducing disruptive behaviour when compared with single treatment technique.

Dunlap, Fox, Hemmeter and Strain (2004) reported a case where a teacher used a combination of time-out and modeling to reduce aggressive behaviour of a pupil who lacked friendship. The subject was often aggressive and disrupts other children's plays. In handling the problem, the teacher first placed the subject on time-out then on release modeled and practiced with the subject how to ask permission to join other children in their play. This steps as reported by the teacher reduced the problem behaviour and increased social skill of the subject.

In another case involving a four year preschooler who knocked down objects to gain adult attention, Dunlap et al reported that a 3 minutes time-out preceded by a one on one discussion with the teacher told the subject how to a ask for toys or get an adult's attention. After the chat every morning the subject was warned that penalty for hitting anyone or creating disruption was to go to the 'thinking chair' to calm down. After the session of dialogue, which the report did not include, the treatment commenced. During the three minutes time-out, the subject received no attention of any kind. On release, the teacher rehearsed with the subject what to say to join in a play or to a mate. The subject repeated and demonstrated the steps after the teacher. Each successful demonstration was praised. This multi intervention technique greatly reduced the disruptive and aggressive bahviours and at the same time increased the asking skill of the subject. As earlier pointed out it is difficult to determine the level each technique's effect. But the fact that the problem was reduced shows that disruptive classroom behaviour and other challenging classroom problems can be handled with results.

The problem with the use of multi-intervention is that it is usually very difficult to determine the specific effect of each component or technique used in isolation. It is also difficult to determine how the various components interplay to reduce Classroom Disruptive Behaviour. This study therefore will use one technique separately then compare for level of effectiveness.

Clerk, Rowbury, Boer and Beier (1973) in threesome (1979) found that time-out is effective in decreasing the frequency of aggressive behaviour. Equally, Pendergrass (1972) retrieved 31st may, 2013 and asses as attached. Volttawa.ca/psy 37/7 personal up /ADHD/53 carried out a research with retarded children. The findings of the study showed that time-out

is both effective in decreasing disruptive behaviour as well as increasing approved desirable behaviour like speaking.

Similarly, Firestone (1992) carried –out work on the effects and side effects of time-out on aggressive nursing school child. The researcher observed that target behaviour and non-target behaviour for a period of time and recorded both. The result revealed that while the target behaviour of aggression reduced the child exhibited increase in other desirable behaviour like in disruptive tendencies. The findings showed that time-out can effectively be use to handle more behaviour problems simultaneously.

Uniqueness of the Study

From the literature reviewed, no work of this nature has been carried out in Nigeria and Benue State in particular. Most of the research works were carried out outside Nigeria. Works done in Nigeria like Nwanuo (2013) used cognitive modeling to treat impulsive behaviour. No study has used modeling technique nor time-out to address the issue of classroom disruptive behaviour in Otukpo.

Again, the treatments of disruptive classroom behaviour or problems through the use of modification techniques were carried out among pre-scholars and primary school pupils, for example, Igbo (1999). No attention has been paid to secondary schools especially the senior secondary school students. This work therefore, hopes to address the disruptive classroom behaviours of these adolescents who are on their way to the wider world.

2.9 Summary of Reviewed Literature

To the researcher, disruptive classroom behavior refers to a behavior exhibited by a student or students during learning activity that significantly interrupts teaching and the students' learning process. Whereas modeling is a behavior modification technique of

showing students an acceptable behavior with the intention that the students will observe and imitate and time-out is the technique whereby a student is removed from desiring situation or activity to a less desirable place or activity for a brief period of time because the student has behaved in an unacceptable way.

The theoretical framework such as operant condition, social learning and frustration-aggression were reviewed. The study further examined the characteristics of disruptive children, identification of disruptive behavior and major causes of behavior problems. Finally, a general review of some related previous studies on modeling such as Mather and Gribble, Paterson and Arco and time-out Rorttved and Miltenberger, Donaldson and Vollmer (2011) were also reviewed, and that most of these studies were done in western culture; lower school consisting of grade K – 6, and an upper school consisting of grade 7 – 12 in re-addressing CD, ODD, ADHD, aggression and others. It was against this background this study sought to use timeout and modeling techniques on re-addressing disruptive classroom behaviour among senior secondary school students in Otukpo, Benue state, Nigeria. This study will serve as a missing link that motivated the researcher for investigation.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the procedure for carrying out this study. Specifically, it describes the research design, area of study, population, sample and sampling technique, instrument for data collection, validity and reliability of the instrument, treatment procedure, method of data collection and analysis.

3.2 The Research Design

The research design that was adopted for this study is quasi-experimental design involving pre-test, post-test and control group design. The researcher found the design suitable for the two techniques; modeling and time-out treatment techniques on reducing classroom disruptive behavior.. Quasi-experimental design is interpretable because it has a pre-test. The researcher therefore, used interpretable non-equivalent group design because it is suitable for this study as it takes cognizance of the inherent pre-testing and biased sampling. The design is diagrammed as:

The pre-test and post-test research design is represented below:

Table 3.1: Pre-test Post-test Quasi-Experimental Format Design

Group	Pre-test	Treatment	Post-test
R_1	O_1	X_1	O_2
R_2	O_3	X_2	O_4
R_3	O_5		O_6

Source: Kolo (2001)

Key:

R_1 = Treatment group (Time-Out)

R_2 = Experimental group (Modeling)

R_3 = Control group that will be pretested and post tested without receiving any treatment

O_1 = Pre-treatment test (Time-Out)

X_1 = Treatment

O_2 = Post-treatment test (Time-out)

O_3 = Pre-treatment test (Modelling)

X_2 = Treatment

O_4 = Post-treatment test (Modeling)

O_5 = Pre-treatment test (Control group

O_6 = Post-treatment test (Control group)

3.3 Population of the Study

The population of the study constituted of 470 SS II students of the three senior secondary schools with high incidence of disruptive classroom behaviour. The choice of the SS II was guided by the assumption that they have attained the puberty and formal operational stage of physical and cognitive development. At this stage, students can be taught new kinds of thinking which are abstract, formal and logical. Thinking symbolically at this stage is necessary if one would be able to deal with disruptive behaviour problems at their level of education.

SS III students could not be used because they were preparing for SSCE and SS I just finished junior secondary school, many were on transfer to and from other schools so they were still trying to settle down and internalize the rules and regulations o f the present school and class.

Table 3.2: Research Population by Schools

Schools	No. of Students	Sample
School 'A' Modeling Group	160	20
School 'B' Time-Out	130	20
Control Group	180	20
Total	470	60

Source: Class Registers (2015)

3.4 Sample Size and Sampling Technique

The sample consisted of Sixty (60) identified disruptive classroom behavior students who were purposively sampled and were used for this study. It was suggested by Abdulsalami (2008) that the number for treatment group can range from 15 to 20 and Denga (1986) maintained that better results are achieved in smaller group and there will be effective concentration and understanding of the treatment procedures by the clients.

The students were selected based on their scores from the DBSPS. After marking, the researcher used ranking order to draw up the sample. Through this, the first 20 samples with highest scores qualified for treatment

3.5 Control of Extraneous Variables

It is important for the researcher to take some precautionary control measures so as to minimize the effects of the intervening variables on the control variable. The researcher therefore will adopt the following control measures in order to attribute the changes to be observed in the control variable to manipulation of the independent variables.

- **Absenteeism from treatment:**

  This refers to the students' refusal to turn up for treatment sessions regularly. To control this, the researcher distributed Materials (Exercise books and Biro) and promised incentive packages to those who will register 100% attendance during and after the treatment sessions in order to motivate them. The treatment session was full of practical activities and involved each member in the treatment discussions.

- **Lack of interest by the teachers and students:**

  To control this problem, the researcher briefed the teachers that the study is about Classroom Disruptive Behaviour. The researcher was given a research assistant by each of the school's Principal.

- **Selection Bias:**

  To control the bias, students selected were 1st 20 highest scorers in each group.

  Instrumentation:

The instrument was not tempered with after the pre-test, i.e. the same instrument was used in both pre and post tests.

3.6 Instrumentation

The instrument of this study was adapted from Veiga's (2008) DBSPS. The instrument consists 25 items. It has a four-point scale meant to determine students' views on Classroom Disruptive Behaviour. The scale ranges from very often (4), often (3), sometimes (2), to never (1) (Appendix B pg 172).

In modifying the instrument the items were increased from 20 to 25 to accommodate more disruptive activities peculiar to Otukpo students. These are;

- Deliberately disrupt class activities when asked to go out for punishment by a teacher

- I undermine class leadership
- I tell the teacher that the bell for change of lesson has been heard
- I draw the teachers' attention to any student waiting at the door
- I talk to other students through the window during lessons
- I yell or shout down a mate who talks too much or gives wrong answers during lessons.
- The following items were replaced
- Use of profanity or derogatory language
- Threats to harm oneself
- Often swear or use of obscene language

They were replaced with

- Leaving my seat to collect something from someone while the teacher is teaching (roaming).
- Engage in side discussion with seat mate or others while teaching is going on in the class
- Makes calls quietly or text messages during lessons.

The responses were rephrased from 'not at all' to never, 'just a little' to sometimes, 'pretty much' to often 'very much' to' very often.

3.6.1 Scoring of Instruments

The minimum score was 1x25= 25 while maximum score was 4x25= 100. The instrument has four columns of 1, 2, 3, and 4 marks allotted respectively. To obtain a respondent's scores, ticks on each column is first counted and summed up as total scores.

3.6.2 Validation of the Instrument

The instrument modified by the researcher was face validated by experts in Educational Psychology and Counseling department. The inputs of these experts contributed to the final form of the instrument.

3.6.3 Reliability of the Instrument

The instrument was trial tested on 20 Senior Secondary School Students of Hajj Camp Secondary School, Gwagwalada Area Council (FCT), Abuja. The internal consistency, reliability estimate of the instrument was determined using the Cronbach alpha method to obtain the reliability. The reliability of the instrument using the Cronbach, Alpha method of reliability coefficient two times was 0.712 and 0.832 in the first and second administration of instrument respectively (See Appendix D pg. 178).

3.7 Procedure for Data Collection

3.7.1 Pre-test

The researcher went to the three schools, obtained permission from the principals and with the help of the research assistant in each school administered the students' disruptive behaviour scale to all the SS 2 students in each school. The students responded to the scale in their classes. The research assistant made use of other teachers to administer the test in the various classes. The researcher went round the classes and gave clarifications on the items where it was demanded. At the end of the exercise the researcher collected the instrument from the teachers through the research assistant. The researcher personally marked and scored the students and from the scores, the first 20 with the highest score qualified for the treatments (See Appendix C pg. 174).

3.7.2 Treatment Procedure

Treatment Phases: Pretreatment phase, treatment phase and post-treatment phase

Treatment1: Modeling technique

Session 1: Establishing the Relationship with the students/Subject

Session 2: Nature Purpose and Process of Modeling

Session 3: Biographical Stories of Non-Violent Behaviour

Session 4: Modeling trained teacher

Session 5: Coaching through offering helps as hint, feedback, reminder while the student misbehaviours including checklist as shown in the appendix

Session 6: Civility recitation of a good behaviour to the respondent/subject

Session 7: Coaching of Civility

Session 8: Changing Skills

Session 9: Modelling and application of civility

Session 10: Contractual fulfillment

Session 11: Revision of the Programme

Session 12: The Re-administration of the student DBSPS

Treatments 2: TIME-OUT technique

Session 1: Establishing the Relationship with the subject.

Session 2: Meaning, purpose and Procedure involves on time out

Session 3: Imitate correct time-out behaviour (sitting or standing quietly in designated area), for ten seconds following demonstration by teacher.

Session 4: Demonstrate correct time-out behaviour for ten seconds following teacher's instructions during practice sessions.

Session 5: Demonstrate correct time-out behaviour for 30 seconds following teacher instructions during practice sessions.

Session 6: Same as step 5 but time-out duration is 2 minutes

Session 7: take a five minutes time-out within ten seconds when instructed to do so by a teacher in a real time-out situation.

Session 8: Same as step 7

Session 9: Take a five minute time-out within 10 seconds, demonstrating appropriate time-out behaviour, when instructed to do so by other teachers

Session 10: Same as step 9

Session 11: Review of the Sessions

Session 12: The Re-administration of the instrument

The DBSPS was administered to the subjects in the treatment groups and those in the control group immediately after treatment. The researcher administered the test with aid of the same research assistants. The scoring was done by the researcher and the scores submitted for analysis.

3.8 Procedure for Data Analysis

The data collected by administering the research instrument was collated, organized and analyzed using mean and standard deviation in answering the six research questions whereas t- test and analysis of variance (ANOVA) were used to answer the hypotheses at 0.05 level of significance. . The IBM version 20 statistical package was used to carry out the entire data analysis. It was discovered that modeling technique and time-out technique significantly reduce the disruptive classroom behaviour of secondary school students.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This research work was conducted with the sole aim of examining the effect of modeling and Time-out techniques on disruptive classroom behaviour among secondary school students in Otukpo metropolis of Benue State. The study was carried out using 60 students from three different schools. The Statistical Package of the Social Sciences IBM 20th Edition was used for the analysis. The analysis is presented in sections below. The first section presents the frequencies and distribution of bio data variables of the respondents' age, gender and experimental group. The research questions were answered using descriptive statistics. The six research hypotheses were tested using paired sample t- test, Independent t-test and Analysis of Variance (ANOVA) at 0.05 alpha level of significance. In addition, the section also presents the summary of major findings and Discussion.

4.2 Distribution of Subjects by their Bio Data Variables

Below is the distribution of subjects by treatment group

Table 4.01: Distribution of Respondents by their Treatment Group

Experimental	Frequency	Percentage
Time-out	20	33.3
Modeling technique	20	33.3
Control	20	33.3
Total	60	100.0

The students were distributed according to their experimental groups and this showed that the first 20 students were exposed to Time-out Technique. The second 20 students

exposed to the modeling technique. The rest 20 students were the control group. In all, there are 60 students that were used for this study

Table 4.02: Distribution of Respondents in Modeling Technique Group by Gender

Gender	Frequency	Percentages
Male	12	60.0
Female	8	40.0
Total	20	100

Among the students that were exposed to the modeling technique in experimental one, 12 or 60.0% of them are male students and the rest 8 representing 40.0-% of them are females. This means that 20 students were exposed to modeling technique.

Table 4.03: Distribution of Respondents in Time-out Technique Group by Gender

Gender	Frequency	Percentages
Male	11	55.0
Female	9	45.0
Total	20	100.0

Among the students that were exposed to Time-out technique in experimental two, 11 or 55.0% of them are male and the rest 9 representing 45.0-% of them are females. This means 20 students were exposed to the Time-out technique.

Table 4.04: Distribution of all Respondents by Age groups

Age group	Frequency	Percent
14 and 15 yrs	13	21.7
16-17 yrs	34	56.7
Above 17 yrs	13	21.7
Total	60	100.0

The table above showed the age groups of all the respondents that were used in this study. A total of 13 of them representing 21.7% are between 14 and 15 years while 34

representing 56.7% are aged between 16 and 17 years and the rest 13 representing 21.7% are from 18 years and above. This shows that majority of the students are aged between 16 and 17 years old.

4.3 Hypotheses Testing

This section answers the research questions as well as test the research hypotheses using the descriptive mean statistics for comparison, t-test and Anova.

Hypothesis One: There is no significant effect of modeling technique on disruptive classroom behaviour among Senior Secondary School Students.

Table 4.05(a): Paired Sample t-test Statistics on the Effect of Modelling Technique for the Pretest and Post test mean scores on Disruptive Classroom Behaviour

Groups	N	Mean	Std. Dev	Std. Err	Df	t-cal	Sig (p)
Pre test	20	50.250	9.170	2.051			
					19	8.158	0.000
Post test	20	34.800	6.574	1.470			

Calculated p < 0.05, at df 19

Table 4.05(a) shows significant difference in the pretest and post test scores of the group exposed to modeling technique (t=8.158, p = 0.000). The mean score for the pre test is higher than that of the post test group; 50.250 and 34.800 respectively.

Table 4.05(b): Independent t test statistics on the difference in the mean classroom disruptive behavior of students exposed to Modeling technique and those in Control

Variable	Groups	N	Mean	Std. Dev	Std. Err	Df	t-cal	Sig (p)
Mean classroom disruptive behavior	Modeling	20	34.800	6.574	1.470			
						38	8.744	0.000
	Control	20	56.250	8.783	1.964			

Calculated p < 0.05, Calculated t > 1.96, at df 38

Table 4.05(b) shows the independent t-test statistics that there is significant difference in the mean classroom disruptive behavior of students exposed to Modeling technique and those in control (t=8.744, p = 0.000). The calculated mean classroom disruptive behaviours were 34.80 and 56.250 for students exposed to Modeling technique and those in control

respectively. This implies that the students exposed to Modeling technique had significant reduction in classroom disruptive behavior than their counterparts in the control after treatment.

From the results presented on Tables 4.05(a) and 4.05(b), modeling technique is effective in reducing disruptive classroom behaviour. Consequently the null hypothesis which states that there is no significant effect of modeling technique on disruptive classroom behavior among senior secondary school students is hereby rejected.

Hypothesis Two: There is no significant effect of time-out technique on disruptive classroom behaviour among Senior Secondary School Students.

Table 4.06(a): Paired Sample t-test Statistics on the Difference in the Effect of Time-out on Disruptive Classroom Behaviour after Treatment

Groups	N	Mean	Std. Dev	Std. Err	Df	t-cal	Sig (p)
Pre test	20	54.550	8.739	1.954			
					19	8.278	0.000
Post test	20	32.750	6.935	1.551			

Calculated p < 0.05, at df 19

The result of the statistics of Table 4.06(a), indicates that significant difference exist in the pretest and post test mean scores of time-out technique on disruptive classroom behavior (t = 8.278, p = 0.000). The calculated mean scores for the pretest and post test are 54.550 and 32.750 respectively. This means that their mean disruptive behavior after exposure to time-out significantly reduced, implying a significant effect of time out.

Table 4.06(b): Independent t test statistics on the difference in the mean classroom disruptive behavior of students exposed to Time Out technique and those in control

Variable	Groups	N	Mean	Std.dev	Std. Err	Df	t calc	Sig (p)
Mean classroom disruptive behavior	Time out (Exp1)	20	32.750	6.935	1.551	38	9.391	0.000
	Control	20	56.250	8.783	1.964			

calculated p < 0.05, Calculated t > 1.96, at df 38

Table 4.06(b) shows results of the independent t-test statistics for significant difference in the mean classroom disruptive behavior of students exposed to Time Out technique and those in control (t= 9.391, p = 0.000). The calculated mean were 32.750 and 56.250 for students exposed to Time out technique and those in control group respectively. This implies that Time-out technique have significantly reduced classroom disruptive behavior of the treatment group as against their counterparts in control that were not exposed to any treatment.

From the results presented on Tables 4.06(a) and 4.06(b), time-out technique is effective in reducing disruptive classroom behaviour. Consequently the null hypothesis which states that there is no significant effect of time-out technique on disruptive classroom behaviour among Senior Secondary School Students is hereby rejected.

Hypothesis Three: There is no significant effect between modeling and time-out techniques on disruptive classroom behavior among Senior Secondary School Students.

Table 4.07: Independent t test statistics on the difference in the effectiveness of Modeling Technique and Time out on classroom disruptive behavior

Variable	Groups	N	Mean	Std.dev	Std. Err	Df	t calc	Sig (p)
Classroom Disruptive Behaviour	Time Out	20	32.750	6.934	1.551	38	0.959	0.343
	Modeling	20	34.800	6.574	1.470			

Calculated p < 0.05, at df 18

The results of the independent t-test statistics on table 4.07 shows there is no significant difference in the effectiveness of the two techniques on classroom disruptive behavior (t = 0.959, p = 0.343). The calculated mean disruptive classroom behaviours were 32.750 and 34.800 for time out and modeling technique respectively. The mean scores for the

two techniques revealed that time-out technique is more effective compared to modeling technique. Therefore, the null hypothesis which states that there is no significant effect between modeling and time-out techniques on disruptive classroom behavior among Senior Secondary School Students is thus retained.

Hypothesis Four: There is no significant effect of modeling technique on disruptive classroom behavior among male and female senior secondary school students

Table 4.08: Independent t test statistics on the gender influence in the effectiveness of Modeling Technique on classroom disruptive behavior

Variable	Groups	N	Mean	Std.dev	Std. Err	Df	t calc	Sig (p)
Modeling	Male	12	34.667	7.266	2.097	18	0.108	0.915
	Female	8	35.000	5.855	2.070			

Calculated p < 0.05, at df 18

The results of the independent t-test statistics on table 4.08, shows there is no significant gender difference in the effectiveness of modeling technique on classroom destructive behavior (t = 0.108, p = 0.915). The calculated mean disruptive classroom behaviours were 34.667 and 35.00 for male and female students exposed to Modeling technique respectively. This implies that there is no significant gender difference in the effectiveness of modeling technique on disruptive classroom behaviour. This means that modeling technique is very effective in reducing disruptive classroom behaviour for both male and female students. Therefore, the null hypothesis which states that there is no significant effect of modeling technique among male and female senior secondary school students' disruptive classroom behavior is thus retained.

Hypothesis Five: There is no significant effect of time out technique on disruptive classroom behavior among male and female senior secondary school students.

Table 4.09: Independent t-test statistics on gender influence in the effectiveness of Time- Out technique on disruptive classroom behaviour;

Variable	Groups	N	Mean	Std.dev	Std. Err	Df	t calc	Sig (p)
Time-out	Male	9	32.778	3.734	1.245	18	0.016	0.988
	Female	11	32.727	8.956	2.700			

calculated p > 0.05, at df 18

The results of the independent t-test statistics of table 4.09 shows that there is no significant gender differences in the effectiveness of Time- Out technique on disruptive classroom behavior (t=0.016, p = 0.988). Their calculated mean disruptive classroom behaviour were 32.778 and 32.727 by male and female students exposed to Time-Out technique respectively. This means that there is no significant gender difference in the effectiveness of Time-Out technique on disruptive classroom behaviour, meaning that Time-Out technique is very effective in reducing disruptive classroom behaviour for both male and female students. Therefore, the null hypothesis which states that there is no significant effect of time-out technique among male and female senior secondary school students' disruptive classroom behavior is retained.

Hypothesis Six: There is no significant effect of modeling technique on disruptive classroom behaviour among Senior Secondary School Students of different age groups.

Table 4.10(a): Analysis of Variance statistics on the differences in the mean disruptive classroom behaviour of students exposed to modeling technique on the basis of their age groups

	Sum of Squares	df	Mean Square	F	p. value
Between groups	105.795	2	52.898		
Within groups	715.405	17	42.083	1.257	.310
Total	821.200	19			

Post Hoc Tests

Table 4.10(b): Mean Score of Modeling Technique LSD

Dependent Variable: Mean Scores of Modeling Technique LSD

(I) Age Groups	(J) Age Groups	Mean Difference (I-J)	Std. Error	Sig.
14 and 15 Yrs	16-17 Yrs	-5.286	3.468	.146
	Above 17 Yrs	-1.262	3.609	.731
	14 and 15 Yrs	5.286	3.468	.146
16-17 Yrs	Above 17 Yrs	4.024	3.609	.280
	14 and 15 Yrs	1.262	3.609	.731
Above 17 Yrs	16-17 Yrs	-4.024	3.609	.280

Table 4.10(c): Descriptive statistics on the differences in the mean of the effect of modeling technique on students Classroom Disruptive Behaviour by Age Group

Age Groups	N	Mean	Std. dev	Std. Error
14 and 15 yrs	7	32.5714	6.70465	2.53412
16-17 yrs	7	37.8571	4.45079	1.68224
Above 17 yrs	6	33.8333	8.08497	3.30067
Total	20	34.8000	6.57427	1.47005

Tables 4.10(a, b, and c) showed the differences in the mean classroom disruptive behavior of students exposed to modeling technique based on age groups. There is no significant difference in the mean classroom disruptive behavior of students exposed to modeling technique based on their age groups. Reason being that in the analysis of variance

statistics table, the calculated p value of 0.310 was found to be higher than the 0.05 alpha level of significance while the calculated F value of 1.257 was found to be lower than the F-critical value of 2.60.

In the mean descriptive statistics table (Table 4.10(c)), their calculated mean classroom disruptive behaviour were 32.571, 37.857 and 33.833 by age groups of 14-15 years, 16-17 years and 17-20 years respectively. This implies that modeling technique is effective for all age groups of disruptive students. That is, the null hypothesis which states that there is no significant effect of modeling technique on disruptive classroom behaviour among Senior Secondary School Students of different age groups is therefore retained.

Hypothesis Seven: There is no significant effect of time-out technique on disruptive classroom behaviour among Senior Secondary School Students of different age groups.

Table 4.11(a): Analysis of Variance statistics on the differences in the mean disruptive classroom behaviour of students exposed to time-out technique on the basis of their age groups

	Sum of Squares	df	Mean Square	F	p. value
Between groups	32.067	2	16.033		
Within groups	881.683	17	51.864	.309	.738
Total	913.750	19			

Post Hoc Tests

Table 4.11(b): Mean Scores of Modeling Technique LSD for Different Age Groups

Dependent Variable: Mean Scores of Modeling Technique LSD

(I) Age Groups	(J) Age Groups	Mean Difference (I-J)	Std. Error	Sig.
14 and 15 Yrs	16-17 Yrs	.467	3.719	.902
	Above 17 Yrs	3.417	4.649	.472
	14 and 15 Yrs	-.467	3.719	.902
16-17 Yrs	Above 17 Yrs	2.950	4.261	.498
	14 and 15 Yrs	-3.417	4.649	.472
Above 17 Yrs	16-17 Yrs	-2.950	4.261	.498

Table 4.11(c): Descriptive statistics on the differences in the mean of the effect of Time-out technique on students Classroom Disruptive Behaviour by Age Group

Age groups	N	Mean	Std. dev	Std. Error
14 and 15 yrs	6	33.667	10.87505	4.43972
16-17 yrs	10	33.2000	5.45283	1.72434
Above 17 yrs	4	30.2500	2.75379	1.37689
Total	20	32.7500	6.93485	1.55068

Table 4.11(a, b, and c) shows the differences in the mean disruptive classroom behaviour of students exposed to Time- Out technique based on their age groups. There is no significant difference in the mean disruptive classroom behaviour of students exposed to Time- Out technique based on their age groups. Reason being that in the Analysis of variance statistics table, the calculated p value of 0.738 was found to be higher than 0.05 alpha level of significance while the calculated F value of 0.309 was found to be lower than the F critical value of 2.60. In the Mean descriptive statistics table, their calculated mean disruptive classroom behaviour were 33.6667, 33.2600 and 30.2500 by age groups of 14-15 years, 16-17 years and 17-20 years respectively. This implies that the Time- Out technique is effective for all the age groups of students.

That is the null hypothesis which states that there is no significant effect of time-out technique on disruptive classroom behaviour among Senior Secondary School Students of different age groups, is hereby accepted and retained.

4.5 Summary of Major Findings

The findings of this study revealed:

1. That modeling technique is effective in reducing disruptive classroom behaviour among secondary school students (t=8.158, p=0.000). This is because their mean disruptive behavior after exposure to modeling technique significantly reduced, implying a significant effect of modeling. There is also significant difference in the mean classroom disruptive behavior of students exposed to Modeling technique and those in control (t=8.744, p = 0.000). Therefore, the null hypothesis which states that there is no significant difference in the effect of modeling technique on classroom disruptive behavior among secondary school students is therefore rejected.
2. That time-out technique is effective in reducing disruptive classroom behaviour among secondary school students (t= 8.278, p= 0.000). There is also a significant difference in the mean classroom disruptive behavior of students exposed to Time Out technique and those in control (t= 9.391, p = 0.000). This implies a significant effect of time-out. With this, the null hypothesis which states that there is no effect of time- out technique on disruptive classroom behaviour among secondary school students is therefore rejected.
3. In comparing the two techniques, significant difference does exist between modeling and time out techniques on effective disruptive classroom behavior among secondary school students (t=0.959, p=0.343). With a mean of 32.750 for time out technique is effective than modeling technique which has a 34.800 mean in reducing disruptive classroom behavior among students. Therefore the null hypothesis which states that there is no significant effect of modeling and time out techniques on disruptive classroom behaviour among Senior Secondary School Students is therefore retained.

4. Significant difference does not exist between male and female students exposed to modelling technique on disruptive classroom Behavior among secondary school students (t=0.108, p=0.915). This implies that modeling technique is effective in reducing disruptive classroom behavior among male and female students therefore the null hypothesis which states that there is no significant effect of modeling technique on disruptive classroom behaviour among male and female Senior Secondary School Students is therefore retained.
5. Timeout technique was effective on disruptive classroom behavior among male and female secondary school students (t= 0.016, p= 0.988). This implies no significant gender differences on the effect of Time out techniques on reducing disruptive classroom behavior among secondary school students. Therefore the null hypothesis which states that there is no significant effect of time-out technique on disruptive classroom behaviour among male and female Senior Secondary School Students is retained.
6. Age was not a significant factor in the effect of modeling technique on disruptive classroom behavior among secondary school students (f=1.257, p=0.310) this means that modeling technique is effective irrespective of age in reducing disruptive classroom behavior among secondary school students. Therefore the null hypothesis which states that there is no significant effect of modeling technique on disruptive classroom behaviour among Senior Secondary School Students of different ages is retained.
7. Age was not a significant factor in the effect of Time out technique on disruptive classroom behavior among senior secondary school students (f= 0.309, p= 0.738):

This means that Time out technique was effective irrespective of age in reducing disruptive classroom behavior among secondary school students. Therefore the null hypothesis which states that there is no significant effect of time-out technique on disruptive classroom behaviour among Senior Secondary School Students of different ages is retained.

4.6 Discussion of Major Findings

This study sought to find measures of reducing disruptive students' classroom behaviour of senior secondary schools students. Two treatment techniques (modeling and time-out) were experimented on two experimental groups of twenty per group. The results of the experiment at post treatment level indicated that the use of modeling and time- out as treatment techniques to reduce students' disruptive classroom problems encountered by teachers can be tackled with result.

Modeling Technique

Hypothesis one aimed at finding out if modeling as a treatment technique could be used to reduce disruptive classroom behaviour of students. It was found that significant difference exists between the pre-test and post-test, mean scores of the subjects that were exposed to modeling. This showed that modeling technique can bring about improvement in the disruptive behaviour of students. By this, the first null hypothesis which states that there is no significant effect of modeling technique on disruptive classroom behavior among senior secondary school students is rejected.

To further buttress the effectiveness of modeling technique on disruptive classroom behaviour, when the mean scores of the subjects exposed to modeling technique were compared to that of the control group significant difference was observed.

From the findings, modeling techniques can significantly reduce disruptive classroom behaviours of senior secondary school students. The findings showed that modeling technique could effectively reduce disruptive classroom behavior among senior secondary school students. The implication of this result is that when appropriate and desirable behaviour or attitude are modeled or demonstrated for the students, they will imitate and inculcate such behaviours into their lives. The positive effect of modeling as seen in the subjects' change in behviour shows that teachers and indeed the important others around the students have not modeled proper and acceptable behaviours to them.

This finding is in agreement with the work of Thomas and Armstrong (1968). They used teachers' modeled behavior to eliminate disruptive classroom behaviour. The researchers made the teachers to model acceptable behaviour and without verbal instructions, the students picked up the modeled behaviour and discarded their unruly behaviours. Similarly Nwanuo (2012) in a study with primary four pupils in Owerri, used Cognitive modeling to reduce impulsive behaviour. Similarly, it corroborates the findings of O'Connor (1972), who in a study affirmed that modeling and shaping as behavior modification techniques can effectively be used to eradicate social withdrawal and inadequate social behavior in nursery school children. The finding is also in conformity with that of Lovaas (1987) who used video modeling to increase the learning output of 10 subjects confirmed to have very severe learning difficulties. The work of Paterson and Arco (2007), affirmed that video modeling can effectively be used in treating autism. The subjects before treatment used to alter meaningless words and repetitive actions. After treatment subjects could alter meaningful words though very few. The subjects at the same time showed increase in appropriate play even in repetitive plays. Matter and Gribble (2005), also demonstrated that

the learning of complex behavior can be achieved and explained through modeling. Again Bandura (1971) an authority on 'learning by observation' in his series of studies especially the classic Bobo Doll demonstrated the effects of modeling on intellectual behaviors. Rosenthal and Zimmerman (1970) demonstrated that modeling has great influence on a variety of behaviours like aggressiveness, phobia, rule learning and disruptive behaviors. From the findings, one can correctly conclude that modeling appropriate and acceptable behaviour for the child or student could be all that is needed for a complete turnaround from the unacceptable behaviour.

The findings of this result are in line with the social learning theory by Bandura (1977). The theory in explaining behaviour problem draws attention to the learning that is acquired by children copying the behaviour of models through the observation of such models and imitation. Similarly, Miller and Dollard (1947) in their theory of Frustration-Aggression, explained that if any imitative learning is to take place, observers should be provided with an example of the desired behaviour. They maintained that if positively reinforced the observers can produce responses that match the models own and in some cases novel forms of the behaviour could be introduced as in the findings of Bandura in his study with the Bobo the Doll (Bandura, 1965).

The success of modeling technique in this study is therefore traced to the diverse modeling and demonstration of appropriate classroom behaviours by the researcher, the assistant and the active participation by the subjects. The implication of this findings is that teachers and the important others around the students should always model acceptable behaviour; whatever behaviour you want the students to put up, model it, give them opportunities to replicate it. In the same vein, whatever behaviour you don't want students to

exhibit, avoid it in the presence of the students. Another implication is that even though our students are surrounded with models who are socially handicapped, if authority figures take time to model acceptable behaviour to the students, results will be achieved.

Time-Out Technique

In the same vein, hypothesis two testing revealed significant difference between the pretest and post test mean scores of the subjects that were exposed to time-out technique. When their mean scores were compared with the mean scores of those in the control group the difference was remarkable. These findings indicate that time-out as a treatment technique is capable of reducing disruptive classroom behaviour. By this the hypothesis which states that there is no significant effect of time-out technique on disrupt classroom behaviour is rejected. This means that time-out is capable of reducing disruptive behaviour of students.

The study in revealing that time-out technique is effective in the treatment of students' disruptive classroom behavior confirmed the work of Whittington and Moran (1990), who used time-out with kindergarten through sixth grade children to control their classroom problems. The findings are also in agreement with Constenbader and Reading-Brown (1995) that investigated the use of isolation time-out in a special education and found it effective. While Zabel (1986) found that younger students experienced time-out procedure more frequently, Constenbader and Reading-Brown (1995) found that older students in more restrictive environment spend more time-out for separate behavioural incidents. Luiselli, Myles, and Littman-Qinn (1983) also revealed that time-out can be effective in the reduction of aggressive and disruptive behaviors.

The finding of this study is also in confirmation with the works of Porterfield, Herbert-Jackson and Risley (1976). They used contingent observation with young children in

reducing disruptive and aggressive behaviours. Again Foxx & Shapino (1978) used non exclusionary time-out on five retarded boys and it proved effective in reducing disruptive behaviour. Rortvedt and Miltenberger (1994) experimented the effect of exclusionary time-out on noncompliance behaviour and the result indicated that time-out can be used to increase the rate of compliance to instructions by students. McQuire (2008), in studies with families who indulge in personal violence, revealed that time-out could be effectively used to reduce behavior of personal violence.

Donaldson and Vollmer (2011) Using four subjects wanted to find out the difference in the effect of time-out with release and without release. In release the culprit served time-out for a period of time while in non release, the subject served time-out for the whole period of the class lesson. Their findings revealed that both type of time-out are effective in treating problem behavior.

At the post-test level, when mean scores of those exposed to time-out treatment was compared to that of the control group, the result revealed a significant difference, indicating that time-out can be used to reduce disruptive classroom behaviour of students.

The findings find relevance in one of the theories in which the study was based, the theories of classical conditioning and of reinforcement propounded by B.F Skinner which states that positive or negative reinforcement could be used for maintaining or increasing the occurrence of a desired behaviour. Whereas positive reinforcement like reward, praise is presented for desired behaviour, negative reinforcement involves the removal of an undesired stimulate.

Furthermore the findings is in line with the principles of behaviour modification based on the principles of learning theory which maintains that every behaviour is an

outcome of learning, that every behaviour can be modified with respect to its frequency, duration or intensity. Basically, the theory emphasizes that whatever behaviour is learnt or copied can be unlearnt, can undergo extinction with proper conditioning of the individuals environment. This explains clearly the result of the treatment in this study.

Again the application of the principle of operant conditioning theory which upholds that voluntary or learned behaviour can be modified through the antecedent and consequences of the behaviour could also be said to have contributed to the efficaciousness of time- out technique in the reduction of students' disruptive behaviour. Each disruptive behaviour in the course of the treatment was followed by a consequence (time- out) which is a determiner of a behaviour either occurring again or not. Since the consequences were not desired by the subjects, what followed was reduction in the disruptive classroom behaviour.

Modeling and Time-out techniques

Research question three was raised to compare difference in the effectiveness of modeling and time-out. This comparison revealed that no much difference exist between the effectiveness of modeling and time-out. It means that the two techniques are very effective in the reduction of disruptive classroom behaviour of students. The equal success or effectiveness of both techniques could be attributed to the systematic way the researcher employed each. Again, it could be traced to the fact that each technique was applied to a group. If the two techniques were used for each group as multicomponent techniques treatment approach differences could be recorded.

Gender

Equally revealed is the fact that gender has no influence in the effect of modeling and time-out technique. The implication of these findings is that modeling and time-out treatment

technique is effective in reducing disruptive behaviour of students of irrespective of gender. This finding agreed with the earlier findings of Bandura(1977).

The reason for this could be attributed to environmentals factor. Since the students are not separated by gender in the classroom arrangement, they faced the same classroom conditions, teacher's teaching methods, it is no wonder that when given the same treatment during the research work, gender was not a factor in the effect of any of the techniques. Again, teachers in secondary schools in Otukpo do not employ different behavior management strategies for male and female students. All students are subjected to the same punishment as stipulated in the school's rules and regulation hand book like cutting grass, kneeling down, flogging, and suspension invitation of parents or guardian.

Age

Concerning age influence, the findings found no age influence. This could be traced to the fact that age in school is viewed in relation to academic class not necessarily biological age. Other than dressing mode, all students are treated equally irrespective of age, what counts is class. This uniformity of treatment received by the students in their everyday school life could account for the lack of age influence in the effect of both modeling and time-out treatment techniques on disruptive classroom behavior among senior secondary school students.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the whole research work, conclusion drawn from the study and recommendations based on the findings of the work. Finally, suggestions for further studies and limitations of the study were made in the chapter

5.2 Summary

The study examined the effects of Modeling and Time-Out techniques on disruptive classroom behaviour among senior secondary school students in Otukpo, Benue state. The study has five chapters. In chapter one, the background to the study and the problem that led to the study was highlighted. Seven objectives and corresponding number of research questions and null hypotheses were formulated to guide the study. The expected contributions the work will make were also explained. Finally, the chapter explained the scope of the study and its delimitations. Chapter two examined the concepts of the key variables of the study; disruptive classroom behaviour, modeling and time-out. Theoretical framework of the study was done and some related previous studies were reviewed in the chapter. Chapter three focused on the design of the study which was the quasi experimental design involving pre and post tests. The study population, sample size and sampling technique used were explained. Purposive sampling technique was used to select the 60 sample size from a population of 470 disruptive students. The chapter also described the instrument and treatment procedures and finally, the procedures for data analyses was stated. Chapter four contains the analyses of the obtained from the study; this includes data presentation, testing of null hypotheses, summary of findings and discussions of findings.

Following the analyzed data collected, it was discovered that modeling and time-out techniques can effectively reduce students' disruptive classroom behaviours.

Hypothesis One which states that there is no significant effect of modeling technique on disruptive classroom behaviour was rejected because when the pre and post tests mean scores were analyzed, it was found that modeling technique was effective in reducing disruptive classroom behaviour.

Hypothesis two which states that there is no significant effect of time-out technique on disruptive classroom behaviour among senior secondary school students was equally rejected because when the pre and post mean scores of the subjects were analyzed it was discovered that time-out was effective in reducing disruptive classroom behaviour.

Hypothesis three which states that there is no significant effect between modeling technique and time-out technique on disruptive classroom behaviour among senior secondary school students was retained. When the mean of the two techniques were compared, time-out technique was a more effective technique.

Hypothesis four which states that there is no significant effect of modeling technique among male and female senior secondary school students' disruptive classroom behaviour was retained as findings revealed that modeling technique on disruptive classroom behaviour is not gender sensitive.

Hypothesis five which states that there is no significant effect of time-out technique among male and female senior secondary school students' disruptive classroom behaviour was accepted because the analyzed result showed that time-out technique on disruptive classroom behaviour is not gender sensitive.

Hypothesis six which states that there is no significant effect of modeling technique on disruptive classroom behaviour among senior secondary school students of different age groups was retained because the findings of the study revealed that modeling technique could be used among students with disruptive classroom behaviour of different age groups.

Hypothesis seven which states that there is no significant effect of time-out technique on disruptive classroom behaviour among senior secondary school students of different age groups was equally retained because the findings of the study revealed that age was not a significant factor in the effect of time-out technique on disruptive classroom behaviour among senior secondary school students.

5.3 Conclusion

From the findings of this study it can be concluded that the modeling technique was found to be effective in reducing the incidents of disruptive classroom behaviour among secondary school students. Equally, Time-out as a behaviour modification technique was also found to be effective in reducing students' disruptive classroom behaviour. It was also concluded from the findings of this study, that gender and age difference was not a significant factor on the effectiveness of the two techniques in re-addressing disruptive classroom behaviour among senior secondary school students in Otukpo, Benue State, Nigeria.

5.4 Recommendations

Based on the findings of the study, the following recommendations were made:

1. Psychologists, counselors, teachers and school principals should be expose to training in the use of modeling and time-out techniques in reducing disruptive classroom behavior.
2. Seminars and conferences should be organized in training all stakeholders in education on the use of these new techniques (modeling and time-out) for reducing disruptive classroom behaviour.
3. Students should be exposed to training on the use of these new techniques (modeling and time-out) for reducing disruptive classroom behaviour irrespective of their age or gender.

5.4 Limitation of the Study

The study had some limitations. Some of the limitations of the study include;

1. The scope of the study was only Otukpo town and only three schools were used. These may narrow the scope of generalization of findings.
2. The conclusions reached in the study were only restricted to the effect of modeling and time-out techniques on disruptive classroom behavior, hence generalization could be made on other behavior problems like bullying and stealing.
3. The treatment setting was restricted to formal classroom (indoor) therefore; generalization could not be made on other settings like assembly ground, game field.

5.5 Suggestions for Further Studies

1. Studies in the use of time-out and modeling techniques on reducing disruptive behavior in primary schools across all states of the nation.
2. Studies in the new techniques on reducing aggression, anxiety, phobia, among others should also be conducted by future researchers and
3. Interaction of other variables such as school location, socio-economic or parental influence on disruptive classroom behaviour and the use of the new techniques should be considered.

REFERENCES

Abdulsalam, A.S. (2008). Research Methods in Education. Ibadan: Stirling-Horden Publishers.

Adejuwon, G.A. (2005). "Mother's Self Evaluation, Attribution in Parenting and Coping Strategies on Child externalizing behavior in Ibadan, Nigeria. Ife Psychologia: *An International Journal of Psychology in Africa*, 13(1), 20-25.

Alberto, P., Heflin, L.J. & Andrews, D. (2002). Use of the time-out ribbon procedure during community-based instruction. *Behavior Modification,26,*297-11.style". Pagewise.http:// mama.essortment.com/authoritativepa_tvxe.htm. Retrieved 2007-0923.

Alberto, P.A. & Troutman, A.C. (2006). *Applied behavioral Analysis for Teachers* (7th e d.). Upper Saddle River, New Jersey: Pearson Merrill Prentice Hall.

Anagbogu, M.A. (1988). *Foundation of Guidance and Counseling.* Awka: Ikenga Publishing Company.

Anderson, H.W. (2010). Gender Differences among Children with Externalizing Behavior Disorder in a Clinic Population. *Childcare in Practice*, 8(4), 282-290. Retrieved on 7/28/12 at http;//www. Tandfomlne.com.

Armstrong, S.B., McNeil, M.E. & Van Houten, R. (1988). A Principal's In-service Training Package for Increasing Teacher Praise? *Teacher Education and Special Education,* 11**,** 79-94.

Arndorter, R.E. Allen, K.D. & Aliazzireh, L. (1999). Behavioural Health Needs in Pediatric Medicine and the Acceptability of behavioural Solutions: Implications and the Acceptability of behavioural Psychology. *Behavioural Therapy*, 30(1), 137-148.

Azrin N.H and Holz. W.C, (1996) Punishment as a discriminative stimulus and conditioned reinforce with humans, In Holth (2005) Two Definitions of Punishment. *Behaviour Analyst Today*, 6(1), 43-47.

Bandura, A. & Walters, R.H. (1963). *Social Learning and Personality Development*. London, Holt, Rinehart and Winston

Bandura, A. (1969). *Principles of behavior Modification.* New York: Holt Rinehart and Winston.

Bandura, A. (1970). Modeling Theory: Some Traditions, Trends and Disputes. In Sahakia, W.S. *Introduction to the Psychology of Learning*. F.E. Peacock Publishers.

Bandura, A. (1971). Social Foundations of thought and Action, Englewood Cliff, NJ: Prentice Hall.

Bandura, A. (1973). *Social Learning theory of Aggression.* In J.F. Knutson (1986) (Ed). The Control of Aggression: Implications from Basic Research. Chicago: Aldine. Pp 201-250.

Bandura, A. (1974). Behaviour Therapy and the Models of Man. *American Psychologist*, 29, 859-869.

Bandura, A. (1977). Self-*efficacy: Toward a unifying theory of behavioural change. Psychological* review 84, 191-215. Retrieved October 31, 2007, from http://www.kk.org/quantifiedself/Bandura.pdf

Bandura, A. (1986). *Social Foundations of thought and Action: A Social Cognitive Theory*. Eaglewood Cliffs: NJ: Prentice-Hall.

Bandura, A. (1987). *Aggression*: *A Social Learning Analysis*. New Jersey: Prentice Hall Ltd.

Bandura, A. (1989). *Social Learning Theory*. New York: Eagle Woodcliff's, N. P. Prentice Hall.

Bandura, A. (1997). *Self-Efficacy: The Exercise of Self Control.* New York: Freeman.

Bandura, A., Blanchard, E.B. & Ritter, B. (1969). The Relative Efficacy of Disentization an Modeling Approaches for Inducing Behavioural, affective and cognitive changes. *Journal of Personality and Social Psychology*, 13, 173-199.

Bandura, A., Blanchard, E.B. and Ritter, R. (1969). The relative efficacy of dissensitization and modeling approaches for inducing behavioural effectiveness and attitudinal changes. *Journal of Personality and Social Psychology,* 13, 173-199.

Bandura, A., Jeffery, R.W. & Wright, C.L. (1974). Efficacy of participant modeling as a function of response induction aids. *Journal of Abnormal Psychology,* 83, 56-64.

Bean, A.L. (2000). *The Bully Free Education*. Minneapolis: Free Spirit.

Bean, A.W. & Roberts, M.W. (1981). The Effect of Time-out Release Contingencies on Changes in Child Compliance. Journal of Abnormal Child

Beihlar B.F. & Snowman, J. (1990). *Psychology Applied to Teaching* (6th Edition) USA: Houston Miffli Company.

Bennett, S.N. & Blundell, D. (1983). Quantity and quality of work in rows and classroom groups. Educational Psychology, 3, 93–105.

Benue State Government (2013). Ministry of Education Headquarter, Makurdi: Continuous Assessment Dossier for Senior Secondary School. Makurdi: Return Press,

Betz, C. (1994). Beyond time-out: Tips from a Teacher. *Young children*, 49, 10.

Bostow, D.E. & Bailey, J.B. (1969). Modification of Severe Disruptive and Aggressive behavior Using Brief Time-Out and Reinforcement Procedure. *Journal of Applied Behaviour Analysis*. Retrieved 06/06/2013. http://www.nbi.n/m.gov/pmc/ articles /es/PMC1311032/

Brophy, J.E. & Good, T. (1995). *Teacher-Student Relationships: Causes and Consequences.* New York: Holt, Rinehart & Winston.

Brophy, J.E. (1983). Classroom Organization and Management. *Elementary School Journal, 83,* 265-285

Brophy, J.E. (2010). Motivating Students to Learn. 3rd Ed. Retrieved from http://www.amazon./motiv. on 21/2/2013.

Carnine, D.W. (1976). Effects of two teacher-presentation rates on off-task behavior, answering correctly, and participation. *Journal of Applied Behavior Analysis*, 9, 119–206.

Center, D.B., Deitz, S.M., & Kaufman, M.E. (1982). Student ability, task difficulty, and inappropriate classroom behavior: A study of children with behavior disorders. *Behavior Modification,* 6, 355–374.

Charlop-Christy, M.H., Le, L. & Freeman, K.A. (2002). A Comparison of Video Modeling with Vivo Modeling for Teaching Children with Autism. *Journal of Autism and Developmental Disorders*, 30, 537-552.

Clark, H.B., Rowbury, T., Baeur, A.M. & Baer, D.M. (1973). Timeout as a Punishing Stimulus in Continuous and Intermittent Schedules. *Applied Behavioural*, 6(3), 443-455.

Clark, R. & Baer, B. (1973). In Fire- Stone (1976). Lovaas, O.I., Koegel, R., Simmons, J. Q., & Long, J. S. (1973). Some generalization and follow-up measures on autistic children in behavior therapy. *Journal of Applied Behavior Analysis,* 6, 131-165

Clarke, S., Dunlap, G., Foster-Johnson, L., Childs, K., Wilson, D. & White, R. (1995). Improving the conduct of students with behavioral disorders by incorporating student interests into curricular activities. *Behavioral Disorders,* 20, 221–227.

Collins, M.M. & Fontenelle, D.H. (1982). *Changing Student behaviors: A positive Approach.* Cambridge, MA: Schenkman Publishing Company, Inc.

Cooper, J.O., Heron, T.E. & Heward, W.I (2007). *Applied Behaviour Analysis (Second)* Columbus: Prentice Hall.

Cooper, J.O., Heron, T.E. & Heward, W.L. (1987). *Applied Behaviour Analysis.* Columbus: Ohio Merrill.

Cope, J. (2000). 'Managing classroom : A star in a class of their own. In Managing behaviour in yourroom: Adobe Acrobat document,

Costenbader, V.K. & Reading-Brown, M. (1995). Isolation timeout used with students with emotional disturbance. *Exceptional Children,* 61, 353-363.

David, P. (1959). David Premack Principle. In E. J. Roeckelein (1998). *Dictionary of Theories, Laws and Concepts in Psychology.* Greenwood.

Davis, C.A., Lane, K.L., Sutherland, K., Gunter, P.L., Denny, R.K. & Pickens, P. (2004). Differentiating curriculum and instruction on behalf of students with emotional and behavioral disorders within general education settings. In L.M. Bullock, R.A. Gable, & K.J. Melloy (Eds.), from the fifth CCBD mini-library series: Meeting the diverse needs of children and youth with E/BD: Evidenced-based programs and practices. Arlington, VA: Council for Children with Behavior Disorders.

Denga, D.I. (1986). *Guidance and Counseling in Schools and non School Setting.* Calabar, Nigeria: Cntuar Press.

Dollar, J. & Miller, N.E. (1989). *Frustration and Aggression*. New Haven (USA): Yale University Press.

Donaldson, J.M. & Vollmer, T.R. (2011). *An Evaluation and comparison of Time-out procedures with and without release contingences.* Retrieved 10/06/2014 From htt://www.ncbi.n/m.nib.gov/pmc/articles/pmc3251271.

Dunbar, C. (2004). *Best Practices in Classroom Management.* Michigan: Michigan State University.

Dunlap, G. (1993). Promoting Generalization, Current Status and Functional Consideration.

Dunlap, G., Fox, M.L., Hemmeter, M.L. & Strian, P (2004). *The role of time-out in a comprehensive approach for addressing challenging behavior of preschool children'*. What works series.(https//csefel.vivc.edu)

Dunlap, G., Kern-Dunlap, L., Clarke, S. & Robbins, G.R. (1991). Functional assessment, curricular revision, and severe behavior problems. *Journal of Applied Behavior Analysis,* 24, 387–397.

Elliot, S.N., Kratochwill, T.R., Littlefield, C.J. & Travers, J.F. (2000). *Educational Psychology Effective Teaching, Effective Learning* (3rd Ed). USA: McGraw Hill Company Inc.

Erford, B.T. (1999). A Modified Time-out Procedure for Children with Noncompliant or defiant behaviors*: Professional School Counseling,* 2(3), 205-210.

Erford, B.T. (1999). *Manual for the Disruptive Behavior Rating Scale*. East Aurora, NY. Slosson Educational Publishers

Erikson, E.H. (1965). *Childhood and Society***.** New York: Norton & Coy.

Essa, E.L. (2000). Preschool Teachers' use of time-out: Is what they say what they do? *: Early Child Development and Care*, 165, 85-94.

Federal Government of Nigeria (2004). *National Policy on Education.* Lagos: Lagos Ministry of Education.

Federal Republic of Nigeria (2007). *National policy on Education* Abuja: NERDC

Fergusson, D.M., Boden, J.M & Horwoow, L.G. (2010) Classification of Behavioural Disorder in Adolescence. Scaling Method, Predictive Validity, Gender Differences. *Journal of Abnormal Psychology* 11a(4), 699-712 retrieved on 7/28/12. http://www.people.umass,edu/aizen/publications.htm/kek.

Fester, C.B. & Skinner, B.F. (1957) Schedules of Reinforcement In J.O. Ellis (2003) *Educational Psychology*. Merril: Prentice Hall.

Firestone, P. (1992). The Effects and Side Effects of Time-out on an Aggressive Nursery School Child. *Journal of Behaviour Therapy and Experimental Psychiatry*, 7(1), 79-81.

Forehand, R. & Long, N. (1991). Prevention of aggression and other behavior problems in the early adolescent years. In D.J. Pepler & K.H. Rubin (Eds.), *The development and Treatment of Childhood Aggression* (pp. 317–337). Hillsdale, NJ: Erlbaum.

Foxx, R.M. & Shapiro, S.T. (1978). The Time-out Ribbon: A Non Exclusionary Time-Out. *Behavioural Anal Spring*, 11(1), 125-136.

Foxx, R.M. & Shapiro, S.T. (1978). The Timeout Ribbon: A Nonexclusionary Timeout Procedure. *Journal of Applied Behaviour Analysis*, 11(1), 125-136.

Frank, M., Gresham, T., Stevart, W. & Christopher, H.S. (2001). Functional Behavioural Assessment: Principles, Procedures and Future Directions. *School Psychology*, 30(2), 156-172.

Friman, P. C. & Finney, J. W. (2003) Time-out (and time-in). In W. O'Donohue, J. E. Fisher, & S. C.

Gartrell, D. (2001). Replacing time-out: Part One—Using guidance to build an encouraging classroom. *Young Children*, 56, 8-16.

Geoge, D., & Mallery, P. (2003). SPSS *for Windows Step by Step: A simple guide and reference.11.0 update (*4th ed.) Boston: Allyn & Bacon.

Ghandour M. (1984). The Effects of Television Mediated Aggressive and Real Life Aggression on the Behaviour of Lebanese Children. *Experimental Child Psychology*, 38(1), 7-18 August.

Goldstein, S. & Goldstein, M. (1990). *Managing attention disorders in children: A guide for practitioners*. New York: John Wiley & Sons Pp. 93-94.

Gunter, P. L., Denny, R. K., Shores, R. E., & Reed, T. M. (1994). Teacher escape, avoidance, and counter control behaviors: Potential responses to disruptive and aggressive behaviors of students with severe behavior disorders. *Journal of Child and Family Studies,* 3, 211-223.

Hannon, J. (2002). No time for time-out. *Kappa Delta Pi Record*, 38, 112-4.

Harden, A., Thomas, J., Evans, J., Scanlon, M. & Sinclair, J. (2003). Supporting Pupils with Emotional and behavioural Difficulties (EBD) in Mainstream Primary Schools: a systematic review of recent research on strategy effectiveness (1999 to 2002). In: *Research Evidence in Education Library*. London: EPPI-Centre, Social Science Research Unit, Institute of Education.

Harris, K.R. (1985). Definitional, parametric, and procedural considerations in timeout interventions and research. *Exceptional Children,* 51, 279-288.

Harris, T.T. & Fuqua, J.D. (2000). What Goes Around Comes Around: Building a Community of Learners through Circle Times. *Young Children*, 55(1), 44-47.

Harrop, A. (1983). *Behaviour Modification in the Classroom*. London: Hodder and Stoughton

Hayes (Eds.), *Cognitive behavior therapy: Applying empirically supported techniques in your practice* (pp. 429-435). Hoboken, NJ: John Wiley & Sons.

Hobbs, S.A., Forehand, R., & Murray, R.G. (1978). Effects of Various Durations of Timeout on the on-Compliant Behavior of Children. *Behavior Therapy,* 9, 652-656.

Holden, G.W. (1995). Parental Attributes Towards Child Rearing. In Adejuwon, G.A. (2005). "Mother's self evaluation, attribution in parenting and coping strategies on child externalizing behavior in Ibadan, Nigeria. Ife *Psychologia: An international Journal of psychology in Africa*. 13(1, 200-205

Holth, T. (2005). Two Definitions of Punishment. *Behaviour Analyst Today*, 6(1), 43-47.

Homans, G. (1958). Social behavior; its elementary Forms. In Ogunbameru (2008). *Sociological Theory*. Ibadan: Penthouse Publications.

Igbo, J.N. (1999). Disruptive behaviour among Pre-primary and Primary School Pupils in Nsukka Urban Area of Enugu State of Nigeria. *African Journal of Science Education and Technology*, 2(1), 1-11.

Ingersoll, R.M. (2001). Turnover and teacher shortages: An organizational Analysis. *American Educational Research Journal*, 38, 499-534

Iwata, B.A. & Bailey, J.S. (1974). In Mather, N. & Goldstein S, (2001), *Learning Disabilities & Challenging Behaviours: A guide to intervention and classroom management*. Baltimore; Paul, H. Brooks Publishing Co. PP 96--- 117

Iwata, B.A., Dorsey, M.F., Slifer, K.J., Bauman, K.E. & Richman, G.S. (1994). Toward a Functional Analysis of self-injury. *Journal of Applied Behaviour Analysis*, *27,* 197-209.

Jenson, W.R. & Reavis, H.K. (1996). Reductive Procedures: Timeout and Other Related Techniques. In *Best Practices.* Longmont, CO: Sopris West Publishing.

Johnson, R. (1999). Time-out: Can it control misbehavior? *Journal of Physical Education, Recreation and Dance,* 70, 32-46.

Jones, R.N. & Downing, R.H. (1991). Assessment of the use of Time-out in an Impatient Child, Psychiatric Treatment Unit. *Behavioural Residential Treatment*, 6(3), 219-230.

Jones, V. & Jones, L. (1995). *Comprehensive Classroom Management: Creating Positive Learning Environments for All Students,* 4th Edition. Needham Heights, MA: Allyn and Bacon.

Kelly, M. (2013). How to Handle Discipline Problems with Effective Classroom Management. *Secondary Education Teacher Education Journal*. Retrieved from www.about.com.guide 20/7/2014

Kern, L., Childs, K., Dunlap, G., Clarke, S. & Falk, G. (1994). Using an assessment-based curricular intervention to improve the classroom behavior of a student with emotional and behavioral challenges. *Journal of Applied Behavior Analysis*, 27, 7–19.

Kern, L., Gallagher, P., Starosta, K., Hickman, W. & George, M.L. (2006). Longitudinal Outcomes of Functional Behavioral Assessment-Based Intervention. *Journal of Positive Behavior Interventions*, 8, 67–78.

Kirk, E. (2009). *Positive Discipline: A Teacher's A-Z Guide: Hundreds of Solutions for Almost Every Classroom Behavior Problem*. UK: Nelsen and Linda Escobar;

Kniveton, B.H. (1986). *Peer Models and Classroom Violence: An Experimental Study*. *Journal of Educational Research*, 28(2), 111-118.

Kolo, F.D. (2003). *Basic Research Concept for Behavioural Researchers.* Zaria: Raspa Vicko Consultancy Services.

Kolvin, I., Garside, R., Nicol, A., Macmillan, A. & Wolstenholme, F. (1976). Maladjusted pupils in ordinary schools. *Special Education and Forward Trends*, 3**,** 15-19.

Laslett, R. (1978). *Educating Maladjusted Children*. New Zealand: Cranada Publishing

Laslett, R. (1982). *Maladjusted Children in the Ordinary School*. Stratford-upon-Avon: National Council for Special Education.

Latham, G.I. (2000). *The power of positive parenting*. North Logan, Utah: P&T Ink.

Leitenberg, H. (1965). Time-Out in an Aversive Even In N. Mather and S. Goldstein (2001) *Learning Disabilities and Challenging Behaviours: A Guide to Intervention and Classroom Management.* Baltimore: Paul H. Brookes Publishing Co. pp

Lilly, S. (1979) (Ed). *Children with Exceptional Needs.* New York: Holt, Rinehart and Winston

Lovaas, O.I. (1967)..A behavior therapy approach to the treatment of childhood schizophrenia'. In J.P. Hill(Ed) *Minnesota Symposium on Child Psychology*: Minnneapolis: University of Minnesota Press.

Lovaas, O.I. (1987). Behavioral treatment and normal educational and intellectual functioning in young autistic children. *Journal of Consulting and Clinical Psychology,* 55, 3-9.

Lucas, R.L. (2000). The effects of time-out and DRA on the aggressive behavior of a spirited two-year-old. *Child and Family Behavior Therapy,* 22, 51-56.

Luiselli, J.K., Myles, E. & Littman-quinni, J. (1983).*Analysis of reinforcement/ Time-out treatment packages to control severe aggressive and destructive behaviors in a multihandicapped. Rubella child*. Retrieved at htt://www.nbi.n/m.nih.gov.pubmed 6870236.

Lumley, V.A., McNeil, C.B., Herschell, A.D. & Bahl, A.B. (2002). An Examination of Gender Differences among Young Children Referred with Disruptive Behaviour Disorders. *Child Study Journal,* 32, 89-100.

Mace, F.C. & Heller, M. (1990). A Comparison of Exclusion time-out and contingent observation for reducing severe disruptive behavior in a 7-year-old boy. *Child & Family Behavior Therapy*, 12(1) 1990, 57-68.

Mace, F.C., Page, T.J., Ivancic, M.T. & O'Brien, S. (1986). Effectiveness of brief time-out with and without Contingent Delay: A Comparative Analysis*: Journal of Applied Behavior Analysis,* 19(1), 79-86.

Marlow, A.G., Tingstrom, D.H., Olmi, D.J. & Edwards, R.P. (1997).The effects of classroom-based time-in/time-out on compliance rates in children with speech/language disabilities. *Child and Family Behavior Therapy,* 19, 1-13.

Martin, G.L. &. Pear, J. (2007). *Behaviour Modification: What it is and how to do it.* Upper Sadelle River, NJ: Practice Hall.

Martin, R. (1979). *Legal Challenges in Regulating Behavior Change*. Champaign, IL: Research Press.

Mather, N. & Goldstein, S. (2001). *Learning Disabilities and Challenging Behaviors: A Guide to Intervention and Classroom Management.* Baltimore: Paul H. Brookes Publishing Co. pp. 96-117.

Mathews, J.R. Frima, P.C. Barone, V.J., Ross, L.V. & Christophersen, E.R. (1987). Decreasing Dangerous Infant Behaviours through Parent Instruction. *Journal of Applied Behaviour Analysis,* 20(2), 165-169.

Mathur, S.R., & Rutherford, R. B., Jr. (1996). Is social skills training effective for students with emotional or behavioral disorders? Research issues and needs. *Behavioral Disorders, 22,* 21-28.

Mattar, A.A. & Gribble, P. (2005) Motor Learning by observing'. *Neuron*, 46(1), 153-160. Retrieved from http//www.cell.com/neuron/ 20/7/2014

Mboto, D.F.A. & Bassiveg, S.W. (2004). Examination of Gender Differences among Children with Disruptive Behaviuor Disorder. *Child Study Journal*, 32, 187-190 retrieved on 7/28/2012 3.08 am at www. Questia.com.500653171.

McDaniel, (1980). In Mather, N. & Goldstein S, (2001), Learning Disabilities & Challenging Behaviours: A guide to intervention and classroom management. Baltimore ;Paul H. Brooks Publishing Co. PP 96--- 117). In Mather, N. & Goldstein, S. (2001), *Learning Disabilities & Challenging Behaviours: A guide to intervention and classroom management.* Baltimore; Paul, H. Brooks Publishing Co. PP 96-117.

McGuffin, P.W. (1987). *The effect of time-out duration on the frequency of aggressive behavior in hospitalized, conduct disordered children:* Dissertation Abstracts International.

McIntosh, K. & Av-Gay, H. (2007). Implications of Current Research on the use of Functional behavior Assessment and behavior Support Planning in School Systems. *IJBCT*, , 3(1), 33-49.

McQuire, J. (2008). *A review of effective intentions for reducing aggression and violence*. Retrieved 30/05/2013. From doi:10,1098/rstb.2008,0035

Miller, A. (2003). *Teachers, Parents and Classroom behavior: Psychosocial Approach.* UK: McGraw Hill.

Miller, D. E. (1986).The Management of Misbehavior by Seclusion. *Residential Treatment for Children & Youth*, 4(1), 63-73.

Miller, K. (2005). *Communication Theories: Perspective, Processes and Contexts* (2nd Ed.). New York: McGraw Hill.

Miller, N.E. & Dollard, J. (1941). Social Learning and Imitation. In K. Miller (2005). *Communication Theories: Perspectives, Processes, and Contexts* (2nd Ed). New York: McGraw-Hill.

Miltenberger, R.G. (2008). *Behaviour Modification: Principles and Procedures*, 4th edition Australia: Michele sordid.

Moffit, T.E., Caspi, A., Harrington, H., Milne, B.J., Pouton, R. (2006). Socially Isolated Children 20 Years Later: Risk of Cardiovascular Disease. *Arch Pediatric Adolescent Med*, 160(8), 805-11.

Mohammed, S.A. (2011). The Classroom Problems Faced Teachers at Public Schools in Tafila and Proposed Solutions. *International Journal of Science*, 3(1), 37 - 48

Montgomery, C.P.S. (2004) *Discipline plan*. Maryland Rock Vile.Retrieved November 20. 2004 From http: // www.mcps.k12. md vs 1 – 64k.

Moreno, J.L. (1953). *Who Shall Survive*? (3rd Ed). Washington D.C: Nervous and Mental Disease Publication.

Morgan C.T., King, R.A., Weisz, J.R & Schopler, J.C. (2004). *Introduction to Psychology* (7th Edition) India Tata: Mc- Graw – Hill.

Mortimer, S., Adamsky, S. & McLaughlin, T.F. (1998).Use of isolated time-out to reduce aggression and non-compliance with an elementary school student with severe behavior disorders: A long term analysis. *International Journal of Special Education*, 13(1), 34-45

Nakpodia, E.D. (2010). Teachers Disciplinary Approaches to Students' Discipline Problems in Nigerian Secondary Schools. International NGO Journal, 5(6), 144-151.

Nelson, J.R. (1997). Designing Schools to Meet the Needs of Students who Exhibit Disruptive behavior. *Journal of Emotional and Behavioral Disorders*, 4**,**147-161

Nelson, M. & Rutherford, R. (1983). Timeout Revisited: Guidelines for Its Use in Special Education. *Exceptional Education Quarterly*, 3, 56-67.

Newcomer, P.L. (1981). Understanding and Teaching Emotionally Disturbed Children. *School Psychology International*, 2(1), 31-32.

Noda, J.T. (2009). Behaviour Modification Effect of Classroom-based behavioural Intervention Package on the Improvement of Children's Setting Posture in Japan.

Nwachukwu, K.O. (1997). Elements of Personality and Personality Formation. In B.N. Iffih (ed) Modern Text Book in Social Sciences. Enugu: JOEN Publishers Ltd. Pp 90-203.

Nwanuo, N. (2013). *Concept of modeling: Retrieved* 24/03/2013. http:www.minddisorders. com/kau-NU/modeling.htm./#ixzzzs iy wpzib.

Nwoke. D.U. (2004). *School Learning Theories and Applications.* Enugu: Magnet Business Enterprises.

Nworgu, B.G. (1999). *Educational Research: Basic issues and Methodology.* Ibadan. Wisdom Publishers limited.

O' Leary, K.D. & Becker, W.C. (2001) *Behvaiour Modification of an Adjustment Class. A Token Reinforcement Programme. Exceptional Children* May, 637-642. Retrieved on 8 August, 2012 at www. Ed school .Virginia: edu/ info.com.

O'Connor, R.D. (1972). Relative Efficacy of Modeling, Shaping and the Combined Procedures for Modification of Social withdrawal. *Journal of Abnormal Psychology* 79(3), 327-334

O'Leary, K.D., Kaufman, K.F., Kase, R.E. & Drabman, R.S. (1970). The Effects of Loud and Soft Reprimands on the behavior of Disruptive Students. *Exceptional Child*, 37(2), 145-155.

O'Mahoney, P.J. (2003). *Challenging Behaviour, Information and Guidelines for Boards of Management.* Dublin: National Association of Boards of Management in Special Education.

Obiekezie, M.C. & Odomelan, A. (1998). Management of Violent Behaviours in School. *Umunze Journal of Education & Technology*, 1(1), 99-106.

Obiyo, N. (2010). Improving achievements of pupils with learning and behavioural problems in Aboh, Delta State, Nigeria. *African Journal of Teacher Education*, 1(1), 158-165.

Ogbue, O. & Abosi, (1987). *Special Education*. Ibadan, Heinemann Educational Books Ltd.

Ogunbameru, O.A. (2008). *Sociological Theory.* Ibadan: Penthouse Publications.

Okoye, N.N. (2001). *Therapeutic skills in psychology and counseling.* Awka: Erudition Publishers.

Olmi, D.J., Sevier, R.C. & Nastasi, D.F. (1997).Time-in/time-out as a response to noncompliance and inappropriate behavior with children with developmental disabilities: Two case studies. *Psychology in the Schools*, 34(1), 31-39.

Peterson, C.R. & Arco, L. (2007). Using Video Modeling for Generalizing Toy Play in Children with Autism. *Behaviour Modification*, 31(5), 660-681.

Peterson, K (1961). Conduct Disturbance and Antisocial Reaction Categories of the Diagnostic In C. Dante, Toth, S.L. (1991). *Behaviour Types: Models and Integration*. Rochester: University of Rochester Press. Retrieved from http://www.books.google.nl/books 12/9/2013.

Petro, M. & Corinne, M. (2010). Disruptive behaviour in the foundation phase of schooling. *South African Journal of Education*, 30, 26-34.

Porterfield, J.K., Herbert-Jackson, E, Risley, T.R. (1976). Contingent Observation: An Effective and Acceptable Procedure for Reducing Disruptive Behaviour of Young Children in a Group Setting. *Journal of Applied Behaviour Analysis*, 9, 55-64.

Presland, J.L. (1980). *'Behavior modification and Secondary Schools', in Upton, G. and Gobell, A. (eds) Behavior problems in theory comprehensive School. Faculty of Education*, University College Cardiff. Publications.

Quay, H.C., Morse, W.C. & Gitter, R.L. (1966). Understanding the Child In *Multicultural Understanding of Child and Adolescent Psychology*. NY: Guilford Press.

Qurich, G. (1995). Theory into Practice: Modelling Respect on the Classroom. *Intervention in School and Clinic*, 31(2), 119-121, November.

Readdick, C.A. & Chapman, P.L. (2000). Young children's perceptions of time-out. *Journal of Research in Childhood Education*, 15, 81-87

Reitman, D. & Drabman, R.S. (1999).Multifaceted uses of a simple time-out record in the treatment of a noncompliant 8-year-old boy: *Education & Treatment of Children*, 22(2), 136-145.

Reitman, D., & Drabman, R. S. (1996). Read my fingertips: A procedure for enhancing the effectiveness of time-out with argumentative children. *Child & Family Behavior Therapy*, 18, 35-40.

Risley, K. (2003). Should we eliminate time-out rooms? Used wisely, they can help students. *American Teacher*, 87, 4.

Roberts, M.L., Marshall, J., Nelson, J.R. & Albers, C.A. (2001). Curriculum-based assessment procedures embedded within functional behavioural assessment: identify escape-motivated behavior in a general education classroom. *School Psychology Review*, 30, 264-277.

Roberts, M.W. & Powers, S.W. (1990).Adjusting chair time-out enforcement procedures for oppositional children. *Behavior Therapy*, 21(3), 257-271.

Roberts, M.W. (1988). Enforcing chair time-outs with room time-outs*: Behavior Modification*, 12(3), 353-370.

Rortvedt, A. K., & Miltenberger, R. G. (1994). Analysis of a high-probability instructional sequence and time-out in the treatment of child noncompliance*: Journal of Applied Behavior Analysis*, 27(2), 327-330.

Rosenberg, M.S., Wilson, R., Maheady, L. & Sindelor, P.T. (1992). *Educating Students with behavior disorder* 3rd ed, www.amazon.com /dp/ 020534075 retrieved

Ryna, J.B., Peterson, R.L. & Rozalski, M. (2007). State Policies Concerning the use of School.

Salend, S.J. & Gordon, B.D. (1987). A Group-oriented time-out Ribbon Procedure *Behaviour Disorders*, 12(2), 131-137.

Scarboro R. and Forehand .M.E (1975), An analysis of Children's oppositional behavior- Vol 3, (1), pp 27-31. The effects of time –out on noncompliance.

Shapiro, E.S., Durnan, S.L., Post, E.E. & Skibitsky, L.T. (2002). Self-monitoring procedures for children and adolescents In M. R. Shinn, H. M. Walker, and G. Stoner (Eds.), *Interventionsfor academic and behavior problems II: Preventative and remedial approaches* (pp. 433–454). Bethesda, MD: National Association of School Psychologists

Shea, B. (1987). In Mather, N. & Goldstein S, (2001), *Learning Disabilities & Challenging Behaviours: A guide to intervention and classroom management.* Baltimore; Paul, H. Brooks Publishing Co. PP 96--- 117

Shriver, M.D. & Allen, K.D. (1996). The time-out grid: A guide to effective discipline: *School Psychology Quarterly*, 11(1), 67-75.

Skiba, R.J. & Raison, J. (1990). Relationship between the use of time-out and academic achievement. *Exceptional Children*, 57(1), 36-46.

Skinner, B.F. (1950). Are Theories of Learning Necessary? Retrieved from http://books.google.nl/bookwilderpublicationsincorporated 20/03/2013

Skinner, B.F. (1953). *Science and Human behaviour*. New York: Macmillan.

Skinner, B.F. (1957). *Verbal behavior*. Cambridge, MA: B.F. Skinner Foundation.

Skinner, B.F. (1968). The design of Experimental Communities. *International E cyclopedia of the Social sciences*.16, 271 – 275.

Solity, J. (1992). *Special Education*. New York: Cassel Ltd.

Spencer, P. (n.d). Time-Out Reviewed by Baby Center Medical Advisory Board. Retrieved from www.babycenter.com/0-time-out-howtomakethemwork 21/3/2013

Spencer, P. (n.d). Time-Outs: How to Make them Work. Reviewed by the Baby Center Medical Advisory Board. Retrieved from http://www.babycenter.com/mission /motherhood on 23/2/2013

Spradling, R. L. (1985). The effect of timeout from performance on attentiveness and attitude of university band students. Journal of Research in Music Education, 33, 123-137.

Stephens, W.E. & Ludy, I.E. (1975). Action-Concept Learning in Retarded Children using Photographic Slides, Motion Picture Sequences, and Live Demonstrations. *American Journal of Mental Deficiency*, 80, 277-280.

Sutherland, K.S., Alder, N. & Gunter, P.L. (2003). The effect of varying rates of opportunities to respond to academic requests on the classroom behavior of students with EBD. *Journal of Emotional and Behavioral Disorders*, 11, 239–248.

Thomas, B. & Armstrong (1968). In Mather, N. & Goldstein S, (2001). Learning Disabilities & Challenging Behaviours: A guide to intervention and classroom management. Baltimore; Paul H. Brooks Publishing Co. PP 96--- 117.

Thorndike, E.L. (1991). Provisional Laws of Acquired behavior or Learning. In Thorndike's Animal Intelligence. New York: The MacMillan Company.

Triger, T. (ed) (1990). Aggressive and Development. *The Encyclopedia of Human Development and Education.* 1, 431 – 433.

Ullman, K. & Krasner, L. (1965). *Case Studies in behaviour Modification*. London: Holt, Rinehart and Winston

Vargo, J.S. (2009). *Behaviour Analysis for Effective Teaching.* New York: Routledge.

Waguespack, A.M., Vaccaro, T. & Continere, L. (2006). Functional Behavioural Assessment and Intervention with Emotional/Behavioural Disordered Students: In Pursuit of State of the Art. *International Journal of Behavioural Consultation Therapy*, 2(4), 463-474.

Walker, J.E & Shea, T.M. (1991). In Mather, N. & Goldstein S,(2001), *Learning Disabilities & Challenging Behaviours: A guide to intervention and classroom management*. Baltimore; Paul H. Brooks Publishing Co. PP 96--- 117

Walters, G.C. & Grusec, J.F. (1978).*Punishment* san Francisco: W. H. Freeman.

Webster, R. E. (1976). A time-out procedure in a public school setting. *Psychology in the Schools*, 13, 72-76.

Wechsler, D. (1948, 1991). *WISC-III Manual*. New York: The Psychological Corporation/Harcourt Brace Jovanovich.

Weider, A. (ed) (1951). *Contributions towards Medical Psychology*. N.Y: Ronal Press.

Welerder, A. (ed) (1950). Contributions towards medical psychology In Shneidman, E.S. (ed) (1998). *Interpretation of Bender Gestalt: Thematic Test Analyses*. New York: Grune and Stratton.

Wenrich, W.W. (1970). *A Primer of behaviours modification.* Belmont. C. A. Wadsworth.

West, R.P. & Sloane, H.N. (1986). Teacher presentation rate and point delivery rate: Effect on classroom disruption,

Wheldall, K., & Lam, Y.Y. (1987). Rows versus tables II: The effects of two classroom seating arrangements on classroom disruption rate, on-task behavior and teacher behavior in three special school classes. *Educational Psychology*, 7, 303–312.

Wheldall, K., Morris, M., Vaughan, P., & Ng, Y.Y. (1981). Rows versus tables: An example of the use of behavioural ecology in two classes of eleven-year-old children. *Educational Psychology*, 1, 171–184.

White, A.G. & Bailey, J.S. (1990). Reducing disruptive behaviors of elementary physical education students with Sit and Watch. *Journal of Applied Behavior Analysis,* 23(3), 353-359.

Whittington, R. & Moran, G. (1990). Teaching nonviolence through time-out: A Curriculum for Elementary School Classrooms. *Social Work in Education*, 12, 237-248.

Wilhoit, G. (2000). Guidelines for Effective Use of Time-out. Kentucky Department of Education, 564-4970.

Wilson, C.C., Robertson, S.J., Herlong, L.H. & Haynes, S.N. (1979).Vicarious effects of time-out in the modification of aggression in the classroom. *Behavior Modification*, 3, 97-111.

Wilson, R. & Sindelar, M. (1992). *Educating Students with behavior Disorders*. USA: Pearson.

Winnicott, D.W. (1957). *The Child and the Family*. In Laslett, R. (1982). *Maladjusted Children in the Ordinary School*. Stratford-upon-Avon: National Council for Special Education.

Winnicott, D.W. (1995). *The Child and the Family*. London: Tavistock.

Witt, J.C. & Martens, B.K. (1983). Assessing the Acceptability of behavioural Interventions used in Classrooms. *Psychology in the schools*, 20(4), 510-17.

Wolfberg, P.J. & Schuler, A.L. (1993). Integrated Play Groups: A Model for Promoting the Social and Cognitive Dimensions of Play in Children with Autism. *Journal of Autism and Development Disorders*, 23(3), 467-489.

Woollard, J. (2010). *Psychology for the Classroom behaviourism.*Canada: Taylor & Francis e-library.

Wortman, C., Loftus, E. & Weaver, C. (1999). *Psychology* (5th Ed). USA: McGraw-Hill

Yeager, C. & McLaughlin, T.F. (1994).Use of a time-out ribbon with and without consequences as procedures to improve a child's compliance. *Perceptual and Motor Skills*, 79(2), 945-946.

Yeager, C. & McLaughlin, T.F. (1995). Use of a time-out Ribbon and Precision Requests to Improve Child Compliance in the Classroom: A case study. *Child & Family Behavior Therapy,* 17, 1-9.

Yell, M.L. (1994). Time-out and students with behavior disorders: A legal Analysis. *Education & Treatment of Children,* 17(3), 293-301.

Zabel, M.K. (1986). Time-out use with behaviorally disordered students. *Behavioral Disorders,* 12, 15-21.

APPENDIX A

LETTER OF INTRODUCTION

Veronica E. Anyebe
Ph. D/EDUC/01651/2008-2009

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELLING
FACULTY OF EDUCATION,
AHMADU BELLO UNIVERSITY, ZARIA

Our Ref: _____ Date: 10/2/2014

The Principal,
Hay Camp Govt
Secondary School
Gwagwalada - Abuja

Dear Sir,

STUDENTS' FIELD RESEARCH

The Department of Educational Psychology and Counselling, Ahmadu Bello University, Zaria requires each student working for a Degree to complete a research project/ Thesis/Dissertation. They are therefore required to collect data for the research studies.

Most of them will need to be allowed access to certain relevant documents and some valuable information which you may have.

Please accord them all the necessary assistance.

TOPIC OF RESEARCH:

Effect of Modeling and time-out techniques on disruptive classroom behaviour among secondary school students in Otukpo Metropolis, Benue State, Nigeria.

Thank you for your continued cooperation.

Yours Sincerely,

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND COUNSELLING

Research Adviser

APPENDIX B

DISRUPTIVE BEHAVIOUR SCALE PROFESSED BY STUDENTS

School: ……

Name: ……

Class:……

Age: ……

Sex: ……

Date: ……

Please indicate the level at which you have done any of these disruptive activities in the past six months, be honest about it.

S/No	Classroom Behaviour	Never/ Rarely	Some/ Times	Often	Very Often
1.	Eating in the class during lesson				
2.	Don't wait for turn to speak or ask questions During lessons				
3.	Engage in side discussion with seat mate or others while the teacher is in the class				
4.	Blurts or shouts out answers before questions have been completed				
5.	Leaving my seat to collect something from someone while the teacher is teaching (roaming)				
6.	Creating excessive noise with lockers or other things during lessons				
7.	Allowing teachers to enter the class before me				
8.	Leaving class during the lessons				
9.	My phone rings in the class during lesson				
10.	Make calls quietly or text message with phones during class				
11.	Speak without permission				
12.	I yell or shout down a mate who talks too much or gives wrong answers during lesson				
13.	Sleeping in the class during lessons				
14.	Verbally assault classmates in the teachers presence				
15.	Physical assault classmates (hitting) during lessons				
16.	Deliberately disrupt class activities when asked to go out for punishment by a teacher				
17.	Enjoy monopolishing class discussion no matter the subject				
18.	I undermine class leadership				

19.	Engage in other activities or activity during class like reading another subject note or copying note during lesson				
20.	Enjoy calling for teachers attention				
21.	Jumps queue in submitting my class work to the teacher or class monitor or lesson prefect				
22.	Hates being ignored by the teachers				
23.	Tell the teachers that the bell for change of lesson has being heard				
24.	I draw the teachers attention to any students waiting at the door				
25.	I talk to other students through the window during lessons				

Veiga F. H. (2008) Disruptive Behavior Scale Professed by Students (DBS_PS). International Journal of Psychology and Psychological Therapy 8, 2,203-216 Retrieved on 10/12/14 at www.ijpsy.com.

APPENDIX C

Treatment Package

MODELING:

Week 1 – Establishment of relationship

- The researcher with the help of the research assistant gathered the subjects using the result of the pre-test.
- had orientation after familiarization
- time of meetings was agreed upon- Tuesdays and Wednesdays -2: 00 – 2:40pm

Second session:
-Had a roll call of participants
-a quick reminder of the essence of the programme
-examined what disruptive behaviour is
The group pointed out some examples of disruptive classroom behaviours
-discussed reasons for such behaviours by students

Week 2 –Nature and purpose of modeling

Had the roll call
- a quick review of last session
- discussed the concept of modeling and types
- what is modeled were looked at and
Why we model
Second session: Process of modeling
-had the roll call
- a review of last session
-discussed the processes involved in modeling
Attention
Retention
Reproduction
Motivation

Week 3- Biographical stories of non violence

-had the roll call
- a quick review of last session
-heard a biographical story of a non-violent man, a peace lover
- discussed the moral lesson in the and how to model some of the lessons
Second session: modeling some of the issues observed in a non-violent stories
-the roll call
-a quick review of last session
-heard another story of non-violence
- Discussed the lessons from it
-the subjects modeled how to be non-violent as:
Students
Prefects
Teachers

Children

Week 4 : (sessions 1 and 2) Coaching through offering helps as hints, provision of instant feedback and corrections

-each session began with the usual preamble and a session of :

- A non- violent story and a discussion on the lesson and a brief demonstration of how any of the lessons could be replicated in other circumstances

Week 5: Civility recitation

-had the roll call

-a review of last session

-Discussed the concept of civility

-discussed the five 'magic words'

Please

Excuse me

Am sorry

Thank you and

Pardon

Each of the word was applied in the class by the subjects while the researcher and the assistant were active observers, providing hints or help when needed.

Second session: Changing skills / contractual fulfillment:

- roll call

- a quick review of last session

- discussed the instances where their new skills could be exercised

In the classroom

At home

In the market

Motor park etc.

Week 6: Revision

-Had a general revision of the programme

-the subjects were encouraged to ask questions make observations concerning any area of the programme

-the researcher appreciated and thanked them profusedly for their active participation in the programme.

Second session: Re- administration of the DBSPS

-the instrument, DBSPS was re-administered to the subjects.

TIME – OUT TECHNIQUE

Week 1: Establishing the relationship

-gathered the subjects together using the result of the pre – test

-formal introduction: the researcher, the research assistant and the subjects took turn to do this.

-subjects were intimated on the programme; its purpose and duration

-meeting days and time arrived at- Mondays and Wednesdays- 10: - 11:35.

Second session: Meaning, Purpose and Procedure for time-out

-had the roll call

- a quick reminder of the nature of the programme by the researcher

-discussed the concept of time-out

-Types and purpose of time-out

-rules governing time-out were discussed

Week 2 : Imitating correct time-out behaviour

-roll call

-A review of last session

- discussion on disruptive classroom behaviour

-what it is and what it is not

Subjects were prompted to cite examples

Second session: Demonstration and application of time-out during discussion

-roll call

-Review of last session

-discussion was on the effects of classroom disruptive behaviour on :

Teachers

Fellow students

Disruptive student (s)

Week 3 : Correct response to time-out instructions

-roll call

- review of the previous session

-discussion was on 'causes of disruptive behaviour'.

-subjects were encouraged to speak out on the reasons for disruptive behaviours

Second session: Same as above

-Roll call

-a quick review of last session

-discussion was on measures to overcome disruptive tendencies

Preparation for lessons

Self control or discipline

Week 4: Observation of 5 minutes time-out

-roll call

-a quick review of last session

-discussion was still on measures of overcoming disrupting behaviour as a student

-correct way of seeking the teacher's attention

Correct way of answering or

Asking questions

Second session: observance of 5 minutes time-out

-roll call
- review of last session
- discussed correct way of communicating with
Seatmates during lessons
-when and how to leave ‘your’ seat during lessons and when the class prefect is in-charge.
Week 5: Observance of 5 minutes time- out
-roll call
-review of last session
-discussion was civility
-its application and observance in the classroom
Second session: Same as above
-roll call
- review of last session
-discussed the application of the golden rule outside the classroom
During break time
During games
Extracurricular activities setting
Week 6: Revision
Had a general revision of the programme
-subjects asked questions in an interactive setting
Second session: Re-administration of DBSPS

APPENDIX D

Reliability of the Instrument (Output)

FIRST TEST
Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	38	100.0
	Excluded[a]	0	.0
	Total	38	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.847	.808	20

Item Statistics

	Mean	Std. Deviation	N
I don't pay attention in the classroom	1.9474	.80362	38
I eat in the class	1.8947	.60580	38
I usually forget to bring my materials to the classroom	2.1316	.90557	38
I arrive late in school	1.8421	.75431	38
I speak without permission	2.0000	.80539	38
I leave my seat/place, yell and cause other disturbances in the class	1.7632	.58974	38
I phsically assault my classmates	2.0263	.78798	38
I verbally assault my classmates	2.0789	.94101	38
I shout down my classmate when they give wrong answers	1.8158	.76601	38
I intentionally destroy or break class/school materials	2.0000	.77110	38
I obey the teachers	1.8421	.71759	38
I sleep in the class	2.0789	.81809	38
I engage in side discussion during class	2.0526	.89887	38
I enter class late	1.8684	.66459	38
I make noise with my locker or with other items	2.1316	.81111	38
I make calls or text message with phones in class	1.7105	.61106	38
I hate group work	2.0789	.81809	38
I undermine class leadership	2.0263	.91495	38
I swear in the classroom when provoked	1.8947	.64889	38
I hate to be ignored by teachers or classmates	2.5000	.76229	38

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	1.984	1.711	2.500	.789	1.462	.030	20

2ND TEST

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	38	100.0
	Excluded[a]	0	.0
	Total	38	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.898	.870	20

Item Statistics

	Mean	Std. Deviation	N
I don't pay attention in the classroom	2.1316	.77707	38
I eat in the class	1.8684	.66459	38
I usually forget to bring my materials to the classroom	2.2105	.90518	38
I arrive late in school	1.8947	.72743	38
I speak without permission	2.1316	.84377	38
I leave my seat/place, yell and cause other disturbances in the class	1.9474	.83658	38
I phsically assault my classmates	2.0526	.76925	38
I verbally assault my classmates	2.1316	.99107	38
I shout down my classmate when they give wrong answers	1.8947	.86335	38
I intentionally destroy or break class/school matreials	2.0789	.85049	38
I obey the teachers	2.1579	.94515	38
I sleep in the class	2.1053	.86335	38

I engage in side discussion during class	2.0789	.81809	38
I enter class late	1.9211	.78436	38
I make noise with my locker or with other items	2.2105	.87481	38
I make calls or text message with phones in class	1.6316	.58914	38
I hate group work	2.0263	.78798	38
I undermine class leadership	2.0263	.91495	38
I swear in the classroom when provoked	1.9737	.67731	38
I hate to be ignored by teachers or classmates	2.2895	.86705	38

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	2.038	1.632	2.289	.658	1.403	.023	20

APPENDIX E

Data Analysis (Output)

T-Test

T-Test HYPO 1 MODELLING BEHAVIOUR

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRETEST_SCORES	50.2500	20	9.17017	2.05051
	POSTTES_SCORES	34.8000	20	6.57427	1.47005

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	PRETEST_SCORES & POSTTES_SCORES	20	.461	.041

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PRETEST_SCORES - POSTTES_SCORES	15.45000	8.46961	1.89386	11.48610	19.41390	8.158	19	.000

T-Test HYPO 2 TIME OUT

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRETEST_SCORES	54.5500	20	8.73875	1.95404
	POSTTES_SCORES	32.7500	20	6.93485	1.55068

Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	PRETEST_SCORES & POSTTES_SCORES	20	-.117	.622

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	PRETEST_SCORES - POSTTES_SCORES	21.80000	11.77687	2.63339	16.28825	27.31175	8.278	19	.000

POSTTES_SCORES	Time out (Exp1)	20	32.7500	6.93485	1.55068
	Modeling (Exp2)	20	34.8000	6.57427	1.47005

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
POSTTES_SCORES	Equal variances assumed	.917	.344	-.959	38	.343	-2.05000	2.13674	-6.37560	2.27560
	Equal variances not assumed			-.959	37.892	.343	-2.05000	2.13674	-6.37601	2.27601

T-Test MODELLING SEX

Group Statistics

	sex	N	Mean	Std. Deviation	Std. Error Mean
POSTTES_SCORES	MALE	12	34.6667	7.26553	2.09738
	FEMALE	8	35.0000	5.85540	2.07020

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
POSTTES_SCORES	Equal variances assumed	.717	.408	-.108	18	.915	-.33333	3.08196	-6.80828	6.14162
	Equal variances not assumed			-.113	17.208	.911	-.33333	2.94698	-6.54520	5.87854

T-Test TIME OUT SEX

Group Statistics

	Sex	N	Mean	Std. Deviation	Std. Error Mean
POSTTES_SCORES	MALE	9	32.7778	3.73423	1.24474
	FEMALE	11	32.7273	8.95646	2.70047

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
POSTTES_SCORES	Equal variances assumed	3.713	.070	.016	18	.988	.05051	3.20237	-6.67743	6.77844
	Equal variances not assumed			.017	13.915	.987	.05051	2.97354	-6.33074	6.43175

T-Test CONTROL SEX

Group Statistics

	sex	N	Mean	Std. Deviation	Std. Error Mean
POSTTES_SCORES	MALE	12	57.4167	9.49122	2.73988
	FEMALE	8	54.5000	7.87401	2.78388

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
POSTTES_SCORES	Equal variances assumed	.063	.805	.718	18	.482	2.91667	4.06105	-5.61527	11.44861
	Equal variances not assumed			.747	16.987	.465	2.91667	3.90601	-5.32480	11.15813

Frequencies

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	14	2	3.3	3.3	3.3
	15	11	18.0	18.3	21.7
	16	22	36.1	36.7	58.3
	17	12	19.7	20.0	78.3
	18	7	11.5	11.7	90.0
	19	2	3.3	3.3	93.3
	20	2	3.3	3.3	96.7
	22	2	3.3	3.3	100.0
	Total	60	98.4	100.0	
Missing	System	1	1.6		
Total		61	100.0		

Oneway

Descriptives

POSTTES_SCORES

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Time out (Exp1)	20	32.7500	6.93485	1.55068	29.5044	35.9956	25.00	55.00
Modeling (Exp2)	20	34.8000	6.57427	1.47005	31.7231	37.8769	27.00	47.00
Control	20	56.2500	8.78321	1.96398	52.1393	60.3607	45.00	82.00
Total	60	41.2667	13.00439	1.67886	37.9073	44.6261	25.00	82.00

ANOVA

POSTTES_SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6777.033	2	3388.517	60.345	.000
Within Groups	3200.700	57	56.153		
Total	9977.733	59			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: POSTTES_SCORES

LSD

(I) groups	(J) groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Time out (Exp1)	Modeling (Exp2)	-2.05000	2.36965	.391	-6.7952	2.6952
	control	-23.50000*	2.36965	.000	-28.2452	-18.7548
Modeling (Exp2)	Time out (Exp1)	2.05000	2.36965	.391	-2.6952	6.7952
	control	-21.45000*	2.36965	.000	-26.1952	-16.7048
control	Time out (Exp1)	23.50000*	2.36965	.000	18.7548	28.2452
	Modeling (Exp2)	21.45000*	2.36965	.000	16.7048	26.1952

*. The mean difference is significant at the 0.05 level.

Oneway TIMEOUT

Descriptives

POSTTES_SCORES

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
14 AND 15 YRS	6	33.6667	10.87505	4.43972	22.2540	45.0793	25.00	55.00
16-17 YRS	10	33.2000	5.45283	1.72434	29.2993	37.1007	28.00	43.00
ABOVE 17 YRS	4	30.2500	2.75379	1.37689	25.8681	34.6319	27.00	33.00
Total	20	32.7500	6.93485	1.55068	29.5044	35.9956	25.00	55.00

ANOVA

POSTTES_SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	32.067	2	16.033	.309	.738
Within Groups	881.683	17	51.864		
Total	913.750	19			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: POSTTES_SCORES

LSD

(I) AGE GROUPINGS	(J) AGE GROUPINGS	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
14 AND 15 YRS	16-17 YRS	.46667	3.71891	.902	-7.3796	8.3129
	ABOVE 17 YRS	3.41667	4.64864	.472	-6.3911	13.2244
16-17 YRS	14 AND 15 YRS	-.46667	3.71891	.902	-8.3129	7.3796
	ABOVE 17 YRS	2.95000	4.26055	.498	-6.0390	11.9390
ABOVE 17 YRS	14 AND 15 YRS	-3.41667	4.64864	.472	-13.2244	6.3911
	16-17 YRS	-2.95000	4.26055	.498	-11.9390	6.0390

Oneway MODELLING

Descriptives

POSTTES_SCORES

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
14 AND 15 YRS	7	32.5714	6.70465	2.53412	26.3707	38.7722	27.00	45.00
16-17 YRS	7	37.8571	4.45079	1.68224	33.7408	41.9734	28.00	41.00
ABOVE 17 YRS	6	33.8333	8.08497	3.30067	25.3487	42.3180	27.00	47.00
Total	20	34.8000	6.57427	1.47005	31.7231	37.8769	27.00	47.00

ANOVA

POSTTES_SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	105.795	2	52.898	1.257	.310
Within Groups	715.405	17	42.083		
Total	821.200	19			

Post Hoc Tests

Multiple Comparisons

Dependent Variable: POSTTES_SCORES

LSD

(I) AGE GROUPINGS	(J) AGE GROUPINGS	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
14 AND 15 YRS	16-17 YRS	-5.28571	3.46751	.146	-12.6015	2.0301
	ABOVE 17 YRS	-1.26190	3.60910	.731	-8.8764	6.3526
16-17 YRS	14 AND 15 YRS	5.28571	3.46751	.146	-2.0301	12.6015
	ABOVE 17 YRS	4.02381	3.60910	.280	-3.5907	11.6383
ABOVE 17 YRS	14 AND 15 YRS	1.26190	3.60910	.731	-6.3526	8.8764
	16-17 YRS	-4.02381	3.60910	.280	-11.6383	3.5907

Oneway CONTROL

Descriptives

POSTTES_SCORES

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
16-17 YRS	17	56.5294	9.27441	2.24938	51.7609	61.2979	45.00	82.00
ABOVE 17 YRS	3	54.6667	6.35085	3.66667	38.8903	70.4431	51.00	62.00
Total	20	56.2500	8.78321	1.96398	52.1393	60.3607	45.00	82.00

ANOVA

POSTTES_SCORES

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.848	1	8.848	.109	.745
Within Groups	1456.902	18	80.939		
Total	1465.750	19			

T-Test

Group Statistics

	groups	N	Mean	Std. Deviation	Std. Error Mean
POSTTES_SCORES	Time out (Exp1)	20	32.7500	6.93485	1.55068
	Control	20	56.2500	8.78321	1.96398

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
POSTTES_SCORES	Equal variances assumed	1.811	.186	-9.391	38	.000	-23.50000	2.50237	-28.56578	-18.43422
	Equal variances not assumed			-9.391	36.059	.000	-23.50000	2.50237	-28.57475	-18.42525

T-Test

Group Statistics

	Groups	N	Mean	Std. Deviation	Std. Error Mean
POSTTES_SCORES	Modeling (Exp2)	20	34.8000	6.57427	1.47005
	Control	20	56.2500	8.78321	1.96398

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
POSTTES_SCORES	Equal variances assumed	.560	.459	-8.744	38	.000	-21.45000	2.45322	-26.41628	-16.48372
	Equal variances not assumed			-8.744	35.204	.000	-21.45000	2.45322	-26.42927	-16.47073

Frequencies

Statistics

		groups	class	sex	AGE GROUP
N	Valid	60	60	60	60
	Missing	0	0	0	0

FREQUENCIES VARIABLES=groups class sex AGESS
/ORDER=ANALYSIS.

Frequencies

Statistics

		groups	class	sex	AGE GROUPINGS
N	Valid	60	60	60	60
	Missing	0	0	0	0

Frequency Table

groups

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Time out (Exp1)	20	33.3	33.3	33.3
	Modeling (Exp2)	20	33.3	33.3	66.7
	control	20	33.3	33.3	100.0
	Total	60	100.0	100.0	

class

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SS2	60	100.0	100.0	100.0

sex

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	33	55.0	55.0	55.0
	FEMALE	27	45.0	45.0	100.0
	Total	60	100.0	100.0	

AGE GROUPINGS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	14 AND 15 YRS	13	21.7	21.7	21.7
	16-17 YRS	34	56.7	56.7	78.3
	ABOVE 17 YRS	13	21.7	21.7	100.0
	Total	60	100.0	100.0	