

**EFFICACY OF COGNITIVE RESTRUCTURING AND  
BEHAVIOURAL REHEARSAL ON CONDUCT DISORDER  
IN ADOLESCENTS IN SPECIAL CORRECTIONAL  
CENTRES IN LAGOS STATE**

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**A THESIS SUBMITTED TO THE DEPARTMENT OF  
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THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF  
DOCTOR OF PHILOSOPHY IN COUNSELLING**

## CERTIFICATION

This is to certify that this research was carried out by ADEUSI, Sussan Olufunmilola and has been read and approved as meeting the requirements of the Department of Psychology, Covenant University, Canaanland, Ota.

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## **DEDICATION**

This thesis is dedicated to God Almighty that delivered me from the valley of the shadow of stagnation and hopelessness. Indeed God does not store prayers, He answers prayers. Thank You Jesus.

This thesis is also dedicated to my late father, Pa Sunday Olushola Oloruntoba Wayas. I celebrate you even in death.

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## ABSTRACT

The work efficacy of Cognitive Restructuring and Behavioural Rehearsal on Conduct Disorder in Adolescents in Special Correctional Centres in Lagos State is concerned with adolescence which is the third phase of human development. This is characterized by stress and storm. Unresolved identity crisis coupled with some factors such as parenting styles, socio-economic status, religion, and peer pressure lead to conduct disorder. The rate of conduct disorder in adolescents is on the increase in the form of truancy, deceitfulness, theft, rule violations, rape, aggression or threats to others. These are becoming rampant and if nothing is done, there would be difficulty in having a healthy future for both individuals and the nation at large. The study adopts an experimental research with 3 x 2 x 3 x 3 factorial design. The variables in the study include the independent variables, which consist of cognitive restructuring, behavioural rehearsal and control group. The intervening variables are gender, socio-economic status and parenting styles while the dependent variable is conduct disorder. A sample size of 90 adolescents is purposively selected. Participants are randomly assigned into experimental and control groups. The three instruments relevant to this study are: Conduct Disorder Scale, Socio-Economic Scale and Parenting Styles Scale. Eight research hypotheses are raised and tested at 0.05 level of significance. The procedure for data collection include the pre and post tests administered to the participants. Participants are exposed to intervention sessions twice a week for the period of eight weeks. Data collected from the study are analyzed using both the descriptive and inferential statistical methods. The study reveals the order of prominence of subscales of conduct disorder to be deceitfulness and or theft, aggression, hostility and rule violation. The prevalent paternal and maternal parenting styles that is prominent is the authoritative parenting style, the prevalent parental socio-economic status is the medium. A significant difference exists in the pre-test and post-test. The results from the tested hypotheses are: There is no significant difference in the order of prominence in conduct disorder of the followings: prevalence of paternal and maternal parenting styles, cognitive restructuring and behavioural rehearsal and cognitive restructuring and behavioural rehearsal on the basis of gender and parental SES. Others include parenting styles, age, educational level, and length of stay at the correctional centres. There is a significant difference in the followings: degree of severity of conduct disorder before and after treatment, treatment of conduct disorder of participants in the two experimental groups when compared with the control group and cognitive restructuring and behavioural rehearsal on the basis of religion. Recommendations are proffered in the study.

*Keywords:* Cognitive Restructuring, Behavioural Rehearsal, Conduct Disorder, Adolescent, Parenting Style, Socio-Economic Status.

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background to the Study

Conduct disorder is a serious behavioural and emotional disorder that can occur in adolescents. Adolescents with this disorder may display a pattern of disruptive and violent behaviour and have problems following rules (Hinshaw & Lee, 2003). It is not uncommon for adolescents to have behaviour-related problems at some time during their development. However, the behaviour is considered to be a conduct disorder when it is long-lasting and when it violates the rights of others, when it goes against accepted norms of behaviour and disrupts the child's or family's everyday life (Hinshaw & Lee, 2003; Goldberg, 2012).

The word “adolescence” comes from a Latin word “adolescere” which means to grow or to grow to maturity (Oladele, 1994; Martins, Carlson & Buskist, 2007). Psychologists have given different definitions of adolescence. Some define it as the transitional period of life between childhood and adulthood; while at other times it is called the period of teenage which is marked by changes in the body, mind and social relationships. This means that the transition is as much social as it is biological. Adolescence is the time between the beginning of sexual maturation (puberty) and adulthood. It is a time of psychological maturation during which a person becomes "adult-like" in behaviour. According to Sacks (2003), adolescence begins with the onset of physiologically normal puberty and ends when an adult identity and behaviour are accepted. This period of development corresponds roughly to the period between the ages of 10 and 19, which is consistent with the World Health Organization’s definition of adolescence (WHO, 2013). Martins, Carlson & Buskist (2007) opine that adolescence starts from teen age and ends in the early twenties, while Gutgesell & Payne (2004) describe adolescence as a prolonged developmental stage that lasts approximately ten (10) years, nominally described as between the ages of eleven (11) and twenty-one (21). It is also noted that an adolescent progresses through stages of biological development as well as changes in psychological and social functioning. Developing proper emotions and controlling them is very essential



during adolescence. Meeting social demands as well as eliminating the damaging effects of the emotions on attitudes, habits, behaviour and physical well-being, as well as control of emotions, is essential. Control does not mean repression but learning to approach a social situation with a rational attitude and repression of those emotions which are socially unacceptable.

When an individual reaches adolescence, he/she knows what type of behaviour is expected of him or her and which behaviours are unacceptable. Adolescents however misbehave from time to time for a variety of reasons. Perhaps, they feel that they need to assert their own independence or they wish to test the limits imposed on them. Sometimes, adolescents misbehave because they are experiencing internal distress, anger, frustration, disappointment, anxiety, or hopelessness. There are also those whose behaviour is consistently of concern to others. In such cases, the adolescents' behaviour is clearly outside the range of what is considered normal or acceptable. Perhaps, most alarming is that many of them show little remorse, guilt, or understanding of the damage and pain inflicted on people by their behaviour (Pruitt, 2000).

The future of any nation is largely determined by the well-being of adolescents. Dealing with adolescents has always been a challenge for both parents and helping professionals. Behavioural disorders typically develop in childhood and adolescence. While some behavioural issues may be normal, those who have behavioural disorders develop chronic patterns of aggression, defiance, open refusal to laws or regulations, disruption and hostility. Adolescents' behaviours can cause problems at home or school and can interfere with relationships. Adolescents with behavioural disorders may develop personality disorders, depression, or bipolar disorder as adults (Richard-Harrington, 2008).

According to Hinshaw & Lee (2003), Henderson (2009), American Academy of Child and Adolescent Psychiatry (2010) and Passamonti, Fairchild, Goodyer, Hurford, Hagan, Rowe & Calder (2010), the specific cause of behavioural disorder such as conduct disorder is not known but a number of factors such as genetic or biological factors, family, parental, child abuse, peer pressure, socio-economic status, lack of

supervision, inconsistent discipline and environmental factors may contribute to its development.

- Genetic factors- Human development is shaped by a continuous interaction between biology and experience. Every child is born with powerful inborn tendencies, and these tendencies can work both for and against the child. When a child is born with a genetically predisposed tendency toward mental health problems, the environment becomes critically important to support and guide the child in a positive and healthy direction. This can add stress to the already difficult job of parenting (Gelhorn, Stallings, Young, Corley, Rhee & Hewitt, 2005).
- Family factors - Antisocial behaviour suggestive of conduct disorder is generally, mostly associated with single parent status (absentee father or mother), absence of parental figure, parental divorce, parental rejection of child, inconsistent management including harsh discipline, large family size, young age of mothers, parent with antisocial personality and alcohol dependence (Hinshaw & Lee, 2003).
- Parental factors (marital conflict, parental mental illness, poor communication between parent and child, poor parenting skills).
- Child abuse - Obinaju (2004) describes child abuse as any act which would amount to making a wrong and excessive use of the child, an act which excludes sympathy and humaneness from the treatment which the child receives and an act which would amount to an insult on the child. Also, Axmaker (2004) states that child abuse is any mistreatment or neglect of a child in non-accidental harm or injury and which cannot be reasonably explained. Child abuse can be verbal, physical, emotional, sexual and psychological. Abused adolescents can exhibit some behavioural disorders such as aggression, truancy, and infidelity among others.
- Peer Pressure – Encarta (2009) defines peer pressure as a social pressure on somebody to adopt a type of behaviour, values, or attitude in order to be accepted as part of a group. Peer pressure can either be positive (good) or negative (bad). Negative peer pressure is when an adolescent is coerced to do what is wrong.

Persistent pattern of wrong act such as theft, truancy, hostility and the like are referred to as behaviour disorder.

- Socio-economic status- Low socioeconomic status of parent, that is evident on the adolescents, thereby leading to not being accepted by their peers may appear to be some risk factors for the development of behaviour disorder in the latter.
- Lack of supervision – Adolescents tends to misbehave grossly in the absence of supervision from either maternal, paternal or care giver figures. Simply, lack of supervision is when adolescents are free to do anything they want either at home or in school.
- Inconsistent discipline – It is important that parents be consistent with whatever disciplining method is in use (or chosen) in the home. This is in order to avoid getting the children confused about certain behaviours and consequences. Parents or caregivers with contradictory attitude towards children’s misbehaviours tend to confuse the latter on what is good or bad, acceptable or unacceptable to the society. Inconsistent discipline is simply punishing a particular behaviour at a time and refraining from punishing the same behaviour at other times.
- Environmental factors- The environment in which an adolescent is raised can contribute to the kind of behaviour such an adolescent will put up. For instance, the influences of parents, extended family, care giver and others with whom he or she has regular contact profoundly affect his or her emotional, cognitive and social development. Healthy environment will produce healthy adolescents while unhealthy environments will encourage or promote behavioural disorder.

Adolescents’ behavioural disorder may include: lying, smoking, use of alcohol and or drugs, involvement in early sexual activity, skipping school and having higher than average risk of suicide. Adolescents may also have other mental, emotional or behavioural disorders like attention-deficit hyperactivity disorder (ADHD), oppositional defiant disorder (ODD) among others (Hinshaw & Lee, 2003; American Academy of Child and Adolescent Psychiatry, 2010).

Conduct disorder as one of the major constructs in this study is a behavioural disorder characterised by a consistent pattern of harming others or their property, or breaking major accepted rules or standards of behaviour. Individuals must be developmentally able to understand and follow the standards of behaviour in order to be considered as having conduct disorder (Evans, 2012). According to APA (2000), conduct disorder is defined as a repetitive and persistent pattern of behaviour that violates the rights of others or in which major age-appropriate societal norms or rules are violated. The symptoms of the disorder fall into four main subscales or dimensions: aggression to people and animals, destruction of property, deceitfulness, and serious violation of rules (Frick & Nigg, 2012). Frick, Stickle, Dandreaux, Farrell & Kimonis (2005) are of the opinion that conduct disorder is an important psychiatric disorder for a number of reasons which are closely related to criminal and violent behaviour that is associated with problems in adjustment across the lifespan.

Adolescents with conduct disorder often view the world as a hostile and threatening place (Evans, 2012). Friends and family members become upset with their misbehaviour and become more irritated when they do not show remorse or guilt over their actions (Evans, 2012). Based on the mentioned causes of behavioural disorder, it is obvious that adolescents with behavioural disorders will not just hurt themselves but also hurt others. Parents, caregivers and society at large report cases of adolescent behaviour or conduct disorder to juvenile courts, remand or correctional homes or centres but these measures are not sufficient in correcting conduct disorder. Different psychological interventions like cognitive restructuring, behavioural rehearsal, token economy, thought-stopping, self management, reinforcement, punishment, modelling and family therapy are some of the measures put in place by professional counsellors and psychologists to treat or correct conduct disorder (Obalowo, 2004; Edelson, 2004; Aderanti & Hassan, 2011).

In this study, cognitive restructuring and behavioural rehearsal are the two treatment interventions used.

### **Cognitive restructuring**

Cognitive restructuring was originally developed by Albert Ellis (1989). It is a psychotherapeutic process of learning to identify and dispute irrational or maladaptive thoughts. There are many methods used in cognitive restructuring, which usually involve identifying and labelling distorted thoughts, socratic questioning, thought recording, identifying cognitive errors, examining the evidence (pro-con analysis or cost-benefit analysis), understanding idiosyncratic meaning/semantic techniques, reattribution, guided imagery and listing rational alternatives (Huppert, 2009). Thus, this study attempts to compare the efficacy of cognitive restructuring and behavioural rehearsal.

### **Behaviour rehearsal**

Dewey (2007) reported that Albert Bandura's *Principles of Behaviour Modification* of 1967 introduced the concepts of vicarious reinforcement, modelling, and behaviour rehearsal to behaviour therapists. Behaviour rehearsal is the acting out of behaviour to learn it and refine it as a skill. It involves clients rehearsing their social skills in the therapy session and eventually moving to real-life situations. For instance, role-playing, requires the client to imagine the stressful situation very vividly, but in addition to thinking about (and feeling) the stress, the client now engages in physical actions that practise what might be done to reduce tension. In role-playing contexts, filmed simulations are sometimes used with discussions of what is happening. Behavioural rehearsal is accompanied by vicarious modelling, that is, observing holistically what a model does in a similarly stressful situation and noticing what happens to that model (Bandura, 1986). Also, at other times, the client or the practitioner might take the role of the client in acting out the scene. Other variations include members of the group taking turns to act out one or more roles and providing feedback and support for the other actors (Schinke, Gilchrist, Smith, & Wong, 1979).

### **Special Correctional Centres**

Special Correctional Centres were formerly known as remand homes. Collins English Dictionary (2009) defines a remand home as an institution where juvenile offenders

between ages 8 and 16 are sent or committed for detention. The term “remand” is derived from the Latin word “*remandare*” which means, “to commit again” or “to send back” especially into custody, which implies sending back to jail or “to be remanded”. In other words, remand home implies the placing of someone charged with a crime on bail or in jail.

There are two special correctional centres in Lagos State namely Special Correctional Centre for Boys located at Oregun and Special Correctional Centre for Girls located at Idi-Araba. The history of the Special Correctional Centres is as old as the history of social welfare in Nigeria. Social welfare activity came to being in 1942 under the Lagos colony and by 1945 the first Boys’ remand home (now Special Correctional Centre for Boys) was established. The remand home was upgraded to Special Correctional Centre so that the scope of work at this centre can be more encompassing. The emphases at the special correctional centres are to:

- i. re-educate and re-orientate the young adults in conflict with the law;
- ii. cater for children in conflict with the law;
- iii. cater for children in conflict with their parents;
- iv. prevent delinquency in children;
- v. assist children who are at risk or pre-delinquent (e.g. abused children, orphans, victims of child trafficking, victims of rape and defilement, children picked up on the street engaged in child labour, begging, hawking among others).

At the special correctional centres, punishment is used as a behavioural modification technique (that is, a way to correct undesirable behaviours). Punishment technique is used when it becomes necessary to apply an aversion stimulus to correct undesirable behaviour. Punishment is usually unpleasant to offenders and it is in various shapes and shades. For instance, at the special correctional centres, washing of toilet, spanking (beating on buttocks), cutting grass and fetching water to the kitchen are examples of punishment given to wards. Spanking, which is a major corrective measure used at the centre is in line with the injunction which states that “withhold not correction from the child: for if thou beatest him with the rod, he shall not die” and “he that spareth his rod hateth his son: but he that loveth him chasteneth him betimes” (Proverbs 23 verse 13 and Proverbs 13 verse 24 respectively from the King James Version).

It is important to note that punishment alone is not a sufficient measure to correct wards with conduct disorder and this is what informed the application of the interventions used in this study.

## **1.2 Statement of the Problem**

Many rapid and turbulent changes in contemporary living have brought adolescents face to face with problems and decisions, and conditions over which adolescents and their parents have little or no control and which have made growing up today vastly different from that of ancient times. Oniyama & Oniyama (2001) reported that social, emotional and psychological problems plague the Nigerian adolescents due to neglect from parents or caregivers, coupled with the desire for independence by the adolescents which they hardly have access to. Inability of parents or caregivers to fit into the world of the adolescents gets the latter frustrated, unhappy and they eventually develop inappropriate behaviours which cause problems to themselves and the larger society. During childhood, children are dependent on their parents because of their lack of experience and submissive nature while parents protect and direct them, but when adolescence is reached, these roles change. Adolescents seek individuality, try to assert their independence while parents on the other hand resist the latter's autonomy. The struggle between parents and adolescents for these changes often leads to disobedience, arguments, conflicts and rebellion on the part of the adolescents especially when they are forcefully brought under adult control (Onuorah, 2001).

According to Agulanna (2012), Nigerian students with conduct disorder engage in deviant behaviours such as aggression, peer cruelty, fighting, bullying or threatening others, rioting, stealing, truancy, substance abuse, raping, smoking, lateness, violation of rules and regulations, vandalization of school properties, among other things. It was also reported that the prevalence of conduct disorder among Nigerian adolescents has increased in the last three years in terms of frequency of recorded delinquent crimes and the number of adolescents involved.

Adolescents with behavioural disorder not only affect themselves, their families and schools negatively but also the society at large. Increase in adolescents' behavioural disorder has led to a leap in chaos, disorderliness, destruction of lives and property, armed robbery, terrorist activities, kidnapping, oil bunkering, and many more evils. The Nigerian government established Remand Homes (now Special Correctional Centres), Approved Schools and Juvenile Courts to address these behavioural disorders in adolescents but mere admission of the latter is not sufficient to reduce or eradicate the conduct disorder. For adolescents with conduct disorder to be helped, there is, therefore, the need to expose them to counselling interventions in order for them to become responsible individuals to themselves and their parents, good students at school and worthy ambassadors of the nation as a whole. Various behavioural modification techniques like cognitive restructuring, self management and token economy among others have been used to treat rebelliousness, disorderliness, depression, anxiety, gambling, attention deficit hyperactivity disorder and other disruptive behaviours (Lam, Cole, Sharpiro & Bambara, 1994; Kanter, Schildcrout, & Kohlenberg, 2005; Chronis, Gamble, Roberts & Pelham, 2006; Pull, 2007; Jiméñez-Murcia, Ivarez-Moya, Granero, Aymami, Go´mez-Pen˜ a, & Jaurrieta, 2007; Aderanti & Hassan, 2011).

Nevertheless, this study sets out to examine the efficacy of cognitive restructuring and behavioural rehearsal in the treatment of conduct disorder (aggression, hostility, deceitfulness/theft and rule violation) among adolescents in two Special Correctional Centres in Lagos State.

### **1.3 Objectives of the Study**

#### **1.3.1 General Objective**

The study mainly sought to examine the efficacy of cognitive restructuring and behavioural rehearsal in the treatment of adolescent conduct disorder.



### **1.3.2 Specific Objectives:**

Specifically, the study sought to:

1. compare the significant difference between participants in experimental groups (cognitive restructuring and behavioural rehearsal) and control group.
2. compare the significant difference between participants exposed to cognitive restructuring and behavioural rehearsal.
3. determine the extent to which the four subsets of conduct disorder (aggressive conduct, hostility, deceitfulness/theft and violation of rules) are prominent among adolescents in Special Correctional Centres.
4. investigate the impact of gender, parenting style and parental socio-economic status on conduct disorder adolescents.
5. explore the impact of age, religious affiliations, length of stay in the Correctional Centre and educational qualification on adolescents' conduct disorder.
6. contribute to existing knowledge by expanding our knowledge base on conduct disorder among adolescents in Special Correctional Centres in Lagos State.

### **1.4 Research Questions**

In the light of the above, the following research questions were raised:

1. What is the order of prominence in conduct disorder (Aggressive conduct, Hostility, Deceitfulness/Theft and Violation of rules) among adolescents in the Special Correctional Centres?
2. What is the prevalent paternal and maternal parenting style experienced by adolescents with conduct disorder?
3. Is there any significant difference in adolescents' conduct disorder based on parental socio-economic status?
4. Is there any difference in the degree of severity of conduct disorder before and after treatment among participants?

5. Will cognitive restructuring and behavioural rehearsal be effective as treatment methods of conduct disorder in adolescents?
6. Is cognitive restructuring more effective than behavioural rehearsal in the treatment of conduct disorder among adolescents?
7. Will gender, parental socio-economic status and parenting style affect the effectiveness of cognitive restructuring and behavioural rehearsal in the treatment of adolescent conduct disorder?
8. Will age, religion, educational qualification and length of stay in the correctional centre affect the effect of cognitive restructuring and behavioural rehearsal on conduct disorder of adolescents?

### **1.5 Research Hypotheses**

The research hypotheses stated in null form tested in this study were:

**Hypothesis one:** There is no significant difference in the order of prominence in conduct disorder (Aggressive conduct, Hostility, Deceitfulness/Theft and Violation of rules) among adolescents in the Special Correctional Centres.

**Hypothesis two:** There is no significant difference in the prevalence of paternal and maternal parenting styles experienced by adolescents with conduct disorder.

**Hypothesis three:** There is no significant difference in parental socio-economic status of the adolescents' conduct disorder.

**Hypothesis four:** There is no significant difference in the degree of severity of conduct disorder before and after treatment among participants.

**Hypothesis five:** There is no significant difference in the treatment of conduct disorder of the participants exposed to cognitive restructuring and behavioural rehearsal when compared with participants in the control groups.

**Hypothesis six:** There is no significant difference in conduct disorder of participants exposed to cognitive restructuring and behavioural rehearsal.

**Hypothesis seven:** There is no significant difference in conduct disorder of the participants exposed to the cognitive restructuring and behavioural rehearsal on the basis of gender, parental socio-economic status, and parenting styles.

**Hypothesis eight:** There is no significant effect of cognitive restructuring and behavioural rehearsal on conduct disorder of the participants based on age, religious affiliations, educational qualification and length of stay in the correctional centre.

## **1.6 Significance of the Study**

The knowledge and research on conduct disorder can serve as a useful tool to clinicians, teachers, and the community in that it will enable them to understand the origin and spread of conduct disorder in order to provide preventions, interventions and treatment programmes. This study will benefit practising and upcoming counselling professionals (counsellors) in the following ways:

For best practices, counsellors through this study will be more enlightened on the most effective intervention for treating conduct disorder. For instance, if behavioural rehearsal is the most effective, it will assist counsellors to use the intervention on any of their clients exhibiting conduct disorder. Professional counsellors, psychologists, parents and people in other related fields will also be enlightened on the likely factors that can cause conduct disorder in human beings especially in adolescents and proffer solutions to combat behavioural disorder for the nation at large to have glorious future leaders. The findings from this study are expected to enable counsellors to help adolescents to build their self esteem, teach them new skills and healthy ways to behave.

With the findings from of this study, counsellors can develop preventive measures for parents or caregivers on how to reduce and probably eradicate conduct disorder among adolescents in our communities. Through counselling, campaigns, seminars, presentations and workshops, counsellors can expose the dangers of conduct disorder to the general public, encourage caregivers and parents to adopt good rearing styles, serve as good models, establish a good rapport with their children most especially as

they approach the stage of stress and storm (adolescence), and promptly check any maladaptive behaviour shown by their children.

Teachers in various educational levels will also benefit from this study. It will enhance their understanding on how to inculcate discipline in the students, serve as model, and report case(s) of aggression, truancy, violation of rules, disturbances of affect, and significant distress which are pointers to conduct disorder. Social workers can also leverage on the findings of the study by offering qualitative help to individuals, parents and family members that come for assistance.

Government at various levels will also benefit from this study because it will enable her to promulgate laws that will promote good conduct in the society, provide necessary facilities or amenities for the people and put necessary sanctions in place when laws are disobeyed.

The study impacted the participants particularly those in the two experimental groups (cognitive restructuring and behavioural rehearsal) to understand their behavioural disorders and consciously reconstruct their thinking pattern and also rehearse good behavioural pattern to correct their conduct disorder which will enable them to be useful to themselves, their families and the society thereby reducing the rate of atrocities committed in the society. The study is also significant for future participants with conduct disorder that will be exposed to the intervention techniques.

In summary, this study will serve as a valuable source of information to various personnel in different institutions that are dealing with children and adolescents. A reduction if not total eradication of conduct disorder among our youths would lead to sanity, improve the economy as little will be spent on correctional centres, increase the security level in our society, and relatively restore peace and orderliness.

## **1.7 Scope of the Study**

This study was limited to adolescents in two special correctional centres in Lagos State (Special Correctional Centre for Boys situated at Oregun and Special Correctional Centre for Girls at Idi-Araba). The study covered male and female

adolescents of different ages, educational levels and length of stay (duration) in the special correctional centres.

## **1.8 Operational Definition of Terms**

In this study, the following terms were operationally defined as follows:

**Adolescents:** These are individuals that have reached the puberty stage but are not yet adults. The terms "adolescents," "juvenile," "youth," "young adults" and "young people" are used interchangeably.

**Behavioural Disorder:** This is an unruly or anti-social behaviour that does not align with the societal norm (examples are: conduct disorder, oppositional defiant disorder, attention deficit hyperactivity disorder).

**Behavioural Rehearsal:** This is the act of trying out new behavioural patterns (performing target behaviours) that are to be used in everyday situations. It is also known as role-playing.

**Cognitive Restructuring:** Cognitive restructuring is a set of techniques for becoming more aware of our thoughts and for modifying them when they are distorted or are not useful. It uses reason and evidence to replace distorted thought patterns with more accurate, believable, and functional ones.

**Conduct Disorder:** This is a long-term, recurrent pattern of behaviours that violates the basic rights of others or major age-appropriate societal rules and norms. Terms such as disorderliness, rebelliousness and deceitfulness are strongly related to conduct disorder.

**Good Conduct:** Good behavioural pattern that conform to the societal norm.

**Inmates:** These are individuals found in the Special Correctional Centres. In order to avoid stigmatization, this term is no longer used for adolescents in Special Correctional Centres.

**Intervention:** This is a deliberate measure or act of influencing another person's affair positively to prevent undesirable consequences. Interventions in this study are Cognitive Restructuring and Behavioural Rehearsal.

**Parenting Styles:** These are ways parent bring up or raise their children. It can also be referred to as child rearing style.

**Socio-Economic Status:** This is the child's parent's financial and social status. It is simply measured by the child's parent's occupation, standard of living, income and social class.

**Special Correctional Centres:** These are institutions in which young deviants or delinquents are kept for the purpose of remoulding their lives.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

For a research work to be reliable and be of good quality it must be rooted in the past efforts and findings in the relevant areas by scholars. In this chapter, the review of relevant literatures are discussed under these broad headings: Conceptual framework, Theoretical framework and Empirical framework. The areas of discussion will be: adolescence, behavioural disorder, conduct disorder, cognitive restructuring, behavioural rehearsal, socio-economic status and parenting style.

#### **2.2 Conceptual Framework**

##### **2.2.1 Concept of Adolescence**

The origin of the word adolescence is from the Latin verb 'adolescere', which means, "to grow up." It can be defined as the transitional stage of development between childhood and full adulthood, representing the period of time during which a person is biologically adult but emotionally not at full maturity. It represents the period of time during which a juvenile matures into adulthood (Ogunlade & Olasehinde, 1995; Gesinde, 2001; Merriam-Webster Learners Dictionary, 2012).

Mosby's Dental Dictionary (2008) defines adolescence as the period of development between the onset of puberty and adulthood. This period is generally marked by the appearance of secondary sex characteristics, usually from 11 to 13 years of age, and spans the teen years, terminating at 18 to 20 years of age with the completion of the development of the adult form. During this period, the individual undergoes extensive physical, psychological, emotional, and personality changes.

Kipke (1999), defines adolescence as the period of life ranging from ages 10-24, during which individuals make the developmental transition from childhood to adulthood. Adolescence is characterized by marked physical, emotional and intellectual changes, as well as changes in social roles, relationships and expectations,

all of which are important for the development of the individual and provide the foundation for functioning as an adult. The development of healthy adolescents is a complex and evolving process that requires: supportive and caring families, peers and communities; access to high quality services (health, education, social and other community services); and opportunities to engage and succeed in the developmental tasks of adolescence.

Scholars have different age range for adolescence. But most importantly, going through different definitions psychologists group this stage of development into three: early (11-14); middle (15-17); and late (18-21) Green & Palfrey (2000). The Center for Disease Control and Prevention, on the other hand, defines the age range for adolescents as 10-19 and refers to 20-24 year olds as young adults, but often group adolescents and young adults are grouped together. Steinberg (2011) affirms that a broad way of defining adolescence is the transition from child-to-adulthood which happens to vary drastically in time between cultures. In some countries, such as the United States, adolescence can last nearly a decade, but in other countries, the transition—often in the form of a ceremony—can last for only a few days.

Historical perspectives such as those offered by Kett (1977) and Hine (1999) stress the fact that adolescence as a developmental period has varied considerably from one historical era to another. Due to its ever-changing nature, it is impossible to generalize about issues such as the degree to which adolescence is stressful, the developmental tasks of the period, or the nature of intergenerational relationships. One group of theorists, referred to as inventionists, argue that adolescence is entirely a social invention, and that the way in which life cycle is divided into stages is nothing more than a reflection of the political, economic and social circumstances in which we live. According to this group, although puberty has been a feature of development for as long as humans have lived, it was not until the rise of obligatory education that we began treating adolescents as a distinct group (Bakan, 1972). Miller (2011), spoke about two cultures - the cultures of science and humanities, which state that most scientists know little about modern age. He also stated that in the past things were different.



According to Larson & Richards (1991), peer groups are especially important during adolescence. It is a period of development characterized by a dramatic increase in time spent with peers and a decrease in adult supervision (Brown, 1990; 2004). Adolescents associate with friends of the opposite sex much more than in childhood and tend to identify with larger groups of peers based on shared characteristics (Eder, 1985). Peer groups offer members the opportunity to develop various social skills, such as empathy, sharing and leadership. Peer groups can have positive influences on an individual, for instance on academic motivation and performance, but they can also have negative influences and lead to an increase in experimentation with drugs, drinking, vandalism, and stealing. Susceptibility to peer pressure increases during early adolescence, peaks around age 14, and declines thereafter (Steinberg & Monahan, 2007).

According to Maier (2012), adolescents experience physical, social, cognitive, moral, behavioural as well as personal and emotional development. The rate at which adolescents experience changes will vary depending on gender, genetics, environmental and health factors.

### **2.2.2 Physical Development in Adolescents**

Physical development/change is a primary characteristic of adolescents. Preteens will experience growth spurts, changes in skeletal structure, muscle and brain development, as well as sexual and hormonal development. Gender differences play a role in which these changes occur. For girls, physical changes begin to happen at about age 12, while boys typically begin to see changes at about age 14. Jenkins (2007) affirms that during adolescence, the changes that occur in girls are:

- Girls may begin to develop breast buds as early as 8 years old. Breasts develop fully between ages 12 and 18.
- Pubic hair, armpit and leg hair usually begin to grow at about age 9 or 10, and reach adult patterns at about 13 to 14 years.

- Menarche (the beginning of menstrual periods) typically occurs about 2 years after early breast and pubic hair appear. It may occur as early as age 10, or as late as age 15. The average age of menstruation is about 12.5 years.
- Girls have a rapid growth in height between ages 9.5 and 14.5, peaking at around age 12.

While changes in boys are:

- Boys may begin to notice that their testicles and scrotum grow as early as age 9. Soon, the penis begins to lengthen. By age 16 or 17, their genitals are usually at their adult size and shape.
- Pubic hair growth - as well as armpit, leg, chest, and facial hair -- begins in boys at about age 12, and reaches adult patterns at about 15 to 16 years.
- Boys do not start puberty with a sudden incident, like the beginning of menstrual periods in girls. Having regular nocturnal emissions (wet dreams) marks the beginning of puberty in boys. Wet dreams typically start between ages 13 and 17, with the average at about 14.5 years.
- Boys' voices change at the same time as the penis grows. Nocturnal emissions occur with the peak of the height spurt.

### **2.2.3 Social Development in Adolescents**

Socialization is another characteristic of adolescents, as they begin to socialize more with their peers and separate themselves from their family. During childhood, children have a loyalty to their adult role models, such as parents or teachers. However, during adolescence, this loyalty shifts, making them more loyal to their friends and peers. For adolescents, self-esteem is largely dependent on their social lives. Girls tend to stick to small groups of close friends, while boys build larger social networks. Adolescents are highly aware of others and how they are perceived during this stage (Martins, Carlson & Buskist, 2007; Maier, 2012).

#### **2.2.4 Cognitive Development in Adolescents**

Changes in cognitive processes are characteristic during adolescence. Individuals at this stage experience more thinking, reasoning and abstract thoughts. Adolescents develop more advanced language skills and verbalization, allowing for more advanced communication. Abstract thought allows adolescents to develop a sense of purpose, fairness and social consciousness. Adolescents also decide how moral and ethical choices will guide their behaviours during this time. Cognitive processes are affected by overall socialization, meaning that adolescents will develop differently during this stage based on the individual factors (Woolfolk, 2010; Maier, 2012).

#### **2.2.5 Personal and Emotional Development in Adolescents**

Adolescence is a time when emotions begin to run high (Maier, 2012). Parents or care givers may begin to notice argumentative and aggressive behaviours due to sudden and intense emotions. Adolescents are also characteristically self-absorbed. They are preoccupied with themselves because they are beginning to develop a sense of self, but they are also scrutinizing their own thought processes and personalities. Possibilities begin to look endless during adolescence leading some in their teens to become overly idealistic. They further believe that their thoughts and feelings are unique, doubting that others could possibly understand what they are experiencing.

#### **2.2.6 Moral Development in Adolescents**

Gabel (2012) states the following as features of moral development of an adolescent:

- Often shows compassion for those who are downtrodden or suffering and have a special concern for animals and environmental problems.
- Are moving from acceptance of adult moral judgments to development of their own personal values. (Nevertheless, they tend to embrace values consistent with those of their parents).
- Are capable of and value direct experience in participatory democracy.

- Are greatly influenced by adult role models who will listen to them and affirm their moral consciousness and actions as being trustworthy role models.
- Are increasingly aware of and concerned about inconsistencies between values exhibited by adults and the conditions they see in society.

### **2.2.7 Behaviour Development in Adolescents**

Encarta Dictionary (2009) defines behaviour as the way in which a person, organism, or group responds to a specific set of conditions. Persons react to various stimuli or inputs, whether internal or external, conscious or subconscious, overt or covert, and voluntary or involuntary. Guez & Allen (2000) defines behaviour as a way an individual behaves or acts that is, the way an individual conducts himself or herself. Human behaviour can be common, unusual, acceptable, or unacceptable. Humans evaluate the acceptability of behaviour using social norms and regulate behaviour by means of social control. The sudden and rapid physical changes that adolescents experience make them very self-conscious, sensitive, and invariably affect their behaviour.

Stevenson & Larson (1996) and Kilmartin (1994) are of the view that some behaviour exhibited by adolescents is typical, but when not “normal” or socially unacceptable it serves as a warning sign for more serious or future problems. Typical behaviour of adolescents are: more attachment to their friends and preference for spending quality time with them, going against parental decisions when contrary to those of their friends. They see denial of their desires as challenging their rights and good choices. Behaviours that are not normal in adolescents include:

- Stealing: take something unlawfully or to take something that belongs to somebody else, illegally or without the owner's permission.
- Staying out all night.
- Open defiance and/or refusal to follow rules
- Hanging out with a dangerous crowd or peer.
- Coming home drunk or high.
- Getting arrested.

- Anxiety or sadness that never seems to go away.
- Being physically abusive to others or destructive in the house.
- Being verbally abusive, intimidating or threatening.
- Obsessing about weight and/or dramatic changes in eating habits.
- Constant need to argue, even over small things.
- Passing the blame for everything – never taking any responsibility for their actions etcetera.

Increased persistence in behaviours that are not normal in adolescents is simply referred to as behavioural disorder.

### **2.2.8 Concept of Behavioural Disorder**

Behavioural disorders or BD are conditions that are more than just disruptive behaviour (Akpan, Ojinnaka, & Ekanem, 2012; Melissia, 2013). They are related to mental health problems that lead to disruptive behaviour, emotional and social problems. Conduct Disorder (CD) and Attention Deficit Disorder (ADD) are examples of behaviour disorder. Persons with behaviour disorders typically need a variety of professional interventions including medication, psychological treatment, rehabilitation, or possibly other treatments.

Behavioural disorders typically develop in childhood or adolescence stage of life. Behaviour disorder is a term frequently used interchangeably with emotionally disturbed or socially maladjusted. Behavioural disorders develop chronic patterns of aggression, defiance, disruption and hostility. These behaviours cause problems at home, school or work, and can interfere with relationships. Better Medicine (2012) reported that adolescents with behavioural disorders may develop personality disorders, depression, or bipolar disorder as adults. Also, adolescents with behavioural disorders may throw frequent and extended tantrums, hurt themselves or others, get involved in criminal activities, lie, smoke, use alcohol or drugs, be openly defiant, or engage in early sexual activity. They may skip or fail school. They also have a higher than average risk of suicide. The specific cause of behavioural disorders is not known,

but a number of factors may contribute to their development. Genetics may play a role, as behavioural disorders are more common in adolescents who have a family history of mental illness or substance abuse, exposure to tobacco or illicit drugs during fetal development. Environmental factors such as unstable home life, child abuse, lack of supervision, and inconsistent/harsh discipline, difficulty in interpreting the actions or intent of others, stressful home and school environment, poor social skills, all seem to increase the risk of children developing behavioural disorders (Glover, Burns, Butler, & Patton, 1998; Bond, Butler, Thomas, Carlin, Glover, Bowes & Patton, 2007).

According to Better Medicine (2012), behavioural disorders can be life threatening. The life-threatening symptoms include:

- Alcohol poisoning symptoms, such as slow breathing, not breathing, slow heart rate, persistent vomiting, cold and clammy skin, bluish coloration of the lips or fingernails, seizures, confusion or loss of consciousness for even a moment.
- Being a danger to oneself or others, including threatening, irrational or suicidal behaviour.
- Drug overdose symptoms, such as rapid or slow pulse or breathing, chest pain or pressure, not breathing, shortness of breath, abdominal pain, vomiting, diarrhea, cool and clammy skin, hot skin, sleepiness, confusion or loss of consciousness for even a moment.
- Trauma, such as bone deformity, burns, eye injuries, and other injuries.

Adolescents with behavioural disorders may have other mental, emotional or behavioural disorders, such as Conduct Disorder (CD) and Attention-Deficit Hyperactivity Disorder (ADHD) (Hinshaw & Lee, 2003; Waston, 2012).

### **2.2.9 Concept of Conduct Disorder (CD)**

Conduct Disorder (CD) is a disruptive type of behavioural disorder in which a child routinely violates the personal rights of others and shows no care for others' property (Barclay & Hoffman, 1990; Clarizo, 1997; American Psychiatric Association, 2000;

Dodge, 2000; PubMed Health, 2011). Baker & Scarth (2002), define conduct disorder as a persistent pattern of antisocial behaviour in which the rights of others are violated or in which major social rules are broken. According to Young (1999), the term antisocial as it is used in psychiatry and psychology means behaviours that violate social norms and are harmful to other persons or to society. Antisocial behaviours fall roughly into two broad categories: behaviours that are overtly harmful to others e.g. violence, theft and behaviour that are harmful to others or to society through neglect or irresponsibility.

Conduct disorder is a common childhood psychiatric problem that has increased incidence in adolescence. It is more often diagnosed in boys than girls and affects approximately five percent of the population under 15 years of age in the United Kingdom. Conduct disorder is frequently associated with adverse psychosocial environments, including unsatisfactory family relationships (family conflict), poverty, drug addiction and alcoholism in parents and failure at school. Its distinction from emotional disorder is well validated, while its separation from hyperactivity is less clear and there is often overlap (Streuning, 1993; PubMed Health, 2011).

For a diagnosis of conduct disorder to be confirmed, a variety of signs and symptoms must be observed. At least one of these must be prevalent for a period of at least six months (American Psychiatric Association, 2000).

### ***Common behaviours associated with conduct disorder***

Common behaviours associated with conduct disorder include:

- Aggression to people and animals: often bullies, threatens, or intimidates others, often initiates physical fights, has used a weapon that can cause serious physical harm to others (e.g., a bat, brick, broken bottle, knife gun), has been physically cruel to people, has been physically cruel to animals, has stolen while confronting a victim (e.g., mugging, purse snatching, extortion, armed robbery), has forced someone into sexual activity (Baker & Scarth, 2002).

- Vandalism and or Destruction of property: has deliberately engaged in fire setting with the intention of causing serious damage, has deliberately destroyed others' property (vandalism).
- Deceitfulness or theft: has broken into someone else's house, building or car, often lies to obtain goods or favours or to avoid obligations (i.e., "cons" others), has stolen items of nontrivial value without confronting a victim (e.g., shoplifting, but without, breaking and entering; forgery)
- Serious violation of rules: often stays out at night despite parental prohibitions, beginning before age 13 years, has run away from home overnight at least twice while living in parental or parental surrogate, home (or once without returning for a lengthy period), is often truant from school, beginning before age 13.

***a. Aggression as subset of conduct disorder***

The term aggression comes from the Latin word *aggressio*, meaning attack. In psychology, the term aggression refers to a range of behaviours that can result in both physical and psychological harm to oneself, others or objects in the environment (Kendra, 2013). According to Wikipedia (2013), aggression, in its broadest sense, is behaviour, or a disposition, that is forceful, hostile or attacking. Aggression can also be defined as the physical or verbal behaviour intended to harm. Aggression may occur either in retaliation or without provocation that is either directed outwardly towards another person or directed inwardly by self mutilation. Social science and behavioural science define aggression as an intention to cause harm or an act intended to increase relative social dominance. The classification of and dimensions of aggression depends on whether the aggression is verbal or physical, mental or emotional. The types of aggressive behaviours include name calling, gossiping, mockery, shouting, swearing, abusive phone calls, racial or sexual comments, harassment, emotional abuse, hitting, kicking, threatening gestures and so forth. Aggression can serve different purposes such as: to express anger and hostility, to assert dominance, to intimidate or threaten, to achieve a goal, to express possession, a response to fear, a reaction to pain, and to compete with others (Kendra, 2013).



Aggression varies in individuals, but can be identified with physical or emotional reactions such as sweating, rapid heartbeat, rapid breathing, clenched fists, clenched teeth and jaw, frustration, restlessness and anxiety.

The causes of aggression are so numerous. Some scholars believe that behaviours like aggression may be partially learned by watching and imitating the behaviour of others. Alao (1982) and Akert, Aronson & Wilson (2005) concluded that mass media have some effects on aggression. The cause of aggression can also be broken down into several groups: mood issues, psychotic illnesses, problem with cognition (for instance mental retardation and autism), disruptive behaviour (ADHD), organic reasons (frontal lobe damage) or certain type of epilepsy, stressors in their situation. Furthermore, potential causes of human aggression are broken homes, racism, poverty, chemical imbalances in the brain, sexual repression and frustration (Schechter, Gross, Willheim, McCaw, Turner, Myers, Zeanah & Gleason, 2009).

Malcolm Tatum (2013), describe the causes of aggression as follows:

- Medication: Sudden changes in behaviour are sometimes attributable to medication. Both prescription and over-the-counter medications can cause a normally balanced personality to suddenly become both aggressive and somewhat combative. This is especially true with medications that are used to treat depression, schizophrenia, or other types of psychological issues. Some anti-seizure medications may also trigger a sudden increase in aggression.
- Presence of some type of disease or brain disorder: Aggressive behaviour can also stem from the presence of some type of disease or brain disorder. People with autism or some form of mental retardation may exhibit this behaviour in spurts, while appearing docile in between explosions of anger. Also, people suffering with epilepsy are also more likely to become aggressive. When the individual suffers with Attention Deficit/Hyperactivity Disorder (ADHD), the behaviour may develop out of sheer frustration, especially if the ADHD has not been diagnosed and the individual has no idea why these sudden moods of aggressive conduct occur.
- Aggression can also occur when an individual is recovering from some type of addiction. For example, people who stop using tobacco products often feel

agitated and may exhibit short tempers, impatience, and other manifestations of aggressive behavior as the body goes through withdrawal. When recovery from addiction is the root cause for these tendencies, using some type of medication to calm the body while it adjusts to the new set of circumstances will often soothe the tendency to engage in the negative behaviour and allow the individual to begin enjoying life once more.

- Injuries to the brain can also lead to the development of aggression. Severe trauma on the head that causes the brain to bounce within the skull may lead to bruising that, in turn, affects the brain's production of different types of neurotransmitters. The end result is that the individual is overcome with intense feelings of anger and is likely to lash out at anyone within a relatively close vicinity. Often, the behavior will fade as the brain begins to heal, especially if medication is taken to help compensate for the imbalance of neurotransmitters.
- Emotional traumas can also lead to fits of anger. The death of a loved one, the loss of a job, or the diagnosis of a life-threatening illness can often create an emotional imbalance that is partly manifested by bouts of aggressive behavior. Therapy, along with medication, can often help move the healing process along, and help the individual recover from the trauma. As the healing progresses, the episodes will likely occur less frequently, while also becoming shorter and less intense.
- Jarret (2013) reported that "human aggression has been blamed on many things, including broken homes, poverty, racism, in-equality, chemical imbalances in the brain, toy guns, TV violence, sexual repression, sexual freedom, overpopulation, alienation, bad genes, and original sin. However, virtually all of these potential causes have one thing in common: Unfulfilled human needs and desire".
- Gender is a factor that plays a role in both human and animal aggression. Males are historically believed to be generally more physically aggressive than females from an early age (Maccoby, & Jacklin, 1974; Coie, & Dodge, 1997). There is evidence that males are quicker to aggression and more likely than females to express their aggression physically (Bjorkqvist, Lagerspetz,

Osterman, 1994). When considering indirect forms of non-violent aggression, such as relational aggression and social rejection, some scientists argue that females can be quite aggressive although this is rarely expressed physically (Archer, 2004; Card, Stucky, Sawalani & Little, 2008).

***b. Vandalism/Destruction of property as subset of conduct disorder***

The term vandalism or destruction of property is often used interchangeably. Vandalism is an act of hostility directed at a victim. The US Department of Justice defines vandalism as “willful or malicious destruction, injury, disfigurement, or defacement of any public or private property, real or personal, without the consent of the owner or persons having custody or control” (Middleearthnj, 2012). George (2013) defines vandalism as the intentional and malicious destruction of or damage to the property of another. Vandalism takes on many forms; it can include slashing someone’s tires, salting lawns, cutting trees without permission, egg throwing, spray painting on the side of commercial trucks or buses, as well as spraying graffiti on the walls or signs on a freeway. It can include smashing mail boxes, placing glue into locks, ransacking a property, flooding a house by clogging a sink and leaving the water running and breaking somebody’s car windows or throwing blocks through the windows of someone’s residence. The damage can be to both public and personal property. In many cases, vandalism is committed by minors, who are working in groups of two or more.

Vandalism is a common form of juvenile crime, with the peak period for committing property crimes ranging between the ages of fifteen and twenty-one. In the United States, adolescent vandalism, including destruction of school property, costs millions of dollars in damages each year. Vandalism is also a frequent gang-related crime. A significant amount of graffiti is the product of gangs, claiming their supposed “territory” and warning other gangs to stay away. Gang-related graffiti can be seen painted across signs, buildings, freeways, buses and other walls.

Cohen (1973) describes six different types of vandalism:

1. Acquisitive vandalism (looting and petty theft).

2. Tactical vandalism (to advance some end other than acquiring money or property – such as breaking a window to be arrested and get a bed for the night in a police cell).
3. Ideological vandalism (carried out to further an explicit ideological cause or deliver a message).
4. Vindictive vandalism (for revenge).
5. Play vandalism (damage resulting from children's games).
6. Malicious vandalism (damage caused by a violent outpouring of diffuse frustration and rage that often occurs in public settings).

Matthew (2004) corroborates that Cohen's original typology of vandalism was improved upon by Mike Sutton whose research led him to add a seventh sub-type of vandalism named Peer Status Motivated Vandalism (PSMV). PSMV is vandalism that is motivated by the desire to acquire or maintain peer status. This type of vandalism is more often committed in groups than alone.

The pain of vandalism is usually felt by everybody in the society. To repair or replace items or facilities destroyed cost something to individuals whose property got damaged or the society as the case may be. The resources that could have been used to buy or maintain other things are diverted because of vandalization. To reduce or eliminate the rate of vandalism all hands must be on deck. Parents, teachers and caregivers need to pay close attention on their adolescents, give quality guidance, keep them busy and encourage them to invest their energy in productive engagements. There is the need for government at all levels to make and enforce laws that will serve as a deterrent or restrain on vandalism in the society.

***c. Deceitfulness or Theft as subset of conduct disorder***

Deceitful means having a tendency or disposition to deceive while theft is the act of stealing. Merriam-Webster Dictionary (2013) defines theft as the felonious taking and removing of personal property with intent to deprive the rightful owner of it. Theft is synonymously used with larceny, stealing, and robbery. There cannot be a case of theft without an act of deceit; the two acts are strongly related. Kansas Statutes (2009)

described theft as any of the following acts done with intent to deprive the owner permanently of the possession, use or benefit of the owner's property:

- i. obtaining or exerting unauthorized control over property;
- ii. obtaining by deception control over property;
- iii. obtaining by threat control over property; or
- iv. obtaining control over stolen property knowing the property to have been stolen by another.

Deceitfulness/theft is a common anti-social behaviour in adolescents. Different factors such as discontentment, greed, poverty, lack of education, weak moral standard, bad models, peer influence, ineffective laws, weak security and psychological problems make up for an increase in the act of deceitfulness/theft. Reasons for adolescents' deceitfulness/theft include: the desire to belong, to avoid harassment, to avoid punishment, avoid doing a chores and so forth.

***d. Serious Violation of rules as subset of conduct disorder***

Violation is an act of disobedience. Violation of rule simply mean an act of disobeying principles governing conduct, that is an authoritative principle set forth to guide behaviour or action. APA (2000) describes serious rule violations to include:

- frequently staying out at night against parents' wishes beginning before age 13,
- running away from parents overnight twice or more or once if for an extended period and
- engaging in frequent truancy beginning before the age of 13.

Likely causes of serious rule violation include: dysfunctional family, poor parenting practices, coercion and hostile communication patterns in the family, history of maltreatment, peer pressure, wrong model(s), covetousness and passion for freedom.

Adolescents may also engage in behaviours harmful to themselves such as smoking and tobacco use, alcohol use, substance abuse and engaging in unprotected sexual activities. Persons with conduct disorder diagnosis may vary in symptoms and behaviours. Disturbance in behaviour always result in clinically significant impairment socially, academically or occupationally.

### **2.2.10 Types of conduct disorder**

There are two types of conduct disorders and the distinction between both is marked by age at onset of each disorder (APA, 1994; 2000; John, 2010).

Child-Onset Type CD is diagnosed when at least one sign or symptom is evident, for at least six months, prior to the age of 10. Persons with childhood-onset type are usually males, who frequently display physical aggression toward others, and or have disturbed peer relationships, and or may have had Oppositional Defiant Disorder (ODD) during early childhood. These usually have symptoms that meet full criteria for conduct disorder prior to puberty. Such individuals are more likely to have persistent conduct disorder and to develop adult antisocial personality disorder compared to those with adolescent-onset type.

Adolescent-Onset Type CD is diagnosed when at least one sign or symptom is evidence, for at least six months, after the age of 10 but no signs or symptoms were noticed prior to the age of 10 years. Individuals with adolescent-onset type of conduct disorder are less likely to display aggressive behaviours and tend to have more normative peer relationships compared with those with the childhood-onset type of conduct disorder. Individuals with adolescent-onset type of conduct disorder are less likely to have persistent conduct disorder or to develop adult antisocial personality disorder. The ratio of males to females with adolescent on-set conduct disorder is lower as discovered from studies (APA, 2000; John, 2010).

### **2.2.11 Severity of Conduct Disorder**

According to APA (2000), conduct disorder can be grouped according to the degree of severity. These degrees are mild, moderate and severe.

Mild: Children with mild conduct disorder will exhibit few symptoms and cause little harm to others. Examples of such are lying, truancy, or staying out after dark without permission;

Moderate: is between mild and severe. Children with moderate conduct disorder will exhibit multiple symptoms and cause some harm to others, examples being stealing without confronting the victim or vandalism.

Severe: Children with severe conduct disorder will exhibit many symptoms (more than three in the previous twelve months or more than one in the previous six months) and will cause much harm to others through their actions or the consequences of their actions (Streuning, 1993; Baker & Scarth, 2002; Meyer, 2004 and Nurcombe, 2008). Examples of severe conduct disorder are: forced sex, physical cruelty, use of weapon, stealing while confronting the victim, or breaking and entering a home or building.

### **2.2.12 Parenting Styles**

Davies (2000), defines parenting as the process of promoting and supporting the physical, emotional, social, and intellectual development of a child from infancy to adulthood. Parenting refers to the aspects of raising a child aside from the biological relationship. The term parenting is used interchangeably with child rearing. The basic styles of parenting are defined by the parents' levels of control over their children and responsiveness to their children. Parents can either have high or low levels of control and high or low levels of responsiveness. The style with which parents raise their children varies from family to family and from culture to culture. Baumrind (1971) identified three main parenting styles in early child development: authoritative, authoritarian, and permissive (Baumrind, 1978, 1991; McKay, 2006). Maccoby & Martin (1983), expanded the styles to four: authoritative, authoritarian, indulgent and

uninvolved (neglectful). These four styles of parenting involve combinations of acceptance and responsiveness on the one hand and demand and control on the other (Nwagwu & Awoyemi, 2004; Santrock, 2007).

***a. Authoritarian parenting style***

Parents who practise authoritarian style of parenting have high control but low responsiveness. They are often very strict and have high expectations for their child's behaviour. These type of parents value obedience and discipline and sometimes use punishment when their children do not do what is expected (Odebunmi, 2007, Barboza, Schiamberg, Oehmke, Korzeniewski, Post & Heraux, 2008; Fletcher, Walls, Cook, Madison & Bridges, 2008). They tend to raise children who are obedient and good students. However, the children of authoritarian parents tend to be anxious, unhappy and withdrawn, even at an early age, since they have very little say in what they want to happen in their lives. Fletcher, Walls, Cook, Madison & Bridges (2008), reported that the punishment aspect of this parenting style contribute to problems in school for the youth, as his or her behaviour are often deemed undesirable. This contributes to the youths conducting themselves in a deviant manner in the school as well as towards other persons.

***b. Authoritative parenting style***

Authoritative parenting is also known as balanced parenting. Here, parents practise both high control and high responsiveness. This is a parenting style that attempts to combine the best aspects of both authoritarian and permissive parenting. Authoritarian parents understand that their children need both discipline and choices. Authoritative parents generally have children who are confident and happy because they understand their limits and know that they are loved for who they are (Brown & Iyengar, 2008).



*c. Permissive parenting style*

People who practice permissive or indulgent parenting have low control and high responsiveness. They allow their children to be self-directed and to make many of their own choices at a young age. Permissive parents set very few limits on their children and generally do not give them any household responsibilities. These parents believe that they are encouraging their children to be free thinkers and to make their own decisions. The children of permissive parents are often rebellious, disobedient and easily discouraged and they also show undesirable behaviours, such as temper tantrums and disrespect for authority figures (Brown & Iyengar, 2008; Finkelhor, Ormrod, Turner & Holt, 2009).

*d. Uninvolved parenting style*

Uninvolved, or neglectful, parenting involves low levels of responsiveness and low levels of control. It is exactly what it sounds like. These are parents who do not set rules or limits with their children and are also not involved in their child's lives. In extreme situations, uninvolved parenting borders on actual neglect, where a child's physical and emotional needs are not met. Uninvolved parents do not participate with their children or take their needs into consideration. Children of uninvolved parents tend to be impulsive and anti-social since they do not know how to get their needs met. Barboza, Schiamberg, Oehmke, Korzeniewski, Post & Heraux, (2008) raised concern that there is often a large gap between parents and children with this parenting style. Children with little or no communication with parents tended more often to be victims of other children's deviant behaviours and involved in some deviance themselves.

Duer & Parke (1970) and Amajirianwu (1981) as cited in Awujo (2007) also support Baumrind's three specific styles of parenting (Authoritarian or Autocratic, Authoritative or Democratic, and permissive or laissez-faire). Irrespective of the terms used in illustrating each of the identified patterns, the characteristics and attributes associated with each group are been consistent. Parents who predominantly rely on the autocratic child rearing lay much emphasis on getting immediate and long-range obedience from their children. The relationship which exists between such parents and

their children is such that places value on controlling the child's behaviour (Baumrind, 1968). Authoritative parents on the other hand approach the act of child upbringing with some measures of flexibility. Children from such homes are allowed considerable freedom with their discipline, and control altered to meet their needs and not wishes.

Related to the authoritative type of parenting is the permissive. Parents in favour of this parental practice typically rely on reasoning and manipulation as against overt demonstration of power. Children are recognized as individuals and consequently the need for them to be encouraged to become independent come to play.

Udofia (2002) gave four types of parenting: Authoritarian, Authoritative, Permissive, and Family-society interaction. The first three are in support of Duer & Parke (1970); Baumrind (1971); and Amajirianwu (1981) while the Family-society interaction type (the fourth) is to make up for lack of specific skills that are not in parents or the family but are present in the society. It is important to recognize that agencies outside the home, no matter how carefully selected, will shape children differently than the parents would have done. Udofia (2002) opined that whether authoritarian, authoritative, permissive or family-society interaction; the parents have the role of being consistent in observing their children's behaviour in order to prevent them from going delinquent.

In sum, each parenting style has repercussions later in childhood, adolescence and even adulthood. Based on Baumrind's 1967 and 1971 studies, children reared under authoritarian parenting are likely to be obedient and quiet, but not happy. By internalizing their frustrations, these children are likely to rebel, leaving home before age 20. Permissive parents should expect to raise generally unhappy, selfish children who lack self-control. Being selfish will lead to problems in relationships. These children will typically be dependent, often living at home as young adults. Authoritative parenting is a balance between the two prior styles. The children reared in this manner are expected to be successful, happy and liked by peers.

### **2.2.13 Socio-Economic Status**

Socio-economic status (SES) is evaluated as a combination of factors including income, level of education, and occupation. It is a way of looking at how individuals or families fit into society using economic and social measures that have been shown to impact the individuals' health and well being (Boskey, 2009). APA (2013) confirmed that socio-economic status is commonly conceptualized as the social standing or class of an individual or group which is often measured as a combination of education, income and occupation. Examinations of socio-economic status often reveal inequities in access to resources, plus issues related to privilege, power and control. Socio-economic status is typically divided into three categories, high SES, middle SES, and low SES to describe the three areas a family or an individual may fall into. When placing a family or individual into one of these categories any or all of the three variables (income, education, and occupation) can be assessed.

Income refers to wages, salaries, profits, rents, and any flow of earnings received. Income can also come in the form of unemployment or workers compensation, social security, pensions, interests or dividends, royalties, trusts, alimony, or other governmental, public, or family financial assistance. Wisdom Supreme (2008) revealed that income can be looked at in two terms, absolute and relative. Absolute income is the relationship in which as income increases, so do consumption, though not at the same rate. Relative income describes a person or family's savings and consumption based on the family's income in relation to others. Income is a commonly used measure of SES because it is relatively easy to figure for most individuals.

Education also plays a role in income. Median earnings increase with each level of education. The report of APA (2007) as conveyed in the chart indicated that the highest degrees, i.e. professional and doctoral degrees, make the highest weekly earnings while those without a high school diploma earn less. Higher levels of education are associated with better economic and psychological outcomes (that is more income, more control, and greater social support and networking). Education plays a major role in skill sets for acquiring jobs, as well as specific qualities that stratify people with higher SES from lower SES.

Occupational status as one component of SES encompasses both income and educational attainment. Occupational status reflects the educational attainment required to obtain the job and income levels that vary with different jobs and within ranks of occupations. Additionally, it shows achievement in skills required for the job. Occupational status measures social position by describing job characteristics, decision making ability and control, as well as psychological demands on the job.

Demarest, Reisner, Anderson, Humphrey, Farquhar & Stein (1993) conclude that a family's socio-economic status is based on family income, parental education level, parental occupation, and social status in the community. Families with high socio-economic status often have more resources to promote and support their young children's development while families with middle and low socio-economic status do not have such resources.

#### **2.2.14 Cognitive Restructuring**

The term cognitive restructuring technique was pioneered by Aaron Beck and Albert Ellis, among others (Ellis, 1989). Cognitive restructuring is sometimes used synonymously with reframing, re-appraisal, re-labeling and attitude adjustment (Brain, 2006). This is the process of learning to identify and challenge irrational or maladaptive thoughts using strategies such as logical disputation. Various types of therapy utilize the process of cognitive restructuring, such as cognitive behavioural therapy and rational emotive therapy (Colin, 1997; Hope, Burns, Hyes, Herbert & Warner, 2010).

Cognitive restructuring, in laymen term, is the process of learning to replace one's current negative thoughts with better and more beneficial thoughts. It is the process of learning a better way of speaking to one's self. Ryan & Eric (2005) and Salman, Esere, Omotosho, Abdullahi, & Oniyangi (2011) define cognitive restructuring as a psychotherapeutic process of learning to identify and dispute irrational or maladaptive thoughts, such as all or nothing thinking (splitting), magical thinking and emotional reasoning, which are commonly associated with many mental health disorders. Similarly, Brain (2006) described cognitive restructuring as a means of changing a

perception from negative interpretation to a neutral or positive one, making it less stressful.

The cognitive restructuring theory asserts that humans are directly responsible for generating their own negative emotions and that these self created negative emotions, over time, lead to dysfunctions, such as stress, depression, anxiety, and even social awkwardness. When utilizing cognitive restructuring in cognitive behavioural therapy (CBT), it is combined with psycho-education, monitoring, in vivo experience, imaginal exposure, behavioural activation and homework assignments to achieve remission (Huppert, 2009).

Hope, Burns, Hyes, Herbert & Warner (2010) identified four steps involved in cognitive restructuring and six types of automatic thoughts. The four steps include:

1. Identification of problematic cognitions known as "automatic thoughts" which are dysfunctional or negative views of the self, world, or future.
2. Identification of the cognitive distortions in the automatic thoughts.
3. Rational disputation of automatic thoughts with the Socratic dialogue.
4. Development of a rational rebuttal to the automatic thoughts.

The six types of automatic thoughts are:

1. Self-evaluated thoughts.
2. Thoughts about the evaluations of others.
3. Evaluative thoughts about the other person with whom they are interacting.
4. Thoughts about coping strategies and behavioural plans.
5. Thoughts of avoidance.
6. Any other thoughts that were not categorized.

The purpose of cognitive restructuring is to widen one's conscious perspective and thus allow room for a change in perception. Conclusively, cognitive restructuring helps client consider any maladaptive patterns in their thinking-feeling-behaviour cycles. The client's goal is to rethink these patterns and consider more adaptive alternatives that will work better for him or her. Ultimately, the goal is to have the adolescents recognize that sometimes his thoughts lead to feelings and actions which

are antisocial. By examining and changing his thought (belief), feelings and actions are altered in a pro-social direction. The shifting in thinking if successful can help the adolescent to minimize chances of future misconduct (Baker & Scarth, 2002; Salman, Esere, Omotosho, Abdullahi, & Oniyangi, 2011; Okwun, 2011).

### **2.2.15 Behavioural Rehearsal**

Behavioural rehearsal is a behaviour therapy technique in which a client practices new behaviour in the consulting room, often aided by demonstrations and role playing by the therapist (Davidson, & John, 1994). Behavioural rehearsal is used primarily in helping the client to learn new ways of responding to specific life situations. “Behavioural rehearsal” and “role playing” are used interchangeably (Goldfried & Davison, 1976). Although both refer to the simulation of real life situations within the consultation room, the function of behaviour rehearsal is less ambiguous (Goldfried & Davison, 1976). Behaviour rehearsal is a therapeutic method to train new response patterns, as a procedure for bringing about attitude change and to provide client with insight into the developmental origin of his problems.

Behaviour Rehearsal Therapy emerged from observational learning techniques that were popularized by Albert Bandura in the 1960's, leading into the '70's. Although Albert Bandura was a social learning theorist, he placed great emphasis on observational learning. He believed observational learning was based on three principles: vicarious reinforcement, modeling, and behaviour rehearsal. “Vicarious reinforcement is being influenced by seeing someone else get reinforced, modeling is learning by watching another person perform a behaviour, and behaviour rehearsal is acting out a behaviour to learn and refine as a skill” (Kesha, 2012). Behaviour rehearsal therapy is an extension of behaviourism and experimental methods of psychology. The concept of behaviourism is that “all behaviours are caused by events in the environment, factors outside of themselves” (Kesha, 2012). John B. Watson contributed to the behaviourism movement by factoring in the study of overt behaviour.

The implementation of behavioural rehearsal treatment package may be broken down into four general stages: preparation of the client, selection of target situations, behaviour rehearsal proper and carrying out of new role behaviours in real life situations (Goldfried & Davison, 1976).

*a. Preparing the client for behaviour rehearsal*

The major goals during this initial phase are to have the client recognize the need for learning a new behaviour pattern, accept the idea that behaviour rehearsal would be an appropriate way to develop this new social role, and overcome any initial uneasiness regarding the notion of play-acting in the consulting room. Assuming that the client is willing to accept a behavioural interpretation, the next step is to convince him that behaviour rehearsal can help him to overcome these deficiencies. The therapist is to present the method of behaviour rehearsal in a general term by outlining the more specific details only when it is apparent that the client seems receptive to the approach.

Goldfried & Davison (1976) reported that some clients react negatively to behaviour rehearsal when it is described to them, partly because they feel that this technique would not help them to really change, and partly because they feel generally awkward about play-acting. By gradually introducing a description of behaviour rehearsal, the therapist stands a better chance of having the client eventually accept the approach.

Although some clients acknowledge that behaviour rehearsal might be helpful, they often are concerned that they would be simply learning to “play a role,” and that they would not be really changing. The therapist can certainly agree with this, and might in fact raise the issue if he or she senses that this is a concern for any particular client. The client should be made aware, however, that in the process of learning any new role, there is apt to be some feeling of artificiality during the early phase of the learning process. This point can be made most convincingly by pointing to any new role the client has recently assumed, such as becoming a spouse, parent, student, and so forth (Goldfried & Davison, 1976).

***b. Selecting Target Situation***

In a situation where clients are having difficulty handling only a few specific situations, the therapist is advised to draw up a hierarchy along with which the training will take place. The items should provide a good sample of those situations where the client's behavioural deficit is likely to manifest itself. It is preferable, if possible to use situations that the subject could instigate, so that there is greater likelihood of him being in that situation in the future. Items in behavioural rehearsal should be arranged according to complexity of the behavioural skills required (Goldfried & Davison, 1976).

***c. Behaviour Rehearsal Proper***

This is the gradual shaping of process. This is true not only because a hierarchy is employed, but because complex social interactions entail a number of component skills. For a client to interact appropriately with another individual, more than just knowing what to say is required. The tone of voice, the pace of his speech, gestures, eye contact, general posture and a host of other facts play a significant role in achieving competent social skills.

In initiating behaviour rehearsal procedure, it is useful to begin with a situation that offers little difficulty to the client. This can contribute to the warm-up process, for both the therapist as well as the client. When it is apparent that the client can stay in role, the actual training situations may be enacted. Starting from the bottom of the hierarchy, each situation is role-played, with the client receiving some feedback about the adequacy of his performance. There are many ways of providing the required feedback, which includes the therapist's comments and the client's own subjective evaluation. The client's ability to evaluate his own performance can help him to learn to become more sensitive toward his behaviour and also facilitate the self monitoring and corrective actions taken between sessions.



*d. Carrying out the new role in real life situations*

Once the client has been successful in performing a given pattern within the consultation session, he should be ready to try out this behaviour in vivo. The client should be made to clearly understand that application of the behaviour in real life situations is part and parcel of the therapy procedure. Periodically, the client is to be reminded of what to do between sessions, and routinely begin each session by checking on his homework. A written self observations are extremely useful in that they can provide a day to day account of target situations and the client's response. Written record also provides a subtle reminder for the client to actually try out his new response in vivo.

### **2.3 Theoretical Framework**

There were various theoretical foundations to assist in giving an in-depth explanation of this study. Six theories were explored namely: Cognitive Behavioural Therapy (CBT), Psychosocial Theory, Psychoanalytic Theory, Humanistic Theory, Social Learning Theory and Social Stratification. Each of these theories bestowed adequate insight into different segments of the study. For instance, cognitive behavioural therapy was explored to buttress cognitive restructuring while psychosocial theory provided detailed information on the identity crisis in the stage of development in adolescents. Psychoanalytic theory also provided explanations to likely causes and or origin of adolescent problems with the humanistic theory shedding light on the importance of one's environment, and the need for the ideal self and real self to be at congruence for mental health. Furthermore, social learning theory assisted to explaining behavioural rehearsal and the issue of adolescent problems that emanate from observational learning while social stratification enlightened on the issue of parental socio-economic status examined in the study.

### **2.3.1 Cognitive Behaviour Therapy**

Cognitive Behaviour Therapy (CBT) was pioneered by psychologists Aaron Beck and Albert Ellis in the 1960s (Rachman, 1997; Gale Encyclopedia of Medicine, 2008). Cognitive Behaviour Therapy is one of the major orientations of psychotherapy (Roth & Fonagy, 2005) and represents a unique category of psychological intervention because it derives from cognitive and behavioural psychological models of human behaviour that include for instance, theories of normal and abnormal development, and theories of emotion and psychopathology. Cognitive Behavioural Therapy (CBT) combines cognitive and behavioural therapies, and involves changing the way you think (cognitive) and how you respond to thoughts (behaviour). CBT focuses on the 'here and now' instead of focusing on the cause of the issue, and breaks overwhelming problems into smaller parts to make them easier to deal with. These smaller parts can be described as thoughts, emotions, physical feelings and actions. Each of these has the ability to affect the other, for instance, the way you think about things can affect how you feel emotionally and physically, and ultimately how you behave.

CBT is based on the principle that individuals learn unhelpful ways of thinking and behaving over a long period of time. However, identifying these thoughts and how they can be problematic to feelings and behaviours can enable individuals to challenge negative ways of thinking, leading to positive feelings and behavioural changes. It is possible for the therapy to take place on a one-to-one basis, with family members or as a group depending on the issue and how the individual feels most comfortable.

The cognitive component in the cognitive-behavioural psychotherapies refer to how people think about and create meaning about situations, symptoms and events in their lives and develop beliefs about themselves, others and the world. Cognitive therapy uses techniques to help people become more aware of how they reason, and the kind of automatic thoughts that spring to mind and give meaning to things. Cognitive interventions use a style of questioning to probe for peoples' meanings and use this to stimulate alternative viewpoints or ideas. This method is called 'guided discovery', and involves exploring and reflecting on the style of reasoning and thinking, and

possibilities of thinking differently and more helpfully. On the basis of these alternatives people carry out behavioural experiments to test out the accuracy of these alternatives, and thus adopt new ways of perceiving and acting. The overall intention is to move away from more extreme and unhelpful ways of seeing things to more helpful and balanced conclusions.

CBT can be useful for dealing with issues such as: anger, anxiety, depression, drug or alcohol problems, eating disorders, obsessive-compulsive disorder, phobias, post-traumatic stress disorder, sexual and relationship problems (Driessen & Hollon, 2010; Matusiewicz, Hopwood, Banducci & Lejuez, 2010; Murphy, Straebler, Cooper & Fairburn, 2010; Otte, 2011; Seligman & Ollendick, 2011). The emphasis on cognitive or behavioural aspects of therapy can vary depending on the issue at hand. For example, the emphasis may be more towards cognitive therapy when treating depression and the emphasis may be more towards behaviour therapy when treating obsessive compulsive disorder.

CBT is a practical therapy, hence it is likely to work best when used in treating a specific issue per time as it focuses on particular problems and how to overcome them. CBT sessions may consist of a number of activities, including: Coping skills, Assessments, Relaxation, Challenging certain thoughts, Thought stopping, Homework projects, and Training in communication (Longmore & Worrell, 2007; Foa, 2009, Shobola, 2011, Salman, Esere, Omotosho, Abdullahi, & Oniyangi 2011).

### **2.3.2 Psychosocial Theory**

Erikson developed psychosocial theory from Freud's psychosexual stages of human development (Kail & Cavanaugh, 2004). The psychosocial development as articulated by Erik Erikson explain eight stages through which a healthily developing human should pass from infancy to late adulthood and eventually to death. In each stage the person confronts, and hopefully masters, new challenges. Each stage the theory postulates must build on the successful completion of earlier stages. The challenges of

stages that are not successfully completed may be expected to reappear as a problems in the future implies the psychosocial theory.

The stages of life according to Erik Erikson are:

- i. Hope: Trust vs. Mistrust (From birth to age 1)
- ii. Will: Autonomy vs. Shame and Doubt (age 1 to 3)
- iii. Purpose: Initiative vs. Guilt (age 3 to 6)
- iv. Competence: Industry vs. Inferiority (age 7 to 11)
- v. Fidelity: Identity vs. Role confusion (Adolescence 12- 19 years)
- vi. Love: Intimacy vs. Isolation (young adult 20 to 34 years)
- vii. Care: Generativity vs. Stagnation (35 to 65years)
- viii. Wisdom: Ego Integrity vs. Despair (Old age or 65 to Death).

Stage five of the psychosocial stages of development (Identity vs. Role confusion) whose virtue is fidelity is very relevant to this study. This stage of development signifies the adolescent stage. As adolescents make the transition from childhood to adulthood, they ponder on the roles they will play in their adult world. Initially, they are apt to experience some role confusion (mixed ideas and feelings) about the specific ways in which they will fit into society and may experiment with a variety of behaviours and activities. Erikson is credited with coining the term "Identity Crisis" (Gross, 1987). Each stage that came before and that follows has its own 'crisis', but even more so now, for this marks the transition from childhood to adulthood. This passage is necessary because "Throughout infancy and childhood, a person form so many identifications. But the need for identity in youth is not met by these"(Wright, 1982). This turning point in human development seems to be the reconciliation between 'the person one has come to be' and 'the person society expects one to become'. This emerging sense of self will be established by 'forging' ahead of past experiences with anticipations of the future. In relation to the eight life stages as a whole, the fifth stage corresponds to the crossroads.

Adolescents "are confronted by the need to re-establish (boundaries) for themselves and to do this in the face of an often potentially hostile world" (Stevens, 1983). This is often challenging since commitments are requested before particular identity roles are formed. At this point, one is in a state of 'identity confusion', but society normally

makes allowances for the youths to "find themselves," and this state is called 'the moratorium' (when a person can freely experiment and explore what may emerge as a firm sense of identity, an emotional and deep awareness of who he or she is) Stevens (1983).

Dependent on this stage is the ego quality of fidelity. This is the ability to sustain loyalties freely pledged in spite of the inevitable contradictions and confusions of value systems (Stevens, 1983). Ego identity enables each person to have a sense of individuality while role confusion is the inability to conceive oneself as a productive member of one's own society and this is a great danger. The inability of an adolescent to resolve the crisis at this stage will lead to infidelity which is a pointer to adolescent onset of conduct disorder.

### **2.3.3 Psychoanalytic theory**

Sigmund Freud theorized that the developmental stages of infancy and early childhood chart human lives in ways that are difficult to change (Encyclopedia of Psychology, 2005). Freud's psychoanalytic theory demonstrates the idea that aggression is an innate personality characteristic common to all humans and that behaviour is motivated by sexual drives. According to the Freudians, criminal behaviour results from various dysfunctions. This includes faulty ego (in which the individual has problem with learning from experience, coping with frustration and insecurity and assessing social reality). Faulty or inadequate superego (in which the individual does not feel remorse or wrong doing), deviant superego (where the individual has failed to internalize conventional standards of conduct and sees nothing bad in his behaviour) and undeveloped or restraining Id (in which the individual allows free outlets for aggressive and sexual drives instead of restraining it by the ego or superego). These imbalances may lead to development of criminal behaviour (conduct disorder) or mental illness (Osinowo, 2005).

Freud believed that most adult neuroses could be attributed to a fixation developed during one of these stages of early life. The psychosexual stages of development are:

Oral, Anal, Phallic, Latency and Genital. According to Freud, there is a crisis which must be worked through at each stage. If the crisis is not properly worked out, the person could become fixated at that stage of development (Woolfolk, 2010). Fixations are seen in adulthood as child-like approaches to gratifying the basic impulses of the Id.

At the oral stage for instance, a child could either be orally aggressive (chewing gum and the ends of pencils, etc) or orally passive (expressed in smoking, eating, kissing, or oral sexual practices). Oral stage fixation might result in a passive, gullible, immature, manipulative personality. In Anal stage, fixation at either anal retentive (Obsessively organized, or excessively neat) or anal expulsive (reckless, careless, defiant, disorganized) has its repercussion. The consequences of psychologic fixation across the other three psychosexual stages are: Frigidity, aggression, impotence, sexual unfulfillment, unsatisfactory relationships, high or low self esteem, over-ambitious. Adolescent behavioural/conduct disorder (aggression, hostility, early sexual activity, disorderliness, rebelliousness or defiance, among others) can evolve from fixation at any of the psychosexual stages of development.

Defense mechanisms are psychological strategies in psychoanalytic theory which reveals the role on the unconscious mind to manipulate, deny, or even distort reality. Healthy persons normally use different defenses throughout life (Altruism, anticipation, humour, sublimation, thought suppression, introjection, and identification). An ego defense mechanism becomes pathological only when its persistent use leads to maladaptive behaviour such that the physical and or mental health of the individual is adversely affected. Displacement and Rationalization (making excuses) are examples of defense mechanism that can be found in the adolescent with conduct disorder.

Displacement is the shift of sexual or aggressive impulses to a more acceptable or less threatening target; redirecting of emotion to a safer outlet; separation of emotion from its real object and redirection of the intense emotion toward someone or something that is less offensive or threatening in order to avoid dealing directly with what is frightening or threatening. An adolescent that experiences frequent abuse physical or

otherwise from parent or caregiver may express such behaviour to his mate or junior colleague and this act will be tagged conduct disorder after consistent repetition.

### **2.3.4 Humanistic Theory**

The Humanistic theory is a psychological perspective which rose to prominence in the mid-20th century in response to the psychoanalytic theory of Sigmund Freud and the behaviourism of Skinner. The theory is sometimes referred to as a "third force," as distinct from the two more traditional approaches of psychoanalytic and behaviourism. This theory emphasizes on an individual's inherent drive towards self actualization and creativity (Aileen Milne 2003). The theory acknowledges that an individual's mind is strongly influenced by ongoing determining forces in both their unconscious and conscious world around them, specifically the society in which they live. The focus of the humanistic perspective is on the self, and this view argues that individuals are free to choose their own behaviour, rather than reacting to environmental stimuli and reinforcers. Here, issues dealing with self-esteem, self-fulfillment, and needs are paramount.

Carl Rogers as a major spokesman in humanistic psychology rejected the deterministic nature of both psychoanalysis and behaviourism and maintained that people behave as observed because of the way they perceive their situation. "As no one else can know how we perceive, we are the best experts on ourselves" (Rogers, 1959, 1969; McLeod, 2007). Carl Rogers (1959) believed that humans have one basic motive, that is the tendency to self-actualize (that is to fulfill one's potential and achieve the highest level of 'human-beingness'). Like a flower that will grow to its full potential if the conditions are right, but which is constrained by its environment, so people will flourish and reach their potentials if their environment is good enough.

Rogers sees people as basically good or healthy or at the very least, not bad or ill. In other words, he sees mental health as the normal progression of life, and he sees mental illness, criminality, antisocial behaviours and other human problems, as distortions of that natural tendency. The entire theory is built on a single "force of

life” which he called “the actualizing tendency”. It can be defined as the built-in motivation that is present in every life-form to develop its potentials to the fullest extent possible. Rogers believed that all creatures strive to make the very best of their existence and are not just concerned with survival (Rogers, 1951 & Gladding, 1988).

Rogers (1959) held that human infants possess the following traits:

- Whatever an infant perceives is that which is defined as reality by the infant. An infant’s perception is an internal process of which no one else can be aware.
- All infants are born with a self-actualizing tendency that is satisfied through goal directed behaviours.
- An infant’s interaction with the environment is an organized whole, and everything an infant does is interrelated.
- The experiences of an infant may be seen as positive or negative based on whether such experiences enhance the actualization tendency.
- Infants maintain experiences that are actualizing and avoid those that are not.

Human problem is as a result of negative socialization, conditioned positive regards (Children accepted by parents when ‘good’ & rejected when ‘bad’; development of view: ‘I ought to be good’, ‘I have to be good’; lose of touch with our true nature that is, ‘real self’ & actualizing tendency; and development of an Ideal self: whom we feel we should be).

Rogers described the self as a social product, developing out of interpersonal relationships and striving for consistency while the concept of actualizing tendency implies that there is an internal, biological force to develop one’s capacities and talents to the fullest. The ideal self and real self involve understanding the issues that arise from having an idea of what you wish you were as a person, and having that which does not match with whom you actually are as a person (incongruence). The ideal self is what a person believes that he should be, as well as imbibing what their core values should be. The real self is what is actually played out in life (Gladding, 1988; Corey, 1990 & Aileen Milne 2003).

The problem of conduct disorder can be seen as a product of the inability of the ideal and real selves to be at congruence and also as a result of negative environment (or



socialization) that an individual is exposed to. For a person to "grow", there is the need for an enabling environment that should provide them with genuineness (openness and self-disclosure), acceptance (being seen with unconditional positive regard), and empathy (being listened to and understood). Without these, relationships and healthy personalities will not develop as they should, just as a tree will not grow without sunlight and water (McLeod, 2007). In the humanistic and reflective theory of Carl Rogers (1963), he suggested that parents use therapeutic skills of empathy to understand a child's needs and feelings. Parents should employ empathy to understand a child's needs and or feelings and reflect back on what they are feeling in order to help them grow in awareness and understanding.

### **2.3.5 Social Learning Theory**

Social learning theory disagrees with psychoanalytic theory which believes that humans are innately aggressive and that frustration automatically leads to aggression. Social learning theory is of the perspective that people learn within a social context. Such learning's are facilitated through concepts which include modelling and observational learning (Ormrod, 1999). According to Social Learning theory, models are an important source for learning new behaviours and for achieving behavioural change in institutionalized settings (Henry & Charlenz, 1982). Anderson (2004), Robert, Nyla & Donn (2009) and Mae Sincero (2012), reported that social learning theory is derived from the work of Albert Bandura which proposed that observational learning can occur in relation to three models:

- i. Live model – in which an actual person is demonstrating the desired behaviour
- ii. Verbal instruction – in which an individual describes the desired behaviour in detail, and instructs the participant in how to engage the behaviour
- iii. Symbolic – in which modeling occurs by means of the media, including movies, television, Internet, literature, and radio. This type of modelling involves a real or fictional character demonstrating the behaviour.

There is convincing evidence from Bandura's famous "Bodo Doll" studies that violent and or aggression, the main ingredient of conduct disorder, is a learned behaviour. People who observe others behaving in aggressive ways (and this includes watching aggression and violence on television, movies and video games) are more likely to demonstrate the aggressive behaviours they have witnessed. The adolescent who witnesses aggressive behaviours at home, such as physical fighting, pushing, and shoving, is at an increased risk for developing conduct disorder. An adolescents with conduct disorder often live in families in which there is a high level of conflict that takes physical form (Robert, Nyla & Donn, 2009; Shuttleworth, 2012).

Robert, Nyla & Donn (2009) reveal that General Aggression Model (GAM) is a newer framework which is an improvement of the social learning perspective. According to this theory, a chain of events that may ultimately lead to overt aggression can be initiated by two major types of input variables namely: situational factors (factors relating to the current situation-some kind of provocation or insult, exposure to other people behaving aggressively either real or in the media) and personal factors (factors relating to the people involved- individual differences across people, including traits that predispose some individuals aggression). Modern theory of aggression (General Aggression Model) recognizes the importance in aggression of learning, various eliciting input variables, individual differences, affective states, and especially, cognitive processes.

In other to correct the consequence of wrong model in individuals, social learning theory put up the technique of behavioural rehearsal whereby persons with wrong behavioural pattern(s) will be exposed to new behavioural patterns which will be aided by demonstrations and role play by the therapy (Davidson & John, 1994). Behavioural rehearsal was one of the principles that social learning theory was based on and it simply promotes acting out behaviour to learn and refine old behavioural patterns. That is, rehearsing new and good behaviour to correct old and bad behaviours that are caused by wrong models or vicarious reinforcement.

### **2.3.6 Social Stratification**

Social stratification is a concept in sociology which involves the classification of people into groups based on shared socio-economic conditions. Stratification can be defined in various ways, but it is most commonly referred to as institutionalized inequalities in power, wealth, and status between categories of persons within a single social system (e.g., classes, castes, ethnic groups) (Haralambos & Holborn, 2000; Macionis, Gerber, John & Linda, 2010). Social stratification is the relatively fixed, hierarchical arrangements in a given society by which groups have different access to resources, power, and perceived social worth. According to Haralambos & Holborn (2000), social stratification is a particular form of social inequality, referring to the presence of distinct social groups which are ranked one above the other in terms of factors such as prestige and wealth. Social Stratification has three major dimensions which are: Power, Wealth, and Prestige. The particular value system of a culture determines how power, wealth and prestige do interact to determine the placement of a person in the stratum.

Power – is the ability to control resources in one's own interest (that is the ability of people or groups to achieve their goals despite opposition from others).

Wealth – is the accumulation of material resources or access to the means of producing these resources (wealth includes property such as buildings, lands, farms, houses, factories and as well as other assets - Economic Situation).

Prestige – is the Social honour or respect (e.g. the regard which a person or status position is regarded by others).

The two major types of stratification systems are caste and class. In a class system social position is largely achieved, although it is also partly determined by the class into which a person is born (ascribed). People may move between social classes which form a continuum from bottom to top. Social classes are characterized by different lifestyles and life chances.

“Achieved status” is a social position that a person chooses or achieves on his or her own (this is an open system which anyone can get into) while ‘Ascribed Status” is a social position that a person is born into (this is a closed system). In a caste system, social position is largely ascribed. Boundaries between castes are sharply defined and marriages are within the caste.

Macionis, Gerber, John & Linda (2010) opine that social stratification is based on four basic principles: Social stratification is a trait of society, not simply a reflection of individual differences; Social stratification carries over from generation to generation; Social stratification is universal but variable; and Social stratification involves not just inequality but beliefs as well. Western societies organized stratification into three main layers: upper class, middle class and lower class. Each of these classes can be sub-grouped into smaller classes (e.g. occupation, level of education, property ownership among others) and this pattern is what obtains in the Nigerian society. The parental socio-economic status of the participants in this research is divided into three: high, middle and lower socio-economic status. Determinants of participants' parental socio-economic status include: possessions, type of occupation, type of house, level of education to mention but a few.

## **2.4 Empirical Studies**

### **2.4.1 Conduct Disorder (CD)**

According to Doll (1996), one of the most frequently diagnosable psychiatric disorders in children is conduct disorder. He affirms that conduct disorder encompasses a class of chronic, severe antisocial behaviour that typically begins in early childhood and extends into adulthood (Robins & Ratcliff, 1979). Academically, children that exhibit these problematic behaviours usually are difficult to teach in the traditional classroom environment, resulting in poor academic performance. They oftentimes present learning disabilities and attention deficit hyperactivity disorder (ADHD). Research also shows that conduct disorder which is antisocial behaviour is related to truancy and dropout rates. Adolescents diagnosed with conduct disorder also appear more susceptible to alcohol and substance abuse (Short & Shapiro, 1993). The significance of conduct disorder results in part from the fact that it constitutes one of the most frequent bases for referral of children and adolescents for psychological and psychiatric problems, criminal behaviours, and social maladjustment by the time they become adults (Kazdin, 1995). In addition, research has shown that the

characteristics of this disorder can be passed on as antisocial behaviour in offspring, forming a cyclical pattern (Kazdin, 1995).

Short and Shapiro (1993) provide a comprehensive view of the epidemiology of conduct disorders as well as an examination of the personal, family, school, and peer effects. It was noted that conduct disorders differ from other childhood challenges due to the antisocial behaviour, the chronicity of such behaviour as well as the impairment of functioning of those exhibiting such behaviour. This disorder tends to exist in a stable form with continual development into adulthood. Examination of the collaboration of personal, family, school and peer components provide information on the complex of conduct disorder as well as an avenue for providing interventions. Personal characteristics and features, such as irritability, aggressiveness, and cognitive difficulties, are crucial for identifying markers for the onset of antisocial behaviour. The perpetuation of these characteristics is mitigated by experiences with parents, school and peers. Each of these components can intensify or minimize the extent to which antisocial behaviours are developed. Parent and family effects can range from familial stress to member criminality or psychopathology to discipline practices. Additionally, the quality of parent-child interactions can create, inadvertently encourage, or negate antisocial behaviours.

Various types of family dysfunction contribute to the formation of conduct disorders in children. Frick (1993) explores three types of family dysfunction as well as implications for studying models that depict family causal relationships with conduct disorder. Parental adjustment, marital situation, and socialization processes are shown as influential. Parental adjustment is examined over three domains: depression, substance abuse and antisocial behavior. Although not directly related, parental depression may contribute to adjustment problems in children, which may lead to behaviour difficulties. Substance abuse in isolation does not place the child at risk for conduct problems. However, when determining the relationship of substance abuse, it is important to recognize the broader implications of subsequent parental behaviours and interactions with children. Unlike depression and substance abuse, research has shown a direct relationship between parental antisocial behaviour and the manifestation of similar behaviour practices in children. The relationship of family

dysfunction can be viewed from a three causal type relationship: mediational, bi-directional and third-variable where the family may directly influence the development of a conduct disorder, the child's antisocial behaviour may attribute to the family's dysfunction or an unrelated variable may negatively affect the family and child. These models reflect the notion that parent and or family effects on childhood conduct disorders are correlational, and not directly causal.

Previous research assumed that disruptive disorders in general and conduct disorders in particular are learned behaviours. However, Comings (1997) provides empirical support, which suggests that there may be genetic influences that are responsible for this behaviour. Evidence abounds that this childhood behaviour as well as other disruptive disorders have a strong genetic component, that are inherited by both parents, and share a number of genes in common that affect certain levels of dopamine in the brain.

Dodge (2000) describes some risk factors for the onset of conduct disorder. These risk factors include biological factors, socio-cultural contexts, and life experiences. An example of a provided biological risk factor is that there may be a function deficit in behavioural inhibition, which can be linked to conduct problems. However, Dodge (2000) notes that the findings that are related to the biological factors are by no means conclusive and that other factors must be recognized and explored in the development of conduct disorder.

#### **2.4.2 Adolescents with Conduct Disorder**

Conduct disorder affects 1 to 4 percent of 9- to 17-year-olds; depending on how exactly the disorder is defined (U.S. Department of Health and Human Services, 1999). Research shows that some cases of conduct disorder begin in early childhood, often by the preschool years. In fact, some infants who are especially "fussy" appear to be at risk for developing conduct disorder. Other factors that may make a child more likely to develop conduct disorder include: early maternal rejection; separation from parents, without an adequate alternative caregiver; early institutionalization; family neglect; abuse or violence; parental mental illness; parental marital discord;

large family size; crowding and poverty (Moffitt, 1993; Moffitt & Caspi, 2001; Hinshaw & Lee, 2003; Roisman, Monahan, Campbell, Steinberg, Cauffman & the Early Child Care Research Network, 2010).

Evans (2012) observed that adolescents who are diagnosed with conduct disorder judge the world as an antagonistic and intimidating place. They may tattle on friends or blame others for the harm they have caused. They have few if any friends because of their limited interpersonal skills. Peers and family members may view them as irritating because of their indifference to their actions. They often have low self-esteem internally but externally they appear tough, cocky or self-assured.

### **2.4.3 Gender and Conduct Disorder**

Empirical evidence by Cohen, Cohen, Kasen, Velez, Hartmark, Johnson, Rojas, Brook & Streuning (1993) has shown that sex differences exist in the age of onset of conduct disorder. The median age of onset for this disorder has been found in the 8 to 10 year old range. Most boys had an onset before the age of 10, while girls had onset ranging from the ages of 14 to 16. The study of Cohen et al. (1993) revealed that conduct disorder was about twice as prevalent for boys than girls. However, the prevalence for boys was highest at younger ages (10-12) and higher for girls at older ages (14-16). These results suggest that developmental trends in boys and girls differ throughout the pre-adolescence and adolescence stages and may directly impact the rates of behaviour problems for children at the school, district, and the governmental levels. The prevalence rate of conduct disorder worldwide is estimated between 2% to 6% among adolescents, with boys showing a higher rate of conduct disorder than girls.

Russo & Beidel (1994); Melgosa (1997); Paetsch & Bertrand (1997); Gidden (2004) and Agnew (2005) accounts that the prevalence of conduct disorder is estimated at about 2% for girls and 9% in boys. APA (1994), reports that conduct disorder is more common in boys (6-16%) compared to girls (2-9%). Thus, conduct disorder likely occur 3 or 4 times more in boys than girls. Even though conduct disorder is classified

as a childhood disorder, particular behaviours may occur over the course of a life span. Generally, conduct disorder occurs at a higher rate for adolescents (approximately 7% for 12 to 16 year olds) than for children (4% for 4 to 11 year olds) (Kazdin, 1995; Cohen, Cohen, Kasen, Velez, Hartmark, Johnson, Rojas, Brook, & Streuning, 1993).

Baker & Scarth (2002), state that there are usually differences in the type of behaviours seen in adolescent boys as against girls with conduct disorder. Boys tend to exhibit aggressive behaviours while girls are more likely to break social rules through offences such as truancy, lying and prostitution. These gender differences tend to disappear with more severe levels of disturbance however.

There are multiple theories that seek to explain findings that males and females of the same species can have differing aggressive behaviours. However the conditions under which women and men differ in aggressiveness are not well understood (Crews, Greenberg, & Scott, 1984). The pattern of male and female aggression is argued to be consistent with evolved sexually-selected behavioural differences, while alternative or complimentary views emphasize conventional social roles stemming from physically evolved differences (Potegal, Ferris, Herbert, Meyerhoff, & Skaredoff, 1996). Aggression in women may have evolved to be, on the average, less physically dangerous and more covert or indirect (Paus, 2005; Caramaschi, De Boer, De Vries, & Koolhaas, 2008). Generally, researches have suggested that males use more physical aggression than females while females use more verbal aggression than males. There are more recent findings that indicate that differences in male and female aggression appear at about two years of age, though the differences in aggression are more consistent in middle-aged children and adolescents. Many studies have found differences in the types of aggression employed by males and females, at least in children and adolescents. Females between the ages of 10 and 14, around puberty age, show a more extreme rate of relational aggression compared to boys. These findings however are true for Western societies, but are not true of all cultures. In countries such as Kenya it has been found that young boys and girls have very similar rates of physical aggression (Landsford, 2012). It has been found that girls are



more likely than boys to use reactive aggression and then retract, while boys are more likely to increase rather than to retract their aggression after their first reaction.

Hess & Edward (2012) observed that girls' show aggressive tactics which include gossip, ostracism, breaking confidences, and criticism of a victim's clothing, appearance, or personality, whereas boys engage in aggression that involves a direct physical and/or verbal assault. Hay (2011) is of the opinion that the difference could be due to the fact that girls' frontal lobes develop earlier than boys which allow them to self-restrain.

#### **2.4.4 Socio-Economic Status (SES) and Conduct Disorder**

Socio-economic status (SES) is an economic and sociologically combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education, occupation, neighbourhood and political power. When analyzing a family's SES, the household income, earners' education, and occupation are examined, as well as combined income, as against that of an individual, when their own attributes are assessed (National Center for Educational Statistics, 2008). Socio-economic status is typically divided into three categories, high SES, middle SES, and low SES.

According to Aneshensel & Sucoff (1996), parental SES is seen as influencing the adolescent's exposure to stress and access to resources, which, in turn, affects the adolescent mental health (Depression, Anxiety, Oppositional Defiant Disorder, and Conduct Disorder). This relationship exists in part, because family SES physically places adolescents within neighborhoods that vary with regard to the presence of social stressors and resources. Thus, both family SES and neighborhood are seen as affecting adolescent emotional well-being by regulating exposure to stressors and access to resources. Aneshensel & Sucoff (1996), found that youths in low socio-economic status (SES) neighborhoods perceive greater ambient hazards such as crime, violence, drug use, and graffiti than those in high SES neighborhoods. The perception of the neighborhood as dangerous, in turn, influences the mental health of

the adolescents: the more threatening the neighborhood, the more common the symptoms of depression, anxiety, oppositional defiant disorder, and conduct disorder.

Demarest, Reisner, Anderson, Humphrey, Farquhar & Stein (1993) and Dada, (2004) are of the view that a family's socio-economic status is based on family income, parental education level, parental occupation, and social status in the community (such as contacts within the community, group associations, and the community's perception of the family). Hausman & Hammen (1993); American Academy of Pediatrics (1995) and Carr-Hill, Rice, & Roland (1996) observed that social disadvantage, homelessness, low socio-economic status, poverty, overcrowding and social isolation are broader factors that predispose adolescents to conduct disorder. It seems that the longer the child has been living in poverty within the first four years of his or her life, the more prevalent externalizing behaviour problems become (Duncan, Brooks-Gunn & Klebanov, 1994). According to Graham (2004), children from large families and those living in homes where divorce or separation has occurred are at greater risk of conduct disorders. Children with conduct disorders are more likely to come from troubled neighbourhoods. Urban areas have higher rates of conduct disorders. Loeber, Green, Keenan, & Lahey (1995), reported that logistic regression showed that low socio-economic status of parents among other factors predict an early onset of conduct disorder.

#### **2.4.5 Cognitive Restructuring**

Cognitive restructuring, says the American Psychological Association, means "changing the way you think" (APA 2000, Shobola, 2007; Yahaya, 2006, Salman, et. al., 2011). Studies revealed that cognitive restructuring has been found to be very effective in the treatment of all forms of antisocial behaviours. Aderanti & Hassan (2011) report that cognitive restructuring is effective in the treatment of rebelliousness and disorderliness while Obalowo, (2004) established its effectiveness in treating stealing. Findings from Aderanti & Hassan (2011) show that cognitive restructuring is more effective on females than on males' rebelliousness and also effective on the rebelliousness of inmates from medium socio-economic backgrounds than the inmates

from both low and high socio-economic backgrounds. According to Aderanti and Hassan (2011), the effectiveness of cognitive restructuring in treating rebelliousness is not a surprise, because cognitive factors play an important and well documented role in delinquent behaviour since the way people think has a controlling effect on their actions.

According to psychology wiki (2012), cognitive restructuring is effective in the treatment of anger (a major construct in conduct disorder). It was exposed to high-anger drivers and it helped to keep them calm and collected. Also, cognitive restructuring has shown great beneficence in the pre-release preparations of criminals, reducing recidivism and depressed persons.

#### **2.4.6 Behavioural Rehearsal**

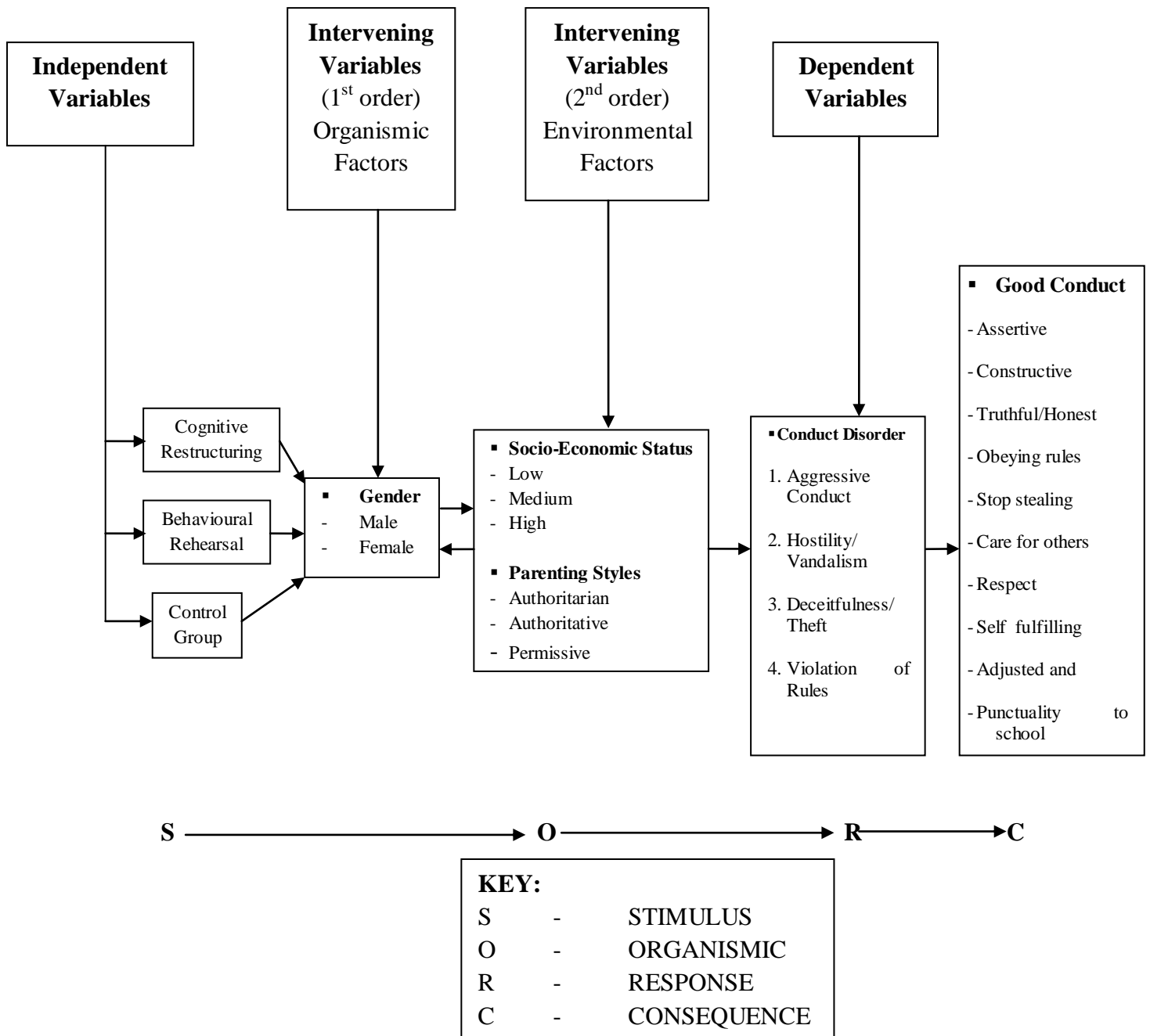
Behaviour rehearsal, role-play and practice are used interchangeably. The practice of target responses is essential for skill acquisition and improvement (Spence, 2003). Ideally, practice should occur as often as possible, as in the learning of any skill. Practice may take place within sessions, or may be set as tasks to perform at home, school or other social venues. Within sessions, role-play scenarios are frequently used for skill practice. Scenarios are described that are of relevance to the group members, and for which the target skill is important.

Many researchers validate the effectiveness of behavioural rehearsal. McFall & Marston (1970) confirm that behaviour rehearsal procedures resulted in significantly greater improvements in assertive performance. McIntosh, Vaughn, & Zaragoza (1991) found behavioural rehearsal and or role play to be effective in producing short-term improvements in specific social skill responses, while Spence (2003) affirms that it enhances behavioural social skills training which serves as a pointer to healthy behavioural conduct of the individual that receives the training. Alrahamneh (2011) further indicates that behaviour rehearsal significantly reduces anxiety and increases more self concept in athletes with special needs.

#### **2.4.7 Parenting Style and Conduct Disorder**

Ineffective parenting behaviours such as poor supervision, rejection, harsh and inconsistent discipline and poor parenting techniques may place adolescents at risk for developing conduct disorders (Scott, Kristin & Thomas, 2011). Research reveals that adolescents are at risk of engaging in delinquent behaviours when they are exposed to ineffective parenting techniques (Patterson, Reid & Dishion, 1992; Warr, 2005; Ingram, Patchin, Huebner, McCluskey & Bynum, 2007; Mmari, Blum & Teufel-Shone, 2010), parental rejection (Richter, Krecklow, & Eisemann, 2002; Barnow, Lucht, & Freyberger, 2005; Stuewig & McCloskey, 2005); harsh and inconsistent discipline (Conger & Simons, 1997; Edwards, Dodge, Latendresse, Lansford, Bates, & Pettit, 2010) and poor family relationships (Rowe & Liddle, 2003). According to Williams and Chang (2000), “Juveniles will return to future delinquent acts if their parents remain unchanged in the areas of consistent limit setting, rebuilding emotional attachments and improved communication”.

Previous studies evaluating programmes meant to reduce conduct disorder in adolescents have generally focused on adolescent behaviour as the outcome of interest (Greenwood, 2008). Few studies have evaluated juvenile justice interventions relative to parental involvement and readiness for change.



**Figure 1: THE CONCEPTUAL MODEL**

**Source:** The Researcher

Figure 1 above indicates the conceptual model which describes the variables in the study. The variables include the independent variables which are in three levels: cognitive restructuring group, behavioural rehearsal group and control group. The

intervening variables are gender at two levels: male and female; socio-economic status at three levels: low, medium and high; and parenting style which also exists at three levels: authoritarian, authoritative and permissive. The dependent variable is conduct disorder. The product of the conceptual model is the 3x2x3x3 factorial design. The application of the intervention techniques will result in a positive consequence tagged “good conduct”.

# CHAPTER THREE

## METHODOLOGY

### 3.1 Introduction

This chapter is concerned mainly with the procedures employed in carrying out the study. These include: Design, Population, Sample and Sampling procedure, Instrumentation, Procedure for Administration of the questionnaire and Methods of data analysis.

### 3.2 Design

The design utilized is a 3 x 2 x 3 x 3 factorial design. This design was selected because it is sufficient to test all the variables in the study.

A factorial design is the most common way to study the effect of two or more independent variables (Hassan, 1995). In a factorial design, all levels of the individual independent variable are matched or cross matched with all levels of the opposing, competing, contrary independent variables. The intention of this is to make available, showcase, indicate, exhibit, demonstrate, expose, all possible conditions. This is more so as it is possible to manipulate each independent variable among subjects in a factorial design.

The advantages of factorial designs are:

- It permit the testing of several hypotheses simultaneously and obviate the need to conduct a series of single independent variable experiments. This is in order to study the effect of different treatments on a dependent variable. This implies that in a single experiment, the solutions to a number of complex questions are reached.
- It permits the assessment of the effect and interaction between or among different independent variables. Interaction in this context, means the relation of an independent variable to a dependent variable in different groups on the one or the relation of more than one independent variables at different levels.

The design is represented below:

O <sub>1</sub>	X <sub>1</sub>	O <sub>4</sub>	-	E <sub>1</sub>
O <sub>2</sub>	X <sub>2</sub>	O <sub>5</sub>	-	E <sub>2</sub>
O <sub>3</sub>		O <sub>6</sub>	-	Control

Where O<sub>1</sub>, O<sub>2</sub> and O<sub>3</sub> represent the pre-test observations for Experimental groups 1, 2 and the control group. O<sub>4</sub>, O<sub>5</sub> and O<sub>6</sub> represent the post-test observations for Experimental groups 1, 2 and the control group respectively. X<sub>1</sub> represents treatment of Cognitive Restructuring while X<sub>2</sub> represents treatment of Behavioural Rehearsal.

### **3.3 Variables in the Study**

The variables in the study include the independent variables, comprising of Cognitive Restructuring, Behavioural Rehearsal and Control. The intervening variables are gender at two levels: male and female, socio-economic status at three levels: low, medium and high; and parenting styles which also exist at three levels: authoritarian, authoritative and permissive. The dependent variable is conduct disorder.

The independent and the intervening variables are crossed as shown in Table 3.1 below to provide basis for a 3 x 2 x 3 x 3 factorial design.



**Table 3.1: The 3 x 2 x 3 x 3 factorial matrix of the experiment**

Treatments	Adolescents with Conduct Disorder								Total
	Gender		Socio-economic status			Parenting Styles			
	Male	Female	Low	Medium	High	Authoritarian	Authoritative (Balanced Parenting)	Permissive	
Cognitive Restructuring (T <sub>1</sub> )	15	15	0	27	3	5	21	4	30
Behavioural Rehearsal (T <sub>2</sub> )	15	15	3	23	4	4	21	5	30
Control (T <sub>3</sub> )	15	15	4	22	4	3	20	7	30
<b>Total</b>									<b>90</b>

Table 3.1 indicates the treatment conditions T as experimental conditions where:

T<sub>1</sub> - Cognitive Restructuring

T<sub>2</sub> - Behavioural Rehearsal

T<sub>3</sub> - Control Group

### 3.4 Population

The population for this study was one hundred and eighty six (186). The population comprised of adolescents in two Special Correctional Centres (formerly known as remand homes) in Lagos State. These centres are: Special Correctional Centre for Girls, Idi-Araba and Special Correctional Centre for Boys, Oregun.

### **3.5 Sample and Sampling Procedures**

The sample size employed for this study is 90 adolescents. Purposive sampling was utilized as there are few correctional centres where adolescents that meet the research diagnostic criteria for conduct disorder are found. Among the 90 participants, 15 were randomly assigned into each of the two experimental groups (Cognitive Restructuring and Behavioural Rehearsal) and the control group. A sum total of 45 participants were involved at each of the Special Correctional Centres. 90 participants were involved in the research as determined by their satisfying or meeting the requirements. At the Special Correctional Centre for Girls, Idi-Araba only 45 wards satisfied the required research criteria for conduct disorder. To work with equal representation from the boy's centre, hence the participation of 45 adolescents only.

The description of samples are as follows:

Age of participants between 10-13 years was 35 constituting 38.9% while participants between 14-17 years were 55 constituting (61.1%) of the sample,

Christian participants were 65 which is 72.2%, while Muslim participants were 25 constituting 27.8% ,

63 of the participants were in Primary School which makes up 70%, 19 were in Junior Secondary School representing 21.1%. A total of 8 were in Senior Secondary School which resulting into 8.9%,

48 of the participants (53.3%) were Yoruba, 2 Hausas or 2.2%, 16 Igbos or 17.8% were participants with, other tribes apart from the three major tribes in Nigeria being 24 or 26.7%.

Participants' in order of birth reveals that the first born's were 28 or 31.1%, second born's were 18 or 20%, third born's were 16 or 17.8%, fourth born's were 13 or 14.4% with fifth or later births being 15 or 16.7% .

Participants' length of stay at the Special Correctional Centres between 1 - 6 months was 28 or 31.1%, 7-12 months were 24 or 26.7% and over one year were 38 or 42.2%.

### **3.6 Instruments**

The instruments that were utilized in the research are three which are:

- i. Conduct Disorder Scale (CDS),
- ii. Socio-Economic Scale (SES), and
- iii. Parenting Style Scale (PSS).

#### **3.6.1 Conduct Disorder Scale (CDS)**

Conduct Disorder Scale (CDS) was designed by James E. Gilliam in 2002. The CDS is preferred in this study because it is an efficient and effective instrument for evaluating students that are exhibiting severe behaviour problems and may have Conduct Disorder. Furthermore, it provides standard scores for use in identifying students with Conduct Disorder. The 40 items that are on the CDS depicts the specific diagnostic behaviours that are characteristic of persons with Conduct Disorder. These items comprise four subscales representing the core symptom clusters that are necessary for the diagnosis of Conduct Disorder which include: Aggressive Conduct, Hostility, Deceitfulness and Theft, and Rule Violations. The CDS is applicable to individuals' that are between ages 5 through 22, exhibiting unique behavioural problems. Items on the subscales have strong face validity because they are based on the diagnostic criteria for Conduct Disorder that were published in the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition-Text Revision (DSM-IV-TR) (Gilliam, 2002).

The subscales have reliability coefficients of: Aggressive Conduct - 0.94, Hostility – 0.91, Deceitfulness and Theft – 0.79, and Rule Violations – 0.74. The overall reliability coefficient for the whole scale (CDS) is 0.96. The scoring pattern for the items on the scale are in the order of: Never Observed (0), Seldom Observed (1), Sometimes Observed (2) and Frequently Observed (3).

### **3.6.2 Socio-Economic Scale (SES)**

This Scale was used by Dada (2004) to measure the socio-economic status of individuals through their parent's profession, educational level, residence and type of equipment in the house. The scale comprise twelve (12) items in this order: Items 1-4 focuses on participants' bio-data, with Items 5-12 focusing on the parent's occupation, educational level, residence and types of equipment in the house.

The Scale has a reliability coefficient of 0.73. The scoring pattern for the Scale is:

Parent's occupation: 1 – 10 points; Educational Level: 1 – 14 points; Parent's Residence: 1 – 6 points; Type of House: 1 – 3 points and Equipment in the house: 1 – 27 points. The maximum point is sixty (60) which is further divided into three (3) parts: Lower socio-economic status (0 – 15 points), Middle socio-economic status (16 – 40 points) and High socio-economic status (41 – 60 points).

### **3.6.3 Parenting Style Scale**

This scale was self-designed by the researcher in order to determine each parent's rearing style. The scale is divided into three sections namely authoritative, authoritarian and permissive parenting styles which are in alignment with Baumrind (1971, 1991) and Mckay (2006). Each section is made up of fifteen (15) items with a response scale from Never (1) to Always (5). The instrument was given to four experts in the psychology department who ascertained its face and content validity. The instrument was further subjected to empirical validation. A pilot study was carried out at different secondary schools on adolescents with conduct disorder record to validate the instrument. Test-retest reliability was carried out by administering the instrument to one hundred and fifty adolescents comprising 71 males and 79 females. After an interval of four weeks, it was re-administered to the same set of adolescents. The scores of the two sets were correlated using the Pearson's  $r$ . The correlation coefficient was found to be 0.78. The items on this self designed scale are based on the Likert-like scale (i.e. Never (1); Almost never (2); Sometimes (3); Often (4) and Always (5).

### **3.7 Procedure for Treatment**

This study was carried out in three phases:

- Phase one: visit to the correctional centres
- Phase two: Treatment
- Phase three: evaluation of the treatment

#### **3.7.1 Visit to the Special Correctional Centres**

The researcher visited the two special correctional centres in Lagos State (special correctional centre for boys, Oregon and special correctional centre for girls, Idi-Araba) after which a letter of introduction from her institution and an application to the Permanent Secretary, Ministry of Youth and Social Development, Alausa Secretariat, Lagos State were submitted. The application sought permission for the participation of adolescents in the two special correctional centres in the research work. The permission was granted after acquainting the representative of the ministry (Youth and Social Development) on the research work.

At the correctional centres, it was discovered that routine activities that take place daily are as follows:

- 5am - Wake up time.
- Between 5 am and 7am, wards say their prayers; roll call is taken; cleaning of the surroundings in preparation for the day.
- 7.30am - School assembly period where wards are given motivational talk.
- 8.00am to 8.30am - Breakfast at the dining hall.
- 8.30am to 11.45am – Attend classes.
- 11.45am to 12 noon – Short break.
- 12 noon – 1 pm: Wards return to the dormitories.
- 1-2 pm: Vocational calls (vocations such as shoe making, arts and craft, screen printing, video coverage and photographing, tailoring, cane weaving, bead making, hair dressing, baking, among others).

- 2pm – 3pm: wards go for lunch at the dining hall.
- 3pm – 4 pm: wards return to the dormitories to rest.
- 4-6pm: Games/Sports.
- 6pm: wards go for supper at the dining hall.
- 7pm: wards return to the dormitories and
- 9pm: Light out time.
- Saturdays and Sundays are slightly different at the correctional centres because these are the days that are earmarked for Non Governmental Organizations (NGOs) to visit and to make gift presentation to the wards.

### **3.7.2 Treatment Package**

The procedure that was employed was the treatment package that lasted for a period of eight weeks. Each session of the treatment programme lasted between one and two hours, twice a week (Tuesdays and Thursdays or Saturdays). In all, there were eight sessions for the participants. This was principally to expose the two counselling interventions (Cognitive Restructuring & Behavioural Rehearsal) to the participants..

#### **3.7.2.1 Experimental Group 1: Cognitive Restructuring Skill Training (CRST)**

Cognitive restructuring is a set of techniques for becoming more aware of our thoughts and for modifying them when they are distorted or are not useful. Cognitive restructuring as a treatment technique in this study was directed towards helping adolescents to restructure their thinking and behaviour.

#### **Treatment Package**

The treatment technique includes strategies such as: Self statement or self talk, self monitoring, rational analysis, problem redefinition and cognitive home work.

## **Week One**

### **Session One: General Orientation to the programme and pre-test administration**

The researcher set out to achieve the following objectives:

- a) To familiarize participants with the entire programme.
- b) To create a conducive atmosphere for discussion sessions.
- c) To administer pre-test questionnaire.

The researcher welcomed participants to the programme, after which each person introduced him or herself including the researcher. The participants were informed that the program would last for eight weeks comprising two hours a week. Breakdown of activities for the period was further announced to participants. The researcher informed the participants that each session would involve group therapy, feedback and discussions based on previous and present sessions. The researcher assured the participants that all information given during the treatment programme would be kept in confidence and they were also encouraged to keep all information received to themselves. The researcher implored participants for maximum cooperation, honesty, sincerity and commitment in making the programme a success.

Three scales consisting those of Conduct Disorder, Parenting Styles and Socio-Economic were administered on participants. The participants were informed that the scales were designed to identify problems relating to them. This is in order to assist one in deciding how best to help them. They were further informed that there are no pass or fail answers to the questions asked in the scale, hence, they should be sincere and honest in providing genuine and truthful information about themselves.

The researcher appreciated the participants for their commitment and cooperation during the session and encouraged them to attend the next session.

## **Week Two**

### **Session Two: Basic terms and concepts in cognitive restructuring**

The objectives for this session were to:

- a) help the participants accept responsibility for their behaviours.
  - b) restructure their thinking and thereby alter their behaviours.
- To achieve the stated objectives, the researcher welcomed the participants to the second session of the cognitive restructuring skill training therapy. The participants were introduced to cognitive restructuring as a process of changing subconscious thoughts. The intent is to bring a person to the full implication of negative statements about one's self.
  - To successfully do this, the researcher explained that each participant has two minds, these being the conscious and the subconscious. The conscious mind belongs to the individual in the present or current state while the subconscious mind belongs to the individual's earlier or previous environment. The latter include learned attitudes from one's parents, friends, school(s) and the home environments that he or she had previously lived. However, every person must take personal responsibility for his or her actions in the final analysis, although some other people may have influenced one to behave wrongly. This is because the major cause of conduct disorder stems from within, in the form of negative self-statements such as self-defeating thoughts, distorted thinking and low self-esteem. For a person to engage in any future behaviour manifestation of conduct disorder therefore is a conscious choice, for there is a knowing of right and wrong by each individual. The researcher helped the participants to realize the effects of negative thoughts as well as self-statements, and how these tend to stimulate conduct disorder. The latter therefore attracts shame, sanctions and sometimes rejection by the society. The researcher stressed the fact that although nobody had the privilege of choosing one's parents or early environment or could control one's beginning; one can however determine who he or she should be - that is, either as a success or a failure. To achieve this, a person must deliberately think positive thoughts towards one's self, irrespective of one's past experiences or the labeling of one by others.



- The knowledge of ‘positive thoughts and positive self’ enabled participants to realize that they could change who they are by altering their doings. That is, a change from conduct disorder to good conduct. Regardless of circumstances, this session insist that one can change by burying all excuses no matter how tenable, into the sea of forgetfulness.
- By way of feedback, participants were asked to give examples of some of their personal negative self-defeating thoughts and encouraged to change such to positive thoughts/self-statements.
- Assignment: List ten behaviour disorder of adolescents known to you.
- The session ended with words of appreciation and encouragement to participants to attend the next session.

### **Week Three**

#### **Session Three: Identification of participants’ problem and information on conduct disorder**

Objective: To guide participants to identify thinking patterns associated with conduct disorders and antisocial behaviours, as well as prosocial behaviours. This is to establish that conduct disorder is a product of negative self-statements.

The researcher welcomed the participants to the third session, and recapitulated the previous discussion. A time of questions and answers followed. The assignment was also collected. The researcher engaged the participants on how to combat conduct disorder. The therapy started by enlightening the participants on the constituent of good and bad conduct (behaviours). Bad conduct or conduct disorder is another term for undesirable behaviours such as aggression, destruction of property or vandalism, deceitfulness or theft and serious violation of rules. Good behaviour or good conduct on the other hand include being assertive, constructive, truthful, and obedient or respectful.

The researcher made reference to prominent individuals in the society who engage in good behaviour or conduct and therefore were able to attain great heights. Participants

were led to make contributions, in the form of question(s), observation(s) and answers.

Assignment: What are some of the ways to combat conduct disorder?

This session ended with appreciation and encouragement of participants to attend the fourth session.

## **Week Four**

### **Session Four: Overcoming conduct disorder through the principle of cognitive restructuring.**

Objectives: To empower participants with strategies of cognitive restructuring such as self awareness, self-regulation, re-construction of thoughts, self statement or self talk and self monitoring to combat conduct disorder.

The researcher started the session by welcoming participants. The last session was reviewed, and the assignment was collected and discussed.

The participants were occupied with the techniques of thought reconstruction, self talk and self monitoring among other strategies and were encouraged to practice the strategies. Once participants were able to identify their thought patterns and how these are linked to their feelings. Feelings are further linked to behaviours or actions, which inadvertently lead to their “trouble spots” (Baker & Scarth, 2002). For instance, in a case of aggression, participants would learn strategies for monitoring the buildup of anger such as clenching of the fists and tightening of the shoulders. Thought restructuring and self talk helped the participants to slow down and carefully assess the situation as well as his or her reaction to it. Participants were made to learn thought stoppage exercise and changing negative thoughts to positive thoughts.

The session ended with appreciation of participants’ participation and therapy assignment is given.

Home work: Make a list of some negative statement that you say to yourself.

Make a list of some positive statement that you say to yourself.

Make a list of some beneficial statements that can replace the negative and harmful thoughts that you think.

## **Week Five**

### **Session Five: Continuation of therapeutic intervention of cognitive restructuring**

During this session, the previous session was reviewed and the therapy assignment was retrieved. This was immediately followed by the continuation of therapeutic intervention of cognitive restructuring. Participants took turn to describe the behaviours they have learnt by practicing the strategies of cognitive restructuring.

The researcher praised the participants for putting the behaviour into practice and stressed its benefits. Participants lauded the positive reactions of others to it and the personal satisfaction and sense of accomplishment derived from behaviours by them. Assignment: Write some observable benefits of cognitive restructuring.

The session was wrapped up with words of appreciation and encouragement by the researcher.

## **Week Six**

### **Session Six: Emphasis on the benefits of cognitive restructuring therapy for adequate restoration of expected behaviour outcome.**

This session commenced with a word of welcome from the researcher and was followed by the review of the last session.

The assignment was collected and answers were discussed. Participants who participated actively were rewarded with token reinforcement such as biscuits and sweets.

The researcher intensified her teachings on the importance of cognitive restructuring and the havoc of conduct disorder if left unattended to or not treated.

The session came to a close with the encouragement of participants to continue to practise the strategies that has been learnt so far.

## **Week Seven**

### **Session Seven: General evaluation of the cognitive restructuring skill training.**

A welcome Address by the researcher kick-started the session. Recapitulation of key points from previous sessions were discussed. The participants were further engaged with the techniques of thought reconstruction, self talk and self monitoring among other strategies that they were encouraged to practise previously. The participants were asked to explain good and bad conduct (behaviours) and examples of responses given are stealing, fighting, running away from home or from school, destruction of property(ies) or vandalism, deceitfulness and serious violation of rules while good behaviour or good conduct are being kind, assertive, constructive, truthful, obedient and respectful.

Participants were encouraged to ask questions, make comments and share personal experiences learnt so far in all the previous sessions.

## **Week Eight**

### **Session Eight: Wrap up**

The researcher appreciated the participants for their dedication and cooperation from the beginning of the cognitive restructuring skill training. Again, participants were reminded and encouraged to practice the learnt techniques. This is in order to experience a total victory over the plagues of conduct disorder.

Finally, a post-test was administered to all the participants.

### **3.7.2.2 Experimental Group II - Behavioural Rehearsal Skill Training (BRST)**

Behavioural rehearsal is a technique in which target behaviour(s) are role-played. Role playing provides a method for structuring and orchestrating modelling opportunities and also provides a safe way to “try on” a newly learned approach (Baker & Scarth, 2002).

#### **Treatment Package**

The treatment plans here include techniques such as: problem definition, role playing or initial enactment, role-reversal, coaching, practice, self monitoring and follow-up.

#### **Week One**

##### **Session One: General orientation of the programme and administration of pre-test**

The researcher set out to achieve the following objectives:

- a. To familiarize participants with the entire programme.
- b. To create a good atmosphere for discussion session.
- c. To administer a pre-test.

The researcher welcomed participants to the behavioural rehearsal skill therapy session, after which a self introduction took place by both the researcher and the participants. The participants were informed that the program would last eight weeks, comprising two hours each session per week. The breakdown of activities for the period was also announced to the participants. The researcher informed the participants that each session would involve lectures, role playing, coaching and practise among other things.

Assurance was given by the researcher to participants that all information given during the therapy would be kept in confidence and they were encouraged to do likewise. The researcher implored participants for maximum cooperation, honesty, sincerity and commitment in making the programme a success.

The scales for Conduct Disorder, Parenting Style and Socio-Economic were administered on participants. The importances of the scales were adequately communicated to the participants and their sincerity in proffering genuine and honest information was solicited. They were made to understand that there is no pass or fail answer in the treatment as every answer is credible.

In closing, the researcher appreciated the participants for their undivided attention and cooperation during the session and encouraged them to attend the next session.

## **Week Two**

### **Session Two: Introduction of basic terms and concepts of Behavioural Rehearsal.**

The objectives of this session are to:

- a. Define the problems of the participants or to identify their present situation
- b. Role play the present behaviour

To achieve the stated objectives, the researcher welcomed the participants to the session of behavioural rehearsal skill training. The researcher and participants deliberated on the problems and also role played the present behaviour. Verbal and non-verbal behaviours were also observed and feedback given.

The session came to an end when the researcher appreciated the participants and gave them a take home assignment.

Assignment: List four behaviour disorders peculiar to you as a person.

## **Week Three**

### **Session Three: Review of assignment and discourse on the harm of conduct disorder**

Objectives: To establish peculiar behaviour(s) that are evident from the assignment that was submitted, role-play the present behaviour(s) and enlighten the participants on the harm of conduct disorder.

The researcher kick-started the session by welcoming participants. Review of the last session was done, questions were asked and answers were provided and the assignment was collected. The researcher enlightened the participants on the havoc of conduct disorder to human life. Good and bad conducts were highlighted. Bad conduct or conduct disorder such as aggression, destruction of property or vandalism, deceit or theft, and serious violation of rules were discouraged while good behaviour(s) or good conduct such as being submissive, docile, constructive, truthful, and obedient or respectful were encouraged and practiced during the session.

Outstanding personalities in the society were cited by the researcher to serve as role models to the participants. The researcher role played some desirable behaviour(s) and contribution(s) were harvested from the participants.

The researcher asked participants to keep a journal (a note book for daily recording of behaviours) of all the activities during the sessions. The purpose of the journal is to spell out the set goals and proffer how to achieve these. Every accomplished goal(s) are to be ticked daily.

This session ended with the participants being appreciated and encouraged to attend the next session.

A take home assignment was given to them.

Assignment: Write down and role play a discussion for the next session.

## **Week Four**

### **Session Four: Therapeutic intervention of behavioural rehearsal**

Objectives: To role play desirable behaviour(s) and create opportunities for real situations.

The researcher started the session by praising the participants for the high level of cooperation that they have exhibited so far. The previous session was reviewed, the take home assignment was collected, discussed and reinforcement was given.

Both the researcher and participants role played good and bad behaviours. The participants also role played among themselves and constructive criticism of behaviour(s) was encouraged, while insisting that the person is not criticized. Members of the group were counselled to show consideration, respect, and due recognition of other persons. In the process of role playing, observers were asked to make suggestion(s) on verbal and nonverbal behaviours that were apparent.

The session ended with appreciating the participants as well as giving them a home work.

Home work: write out your goal(s) for the week and tick as each is attained.

### **Week Five**

#### **Session Five: Continuation of therapeutic intervention of Behavioural Rehearsal**

During this session, each participants' journal was reviewed. Furthermore, all the participants took turns to describe the behaviours they have learnt by practising the strategies of behavioural rehearsal.

The researcher praised correct rehearsal by participants and implored them to practise regularly as this is the way to overcoming conduct disorder. They were given home work

Assignment: Write some observable benefits of behavioural rehearsal.

The session was wrapped up with words of appreciation and encouragement to all the participants by the researcher.

### **Week Six**

#### **Session Six: Concretization of the benefits of behavioural rehearsal therapy for adequate restoration of expected behaviour outcome.**

A welcome address by the researcher kick started the session.

The previous week's assignment was collected and responses were discussed.

The researcher intensified the teachings on the benefits of behavioural rehearsal therapy as against the unpleasant consequences of conduct disorder.



The session ended with words of encouragement to the participants to continue the practise of the newly acquired therapy. This is in order to better the conduct of each person.

## **Week Seven**

### **Session Seven: General evaluation of the behavioural restructuring skill training.**

This session commenced with words of welcome from the researcher to the participants. Key points from previous sessions were revisited and reemphasized.

The researcher reminded the participants of the havoc of conduct disorder to human and the benefits of good behaviour to self and the society at large. The group members were divided into two groups. The first group role played bad conduct such as aggression, destruction of property/ vandalism, deceit, theft, and serious violation of rules while the second group role played good behaviours or good conduct such as being assertive, submissive, constructive, truthful, obedient, and respectful. Outstanding personalities in the society were cited by the researcher to encourage the participants, researcher role played desirable behaviours and contribution(s) were harvested.

This session ended with appreciation and encouragement of the participants to attend the next session.

Participants were encouraged to ask question(s), make free comment(s) and share personal experience(s) gathered in all the sessions.

## **Week Eight**

### **Session Eight: Wrap up and post-test administration**

The researcher expressed gratitude to all the participants for their commitment and cooperation during all the previous sessions of the behavioural rehearsal skill training. They were encouraged to make the sessions undergone a reality by making sure that all the conduct disorder that were observed and dropped, be avoided henceforth. Few

participants were called to rehearse good behaviours and they all performed excellently well. Reinforcement was given to all the group members for their performance.

Finally, the post test was administered to all the participants.

### **3.8 Data Analysis**

Data collected from the study were analyzed using both the descriptive and inferential statistical methods. The descriptive statistics are: frequency counts, percentage, measures of central tendency and measures of dispersion or variability. The inferential statistics deals with inferences about the population characteristics based on the sample characteristics (Hassan, 1995). The inferential statistics used in this study include analysis of variance (ANOVA), regression analysis and t-test.

Analysis of variance was used for testing the hypothesis that two or more independent samples are drawn from populations having same mean. The samples constitute independent random samples from a single population, subjecting them to experimental treatments, and comparing them on a single dependent or criterion variable (Hassan, 1995). The one-way analysis of variance was used to test hypothesis one for order of prominence in conduct disorder, hypothesis three for parental socio-economic status of adolescents' conduct disorder, and hypothesis five for cognitive restructuring and behavioural rehearsal when compared with the control group. The one way analysis of variance was also applied to hypothesis seven in testing for participants' paternal, maternal parenting style and parental socio-economic status, and on hypothesis eight for the significant effect of cognitive restructuring and behavioural rehearsal on conduct disorder of participants based on age, religious affiliations, educational qualification and length of stay in the Special Correctional Centres.

Regression analysis is a statistical tool or technique for the investigation of relationship between variables (Awoniyi, Aderanti & Tayo, 2011). Regression analysis includes many techniques for modelling and analyzing several variables, when the focus is on the relationship between a dependent variable and one or more

independent variables. More explicitly, regression analysis helps one to understand how the typical value of the dependent variable changes when any one of the independent variables is varied, while the other independent variables remain fixed. In this study, regression analysis variance was used to test hypothesis two (2) for the difference in the prevalence of paternal and maternal parenting styles among adolescents with conduct disorder.

The t-test statistical tool was used to test hypothesis four for the significant difference in the degree of severity of conduct disorder before and after treatment among the participants. It was also used on hypothesis six to discover the existence of a significant difference (if any) in the conduct disorder of participants that are exposed to cognitive restructuring and behavioural rehearsal. It was applied on hypothesis seven with reference to sex: male and female and socio-economic status which is in two divisions: medium and high (in the cognitive restructuring group). The hypotheses were tested at 0.05 level of significance.

## CHAPTER FOUR

### DATA ANALYSIS AND PRESENTATION

#### 4.1 Introduction

This chapter's main focus is on the data presentation and analysis of result. It begins with the description of the participants' demographic information. This is followed by the descriptive analysis of the variables that were employed in the research. The next discussion is on the testing of the hypotheses that were formulated for the study which guides the arrangement of the tables. Finally, a summary of the main findings which appear next to each hypothesis as well as selected findings from the demographic data that were collected are used to inform and contrast the findings.

#### 4.2 Demographic Data

This section presents the description of the participants of the study in frequency counts and percentages.

**Table 4.2.1:** Distribution of Participants by Sex.

Sex	Frequency	Percentage (%)
Male	45	50
Female	45	50
Total	90	100

Table 4.2.1 indicates that forty-five (45) were male constituting fifty percent (50%) and the same number of female participants were involved, all being a total of 90 participants.

**Table 4.2.2: Distribution of Participants by Age.**

Age (M = 14.3)	Frequency	Percentage (%)
10 - 13	35	38.9
14 – 17	55	61.1
Total	90	100

**Table 4.2.3: Distribution of Participants' Age by Sex.**

Age	Male		Female		Total	
	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
10-13	11	24.4	24	53.3	35	38.9
14-17	34	57.6	21	46.7	55	61.1
Total	45	100	45	100	90	100

From Table 4.2.2, participants between 10-13 years of age were 35 constituting 38.9% while participants between 14-17 years old were 55 constituting 61.1% of the sample. This table revealed that a large number of participants were from the age bracket of 14-17 years. The age distribution by sex (Table 4.2.3) revealed that the female participants' between ages 10-13 were 24 which is 53.3%, while the male participants that were 34 constituting 75.6% were more than the females in the age range of 14-17.

**Table 4.2.4: Distribution of Participants by Religion.**

Religion	Frequency	Percentage (%)
Christianity	65	72.2
Islam	25	27.8
Total	90	100

Table 4.2.4, indicates that the majority of the participants were Christians. Christian participants were 65 that is, 72.2%, while Muslim participants were 25 constituting 27.8% of the participants.

**Table 4.2.5:** Distribution of Participants' Religion by Sex.

Religion	Male		Female		Total	
	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
Christianity	26	57.8	39	86.7	65	72.2
Islam	19	42.2	6	13.3	25	27.8
Total	45	100	45	100	90	100

From Table 4.2.5, the result shows that the female participants (39) were predominantly Christians representing 86.7%, though participants who indicated Christianity were more prevalent in male, participants who indicated Islamic religion were 19 constituting 42.2% compared with females that indicated Islam as their religion. The most prevalent religion among participants is Christianity.

**Table 4.2.6:** Distribution of Participants' by Educational Level.

Educational Level	Frequency	Percentage (%)
Primary	63	70.0
JSS	19	21.1
SSS	8	8.9
Total	90	100

Table 4.2.6 shows that 63 of the participants were in Primary School which sums up to 70%, and 19 of the participants were in Junior Secondary School representing 21.1%, while 8 of the participants were in the Senior Secondary School level which constitutes 8.9% of the participants.

**Table 4.2.7:** Distribution of Participants' Educational Level by Sex.

Educational Level	Male		Female		Total	
	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
Primary	30	66.7	33	73.3	63	70
JSS	11	24.4	8	17.8	19	21.1
SSS	4	8.9	4	8.9	8	8.9
Total	45	100	45	100	90	100

In Table 4.2.7, there were more female participants 33 or 73.3% in Primary School compared to males in Primary School who are 30 or 66.7%. on the other hand, males in Junior Secondary Schools are 11 or 24.4% were more than their female counterparts that were 8 or 17.8%.

**Table 4.2.8:** Distribution of Participants by Tribe.

Tribe	Frequency	Percentage (%)
Yoruba	48	53.3
Hausa	2	2.2
Igbo	16	17.8
Others	24	26.7
Total	90	100

Table 4.2.8 revealed that 48 of the participants that is 53.3% were Yoruba, 2 were Hausas or 2.2%, while 16 were Igbos or 17.8%. a total of 24 or 26.7% belong to the other tribe in Nigeria. The participants consequently were predominantly Yorubas mainly may be because of the location of the Special Correctional Centres.

**Table 4.2.9:** Distribution of Participants' Tribe by Sex.

Tribe	Male		Female		Total	
	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
Yoruba	35	77.8	13	28.9	48	53.3
Hausa	0	0	2	4.4	2	2.2
Igbo	7	15.6	9	20	16	17.8
Others	3	6.7	21	46.7	24	26.7
Total	45	100	45	100	90	100

Table 4.2.9 indicates that 35 or 77.8% males were Yoruba which is the highest number of tribe among the participants. Female participants from other tribes were 21 constituting 46.7%. Thus was the second predominant tribe among the participants.

**Table 4.2.10:** Distribution of Participants by Order of Birth.

Order of Birth	Frequency	Percentage (%)
First	28	31.1
Second	18	20.0
Third	16	17.8
Fourth	13	14.4
Fifth of Later	15	16.7
Total	90	100

From Table 4.2.10, participants' order of birth indicates that the first born among the participants were 28 or 31.1%, followed by the second borns were 18 or 20%. The third borns among the participants were 16 or 17.8%, while the fourth borns were 13 or 14.4%. The fifth or later births were 15 or 16.7%.



**Table 4.2.11: Distribution of Participants Order of Birth by Sex.**

Order of Birth	Male		Female		Total	
	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
First	19	42.2	9	20	28	31.1
Second	10	22.2	8	17.8	18	20
Third	7	15.6	9	20	16	17.8
Fourth	3	6.7	10	22.2	13	14.4
Fifth and Later	6	13.3	9	20	15	16.7
Total	45	100	45	100	90	100

Table 4.2.11 indicates that the three predominant birth orders were first born males 19 or 42.2%, second born males 10 or 22.2% and fourth born females 10 or 22.2%.

**Table 4.2.12: Distribution of Participants by Length of Stay.**

Length of Stay	Frequency	Percentage (%)
1 – 6 months	28	31.1
7 – 12 months	24	26.7
Over One year	38	42.2
Total	90	100

Table 4.2.12 shows the length of stay of each of the participants at the correctional centres. The participants that had stayed between 1-6 months were 28 or 31.1%, while those that had stayed between 7-12 months were 24 or 26.7%. Those that had stayed over one year were 38 or 42.2%. Here, it is observed that participants “over one year” had the highest frequency.

**Table 4.2.13: Distribution of Participants' Length of Stay by Sex.**

Length of Stay	Male		Female		Total	
	Frequency	Percentage (%)	Frequency	Percentage (%)	Frequency	Percentage (%)
1-6 month	19	42.2	9	20	28	31.1
7-12 month	16	35.6	8	17.8	24	26.7
Over One year	10	22.2	28	62.2	38	42.2
Total	45	100	45	100	90	100

Table 4.2.13 shows that the male participants that had stayed between 1-6 months were 19 or 42.2%, while those with the duration between 7-12 months were 16 or 35.6%, and those whose stay were over one year were 10 or 22.2%. The female participants that had stayed between 1- 6 months were 9 or 20.0%, and those female whose stay is between 7 – 12 months were 8 (17.8%). As for the female participants whose stay were over one year they were 28 or 62.2%. This last group constituted the largest among the participants.

**Table 4.2.14: Order of Prominence in Conduct Disorder among Participants.**

Conduct Disorder	1 <sup>st</sup> Prominent		2 <sup>nd</sup> Prominent		3 <sup>rd</sup> Prominent		4 <sup>th</sup> Prominent	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Aggression	22	24.4	*24	26.7	24	26.7	20	22.2
Hostility	5	5.6	23	25.6	*32	35.6	30	33.3
Deceitfulness/theft	*58	64.4	22	24.4	10	11.1	-	-
Rule Violation	5	5.6	21	23.3	24	26.7	*40	44.4
Total	90	100	90	100	90	100	90	100

\*Most Prominent

Table 4.2.14 presents the order of prominence in conduct disorder among adolescents in the Special Correctional Centres. A total number of 58 participants or 64% of the participants exhibited deceitfulness/theft as the first disorder among the four subdivisions of conduct disorder. Though deceitfulness came first overall, it should be noted that some participants came first in other disorders. For instance, 22 or 24.4% participants came first in aggression, while 5 or 5.6% exhibited first in hostility and rule violation respectively.

In the second order of prominence, the disorder among adolescents in the Special Correctional Centres was aggression. A total number of 24 or 26.7% participants exhibited conduct disorder of aggression, while participants with hostility were 23 or 25%. Conduct disorder of deceitfulness/theft were 22 or 24.4% participants, rule violation participants being 21 or 23.3%. The third order of prominence in conduct disorder among adolescents in the Special Correctional Centres was hostility with 32 or 35.6% participants, followed by aggression and rule violation which had 24 or 26.7% each, while participants with deceitfulness/theft were 10 or 11.1%. The fourth order of prominence revealed that rule violation was the highest with 40 or 44.4% of the participants. Hostility and aggression accounted for 30 or 33.3% and 20 or 22.2% respectively, with no participant indicating deceitfulness/theft.

**Table 4.2.15:** Order of prominence in conduct disorder among participants by sex.

Conduct Disorder	Sex	1 <sup>st</sup> Prominent		2 <sup>nd</sup> Prominent		3 <sup>rd</sup> Prominent		4 <sup>th</sup> Prominent	
		Freq.	%	Freq.	%	Freq.	%	Freq.	%
Aggression	Male	10	22.2	*14	31.1	13	28.9	8	17.8
	Female	12	26	10	22.2	11	24.4	12	26.7
Hostility	Male	4	8.9	12	26.7	*15	33.3	14	31.1
	Female	1	2.2	11	24.4	*17	37.8	16	35.6
Deceitfulness/theft	Male	*27	60	11	24.4	7	15.6	-	-
	Female	*31	68.9	11	24.4	3	6.7	-	-
Rule Violation	Male	4	8.9	8	17.8	10	22.2	*23	51.1
	Female	1	2.2	*13	28.9	14	31.1	*17	37.8
Total		90	100	90	100	90	100	90	100

\*Most Prominent

Table 4.2.15 indicates the order of prominence in conduct disorder among adolescents in the Special Correctional Centres by sex. Here, 27 or 60% of male exhibited deceitfulness or and theft while females were 31 or 68.9% in the first order of prominence. It was observed that the female participants exhibited more deceitfulness and theft than the male participants. In the second order of prominence, aggression came second for the males, with 14 or 31.1% participants while rule violation came second for females, having 13 or 28.9% participants. Hostility and rule violation in males had 12 or 26.7% and 8 or 17.8% participants respectively. Aggression in females was 10 or 22.2%. On the other hand, deceitfulness and theft in male and female participants had equal frequencies and percentages of 11 or 24.4% respectively.

The third prominent column revealed hostility with the sex variations being: males 15 or 33.3% and female 17 or 37.8%. Aggression and rule violation were also high for

both sexes in the third prominent disorder where aggression in males was 12 or 26.7% and rule violation was 11 or 24.4%. Aggression in the females was 13 or 28.9% and rule violation was 14 or 31.1%. The fourth in the order of prominence of conduct disorder among the participants is rule violation. The result indicates that the males had the highest frequency with 23 or 51.1% while females had 17 or 37.8%. Aggression and hostility in the males were 8 or 17.8% and 14 or 31.1% respectively while it was 12 or 26.7% and 16 or 35.6% respectively in the females.

**Table 4.2.16:** Prevalent Paternal and Maternal Parenting Styles.

Parenting Style		Frequency	Percentage (%)
Paternal	Authoritative	*62	68.9
	Authoritarian	12	13.3
	Permissive	16	17.8
	Total	90	100
Maternal	Authoritative	*58	64.4
	Authoritarian	22	24.4
	Permissive	10	11.1
	Total	90	100

\* Most prevalent

Table 4.2.16 indicates the participants' paternal and maternal parenting styles. Here, the authoritative parenting style was predominant. Participants with paternal authoritative style were 62 or 68.9%, while participants with authoritarian parenting style were 12 or 13.3%. Those whose parenting style was permissive were 16 or 17.8%. Participants' maternal parenting styles indicated that those that were authoritative were 58 or 64.4%, while those that were authoritarian were 22 or 24.4% and the permissive were 10 or 11.1%. It has been observed that authoritative parenting style is often termed "balanced parenting" and is believed to be the best parenting style. The study however revealed that adolescents that were raised with this parenting style are prominent with conduct disorder. There is the need therefore to re-examine previous findings and conclusions.

**Table 4.2.17: Prevalent Paternal and Maternal Parenting Style by Sex**

Parenting style	Male		Female		Total	
	Freq.	Percent (%)	Freq.	Percent (%)	Freq.	Percent (%)
Paternal						
Authoritative	36	80.0	26	57.8	62	68.9
Authoritarian	3	6.7	9	20	12	13.3
Permissive	6	13.3	10	22.	16	17.8
Total	45	100	45	100	90	100
Maternal						
Authoritative	24	53.3	34	75.6	58	64.4
Authoritarian	13	28.9	9	20	22	24.4
Permissive	8	17.8	2	4.4	10	11.1
Total	45	100	45	100	90	100

Table 4.2.17 reveals that the authoritative father's parenting style is predominant in both the male and female participants. Among the male participants, there were 36 or 80% with authoritative father's parenting style and 26 or 57.8% among the female participants with authoritative father's parenting style. The female participants had a higher authoritative father's parenting style and permissive father's parenting style vis a vis compared to male participants.

The Table also reveals that authoritative mother's parenting style is predominant in both the male and female participants. Among the male participants, there were 24 or 53.3% with authoritative mother's parenting style and 34 participants or 75.6% in the female category with authoritative mother's parenting style. Although the female participants with authoritative mother's parenting style were higher in authoritative mother's parenting style, the male participants had a higher authoritarian mother's parenting style and permissive mother's parenting style in frequency compared to the female participants.

**Table 4.2.18:** Cross Tabulations of Participants Parenting Style (paternal and maternal) and Conduct Disorder.

Parenting Style	Degree of Conduct Disorder						Total	
	Mild		Moderate		Severe		Freq.	%
	Freq.	%	Freq.	%	Freq.	%		
Authoritative	55	70.5	58	61.7	7	87.5	120	66.7
Authoritarian	11	14.1	23	24.5	0	0	34	18.9
Permissive	12	15.4	13	13.8	1	12.5	26	14.4
Total	78	100	94	100	8	100	180	100

The data in Table 4.2.18 shows a cross tabulation of participants' parenting style (paternal and maternal) side by side the degree of conduct disorder. It is observed that authoritative parenting style is predominant across the three degrees of conduct disorder. The participants from the authoritative parenting style bracket were 55 or 70.5% mild in the degree of severity, while the participants from the authoritarian parenting style group were 11 or 14.1% of moderate in the degree of severity. The participants from the class of permissive parenting style had 12 or 15.4% in the mild degree category.

The parenting styles moderate degrees of severity in the conduct disorder as revealed by this study are: authoritative with 58 or 61.7% of participants, authoritarian with 23 or 24.5% participants, and permissive with 13 or 13.8% participants. It was also observed that participants with the authoritative parenting style had 7 or 87.5% in severe conduct disorder, with participants from authoritarian parenting style having no case of severe conduct disorder. The participants with permissive parenting style had 1 or 12.5% in the severe degree of conduct disorder.

**Table 4.2.19:** Participants Parental Socio-Economic Status.

Parental Socio-Economic Status	Frequency	Percentage (%)
Low	7	7.8
Medium	72	80.0
High	11	12.2
Total	90	100

Table 4.2.19 shows the participants parental socio-economic status. It was revealed that the participants from the low parental socio-economic status were 7 or 7.8%. Participants whose parents were from the medium socio-economic status category were 72 or 80% with the participants from the high socio-economic status being 11 or 12.2%. The study therefore revealed that the participants from the medium socio-economic status were prevalent.

**Table 4.2.20:** Cross Tabulations of Participants Parental Socio-Economic Status and Conduct Disorder by Sex.

Sex	Socio-Economic Status	Degree of Conduct Disorder			Total
		Mild	Moderate	Severe	
Male	Low	3	1	1	5
	Medium	22	18	0	40
	High	-	-	-	-
	Total	25	19	1	45
Female	Low	0	2	0	2
	Medium	12	19	1	32
	High	2	7	2	11
	Total	14	28	3	45

Table 4.2.20 examines the cross tabulation of participants parental socio-economic status and conduct disorder by sex. Here, none of the male participants were from parents with high socio-economic status, but 11 or 24.4% of the female participants were from parents with high socio-economic status. The male participants had the highest number in the medium socio-economic cadre which were 40 or 88.9%. the



male participants from the low socio-economic status were 5 or 11.1% compared with the female participants from the same low socio-economic status being 2 or 4.4%. The participants from medium socio-economic status were 32 or 71.1%.

Table 4.2.20 indicates that 7 participants were from the low SES, with 72 participants from the medium SES and 11 participants from the high SES. The distributions of the degree of conduct disorder are: participants with mild conduct disorder were 39, participants with moderate conduct disorder were 47 and participants with severe conduct disorder were 4. The participants from the medium SES constituted the highest number of both mild and moderate degrees of conduct disorder which were 34 and 37 respectively. The participants from the high SES were two (2) out of the four (4) participants with severe degree of conduct disorder. The males from low socio-economic status homes exhibited the following degrees of conduct disorder: mild - 3, moderate - 1 and severe – 1. The males from medium socio-economic status homes were: mild - 22 and moderate - 18. The females from low SES homes displayed moderate conduct disorder. The distribution of the females from medium SES homes side by side conduct disorder are: mild - 12, moderate - 19 and severe – 1. The distribution of females from high SES homes with conduct disorder are: mild - 2, moderate - 7 and severe - 2.

**Table 4.2.21:** Degree of Severity of Conduct Disorder Pre-test.

Degree of Severity (Pre-test)	Frequency	Percentage (%)
Mild	39	43.3
Moderate	47	52.2
Severe	4	4.4
Total	90	100

Table 4.2.21 indicates the participants' degree of severity of conduct disorder at the pre-test exercise before the introduction of the intervention packages. Here, the participants at the mild severity category were 39 or 43.3%, the moderate degree were 47 or 52.2% and the severe group were 4 4.4%.

**Table 4.2.22:** Degree of Severity of Conduct Disorder Pre-test by Sex.

Degree of Severity (Pre-test)	Male		Female		Total	
	Freq.	(%)	Freq.	(%)	Freq.	(%)
Mild	25	55.6	14	31.1	39	43.3
Moderate	19	42.2	28	62.2	47	52.2
Severe	1	2.2	3	6.7	4	4.4
Total	45	100	45	100	90	100

Table 4.2.22 demonstrates the distribution of the participants conduct disorder by sex. The males had mild conduct disorder of 25 or 55.6%, moderate conduct disorder of 19 or 42.2, and severe was 1 or 2.2%. The female participants were 14 or 31.1% of mild conduct disorder, 28 or 62% of moderate degree while the severe conduct disorders were 3 or 3.7%.

**Table 4.2.23:** Degree of Severity of Conduct Disorder Post-test.

Degree of Severity (Post-test)	Frequency	Percentage (%)
Not Applicable	52	57.8
Mild	26	28.9
Moderate	12	13.3
Total	90	100

Table 4.2.23 reveals the post-test result of conduct disorder. After the intervention, 52 or 57.8% of the participants could no longer be tagged to have conduct disorder, A total of 26 or 28.9% of the participants fall into the mild category while 12 or 13.3% exhibited moderate conduct disorder.

**Table 4.2.24:** Degree of Severity of Conduct Disorder Post-test by Sex.

Degree of Severity (Pre-test)	Male		Female		Total	
	Freq.	(%)	Freq.	(%)	Freq.	(%)
Not Applicable	28	62.2	24	53.3	52	57.8
Mild	11	24.4	15	33.3	26	28.9
Moderate	6	13.3	6	13.3	12	13.3
Severe	-	-	-	-	-	-
Total	45	100	45	100	90	100

Table 4.2.24 presents the sex distribution of the post test. A total of 28 or 62.2% of the male participants were no longer tagged to have conduct disorder. Another 11 or 24.4% had mild conduct disorder with 6 or 13.3% being moderate. The female participants indicated 24 or 53.3% as not applicable, some 15 or 33.3% of mild conduct disorder and 6 or 13.3% having moderate conduct disorder. The frequency table of the post-test revealed that there was a commendable improvement (difference) in the adolescents' behaviour compared with the pre-test.

### 4.3 Hypotheses Testing

This section presents the result of tested hypotheses as well as the interpretation of the data that was analyzed.

#### Hypothesis One:

There is no significant difference in the order of prominence in conduct disorder (Aggressive conduct, Hostility, Deceitfulness/Theft and Violation of rules) among the adolescents in the Special Correctional Centres.

**Table 4.3.1: Analysis of Variance of Participants Order of Prominence.**

Source	Sum of Squares	df	Mean Square	F Value	F Critical	Sig.
Between	83.0079	3	27.693	0.427	2.70	0.734
Within	5577.243	86	64.852			
Total	5660.322	89				

Table 4.3.1 expresses the analysis of the variance of the participants' in order of prominence in conduct disorder. There was no significant difference in the order of prominence in conduct disorder (aggressive conduct, hostility, deceitfulness/theft and violation of rules) among adolescents in the Special Correctional Centres ( $F_{(3, 86)} = .427$ ,  $p = 0.734$ ). Tukey Honestly Significant Difference (HSD) post-hoc test was employed to identify which pair(s) of conduct disorder significantly differed or not (see Appendix IV Table A). The post hoc test revealed that there was no pair that was significant - aggressive conduct and hostility ( $p = 0.997$ ), aggressive conduct and deceitfulness/theft ( $p = 0.972$ ), aggressive conduct and rule violation ( $p = 0.850$ ), hostility and deceitfulness/theft ( $p = 1.000$ ), hostility and rule violation ( $p = 0.861$ ), and deceitfulness and rule violation ( $p = 0.695$ ). Conclusively, there was no significant difference in the order of prominence in conduct disorder among adolescents in the Special Correctional Centre. Here, the critical value is greater than the calculated value, hence, the hypothesis was sustained.

**Hypothesis Two:**

There is no significant difference in the prevalence of paternal and maternal parenting styles experienced by adolescents with conduct disorder.

**Table 4.3.2: Contribution of the Independent Variables in the Prevalence of Paternal and Maternal Parenting Styles experienced by Adolescents with Conduct Disorder.**

Model	Predictor Variables	Unstandardized Coefficients		Standardized Coefficients	t-ratio	Sig
		B	Std. Error	Beta		
1	(Constant)					
	Paternal Parenting Style	85.283	2.473		34.488	0.000
	Maternal Parenting Style	1.269	1.082	0.125	1.174	0.244
	Parenting Style	1.247	1.226	0.108	1.017	0.312

**a. Dependent Variable:** Conduct Disorder Pretest.

Table 4.3.2 revealed that the predictor variables (Paternal and Maternal Parenting Styles) were not a predictor of conduct disorder experienced by adolescents with conduct disorder. Paternal parenting style test was ( $\beta = 1.269$ ;  $t = 1.174$ ;  $p = 0.244$ ), although better than maternal parenting test ( $\beta = 1.247$ ;  $t = 1.017$ ;  $p = 0.312$ ).

The hypothesis which states that there is no significant difference in the prevalence of paternal and maternal parenting styles among adolescents with conduct disorder was sustained.

**Table 4.3.3: Model Summary of Regressions<sup>b</sup>**

Predictors	R	R <sup>2</sup>	R <sup>2</sup> Adjusted	Std. Error
Paternal Parenting Style, Maternal Parenting Style	0.159 <sup>a</sup>	0.025	0.003	7.96370

**a. Predictors: (Constant), Paternal Parenting Style, Maternal Parenting Style**

**b. Dependent Variable:** Conduct Disorder Pretest

**Table 4.3.4: Regression Analysis on the Prevalence of Paternal and Maternal Parenting Styles experienced by the Adolescents with Conduct Disorder**

Source of Variation	Sum of Squares	df	Mean Square	F Value	F Critical	Sig.
Regression	142.744	2	71.372	1.125	3.10	0.329
Residual	5517.579	87	63.420			
Total	5660.322	89				

**a. Predictors: (Constant), Paternal Parenting Style, Maternal Parenting Style**

**b. Dependent Variable: Conduct Disorder Pretest**

The model summary Tables as represented by 4.3.3 and 4.3.4 revealed that when the predictor variables were entered into the regression model at once, there was no significant effect of the combination of paternal and maternal parenting styles ( $r = 0.159$ ,  $r^2 = 0.025$ ;  $F_{(5, 87)} = 1.125$ ;  $p = 0.329$ ). Table 4.2.3 indicates the model summary table which provides useful information about the regression analysis. The “R” column is the correlation between the actual observed independent variables and the predicted dependent variable, while the “R square” is the square of R which is also known as the “coefficient of determination”. The “adjusted R square” refers to the best estimate of R square for the population from which the sample was drawn. The “standard error of the estimate” indicated that on the average, observed paternal and maternal parenting styles testing deviated from the predicted regression line by a score of 7.96370.

**Hypothesis Three:** There is no significant difference in parental socio-economic status of the adolescents conduct disorder.

**Table 4.3.5: Analysis of Variance of Participants Parental Socio-Economic Status**

Source of Variation	Sum of Squares	df	Mean Square	F Value	F Critical	Sig.
Between Groups	403.760	2	201.880	3.341	3.10	0.040
Within Groups	5256.562	87	60.420			
Total	5660.322	89				

Table 4.3.5 reveals that there was a significant difference in parental socio-economic status ( $F_{(2, 87)} = 3.341; p = 0.040$ ). The F value was greater than F critical and for this reason, the hypothesis was rejected. A post-hoc test was performed using Honestly Significant Difference to identify the pair(s) of socio-economic status that significantly differed (see Appendix IV Table B). The results of the test revealed that there were no significant difference found between participants from low and medium socio-economic status ( $p = 0.867$ ), low and high socio-economic status ( $p = 0.396$ ). But there was a significant difference between medium and high socio-economic status ( $p = 0.031$ ).

**Hypothesis Four:** There is no significant difference in the degree of severity of conduct disorder before and after treatment among participants

**Table 4.3.6: Means, Standard Deviations and t-values of Degree of Severity of Conduct Disorder Before and After Treatment.**

Groups	No. of Cases	Mean	Std Dev.	df	t - value	t- critical	Sig.
Degree of Severity of CDS (Before)	90	85.34	7.97	89	13.97	1.98	0.000
Degree of Severity of CDS (After)	90	70.82	10.07				

Table 4.3.6 presents the resulting difference between the degrees of severity of conduct disorder before and after treatment among the participants. It was revealed that there was a significant difference between the degree of severity of conduct disorder before and after treatment ( $t = 13.974$ ,  $df = 89$ ,  $p < 0.05$ , two tailed). The t value was greater than the t critical; therefore, the hypothesis was rejected.

**Hypothesis Five:** There is no significant difference in the treatment of conduct disorder of participants exposed to cognitive restructuring and behavioural rehearsal when compared with participants in the control groups.

**Table 4.3.7: Analysis of Variance of Participants exposed to Cognitive Restructuring and Behavioural Rehearsal compared to Control Groups.**

Source of Variation	Sum of Squares	df	Mean Square	F Value	F Critical	Sig.
Between Groups	4666.822	2	2333.411	46.622	3.10	0.000
Within Groups	4354.333	87	50.050			
Total	9021.156	89				



Table 4.3.7 explicates that there was a significant difference in the treatment of conduct disorder of participants' that were exposed to cognitive restructuring and behavioural rehearsal when compared with participants' in the control group ( $F_{(2,87)} = 46.622, p < 0.05$ ). The hypothesis was rejected because the F value was greater than the F critical. To identify which pair(s) of treatment significantly differed, a post-hoc test was performed (see Appendix IV Table C). Tukey Honestly Significant Difference (HSD) post-hoc test was employed. There was no significant difference found between the participants in Experimental Group I (Cognitive Restructuring) and Experimental Group II (Behavioural Rehearsal) ( $p = 0.942$ ), but there were significant differences however between the participants in cognitive restructuring group and those of the control group ( $p < 0.05$ ) on the one hand, and between the participants in behavioural rehearsal group and its control group ( $p < 0.05$ ).

**Hypothesis Six:** There is no significant difference in conduct disorder of participants exposed to cognitive restructuring and behavioural rehearsal.

**Table 4.3.8: Means, Standard Deviations and t-values of Participants in Experimental Groups.**

Groups	No. of Cases	Mean	Std Dev.	df	t - value	t- critical	Sig.
Cognitive Restructuring	30	66.0333	7.02941	58	0.313	2.00	0.756
Behavioural Rehearsal	30	65.4333	7.81988				

Table 4.3.8 presents the difference in the conduct disorder of participants that were exposed to the cognitive restructuring and behavioural rehearsal experimental groups. The result revealed that there was no significant difference in the conduct disorder of participants that were exposed to the cognitive restructuring and behavioural rehearsal groups ( $t = 0.313, df = 58, p = 0.756$  two tailed). Nevertheless, the mean indicated that the participants in the behavioural rehearsal group displayed a reduced conduct disorder compared to the participants in the cognitive restructuring group. The t

critical (2.00) is greater than the t value (0.313), therefore the hypothesis was sustained.

**Hypothesis Seven:** There is no significant difference in conduct disorder of participants exposed to cognitive restructuring and behavioural rehearsal on the basis of gender, parental socio-economic status, and parenting styles.

**Table 4.3.9: Means, Standard Deviations and t-values of Participants Sex in Experimental Group I (Cognitive Restructuring).**

Groups (CR)	No. of Cases	Mean	Std Dev.	df	t - value	t-critical	Sig.
Male	15	70.0000	3.87298	28	1.058	2.05	0.299
Female	15	72.0000	6.21059				

In Table 4.3.9, the difference in conduct disorder of male and female participants that were exposed to Cognitive Restructuring (Experimental Group I) revealed that there was no significant difference in the conduct disorder of the participants that were exposed to the Cognitive Restructuring treatment ( $t = 1.058$ ,  $df = 28$ ,  $p = 0.299$ , two tailed). However, the mean indicated that the female participants displayed more conduct disorder compared to the male participants. On the basis of gender, the t critical was greater than the t value, hence, the hypothesis was therefore sustained.

**Table 4.3.10: Means, Standard Deviations and t-values of Participants' Socio-Economic Status in Experimental Group I (Cognitive Restructuring).**

Groups (CR)	No. of Cases	Mean	Std Dev.	df	t - value	t-critical	Sig.
Medium	27	71.2222	5.43021	28	0.698	2.05	0.491
High	3	69.0000	.00000				

Table 4.3.10 presents the difference in conduct disorder of participants that were exposed to cognitive restructuring experimental group I based on parental socio-economic status. In the cognitive restructuring group, there was no participant from the low parental socio-economic status. The result thus revealed that there was no significant difference in the conduct disorder of participants that were exposed to cognitive restructuring ( $t = 0.698$ ,  $df = 28$ ,  $p = 0.491$ , two tailed). In spite of this, the mean indicated that the participants from the medium socio-economic status had more conduct disorder compared to the participants from the high socio-economic status. On the basis of the socio-economic status, the  $t$  critical was greater than the  $t$  value, therefore, the hypothesis was sustained.

**Table 4.3.11: Analysis of Variance of Participants Paternal Parenting Style exposed to Cognitive Restructuring.**

Source of Variation	Sum of Squares	df	Mean Square	F Value	F Critical	Sig.
Between Groups	102.857	2	51.429	2.051	3.34	0.148
Within Groups	677.143	27	25.079			
Total	780.000	29				

Table 4.3.11 revealed that there was no significant difference in the treatment of conduct disorder of the participants that were exposed to the cognitive restructuring on the basis of paternal parenting styles ( $F_{(2, 27)} = 2.051$ ,  $p = 0.148$ ). The hypothesis was sustained because the  $F$  critical was greater than the  $F$  value. To identify which pair(s) of paternal parenting style significantly differed, a post-hoc test was performed (see Appendix IV Table D). Employing Tukey Honestly Significant Difference (HSD) post-hoc test, no significant difference were found between authoritative father and authoritarian father ( $p = 0.178$ ); authoritative father and permissive father ( $p = 0.861$ ); and authoritarian father and permissive father ( $p = .193$ ). The mean difference revealed that authoritative and authoritarian father, authoritarian and permissive father have a high mean which signifies a high conduct disorder.

**Table 4.3.12: Analysis of Variance (ANOVA) of Participants Maternal Parenting Style exposed to Cognitive Restructuring.**

Source of Variation	Sum of Squares	df	Mean Square	F Value	F Critical	Sig.
Between Groups	6.066	2	3.033	0.106	3.34	0.900
Within Groups	773.934	27	28.664			
Total	780.000	29				

Table 4.3.12 indicated that there was no significant difference in the treatment of conduct disorder of participants that were exposed to cognitive restructuring on the basis of maternal parenting styles ( $F_{(2, 27)} = 0.106, p = 0.900$ ). The hypothesis was sustained. In order to discover which pair(s) of maternal parenting styles significantly differed, a post-hoc test was performed (see Appendix IV Table E). Tukey Honestly Significant Difference (HSD) post-hoc test was employed, and no significant differences were found in the following pairs: authoritative mother and authoritarian mother ( $p = 0.999$ ); authoritative mother and permissive mother ( $p = 0.893$ ); and authoritarian mother and permissive mother ( $p = 0.928$ ). Although there was no significant difference in the three maternal parenting styles, the mean difference however revealed that the authoritative and permissive mothers had high a conduct disorder in the cognitive restructuring group.

**Table 4.3.13: Means, Standard Deviations and t-values of Participants' Sex in Experimental Group II (Behavioural Rehearsal).**

Groups (BR)	No. of Cases	Mean	Std Dev.	df	t - value	t-critical	Sig.
Male	15	60.4667	5.71797	28	4.478	2.05	0.000
Female	15	70.4000	6.41204				

In Table 4.3.13, the difference in conduct disorder of the male and the female participants that were exposed to the behavioural rehearsal experimental group II revealed that there was no significant difference in the conduct disorder of either the male and female participants that were exposed to the behavioural rehearsal ( $t = 4.478$ ,  $df = 28$ ,  $p < 0.05$ , two tailed). However, the mean indicated that the male participants displayed a reduced conduct disorder when compared to the female participants. Thus, on the basis of gender, the  $t$  value was greater than the  $t$  critical, the hypothesis was therefore rejected.

**Table 4.3.14: Analysis of Variance (ANOVA) of Participants Socio-Economic Status exposed to Behavioural Rehearsal.**

Source	Sum of Squares	df	Mean Square	F	F Critical	Sig.
Between	155.515	2	77.758	1.298	3.34	0.290
Within	1617.851	27	59.920			
Total	1773.367	29				

Table 4.3.14 revealed that there was no significant difference in the treatment of conduct disorder of the participants that were exposed to the behavioural rehearsal on the basis of parental socio-economic status ( $F_{(2, 27)} = 1.298$ ,  $p = 0.290$ ). The hypothesis was sustained because the  $F$  value was lower in comparison to the  $F$  critical. To identify which pair(s) of parental socio-economic status significantly differed, a post-hoc test was performed (see Appendix IV Table F). Employing Tukey HSD post-hoc test, no significant differences were found among the low parental socio-economic status and the medium parental socio-economic status ( $p = 0.796$ ), the low parental socio-economic status and the high parental socio-economic status ( $p = 0.833$ ), and the medium parental socio-economic status and high parental socio-economic status respectively ( $p = 0.285$ ). However, there was a high mean difference between medium and high parental socio-economic status which would account for a high conduct disorder.

**Table 4.3.15: Analysis of Variance (ANOVA) of Participants Paternal Parenting Style exposed to Behavioural Rehearsal.**

Source	Sum of Squares	df	Mean Square	F	F Critical	Sig.
Between	105.281	2	52.640	0.852	3.34	0.438
Within	1668.086	27	61.781			
Total	1773.367	29				

Table 4.3.15 confirmed that there was no significant difference in the treatment of conduct disorder of the participants that were exposed to behavioural rehearsal on the basis of paternal parenting styles ( $F_{(2, 27)} = 0.852$ ,  $p = 0.438$ ). The F value was lower compared to the F critical therefore, the hypothesis was sustained. To identify which pair(s) of paternal parenting style significantly differed, a post-hoc test was performed (see Appendix IV Table G). Using Tukey HSD post-hoc test, no significant differences were found between authoritative father and authoritarian father ( $p = 0.794$ ), authoritative father and permissive father ( $p = 0.583$ ), and authoritarian father and permissive father ( $p = 0.423$ ). The mean difference was high between authoritative father and permissive father (3.91429) and even higher between authoritarian and permissive fathers (6.70000) when compared with authoritative and authoritarian fathers (2.78571).

**Table 4.3.16: Analysis of Variance (ANOVA) of Participants Maternal Parenting Style exposed to Behavioural Rehearsal.**

Source	Sum of Squares	df	Mean Square	F	F Critical	Sig.
Between	27.756	2	13.878	.215	3.34	0.808
Within	1745.611	27	64.652			
Total	1773.367	29				

Table 4.3.16 revealed that there was no significant difference in the treatment of conduct disorder of the participants that were exposed to the behavioural rehearsal on the basis of maternal parenting styles ( $F_{(2, 27)} = 0.215, p = 0.808$ ). The F critical was greater than F value therefore, the hypothesis was sustained. In order to discover which pair(s) of maternal parenting style significantly differed, a post-hoc test was performed (see Appendix IV Table H). Tukey HSD post-hoc test was employed, and no significant differences were found between authoritative mother and authoritarian mother ( $p = 0.981$ ), authoritative mother and permissive mother ( $p = 0.792$ ), and authoritarian mother and permissive mother ( $p = 0.873$ ). It was observed from the mean difference that the authoritative and permissive maternal parenting style in the behavioural rehearsal group had the highest mean which accounted for a high degree of conduct disorder.

**Hypothesis Eight:** There is no significant effect of cognitive restructuring and behavioural rehearsal on conduct disorder of the participants based on age, religious affiliations, educational qualification and length of stay in the Special Correctional Centres.

**Table 4.3.17: Analysis of Variance on age, religious affiliation, length of stay and educational qualification.**

Source	Type III SS	df	Mean Sq.	F	Sig.
Corrected Model	6.905 <sup>a</sup>	21	0.329	1.543	0.120
Intercept	57.033	1	57.033	267.722	.000
Age	0.069	1	0.069	0.322	0.574
Religion	1.216	1	1.216	5.710	0.022
Educational level	0.743	2	0.371	1.743	0.189
Length of stay	0.431	2	0.215	1.011	0.373
Age * Religion	0.365	1	0.365	1.712	0.199
Age * Educational level	0.060	1	0.060	0.282	0.599
Age * Length of Stay	0.071	2	0.036	0.167	0.847
Religion * Educational level	0.570	1	0.570	2.674	0.110
Religion * Length of stay	0.831	2	0.416	1.951	0.156
Educational level * Length of stay	0.118	2	0.059	0.276	0.760
Age * Religion * Educational level	0.000	0	.	.	.
Age * Religion * Length of stay	0.365	1	0.365	1.712	0.199
Age * Educational level * Length of stay	0.167	1	0.167	0.782	0.382
Religion * Educational level * Length of stay	0.345	1	0.345	1.618	0.211
Age * Religion * Educational level * Length of stay	0.000	0	.	.	.
Error	8.095	38	0.213		
Total	150.000	60			
Corrected Total	15.000	59			

**a R Square = 0.460 (Adjusted R Square = 0.162)**



Table 4.3.17 revealed that there was no significant effect of cognitive restructuring and behavioural rehearsal on conduct disorder of the participants based on age ( $F_{(1, 38)} = .322, p = .574$ ); educational qualification ( $F_{(2, 38)} = 1.743, p = .189$ ) and length of stay in the correctional centres ( $F_{(2, 38)} = 1.011, p = .373$ ). However, there was a significant effect on religious affiliations ( $F_{(1, 38)} = 5.710, p = .022$ ). The hypothesis which stated that there is no significant effect of cognitive restructuring and behavioural rehearsal on conduct disorder of participants based on age, religious affiliations, educational qualification and length of stay in the special correctional center was sustained for age (where  $F$  critical = 4.08, greater than  $F$  value), educational qualification (where  $F$  critical = 3.23, greater than  $F$  value) and length of stay in the Special Correctional Centres (where  $F$  critical = 3.08, greater than  $F$  value). It was however rejected for religious affiliations (where  $F$  value 5.710 is greater than  $F$  critical 4.08).

#### **4.4 Summary of Findings**

The focus of this study was to examine the effectiveness of cognitive restructuring and behavioural rehearsal in the treatment of adolescents' conduct disorder. Factors such as sex, parenting styles (paternal and maternal), parental socio-economic status, educational background, religion, age, length of stay in the Special Correctional Center were further investigated. This is in order for the work to be robust work. Based on the analyses carried out in this study, the followings are the summary of the findings.

1. The overall order of prominence of conduct disorder of participants at the Special Correctional Centres are: Deceitfulness and or theft, Aggressive conducts, Hostility and Rule violation. It should be noted that all the subdivisions of conduct disorder were highly relevant. The order of prominence also varied with sex and group divisions.
2. The result revealed that participants were mostly from parents with authoritative parenting style. This conclusion is reached because it was the predominant parenting style among the three parenting styles examined.

3. Participants socio-economic status (SES) revealed that there was more conduct disorder among participants that were from the medium SES in the cognitive restructuring group. In the behavioural rehearsal group on the other hand, it was observed that the participants from the low and high SES indicated more conduct disorder than those from the medium SES. Conclusively, the three levels of SES can produce or encourage adolescents conduct disorder.
4. There was a commendable decrease in the participants' conduct disorder when the pre-test and post test results were compared, this simply reflected the efficacy of the interventions that were used.
5. The participants that were exposed to the cognitive restructuring and behavioural rehearsal therapies performed better than those in the control groups.
6. Although the two interventions (cognitive restructuring and behavioural rehearsal) were found to be effective in the treatment of adolescent conduct disorder, the findings revealed that behavioural rehearsal was more effective compared to cognitive restructuring (going by the mean result of the two interventions).
7. In the cognitive restructuring group, the participants from authoritative and permissive fathers improved better than those from authoritarian fathers. At the same time the participants from authoritative and authoritarian mothers indicated better results compared with the participants from permissive mothers.
8. In the behavioural rehearsal group, the participants from authoritative and permissive fathers performed better than those from authoritarian father. Again, the participants from permissive mothers had a better performance when compared with those from authoritative and authoritarian mothers.
9. Findings indicate that there was no significant effect of cognitive restructuring and behavioural rehearsal on age, educational qualifications and length of stay

at the correctional centres. However, the data that was collected revealed that there is a significant effect on religion.

10. There are three degrees of conduct disorder - mild, moderate and severe among the participants. But the predominant one was “moderate” followed by mild while severe was the least.
11. The three parenting styles that were addressed revealed a varying number or frequency on the participants. Consequently, it is clear that the three parenting styles influenced the adolescents with conduct disorder – this is not minding the frequency that is high or low.
12. Male participants in both the cognitive restructuring and behavioural rehearsal groups benefitted more than their female counterparts. This result is likely due to the high severity level of conduct disorder among female participants which was observed from the pre-test results.

## **CHAPTER FIVE**

### **DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

The thrust of this study was to examine the efficacy of cognitive restructuring and behavioural rehearsal in the treatment of conduct disorder in adolescents. Eight research questions were raised with eight research hypotheses formulated. These were tested with the aid of analysis of variance (ANOVA), regression and t-test statistic. The Tukey's Honestly Significant Difference (HSD) post-hoc test was employed in determining which group differs from one another. Here, the difference in score was compared to a critical value in order to determine if the difference is significant or not. All the hypotheses were tested at 0.05 level of significance.

In this chapter, the researcher discusses the findings of the work, their implications, and limitation. Finally, recommendations and suggestions for further studies are also presented.

#### **5.2 Discussion of Findings**

We must bear in mind that the definition of conduct disorder is a repetitive and persistent pattern of behaviour, whereby the basic rights of others or major society rules are violated (APA, 2000). Conduct disorder encompasses aggression to people and animals which may be in the form of bullying, threatening, or intimidating others, initiating physical fights, use of a weapon that could cause serious physical harm to others, being physically cruel to animals or people, and stealing as well as confronting the victim. Conduct disorder is destruction of life and properties (deliberately destroying the property of another, by setting fire on another's property). Again, conduct disorder is deceitfulness or theft (that is breaking into another's house, building or car. Others are lying to obtain goods or favours or avoidance of work, and stealing items of nontrivial value without confronting the victim), and serious violation of rules (such as often staying out at night despite parental prohibitions, -

this beginning before thirteen years of age, running away from home overnight, - at least twice without returning home for a lengthy period as well as often skipping school before age thirteen). Before an individual can be said to have conduct disorder, at least three of the afore-mentioned criteria must be have been observed and confirmed within a period of 12 months consistently. Or, at least one criterion must have been observed and confirmed in a person within a consistent period of 6 months (Sanford, Boyle, Szatmari, Offord, Jamieson & Spinner, 1999; APA, 2000, Baker, & Scarth, 2002).

The research question that focused on the order of prominence supported the definition of conduct disorder. The entire criteria for conduct disorder were identified in the participants as is evident from the result of the study. The overall conduct disorder that was first prominent among the participants was deceitfulness and or theft with 58 or 64% of the participants. Although deceitfulness came first, it should be noted that that some of the participants came first in other forms of disorders. 22 or 24.4% participants has first in aggression, while five or 5.6% came in hostility and rule violation respectively. It was observed that even though deceitfulness and theft as conduct disorder were the most prominent exhibited among the adolescents, this was not applicable to both the male and female categories. The female participants exhibited more deceitfulness and theft compared to the male participants. 27 or 60% of the male participants exhibited deceitfulness and theft while the female participants were 31 or 68.9%.

The second prominent disorder that was prevalent among the adolescents in the Special Correctional Centres was aggression. 24 or 26.7% of the participants exhibited conduct disorder of aggression as the second most prevalent disorder. Going by gender, the male participants that exhibited aggression had the second prominent placement with 14 or 31.1%. For the females, rule violation came second with the frequency of 13 or 28.9%. It is believed that men and women experience aggression differently. While men engage more in physical aggression, both men and women engage in verbal aggression equally (Burton, Hafetz, & Henninger, 2007; Landsford, 2012). Cambell & Muncer (1987) reported that women often interpret exhibition of their aggression as resulting from excessive stress, hence it is an indication of loss of

self-control, the males often view their exhibition of aggression as an exercise of their control over others. This is more so when they think that their self-esteem of integrity is being challenged. Bjorkqvist, Lagerspatz, & Kaukainen (1992) revealed that adolescent girls are much more likely to engage in indirect aggression than their counterpart the boys. Aggression can be direct or indirect. Indirect aggression include gossiping, spreading false rumour, and revealing another's secret without his or her consent (Owens, Shute, & Slee, 2000a).

The third conduct disorder that is prevalent among adolescents in the Special Correctional Centres is hostility. Participants with frequency of 32 or 35.6% were for hostility. The sex variations for the hostility conduct were 15 or 33.3% males with the females being 17 or 37.8%. Aggression and rule violation as conduct disorders come third in prominence. The males have 12 or 26.7% and 11 or 24.4% respectively, while the females have 13 or 28.9% and 14 or 31.1% for each respectively. The fourth prominent disorder, rule violation, the study revealed that 44.4% of the participants' exhibited. Here, the males have the highest frequency with 51.1% while the females with 37.8%. In sum, the orders of prominence of the criteria of conduct disorder are as follows: deceitfulness and theft, aggression, hostility and rule violation. However, there were variations when it was examined under the sub-heading of sex as it applies to the three groups. There is the possibility that these disorders could also be as a result of wrong placement (fixation) of the participants in to one of the five psychosexual stages of development. Disorders could emanate from wrong use of defense mechanism or as a result of social learning – exposure to wrong live models, and symbolic or verbal instructions (Anderson, 2004, Bartlett, Harris, & Baldassaro, 2007; Robert, Nyla & Donn, 2009, Woolfolk, 2010).

In this study, parenting styles was examined under three headings namely: i) authoritative, ii) authoritarian and iii) permissive. These were further divided under the two broad groups paternal and maternal. The study revealed that authoritative father is predominant among the participants with 68.9%, authoritarian father 13.3% and permissive father 17.8%. Authoritative father is predominant in both the males (80%) and the females (57.8%). Although that of the males is higher here, in both authoritarian and permissive fathers, those of the female participants' are higher.

Authoritative mother was also predominant with 63.3% among the participants, while authoritarian and permissive mothers were 22.2% and 14.4% respectively. Hitherto, authoritative parenting style has been classified as “balanced parenting” or the best parenting style but if it is now predominant among parents of adolescents with conduct disorder, there is the need for a review of the books.

According to Lamborn, Mants, Seinberg & Dornbusch (1991), youths with authoritative parents had more social competence and fewer psychological and behavioural problems than youth with authoritarian or indulgent parents. Furthermore, it was concluded that youths with neglectful parents were the least socially competent, and exhibiting the most psychological and behavioural problems. The youths with authoritarian parents on the other hand, were obedient and well conformed to authority, though with poorer self concept than other adolescents, the research exposed. In addition, Ge, Conger, Cadoret & Neiderhiser (1996b) are of the opinion that the presence of behavioural problems in parent is a link to the presence of problems in adolescent developmental process. For instance, the presence of antisocial and hostile behaviours in adolescents has been traced to psychiatric disorders in their parents.

The participants’ parental socio-economic status is divided into three: low, medium and high. The predominant socio-economic status among the parents of the participants’ is medium socio-economic status with 80% while low is made up of 7% and 12.2% constitute high. The study examining the sex variation of the parental socio-economic status, observed that none of the male participants have parents with high socio-economic status. In this regard, only 24.4% of the females have parents with high socio-economic status. The male participants had high number belonging to the medium SES with 88.9% and the low SES with 11.1%. This is when compared with the female who were 4.4% and 71.1% from the low and medium SES respectively. The three groups in the study express varying distributions of the parental socio-economic status but most importantly, the cross tabulation of the socio-economic status with the degree of conduct disorder revealed that 39 participants exhibited mild conduct disorder, 47 participants exhibited moderate conduct disorder and four participants exhibited severe conduct disorder. Fergusson, Swain-Campbell, & Horwood (2004) & Agnew (2005) concluded that delinquent behaviours are

prevalent among adolescents who are faced with economic hardship. Some of the measuring yardsticks include income, poverty and status. The conclusion reached was that youths in lower socio-economic standing are more likely to be delinquent than persons from higher socio-economic background. This being interpreted means that adolescents from a low SES background exhibit more delinquent behaviours. This study is in agreement with the above opinion as the participants from both low and medium parental socio-economic status displayed more conduct disorder than those from the high parental socio-economic status.

In this study, both the pretest and post test were administered on the participants. Between both test, the experimental groups were exposed to the two different interventions (cognitive restructuring and behavioural rehearsal). The result of the pretest revealed the level of conduct disorder of the participants were: mild 43.3%, moderate 52.2% and severe 4.4%. The males indicated mild conduct disorder of 55.6%, moderate 42.2% and severe 2.2% while female participants' exhibited 31.1% as mild, 62% as moderate and 3.7% as severe. The result of the post-test revealed the effect of the interventions on the adolescents levels of conduct disorder. The study revealed that 57.8% of the participants could no longer be tagged to have conduct disorder because of the reduction in quotient. Participants with mild status reduced to 28.9% and 13.3% exhibited moderate disorder while those with severe conduct disorder status were nullified or rule out. Even at face value, there is a remarkable improvement and difference in outcome of the adolescents' post test when compared with the pre-test. However, a close study of the mean position of the pre-test result for the female participants revealed that these have more conduct disorder than the males. This is as indicated in the higher mean of 88.3556 and 82.333 respectively. The implication is the higher the mean, the higher the conduct disorder. But the post-test demonstrated a reduction in the mean of both the female (72.82222) and male (68.8222) participants.



### **Hypothesis One**

The first hypothesis which stated that there is no significant difference in the order of prominence in conduct disorder (Aggressive conduct, Hostility, Deceitfulness and or Theft and Violation of rules) among adolescents in the Special Correctional Centres was sustained. Findings from the study indicated that there was no significant difference in the order of prominence in conduct disorder. The post-hoc test using the Honestly Significant Difference (HSD) method indicated that there is no significant mean difference between all the paired variables (aggression and hostility, aggression and deceitfulness/theft, aggression and rule violation, hostility and deceitfulness and or theft, hostility and rule violation, and deceitfulness and or theft). The findings corroborated the definition of conduct disorder (APA, 1994; 2000) as a repetitive, persistent pattern of behaviour in which the person violates the basic rights of others or violates major age-appropriate societal norms or rules. It was stated that three of the criteria or symptoms must be present over a period of twelve months or that one of the three must be present in the past six months. These criteria the participants in the study met satisfactorily (Loeber, Green, Lahey, Frick & McBurnett, 2000).

### **Hypothesis Two**

The second hypothesis which stated that there is no significant difference in the prevalence of paternal and maternal parenting styles among adolescents with conduct disorder was sustained. This hypothesis sought to find out whether there was a combined and relative contribution of the predictor variables but the result of the data was not significant. Scott (2008) and Finzi-Dottan, Bilu & Golubchik (2011) reported that parenting style is a major risk factor in adolescent conduct disorder. For them, harsh and inconsistent parenting is associated with behavioural problems. Similarly, Garber, Robinson & Valentiner (1997) reported a significant relationship between high levels of parental warmth and lower levels of externalizing behavioural problems in young individuals.

Previous research also suggested that a lack of involvement, as well as poor monitoring and supervision of children's activities, strongly predicted antisocial behaviours (Loeber & Stouthamer-Loeber, 1986, Murray & Farrington, 2010).

Parents of children with antisocial behaviours it was implied were likely to be less positive, more permissive and inconsistent, and use more violent and critical disciplines (Reid, Webster-Stratton & Baydar, 2004). In an influential review Rutter, Giller & Hagell (1998) concluded that antisocial behaviours are associated with hostile, critical, punitive and coercive parenting. In addition, Bornovalova, Hicks, Iacono & McGue (2010) affirmed that conduct disorder development in young children is as a result of parents who model violence and antisocial behaviours or reward selfish and aggressive behaviours. In the study of Frick, et al (1992), poor maternal supervision and low persistence in discipline was said to predict conduct disorder. parents therefore, who are inconsistent in their approach towards their wards could unintentionally promote negative behaviours, which could lead to a mutual escalation into negative behaviour (Rutter, Bishop, Pine, Scott, Stevenson & Taylor, 2008).

### **Hypothesis Three**

The third hypothesis which stated that there is no significant difference in parental socio-economic status of adolescents conduct disorder was rejected. This hypothesis was rejected by the result of the findings as there was a significant difference. The hypothesis was tested using analysis of variance and the result of the analysis revealed  $F(2, 87) = 3.341, p = .040$ . In order to identify which of the pair(s) significantly differed, a post-hoc test was performed. Turkey's Honestly Significant Difference (HSD) post-hoc test revealed a significant difference between participants from low and medium SES where  $p > 0.05$ , low and high SES with  $p > 0.05$  and medium and high SES where  $p < 0.05$ ). While there was no significant difference between participants from low and medium SES, and low and high SES, there was a significant difference between participants from the medium and high SES.

The result contradicted the general belief that low socioeconomic status is associated with conduct disorders (Murray & Farrington, 2010). A family's socioeconomic status is dependent on family income, parental educational level, parental occupation, and their social status in the community (Demarest, Reisner, Anderson, Humphrey,

Farquhar & Stein, 1993; Murray & Farrington, 2010). Parental SES is adduced to influencing the adolescents exposure to stress and access to resources, which, in turn, affect his or her mental health (Aneshensel & Sucoff, 1996). Family SES physically places adolescents within neighborhoods that vary with regard to the presence of social stressors and resources. Aneshensel & Sucoff (1996) found that youths in low socioeconomic status (SES) neighborhoods perceive greater ambient hazards such as crime, violence, drug use, and graffiti than those in high SES neighborhoods. The perception of the neighborhood as dangerous, in turn, influences the mental health of the adolescents. This could be interpreted as saying the more threatening the neighborhood, the more common the symptoms of depression, anxiety, oppositional defiant disorder, and conduct disorder.

The American Academy of Pediatrics (1995) and Carr-Hill, Rice & Roland (1996) observed that social disadvantage, homelessness, low socio-economic status, poverty, overcrowding and social isolation are broader factors that predispose adolescents to conduct disorder. Duncan, Brooks-Gunn & Klebanov (1994) reported that the longer a child has lived in poverty within the first four years of life, the more prevalent the externalizing behavioural problems would become. Similarly, Loeber, Green, Keenan & Lahey (1995), reported that logistic regression showed that low socio-economic status of parents among other factors predicts an early onset of conduct disorder.

#### **Hypothesis Four**

The fourth hypothesis which stated that there is no significant difference in the degree of severity of conduct disorder before and after treatment among participants was rejected. Conduct disorder is grouped into three degrees of severity which are: mild, moderate and severe (APA, 1994; 2000). Prior to the administration of the treatment or intervention plans, participants exhibited conduct disorder in the above degrees of severity. Naturally, after the administration of an effective treatment, the degree of severity must change from what it was or postulated before the treatment.

Mild conduct disorder exhibits few signs and or symptoms and results in little harm to others, while moderate is between mild and severe. But persons with severe conduct

disorder exhibit many signs and or symptoms (Baker & Scarth, 2002; Meyer, 2004 and Nurcombe, 2008).

The post test result revealed that there was a significant difference in the degree of severity of conduct disorder because there was a great change observed in the mean score of the pre-test and post test.

### **Hypothesis Five**

The fifth hypothesis stated that there is no significant difference in the treatment of conduct disorder of participants that are exposed to cognitive restructuring and behavioural rehearsal when compared with participants in the control groups. This hypothesis was rejected by the result of the findings as there was a significant difference. The hypothesis was tested using analysis of variance and the result of the analysis revealed  $F_{(2, 87)} = 46.622, p < 0.05$ . In order to identify which pair(s) of treatment significantly differed, a post-hoc test was performed. Turkey's Honestly Significant Difference (HSD) post-hoc test revealed a significant difference between the participants in the experimental group I (cognitive restructuring) and control group (placebo) where  $p < 0.05$ , experimental group II (behavioural rehearsal) and control group (placebo) ( $p < 0.05$ ). There was no significant difference between participants in experimental group I (Cognitive Restructuring) and experimental group II (Behavioural Rehearsal) ( $p = 0.942$ ). The findings indicated that cognitive restructuring and behavioural rehearsal are both effective in the treatment of conduct disorder among adolescents. The reason for this result is as a result of the eight weeks exposure of the participants to their respective treatments. This study is in agreement with the findings of Shobola (2007) and Aderanti & Hassan (2011) that cognitive restructuring is an effective intervention in the treatment of all forms of antisocial behaviours such as cigarette smoking, stealing, rebelliousness, and socially undesirable behaviours among others. It is therefore worthy of note that these interventions can be used in other studies to treat behavioural problems.

## **Hypothesis Six**

The sixth hypothesis which stated that there is no significant difference in conduct disorder of the participants that are exposed to cognitive restructuring and behavioural rehearsal was sustained by the result of the findings. This is in the sense that there was no significant difference. T-test analysis was used to test the hypothesis and the result showed  $t = .313$ ,  $df = 58$ ,  $p = .756$ , two tailed. Although the result was not significant, the mean scores indicated that the participants in cognitive restructuring group displayed a higher conduct disorder level after exposure to the technique compared to the participants in the behavioural rehearsal group. The mean scores for the cognitive restructuring group was 66.0333 and the mean scores for the behavioural rehearsal group was 65.4333. The result implies that both interventions were effective and again the result of the hypothesis is an affirmation of the theory and previous studies that are carried out on cognitive restructuring and behavioural rehearsal (Bandura, 1986; Baker & Scarth, 2002; Aderanti & Hassan, 2011). With the aid of cognitive restructuring clients are assisted to reconsider any maladaptive pattern in their thinking-feeling-behaviour cycles. The goal of a client is to rethink these patterns and reconsider more adaptive alternatives that would work better for them. These skills that are involved in the above process is what the adolescents in the experimental I (Cognitive Restructuring) has been exposed to. The adolescents in the experimental II (Behavioural Rehearsal) group were also exposed to the nitty-gritty of behavioural rehearsal, which is aimed at providing a method for structuring and orchestrating modelling opportunities. The privilege of role playing and reversing roles is to help the adolescents to have a better understanding of their present behaviours and consequently enhance the desire for a positive change.

## **Hypothesis Seven**

The seventh hypothesis which stated that there is no significant difference in conduct disorder of the participants that were exposed to cognitive restructuring and behavioural rehearsal treatments on the basis of gender, parental socio-economic status, and parenting styles was sustained. T- test analysis and analysis of variance

were used to test hypothesis seven. Gender and parental socio-economic status are in two divisions (male and female, and medium and high SES respectively) in cognitive restructuring group. The hypothesis was sustained because the  $p$  is greater than ( $>$ ) 0.05. The implication of this finding is that the gender of participants did not interact with the treatment (cognitive restructuring) on conduct disorder. Although the hypothesis was sustained, the mean score indicated that the female participants from the medium parental socio-economic status exhibited more conduct disorder compared to the male participants and those from high socio-economic status.

Paternal and maternal parenting styles were tested with analysis of variance and the result retained the hypothesis that there is no significant difference in conduct disorder of the participants that were exposed to cognitive restructuring parenting styles. The study employed Tukey's Honestly Significant Difference (HSD) post-hoc test in order to identify which pair(s) of paternal parenting style significantly differed. No significant difference was found between authoritative father and authoritarian father, authoritative father and permissive father, and authoritarian father and permissive father where  $p > .05$ . The mean scores revealed that the participants from authoritarian fathers had more conduct disorder (75.00) compared to participants from authoritative fathers (70.43) and participants from permissive fathers (69.00). The mean score for maternal parenting styles revealed that participants from permissive mothers (72.00) exhibited more conduct disorder compared to authoritative (70.765) and authoritarian (70.876) in the cognitive restructuring group.

The American Psychiatric Association (1994) and Baker & Scarth (2002) reported that conduct disorder is more common in boys (6-16%) compared with girls (2-9%), boys tend to exhibit aggressive behaviours while girls are more likely to break social rules through offenses such as truancy, lying and prostitution. The results of the study however reveals a partial deviation from APA (1994), that conduct disorder is more in girls presently compared to the boys. This is going by the mean score result of the pretest whereby the males had 82.33 while the females had 88.36. The result that was obtained based on the order of prevalence of conduct disorder further revealed that the females exhibited more deceitfulness and or theft and hostility than the males, while aggression and rule violation were exhibited more by the males.

Findings from the participants that were exposed to behavioural rehearsal therapy showed that there was no significant difference in conduct disorder of the participants on the basis of gender where  $p > .05$ . However, the mean indicated that the male participants displayed a reduced conduct disorder compared to the female participants. Parental socio-economic status and parenting styles (paternal and maternal) were tested with analysis of variance, and the hypothesis was sustained because  $p > .05$ . The post hoc – Turkey HSD revealed that no significant differences were found between the low parental socio-economic status and the medium parental socio-economic status, between the low parental socio-economic status and the high parental socio-economic status, and between the medium parental socio-economic status and the high parental socio-economic status. However, there is a high mean difference between the low and medium parental socio-economic status which would account for a high conduct disorder.

Furthermore, the paternal and maternal parenting styles were not significant. The hypothesis is therefore sustained although the post hoc Turkey HSD revealed that the mean difference was high (3.91) between authoritative and permissive fathers compared with authoritative father and authoritarian father (2.79). But the mean for authoritarian and permissive father was the highest (6.70). Studies have shown that the interpretation of behaviour as a problem is dependent on the nature of the problem and the person perceiving it. According to DeVito & Hopkins (2001), permissive parenting (that is, when a child is non-compliant, and there is no structure, consistency and involvement from parents) can lead to disruptive behaviour in preschool children. Again, that permissive parenting may play a greater role in the development of disruptive behaviour in the lives of preschool children than the role played by authoritarian parenting. Though DeVito & Hopkins (2001) studied preschool children, it can be inferred on adolescents since the same training that is received in childhood is very likely to proceed to adolescent stage and even adulthood if nothing is done to change such.

## **Hypothesis Eight**

The hypothesis stated that there is no significant effect of cognitive restructuring and behavioural rehearsal on conduct disorder of participants based on age, religious affiliations, educational qualification and length of stay in the correctional centres. This hypothesis was sustained for age, educational qualification and length of stay but was rejected for religious affiliations. The four-way analysis of variance was used to test the hypothesis, and the results for age, educational qualification and length of stay was not significant because  $p > .05$ , but that of religious affiliations was significant  $p < .05$ . In this study, age was not significant but Nagin, & Tremblay (2001), reported that Kindergarten boys that are displaying high levels of opposition and hyperactivity are at a high risk of physical aggression in adolescence. In their opinion, the only parental characteristics that predicted aggression in adolescence are low educational attainment and teenage childbearing in the mother. Meltzer, Dogra, Vostanis & Ford (2011), presented three possible types of association between religion and mental health of young people. These are: religion has a protective effect on the mental health of young people, religion may be harmful in terms of poor psychological adjustment or has no effect at all. Meltzer et al (2011) concluded that religion is clearly relevant in the study of behavioural problems as the relationship between regular attendance at religious services and the reduced likelihood of conduct disorder may be attributable to attendance at prayer meetings being associated with strong adult scrutiny and support. In the course of the eight weeks intervention, it was observed that parents with Islamic affiliation requested the release of their wards earlier compared with parents from Christian background. This explains the reason for the presence of more Christian wards or participants at the Special Correctional Centres compared with Muslim wards or participants. Furthermore, Christian bodies visit the centres to donate items and expose the wards to various teachings from the Bible every Saturday. This may also explain the quick withdrawal of wards from the centre by parents with Islamic affiliation, in order to avoid the indoctrinating of their wards with Christian teachings. On the other hand, the significant result of religious affiliation either encourages or dissuades certain behaviours. For instance, Islam encourages aggression, provocation, maiming of others in times of proselytizing or an holy war; while Christianity dissuades aggression and even retaliation - no matter the



situation at hand. Thus, religious affiliation was significant in this study which implies that religion has influence on conduct disorder of participants that were exposed to cognitive restructuring and behavioural rehearsal therapies. There is however the need for religious bodies to rise and fight the plague of conduct disorder in our society and particularly among the adolescents.

### **5.3 Implication of the Study for Counselling**

Adolescence period is a unique stage in the developmental process of man. Adolescents are consequently to be helped due to the peculiarities of this stage of development in their lives. This is in order for them not to be entangled with acts of conduct disorder. Counsellors are expected to show serious concerns about every conduct disorder that originates from the adolescents, and invest and energy in the promotion of good behaviour. This can be in the form of the use of behaviour modification techniques on errant wards.

The results of this study indicate that participants that were exposed to treatments (cognitive restructuring and behavioural rehearsal) exhibited a reduction in conduct disorder than their counterparts in the control group who received no treatment. The efficacy of the treatment packages is a favourable development for counselling and other helping professions. Regular application of these counselling interventions in schools and Special Correctional Centres can further help to reduce conduct disorder among adolescents.

Counsellors should mount intensive media awareness, organize seminars, engage in community talks, and write as well as publish articles on the ills of conduct disorder. Posters can be pasted and bill boards mounted at strategic location such as in school premises and road junctions – where the message could be read intentionally or unintentionally. Most of the challenges that are faced by adolescents are relationship oriented. It is thus essential that counsellors, psychologists and other helping professionals expose parents, caregivers, and adolescents to the dangers in conduct disorder. It is also necessary that parents, teachers, social workers and caregivers

generally be counseled to always act and live as models to adolescents around them – to the best of their ability.

This study examined three parenting styles: authoritative, authoritarian and permissive. These parenting styles were further viewed from paternal and maternal perspectives. The goal or objective of the study is to encourage parents to work hand in hand with one another in the process of rearing their children. Parents should reduce harsh treatment that is meted out to their adolescents. Parents that are involved in negative and inconsistent parenting should desist. This may involve that parents seek help from counsellors in order to learn skills, to manage problems of behaviour(s) in adolescents.

Counsellors are to educate parents and adolescents alike on the positive ways of living, this is in order not to fall victims of their environment especially since socio-economic status influences conduct disorder. Time and resource management should also be emphasized by counsellors so as to assist parents and adolescents in managing their time and resources effectively, for utmost benefit.

Atrocities of varying magnitudes are not gender based, despite the fact that studies generally reveal that conduct disorder is prevalent among boys. One of the likely reasons for this may be due to the societal norms which usually gloss over certain anti-social behaviour(s) that are exhibited by girls. This study discovered that conduct disorder is more prevalent in girls, consequently, counsellors are to sensitize the society at large on the importance of correcting or punishing anti-social behaviours, irrespective of the gender of the offender.

There is the need to consciously reinforce adolescents in our society whenever they exhibited good conduct. Counsellors should also emphasize the need for prompt and commensurate rewards or punishment where necessary.

Social workers at the correctional centres should endeavour to learn more counselling skills and utilize the two interventions alongside with any corrective measures already in use. This is because mere admission of adolescents into the correctional centres is not a sufficient measure that would correct conduct disorder in adolescents.

#### **5.4 Limitations of the Study**

In the course of the study, a number of challenges were encountered. The first of these was the unavailability of adequate literatures in the area of assisting adolescents with conduct disorder in Special Correctional Centres especially in Nigeria. Much work is yet to be done in this particular area to the best of this researcher's knowledge although there are similar works carried out by Aderanti & Hassan (2011). But not all the constructs (the four sub-divisions – aggressive conduct, hostility, deceitfulness and or theft and rule violation) of conduct disorder were researched on and different interventions were used.

The second limitation that was encountered in the course of the study is the issue of limited time. The researcher was granted a specific period by the authorities to meet with the wards but certain events at the centres intermittently interfered with the intervention programme. Furthermore, translation of the instrument(s) from English to the local dialect also posed a limitation, especially at the first meetings (with each of the groups). This is largely due to the participants educational backgrounds.

The sample size was also constraint. At the correctional centres, virtually all the wards exhibited conduct disorder but largely because the centres are transit homes, not all the wards could participate in the intervention plans. This is because some of them would be released before the conclusion of the therapies. Thus, only a limited number with certainty of starting and concluding the plan could participate. Again, since the research is experimental, utilization of a large sample size would have resulted in the difficulty of easy and adequate monitoring, intervention and data computation.

Furthermore, the study was limited because only Special Correctional Centres in Lagos State were used. Adolescents with conduct disorder are elsewhere in the State and other parts of the nation aside the Special Correctional Centres. Part of the limitation encountered included the inability to effect a post treatment evaluation and follow up. These should last at least six months but could not take place due to the nature of the Special Correctional Centres. This is because of their transitory nature as discussed earlier.

This study was also limited because it was restricted to adolescents only. Studies and literature reveal that conduct disorder can either be childhood onset or adolescent onset. It is thus necessary that same interventions be extended to children with conduct disorder. This can serve as a way of testing the effectiveness of these two interventions (cognitive restructuring and behavioural rehearsal) on children's conduct disorder.

## **5.5 Conclusion**

This study investigated the efficacy of cognitive restructuring and behavioural rehearsal on conduct disorder in adolescents in Special Correctional Centres. It has been observed that behavioural rehearsal is more effective than cognitive restructuring in the treatment of conduct disorder. The adolescents are peculiar individuals, as they stand midway between childhood and adulthood; hence they are not liable when involved in conduct disorder. It is therefore the responsibility of the parents, schools and government at all levels (local, state and federal) to play their expected roles to promote good conduct in adolescents. This is more so when we remember that they are the future of the society.

The study revealed that parenting styles of parents are not usually the same. It was also discovered that the three styles can influence conduct disorder. Hence, parents should be vigilant and observant in their rearing methods and the results. Likewise, the study revealed that not only low socio-economic status of parents predict adolescent conduct disorder, as participants from the medium and high socio-economic status also exhibited conduct disorder.

## **5.6 Recommendations**

From the study, the following recommendations are proffered based on my findings:

1. Counselling curriculum should be introduced, encouraged and promoted at the Special Correctional Centres and other educational settings. This will go a

long way in eradicating conduct disorder in the adolescents that are admitted into the centres.

2. Counsellors, psychologists, social workers at the Special Correctional Centres and other helping professionals should endeavour to attend conferences, workshops and be acquainted with current and relevant literatures. More research should be intensified in order to proffer solution to the challenges that are faced by the adolescents.
3. It is noted that indigenous psychological tests are not readily available. Counsellors and psychologists should make conscious efforts to develop indigenous psychological tests for easy and effective application in the locality. The conduct disorder scale that was used in this study is a foreign one.
4. Since cognitive restructuring and behavioural rehearsal are tested and found effective in the treatment of conduct disorder in adolescents, it is recommended that the use of these two interventions be encouraged to combat conduct disorder.
5. Parents need counselling to enable them understand the challenges that are faced by the adolescents. This will equip them with appropriate and realistic solutions in attending to affected adolescent.
6. Parents should monitor the activities of the adolescents. This would enable them to detect any indication of conduct disorder early enough.
7. As much as possible, parents should pay greater attention to their children's behaviours. The act of watching home videos for instance should be discouraged and films of movies watched by them should be censored. This would caution their comportment.
8. Again, adolescents should not be left at the mercy of housemaids or relatives. More time should be spent with them at home and regular checks in their schools be effected unannounced. This is to monitor their conduct at school and compare with that which obtains at home.

9. The Nigerian government should encourage counselling by employing more counsellors in all educational institutions but especially in Special Correctional Centres and rehabilitation centres. This is to effectively serve the community.
10. Government should sanction both parents and the adolescents that are caught in any act of conduct disorder. This would serve as a warning to other parents to intensify good upbringing.
11. It is essential that government provides test batteries and or psychological tests which are difficult to come by and also expensive. This is in order to enhance effective assessment of conduct disorder in clients.
12. The study revealed that participants from the low and medium parental Socio-Economic Status exhibited more conduct disorder compared to participants from the high SES. There is the need for the government to assist the general public to alleviate poverty, reduce the cost of living and make the masses comfortable.
13. Persons in the helping profession are to apply the two interventions (cognitive restructuring and behavioural rehearsal) on adolescents' conduct disorder cases. In this way, the efficacy of the therapies would be improved upon.
14. Religious bodies (Christians and Muslims) should intensify teachings on good conduct. The study showed that there is significant effect of cognitive restructuring and behavioural rehearsal on conduct disorder of participants based on religion. Churches and Mosques should initiate various programmes to educate parents, children and society at large - on the dangers of conduct disorder. Furthermore, moral instructions should be offered by experts and or models, reordering of values which involve honesty, obedience, friendliness and contentment should be encouraged and rewarded by all.

## **5.7 Contribution to Knowledge**

The study has contributed to the body of existing knowledge in the following ways:

The revealed that conduct disorder among adolescents can be treated or corrected with both cognitive restructuring and behavioural rehearsal. The study also revealed that behavioural rehearsal is more effective when compared with cognitive restructuring in the treatment of conduct disorder among adolescents.

In the course of the study, the researcher developed the parenting scale that could be used to determine the parenting styles of both the father and mother. The study revealed that a large percentage of the participants were from families where both parents used authoritative parenting style. One wonders why parents with authoritative parenting style (which is believed to be the best parenting style – “balanced parenting”) should have adolescents with conduct disorder. The answer is not far-fetched, as other factors (such as peer pressure or negative socialization) can affect adolescents although their upbringing may be tagged balanced.

The study also identified a hierarchical picture (order of prominence) of the subdivisions of conduct disorder in the adolescents that are in the Special Correctional Centre. The result therefore is a pointer to the trait(s) that parents are to watch out for – especially when dealing with adolescents.

This study will assist professional counsellors, psychologists, clinicians, teachers and the community at large to have a better perception of conduct disorder among adolescents. The causes, treatment or effective intervention and preventive measures and strategies with which to build a healthy army of adolescents are proffered.

## **5.8 Suggestions for Further Studies**

This study has enhanced expertise and more experience was acquired. To this effect, the followings are suggested for further studies:

The study is limited to two Special Correctional Centres in Lagos State, thus it is important to replicate this empirical study for a larger population. Similar studies

could be carried out in other States of Nigeria, in regular schools, approved schools and rehabilitation centres.

Further studies should incorporate post treatment evaluation and follow up by engaging participants that will be available for the post treatment evaluation and follow up which is usually done for at least six months.

Counsellors should endeavour to explore the effectiveness of other behavioural modification techniques on conduct disorder of children and adolescents alike.

This study revealed the efficacy of cognitive restructuring and behavioural rehearsal in the treatment of adolescents conduct disorder. Other interventions could be used either in isolation or in conjunction with the already tested and proven ones.

The present study focused on adolescents. But similar studies could focus on children with conduct disorder or combine children and adolescent with conduct disorder.

Other variables such as peer pressure, state of origin and or ethnicity, marital status of parents, types (white or blue collar job) and nature of parents' job (self employed, private or public employed), among others could be considered as intervening variables to conduct disorder.

The counselling interventions (cognitive restructuring and behavioural rehearsal) could be used to treat or correct other behavioural challenges. These include disruptive behaviours, attention deficit hyperactivity disorder (ADHD), oppositional defiant disorder (ODD) among others.



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## APPENDIX I

### SOCIO-ECONOMIC SCALE

1. Name: .....

2. School Attended: .....

3. Class: .....

Please tick ( ✓ ) the appropriate box

4. Sex: Male (     )     Female (     )

5. How many cars do your parent have: .....

6. Parents' occupation: put tick ( ✓ ) in the appropriate box

	Father	Mother	Guardians
A. 1. Professional e.g. in Law, Engineering, Medicine, Senior Civil Service.  2. Professors, Lecturer, Manager, Graduate teacher, Senior Army Officer, Clergy			
B. Clerk, office worker, non-graduate teacher, nurse, police, soldier			
C. Trader, business man			
D. Craftsman, Artisan, Driver, Messenger			
E. Farmer, Fisherman			

7. Educational levels of parents: tick (✓) in the appropriate box

	Father	Mother	Guardians
a. No schooling			
b. Elementary school			
c. Secondary school or Teacher Training			
d. Professional Training-clergy, trade school			
e. Higher than a- d but not University			
f. University graduate (1 <sup>st</sup> Degree)			
g. Above first degree			

8. Parents' Residence: tick (✓) in the appropriate place

Parent	Own House	Company/Government/University Quarters	Rented House
Father			
Mother			
Guardians			

9. Put an (X) in the appropriate space. If in rented house, state whether it is

(a) A flat ( )

(b) Two rooms ( )

(c) One room ( )

10. Do your parents have the following? Put an (X) in the appropriate space

(i) Radio ( )

(ii) Stereo Set ( )

(iii) A TV Set ( )

- (iv) A refrigerator ( )
- (v) Gas/ Electric Cooker ( )
- (vi) Freezer ( )
- (vii) Video Machine ( )

11. Do your parents have the following? Put an (X) in the appropriate space

- (i) Executive Furniture ( )
- (ii) Cushion ( )
- (iii) Wooden furniture ( )
- (iv) Iron Chair ( )
- (v) Mat ( )

12. Do your parent have the following? Put X in the appropriate space

- (i) Library ( )
- (ii) Book Shelves ( )
- (iii) Periodicals ( )
- (iv) Newspapers ( )
- (v) Nothing related to books ( )

## APPENDIX II

### PARENTING STYLE SCALE

#### QUESTIONNAIRE

Dear Respondent,

This questionnaire is to obtain information from you only for the purpose of research. The scale is on parenting styles. You are kindly requested to respond as honest as possible. There are no right or wrong answers, any information supplied by you would be treated as confidential.

Thank you for your cooperation.

#### Section A: Demographic Information

Please tick (✓) where applicable.

1. Sex: (a). Male ( ) (b). Female ( )
2. Age: (a). 10-13 ( ) (b). 14-17 ( )
3. Religion: (a). Christianity ( ) (b). Islam ( ) (c). African Traditional Religion ( )  
(d). Others ( )
4. Education: (a). Primary ( ) (b). JSS ( ) (c). SSS ( )
5. Tribe: (a). Yoruba ( ) (b). Hausa ( ) (c). Igbo ( ) (d). Others specify.....
6. What is the order of your birth? (a). Firstborn ( ) (b). Second ( ) (c). Third ( )  
(d). Fourth ( ) (e). Fifth or later ( )
7. Length of stay at the special correctional home (a) 1-6months ( ) (b). 7-  
12months ( ) (c). Over 1year ( )



### Section B<sub>1</sub>: Father's Parenting Style

This questionnaire lists various parenting styles. As it relates to you, please tick the most appropriate box next to each question.

	Items	1 Never	2 Almost never	3 Sometimes	4 Often	5 Always
1	My father is responsive to my feelings and needs.					
2	My father takes my wishes into consideration before he does something.					
3	My father explains to me how he feels about my good/bad behaviour.					
4	My father encourages me to talk about my feelings and problems.					
5	My father encourages me to freely "speak my mind", even if he disagrees with me.					
6	My father explains the reasons behind his expectations.					
7	My father provides comfort and understanding when I am upset.					
8	My father gives me compliment.					
9	My father considers my preferences when he makes plans for the family (e.g., weekends away and holidays).					
10	My father respects my opinion and encourages me to express them.					
11	My father treats me as an equal member of the family.					
12	My father provides reasons for the expectations he has for me.					

	<b>Items</b>	<b>1</b> Never	<b>2</b> Almost never	<b>3</b> Sometimes	<b>4</b> Often	<b>5</b> Always
13	My father has warm and intimate times together with me.					
14	My father expresses disappointment when I do something wrong.					
15	My father treats me with dignity and respect.					
16	My father enforces rules on me even when I have a different opinion.					
17	My father punishes me by taking privileges away from me (e.g., TV, games, visiting friends).					
18	My father yells at me to disapprove my behaviour.					
19	My father explodes in anger towards me.					
20	My father spansks me when he doesn't like what I do or say.					
21	My father uses criticism to make me improve my behaviour.					
22	My father uses threats as a form of punishment with little or no justification.					
23	My father punishes me by withholding emotional expressions.					
24	My father openly criticizes me when my behaviour does not meet his expectations.					
25	My father struggles to change how I think or feel about things.					
26	My father points out my past behavioural problems to make sure I don't do them again.					
27	My father reminds me that he is my father.					

	<b>Items</b>	<b>1</b> Never	<b>2</b> Almost never	<b>3</b> Sometimes	<b>4</b> Often	<b>5</b> Always
28	My father reminds me of all the things he has done for me.					
29	My father enforces rules and regulations on me.					
30	My father believes that I don't have any say as regards his dictates.					
31	My father finds it difficult to discipline me.					
32	My father gives me whatever I want when I cause a commotion about something.					
33	My father spoils me.					
34	My father ignores my bad behaviour.					
35	My father allows me to go to wherever I want.					
36	My father buys me whatever I ask him.					
37	My father encourages me to be independent.					
38	My father never criticizes my opinion.					
39	My father does not know my friends.					
40	My father does not check me when I stay late or come home late.					
41	I work without my father's supervision.					
42	My father does not ask me about my plans for the coming day.					
43	My father ignores my bad behaviour(s).					
44	My father fixes my mistakes and protects me from different consequences.					
45	My father always finds out what I want to make me happy.					

## Section B<sub>2</sub>: Mother's Parenting Style

This questionnaire lists various parenting styles. As it relates to you, tick the most appropriate box next to each question.

	Items	1 Never	2 Almost never	3 Sometimes	4 Often	5 Always
1	My mother is responsive to my feelings and needs.					
2	My mother takes my wishes into consideration before she does something.					
3	My mother explains to me how she feels about my good/bad behaviour.					
4	My mother encourages me to talk about my feelings and problems.					
5	My mother encourages me to freely "speak my mind", even if she disagrees with me.					
6	My mother explains the reasons behind her expectations.					
7	My mother provides comfort and understanding when I am upset.					
8	My mother gives me compliment.					
9	My mother considers my preferences when she make plans for the family (e.g., weekends away and holidays).					
10	My mother respects my opinion and encourages me to express them.					
11	My mother treats me as an equal member of the family.					
12	My mother provides reasons for the expectations she has for me.					

	<b>Items</b>	<b>1</b> Never	<b>2</b> Almost never	<b>3</b> Sometimes	<b>4</b> Often	<b>5</b> Always
13	My mother has warm and intimate times together with me.					
14	My mother expresses disappointment when I do something wrong.					
15	My mother treats me with dignity and respect.					
16	My mother enforces rules on me even when I have a different opinion.					
17	My mother punishes me by taking privileges away from me (e.g., TV, games, visiting friends).					
18	My mother yells at me to disapprove my behaviour.					
19	My mother explodes in anger towards me.					
20	My mother spansks me when she doesn't like what I do or say.					
21	My mother uses criticism to make me improve my behaviour.					
22	My mother uses threats as a form of punishment with little or no justification.					
23	My mother punishes me by withholding emotional expressions.					
24	My mother openly criticizes me when my behaviour does not meet her expectations.					
25	My mother struggles to change how I think or feel about things.					
26	My mother points out my past behavioural problems to make sure I don't do them again.					

	<b>Items</b>	<b>1</b> Never	<b>2</b> Almost never	<b>3</b> Sometimes	<b>4</b> Often	<b>5</b> Always
27	My mother reminds me that she is my mother.					
28	My mother reminds me of all the things she has done for me.					
29	My mother enforces rules and regulations on me.					
30	My mother believes that I don't have any say as regards her dictates.					
31	My mother finds it difficult to discipline me.					
32	My mother gives me whatever I want when I cause a commotion about something.					
33	My mother spoils me.					
34	My mother ignores my bad behaviour.					
35	My mother allows me to go to wherever I want.					
36	My mother buys me whatever I ask her.					
37	My mother encourages me to be independent.					
38	My mother never criticizes my opinion.					
39	My mother does not know my friends.					
40	My mother does not check me when I stay late or come home late.					
41	I work without my mother's supervision.					
42	My mother does not ask me about my plans for the coming day.					
43	My mother ignores my bad behaviour(s).					
44	My mother fixes my mistakes and protects me from different consequences.					
45	My mother always finds out what I want to make me happy.					

## APPENDIX III

### **Experimental Group 1: Cognitive Restructuring Skill Training (CRST)**

**Session I:** This session was devoted to welcoming the participants followed by self-introduction of the researcher and participants. After the introduction, the participants were intimated with the purpose of the programme as well as topics to be covered. The pre-test was administered and participants were urged to provide adequate and genuine information.

**Session II:** The session was devoted to the introduction of basic terms and concepts of cognitive restructuring.

**Session III:** The researcher reviewed previous work with subjects after which “causes of CD” among children and adolescents were discussed. Class activity and a take home assignment was given to participants.

**Session IV:** The researcher reviewed previous work and the take home assignment with subjects. The topic of focus was “Overcoming conduct disorder through the principle of Cognitive Restructuring”. Subjects were encouraged to practice the therapy learnt.

**Session V:** Previous session and take home assignment were reviewed followed by the continuation of therapeutic intervention.

#### Reviewing the homework

During this session, the behaviours practiced by the subjects since the previous session was reviewed.

Due to time constraints, some of the subjects took turns describing the behaviours they have been practicing and the context of the exercise (place, persons involved, behaviours used and other opportunities).

The researcher praised the participants for putting the behaviour into practice and stressed the benefits of that behaviour, including the positive reactions of others to it and the personal satisfaction and sense of accomplishment derived by the participants.

**Session VI:** Emphasis on the benefits of cognitive restructuring therapy for adequate restoration of expected behaviour outcome.

**Session VII:** Repetition of the previous session. This was the final session with the experimental group 1.

**Session VIII:** Wrap-up. The post test was given to all subjects including the control group.

For the control group, participants were only given general information, that is, no exposure to any special treatment. However, pre and post test were administered.

### **Experimental Group 2: Behavioural Rehearsal Skill Training (BRST)**

**Session I:** General orientation and administration of pre-test.

**Session II:** Introduction of basic terms and concepts of behavioural rehearsal

**Session III:** The researcher reviewed previous work with subjects, class activity and a take home assignment was given to participants.

**Session IV:** The researcher reviewed previous work, discuss take home assignment and expose participants to the principle of behavioural rehearsal in overcoming conduct disorder

**Session V:** Continuation of principles of behavioural rehearsal and demonstration by researcher and participants.

The facilitator praised correct demonstration of participants' desired behaviour.

**Session VI:** Concretization of the benefits of behavioural rehearsal therapy for adequate restoration of expected behaviour outcome.

**Session VII:** Repetition of the previous session expression of desired behaviour.

**Session VIII:** Wrap-up and post-test administration. The post-test was also given to the control group.



## APPENDIX IV

### STATISTICAL ANALYSIS

**Hypothesis One:**

There is no significant difference in the order of prominence in conduct disorder (Aggressive conduct, Hostility, Deceitfulness/Theft and Violation of rules) among adolescents in the special correctional center.

**Table A: Post Hoc Tests Using Tukey Honestly Significant Difference (HSD) to identify which pair(s) of conduct disorder significantly differ or not.**

(I) OrderofProminence	(J) OrderofProminence	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Aggression	Hostility	.77273	3.98975	.997	-9.6804	11.2258
	Deceitfulness/theft	.87618	2.01642	.972	-4.4068	6.1592
	Rule Violation	-3.22727	3.98975	.850	-13.6804	7.2258
Hostility	Aggression	-.77273	3.98975	.997	-11.2258	9.6804
	Deceitfulness/theft	.10345	3.75346	1.000	-9.7306	9.9374
	Rule Violation	-4.00000	5.09320	.861	-17.3441	9.3441
Deceitfulness/theft	Aggression	-.87618	2.01642	.972	-6.1592	4.4068
	Hostility	-.10345	3.75346	1.000	-9.9374	9.7306
	Rule Violation	-4.10345	3.75346	.695	-13.9374	5.7306
Rule Violation	Aggression	3.22727	3.98975	.850	-7.2258	13.6804
	Hostility	4.00000	5.09320	.861	-9.3441	17.3441
	Deceitfulness/theft	4.10345	3.75346	.695	-5.7306	13.9374

\*. The mean difference is significant at the 0.05 level.

**Hypothesis Three:** There is no significant difference in parental socio-economic status of adolescents conduct disorder.

**Table B: Post Hoc Tests using Tukey Honestly Significant Difference (HSD) to identify which pair(s) of parental socio-economic status significantly differ.**

(I) SES	(J) SES	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Low	Medium	1.56944	3.07744	.867	-5.7686	8.9075
	High	-4.90909	3.75822	.396	-13.8705	4.0523
Medium	Low	-1.56944	3.07744	.867	-8.9075	5.7686
	High	-6.47854*	2.51633	.031	-12.4787	-.4784
High	Low	4.90909	3.75822	.396	-4.0523	13.8705
	Medium	6.47854*	2.51633	.031	.4784	12.4787

\*. The mean difference is significant at the 0.05 level.

**Hypothesis Five:** There is no significant difference in the treatment of conduct disorder of participants exposed to cognitive restructuring and behavioural rehearsal when compared with participants in the control groups.

**Table C: Post Hoc Tests using Tukey Honestly Significant Difference (HSD) to identify which pair(s) of group significantly differs.**

(I) classification	(J) classification	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Cognitive restructuring	Behavioural rehearsal	.60000	1.82665	.942	-3.7556	4.9556
	Control	-14.96667*	1.82665	.000	-19.3223	-10.6111
Behavioural rehearsal	Cognitive restructuring	-.60000	1.82665	.942	-4.9556	3.7556
	Control	-15.56667*	1.82665	.000	-19.9223	-11.2111
Control	Cognitive restructuring	14.96667*	1.82665	.000	10.6111	19.3223
	Behavioural rehearsal	15.56667*	1.82665	.000	11.2111	19.9223

\*. The mean difference is significant at the 0.05 level.

**Hypothesis Seven:** There is no significant difference in conduct disorder of participants exposed to cognitive restructuring and behavioural rehearsal on the basis of gender, parental socio-economic status, and parenting style.

**Table D: Post Hoc Tests using Tukey Honestly Significant Difference (HSD) to identify which pair(s) of paternal parenting style in Cognitive Restructuring group significantly differs.**

(I) Parenting Style	(J) Paternal Parenting Style	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Authoritative	Authoritarian	-4.57143	2.49201	.178	-10.7502	1.6073
	Permissive	1.42857	2.73205	.861	-5.3453	8.2025
Authoritarian	Authoritative	4.57143	2.49201	.178	-1.6073	10.7502
	Permissive	6.00000	3.35942	.193	-2.3294	14.3294
Permissive	Authoritative	-1.42857	2.73205	.861	-8.2025	5.3453
	Authoritarian	-6.00000	3.35942	.193	-14.3294	2.3294

**Table E: Post Hoc Tests using Tukey Honestly Significant Difference (HSD) to identify which pair(s) of maternal parenting style in Cognitive Restructuring group significantly differs.**

(I) Parenting Style	(J) Maternal Parenting Style	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Authoritative	Authoritarian	-.11029	2.29546	.999	-5.8017	5.5811
	Permissive	-1.23529	2.72378	.893	-7.9887	5.5181
Authoritarian	Authoritative	.11029	2.29546	.999	-5.5811	5.8017
	Permissive	-1.12500	3.05219	.928	-8.6927	6.4427
Permissive	Authoritative	1.23529	2.72378	.893	-5.5181	7.9887
	Authoritarian	1.12500	3.05219	.928	-6.4427	8.6927

**Table F: Post Hoc Tests using Tukey Honestly Significant Difference (HSD) to identify which pair(s) of parental socio-economic status in Behavioural Rehearsal group significantly differs.**

(I) SES	(J) SES	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Low	Medium	3.07246	4.75171	.796	-8.7090	14.8539
	High	-3.41667	5.91216	.833	-18.0754	11.2420
Medium	Low	-3.07246	4.75171	.796	-14.8539	8.7090
	High	-6.48913	4.19349	.285	-16.8865	3.9083
High	Low	3.41667	5.91216	.833	-11.2420	18.0754
	Medium	6.48913	4.19349	.285	-3.9083	16.8865

**Table G: Post Hoc Tests using Tukey Honestly Significant Difference (HSD) to identify which pair(s) of paternal parenting style in Behavioural Rehearsal group significantly differs.**

(I) Paternal Parenting Style	(J) Paternal Parenting Style	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Authoritative	Authoritarian	-2.78571	4.28803	.794	-13.4175	7.8461
	Permissive	3.91429	3.91128	.583	-5.7834	13.6120
Authoritarian	Authoritative	2.78571	4.28803	.794	-7.8461	13.4175
	Permissive	6.70000	5.27271	.423	-6.3732	19.7732
Permissive	Authoritative	-3.91429	3.91128	.583	-13.6120	5.7834
	Authoritarian	-6.70000	5.27271	.423	-19.7732	6.3732

**Table H: Post Hoc Tests using Tukey Honestly Significant Difference (HSD) to identify which pair(s) of maternal parenting style in Behavioural Rehearsal group significantly differs.**

(I) Maternal Parenting Style	(J) Maternal Parenting Style	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Authoritative	Authoritarian	.61111	3.28259	.981	-7.5278	8.7500
	Permissive	3.27778	5.01423	.792	-9.1546	15.7102
Authoritarian	Authoritative	-.61111	3.28259	.981	-8.7500	7.5278
	Permissive	2.66667	5.36044	.873	-10.6241	15.9574
Permissive	Authoritative	-3.27778	5.01423	.792	-15.7102	9.1546
	Authoritarian	-2.66667	5.36044	.873	-15.9574	10.6241

## APPENDIX V

<h1 style="font-size: 2em; margin: 0;">CDS</h1> <h2 style="font-size: 1.5em; margin: 0;">Conduct Disorder Scale</h2> <h3 style="font-size: 1.2em; margin: 0;">Summary/Response Form</h3>	<h4 style="text-align: center; margin: 0;">Section III. Interpretation Guide</h4> <table style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: center; border-right: 1px dashed black;">Conduct Disorder Quotient</th> <th style="text-align: center; border-right: 1px dashed black;">Degree of Severity</th> <th style="text-align: center;">Probability of Conduct Disorder</th> </tr> <tr> <td style="text-align: center; border-right: 1px dashed black;">≥ 100</td> <td style="text-align: center; border-right: 1px dashed black;">Severe</td> <td style="text-align: center;">Highly Probable</td> </tr> <tr> <td style="text-align: center; border-right: 1px dashed black;">85-99</td> <td style="text-align: center; border-right: 1px dashed black;">Moderate</td> <td style="text-align: center;">Probable</td> </tr> <tr> <td style="text-align: center; border-right: 1px dashed black;">70-84</td> <td style="text-align: center; border-right: 1px dashed black;">Mild</td> <td style="text-align: center;">Likely</td> </tr> <tr> <td style="text-align: center; border-right: 1px dashed black;">≤ 69</td> <td style="text-align: center; border-right: 1px dashed black;">(Not Applicable)</td> <td style="text-align: center;">Unlikely</td> </tr> </table>	Conduct Disorder Quotient	Degree of Severity	Probability of Conduct Disorder	≥ 100	Severe	Highly Probable	85-99	Moderate	Probable	70-84	Mild	Likely	≤ 69	(Not Applicable)	Unlikely																																																																																																																																																																																																																																															
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Profile of Scores</h4> <table style="width: 100%; border-collapse: collapse; font-size: 0.8em;"> <thead> <tr> <th rowspan="2" style="writing-mode: vertical-rl; transform: rotate(180deg);">Standard Scores</th> <th colspan="5" style="text-align: center;">CDS Subscales</th> <th colspan="3" style="text-align: center;">Other Measures of Intelligence, Achievement or Diagnostic Ratings</th> </tr> <tr> <th style="writing-mode: vertical-rl; transform: rotate(180deg);">Aggressive Conduct</th> <th style="writing-mode: vertical-rl; transform: rotate(180deg);">Hostility</th> <th style="writing-mode: vertical-rl; transform: rotate(180deg);">Deceitfulness/Theft</th> <th style="writing-mode: vertical-rl; transform: rotate(180deg);">Rule Violations</th> <th style="writing-mode: vertical-rl; transform: rotate(180deg);">Conduct Disorder Quotient</th> <th style="writing-mode: vertical-rl; transform: rotate(180deg);">Quotients</th> <th style="writing-mode: vertical-rl; transform: rotate(180deg);"> </th> <th style="writing-mode: vertical-rl; transform: rotate(180deg);"> </th> <th style="writing-mode: vertical-rl; transform: rotate(180deg);">Quotients</th> </tr> </thead> <tbody> <tr><td>20</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>150</td><td>•</td><td>•</td><td>•</td><td>150</td></tr> <tr><td>19</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>145</td><td>•</td><td>•</td><td>•</td><td>145</td></tr> <tr><td>18</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>140</td><td>•</td><td>•</td><td>•</td><td>140</td></tr> <tr><td>17</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>135</td><td>•</td><td>•</td><td>•</td><td>135</td></tr> <tr><td>16</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>130</td><td>•</td><td>•</td><td>•</td><td>130</td></tr> <tr><td>15</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>125</td><td>•</td><td>•</td><td>•</td><td>125</td></tr> <tr><td>14</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>120</td><td>•</td><td>•</td><td>•</td><td>120</td></tr> <tr><td>13</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>115</td><td>•</td><td>•</td><td>•</td><td>115</td></tr> <tr><td>12</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>110</td><td>•</td><td>•</td><td>•</td><td>110</td></tr> <tr><td>11</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>105</td><td>•</td><td>•</td><td>•</td><td>105</td></tr> <tr><td>10</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>100</td><td>•</td><td>•</td><td>•</td><td>100</td></tr> <tr><td>9</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>95</td><td>•</td><td>•</td><td>•</td><td>95</td></tr> <tr><td>8</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>90</td><td>•</td><td>•</td><td>•</td><td>90</td></tr> <tr><td>7</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>85</td><td>•</td><td>•</td><td>•</td><td>85</td></tr> <tr><td>6</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>80</td><td>•</td><td>•</td><td>•</td><td>80</td></tr> <tr><td>5</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>75</td><td>•</td><td>•</td><td>•</td><td>75</td></tr> <tr><td>4</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>70</td><td>•</td><td>•</td><td>•</td><td>70</td></tr> <tr><td>3</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>65</td><td>•</td><td>•</td><td>•</td><td>65</td></tr> <tr><td>2</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>60</td><td>•</td><td>•</td><td>•</td><td>60</td></tr> <tr><td>1</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td>55</td><td>•</td><td>•</td><td>•</td><td>55</td></tr> </tbody> </table>	Standard Scores	CDS Subscales					Other Measures of Intelligence, Achievement or Diagnostic Ratings			Aggressive Conduct	Hostility	Deceitfulness/Theft	Rule Violations	Conduct Disorder Quotient	Quotients			Quotients	20	•	•	•	•	•	150	•	•	•	150	19	•	•	•	•	•	145	•	•	•	145	18	•	•	•	•	•	140	•	•	•	140	17	•	•	•	•	•	135	•	•	•	135	16	•	•	•	•	•	130	•	•	•	130	15	•	•	•	•	•	125	•	•	•	125	14	•	•	•	•	•	120	•	•	•	120	13	•	•	•	•	•	115	•	•	•	115	12	•	•	•	•	•	110	•	•	•	110	11	•	•	•	•	•	105	•	•	•	105	10	•	•	•	•	•	100	•	•	•	100	9	•	•	•	•	•	95	•	•	•	95	8	•	•	•	•	•	90	•	•	•	90	7	•	•	•	•	•	85	•	•	•	85	6	•	•	•	•	•	80	•	•	•	80	5	•	•	•	•	•	75	•	•	•	75	4	•	•	•	•	•	70	•	•	•	70	3	•	•	•	•	•	65	•	•	•	65	2	•	•	•	•	•	60	•	•	•	60	1	•	•	•	•	•	55	•	•	•	55
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## Section V. Response Form

**Directions:** Rate each item according to the frequency of occurrence. Use the following guidelines for your ratings:

- 0 **Never Observed**—You have never seen the person behave in this manner.
- 1 **Seldom Observed**—Person behaves in this manner 1 to 2 times per 6-hour period.
- 2 **Sometimes Observed**—Person behaves in this manner 3 to 4 times per 6-hour period.
- 3 **Frequently Observed**—Person behaves in this manner at least 5 times per 6-hour period.

Circle the number that best describes your observations of the person's typical behavior under ordinary circumstances (i.e., in most places, with people he or she is familiar with, and in usual daily activities). Remember to rate every item. If you are uncertain about how to rate an item, delay the rating and observe the person for a 6-hour period to determine your rating.

The person:

	Never Observed	Seldom Observed	Sometimes Observed	Frequently Observed	
1. argues with adults.	0	1	2	3	
2. actively defies or refuses to comply with adults' requests or rules.	0	1	2	3	
3. deliberately annoys people.	0	1	2	3	
4. acts in a spiteful or vindictive manner.	0	1	2	3	
5. is verbally abusive.	0	1	2	3	
6. creates disturbances.	0	1	2	3	
7. ignores adults' warnings or reprimands.	0	1	2	3	
8. starts fights.	0	1	2	3	
9. is physically cruel to others.	0	1	2	3	
10. makes demands rather than requests.	0	1	2	3	
11. attempts to physically hurt others.	0	1	2	3	
12. deliberately destroys others' property.	0	1	2	3	
13. is explosive.	0	1	2	3	Aggressive Conduct Raw Score
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	= <input type="text"/>
14. loses temper.	0	1	2	3	
15. is angry and resentful.	0	1	2	3	
16. shows little or no shame or guilt after being caught doing something wrong.	0	1	2	3	
17. irritates teachers and other students.	0	1	2	3	
18. cruelly teases or makes fun of others.	0	1	2	3	
19. is insensitive to the feelings of others.	0	1	2	3	
20. displays a negative attitude.	0	1	2	3	
21. says authority figures do not have the right to touch him or her.	0	1	2	3	
22. says he or she doesn't care about how others feel.	0	1	2	3	
23. is unconcerned about others' rights.	0	1	2	3	
24. rejects moral statements about what is right or wrong.	0	1	2	3	
25. associates with antisocial students.	0	1	2	3	
26. makes sexually abusive comments.	0	1	2	3	
27. says he or she doesn't care what happens to him or her.	0	1	2	3	Hostility Raw Score
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	= <input type="text"/>
28. blames others for his or her mistakes or misbehavior.	0	1	2	3	
29. lies to obtain goods or favors or to avoid obligations.	0	1	2	3	
30. steals while confronting a victim.	0	1	2	3	
31. steals without confronting a victim.	0	1	2	3	
32. uses other people's property without permission.	0	1	2	3	
33. cheats on assignments, tests, or games.	0	1	2	3	Deceitfulness/ Theft Raw Score
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	= <input type="text"/>

CDS

2



	Never Observed	Seldom Observed	Sometimes Observed	Frequently Observed	
34. is touchy or easily annoyed by others.	0	1	2	3	
35. infringes on the rights of others.	0	1	2	3	
36. is uncooperative.	0	1	2	3	
37. is disobedient (breaks known rules).	0	1	2	3	
38. responds poorly to discipline.	0	1	2	3	
39. bullies, threatens, or intimidates others.	0	1	2	3	
40. has difficulty waiting for things.	0	1	2	3	
					Rule Violations Raw Score
	<input type="text"/>	+ <input type="text"/>	+ <input type="text"/>	+ <input type="text"/>	= <input type="text"/>

### Section VI. Key Questions

Answer each question by circling either Yes or No and writing a description of the behavior in question. Because the time period in which the behavior occurred is important, be sure to record the date when the behavioral episode occurred.

**Has the person ever:**

- harmed someone or threatened to harm someone using a weapon (e.g., bat, brick, broken bottle, knife, or gun)? Yes      No

---

- been physically cruel to people or animals? Yes      No

---

- engaged in stealing directly from a victim (e.g., mugging, purse snatching, extortion, or armed robbery)? Yes      No

---

- forced someone into sexual activity? Yes      No

---

- engaged in physical violence (e.g., rape, assault, or homicide)? Yes      No

---

- deliberately destroyed someone's property (e.g., deliberate fire setting with the intention of causing serious damage)? Yes      No

---

- deliberately destroyed someone's property in other ways (e.g., smashing car windows or school vandalism)? Yes      No

---

- engaged in deceitfulness or theft such as breaking into someone else's house, building, or car? Yes      No

---

- lied or manipulated someone to obtain goods or favors or to avoid obligations? Yes      No

---

10. engaged in stealing items of nontrivial value without confronting the victim (e.g., shoplifting or forgery)?	Yes	No
_____		
_____		
11. stayed out late at night despite parental prohibition?	Yes	No
_____		
_____		
12. run away from home overnight (at least twice or only once if the subject stayed away for a lengthy period of time)? (NOTE: These running away episodes are not a result of physical or sexual abuse.)	Yes	No
_____		
_____		
13. been truant from school before the age of 13?	Yes	No
_____		
_____		

**Section VII. Interpretations and Recommendations**

\_\_\_\_\_

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**Section VIII. CDS Characteristics**

**Description.** The *Conduct Disorder Scale* is a highly standardized instrument designed for assessment of persons with Conduct Disorder and other severe behavioral disorders. The CDS provides norm-referenced information that can assist in the diagnosis of Conduct Disorder.

**Item Selection.** Items on the CDS are based on the definitions of Conduct Disorder published in the *Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition—Text Revision* (DSM-IV-TR; American Psychiatric Association, 2000). The items on the subscales are derived from the DSM-IV-TR diagnostic criteria for Conduct Disorder.

**Normative Data.** The CDS was standardized on a sample of 1,040 subjects from 22 states. Six hundred forty-four of the subjects were adjudicated juvenile delinquents or had a psychiatric diagnosis of Conduct Disorder.

**Reliability.** Internal consistency of the CDS was determined using Cronbach's alpha technique. Studies revealed a coefficient alpha of .96 for the entire test. This reliability coefficient is exceptionally strong and indicates that the items within the scale are very consistent in the measurement of characteristic behaviors of persons with Conduct Disorder and other serious behavioral disorders. All of the items are sufficiently reliable for contributing to important diagnostic decisions.

**Validity.** The validity of the CDS was demonstrated through several research studies. Item analysis established that the CDS items are very consistent and discriminative. Concurrent criterion-related validity studies demonstrated that scores from the CDS can be used to discriminate subjects who have Conduct Disorder from those who belong to different diagnostic groups. Other evidence of concurrent validity was established by correlating scores on the CDS with scores from the *Behavior Rating Profile—Second Edition* (Brown & Hammill, 1990) and the *Differential Test of Conduct and Emotional Problems* (Kelly, 1990). Positive correlations were obtained between relevant subscales on these instruments and the CDS.