



# EFFECT OF COGNITIVE BEHAVIOUR THERAPY ON ADOLESCENTS' PSYCHOLOGICAL AGGRESSIVENESS AMONG SENIOR SECONDARY SCHOOL STUDENTS IN POTISKUM L.G.A., YOBE STATE

## ABSTRACT

The work Effect of Cognitive Behaviour Therapy on Adolescents Psychological Aggressiveness Among Senior Secondary school students 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 aggression. The study adopts a quasi-experimental research design. The

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## INTRODUCTION

Psychological aggression in 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 aggression 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 families everyday life (Hinshaw & Lee, 2003; Goldberg, 2012). In another vein, the word —adolescence comes from a Latin word —adolescence 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



*variables in the study include the independent variable, which consist of cognitive behaviour therapy and control group. The intervening variables are gender, socio-economic status and parenting styles while the dependent variable is aggression. A sample size of 50 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, Four research hypotheses are raised and tested at 0.05 level of significance. The procedure for data collection includes 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 parenting style, the prevalent parental socioeconomic 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 prevalence in aggression of the followings: prevalence of paternal and maternal parenting styles, cognitive behaviour therapy on the basis of gender and parental SES. Others include parenting styles, age, educational level, and length of stay at the schools. There is a significant difference in the followings: degree of severity of aggression before and after treatment, treatment of aggression of participants in the two experimental groups when compared with the control group and cognitive behaviour therapy on the basis of religion. Recommendations are proffered in the study.*

**Keywords:** *Adolescents, Aggression, Cognitive-behavioral therapy (CBT), Effect, Socio-Economic Status*

(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.

Therefore, 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).

Cognitive Behaviour Therapy is a type of psychotherapeutic treatment that helps understand the influence of thoughts and feelings on human behaviour. According to Westen (1996), Cognitive Behaviour Therapy begins with a careful behavioural analysis, examining the symptom and stimuli or thought associated with it. It then tailors procedures to address problematic behaviours, cognitive and emotional responses. Therefore, negative and unrealistic thought can cause distress and result into problem, such as the thought experience by students having low self-esteem. One example could be a student who, after making mistake may think he/she is useless and can't do anything right. This may impact negatively on their moods, making the students feel worst about themselves, and the problem may be worsened if the students react by avoiding school activities. Reinecke, Dattilow and Freeman (2003) in their views, noted that the use of Cognitive Behaviour Therapy has been extended to children and secondary school students with good result. It has often been used to treat depression, aggression, anxiety disorder, and symptom related to trauma and post-traumatic stress disorder with good success. It is based on the above evidence of cognitive behaviour therapy in treating other disorder, that the researcher want to determine the Effect Of Cognitive Behaviour Therapy On Adolescents' Aggressiveness Among Senior Secondary School Students in Potiskum Local Government, Yobe State.

### **Statement of Problem**

In recent time, the level of aggressive behaviours have been on the increase all over Yobe State. There are no restrictions were these behaviours are exhibited. Such have been witnessed in work places, markets, recreational parks, motor stations, churches/mosques, schools/colleges and universities, and so on. Almost on daily bases, reports of aggressive acts grace newspaper headlines in Nigeria. Aggression is a physical or verbal behaviour intended to hurt someone. Similarly, researchers opined that



aggression is any behaviour directed toward another individual that is carried out with the proximate intent to cause harm.

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, and many more evils. The Nigerian government established Remand Homes (now Secondary schools), 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 aggression. For adolescents with aggression 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.

It is in the light of this persistence wrong doing of our adolescents that this studies therefore will investigate the ways in which cognitive behaviour therapy is effective to reform and rehabilitate the adolescents remanded in custody.

### **Objectives**

The objectives of the Study are to:

- i. Determine the effect of Cognitive Behaviour Therapy on adolescents' aggressiveness among Yobe State Senior Secondary School Students.
- ii. Determine whether the effect of Cognitive Behaviour Therapy on adolescents' aggressiveness among Yobe State Senior Secondary School Students vary according to gender.
- iii. Determine whether the effect of Cognitive Behaviour Therapy on adolescents' aggressiveness among Yobe State Senior Secondary School Students vary according to parenting styles.
- iv. Determine whether the effect of Cognitive Behaviour Therapy on adolescents' aggressiveness among Yobe State Senior Secondary School Students vary according to parental socio-economic status.

### **Research Questions**

In the light of the above, the following research questions are answered:

1. What is the mean difference in achievement scores of aggressive students expose to CBT and that of those to control group?



2. Does aggression among senior secondary school adolescents' students vary according to gender?
3. Does parenting style affect the effectiveness of cognitive behaviour therapy in the treatment of adolescent conduct disorder?
4. Does the effect of cognitive behaviour therapy on adolescents vary according to parental socio-economic status?

### **Hypotheses**

The following null hypotheses are tested at 0.05 level of significance:

- H<sub>01</sub>: There is no significant effect of Cognitive Behaviour Therapy on adolescent aggressiveness among Senior Secondary School students in Potiskum, Yobe State.
- H<sub>02</sub>: There is no significant difference between male and female senior secondary school adolescents' students for effect of CBT on aggression in Potiskum Local Government.
- H<sub>03</sub>: There is no significant effect of Cognitive Behaviour Therapy on adolescent aggressiveness according to parenting style.
- H<sub>04</sub>: There is no significant effect of Cognitive Behaviour Therapy on adolescent aggressiveness according to parental socio-economic status.

### **Significance of the Study**

The knowledge and research on aggression 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 aggression in order to provide preventions, interventions and treatment programmes. This study will benefit practicing and upcoming counselling professionals (counsellors) in the following ways:

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. The study would also assist the government to be proactive in tackling any form of aggressiveness when it comes to drafting curriculum for the state and nation as a whole. Moreover, the study would be of immense benefit to the secondary school principals in the north eastern states of Nigeria to be very conscious of any issue related to aggressiveness reported to them. The study would be of immense benefit to the various stakeholders that deal with educational matters for policy making. The study would also be of immense benefit to the scholars who want to use it for research on the same subject matter in the nearest future.

### **CONCEPTUAL FRAMEWORK**

#### **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 Kelt (1977) and Mine (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.

### **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.

### **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).

### **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).

### **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.



### **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.

### **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 & Alien (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 Kilmartm (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.

### **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).

### **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 can be useful for dealing with issues such as: anger, anxiety, depression, drug or alcohol problems, eating disorders, obsessive-compulsive disorder, phobias, posttraumatic 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.

### **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, selffulfillment, 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.

### **Research Design**

The design for this study was Quasi-experimental design. The design is called Quasi-experimental because subjects were randomly assigned to groups. Because of the control they provide, they are the mostly highly recommended designed for experimentation in education. In the randomized subjects, pre-test and posttest control group design; one randomly assigns subjects to the experimental and control groups and administer a pretest to both groups. The treatment is introduced only to the experimental subjects, after which the two groups are measured. The researcher then compares the two group scores on the post test. The group known as the experimental group I was given cognitive behavioural treatment, while the other group known as the control group II was given another or no treatment.

A randomized pretest and post-test control group design

<b>Group</b>	<b>Pre-test</b>	<b>Research condition</b>	<b>Post-test</b>
<b>Experimental</b>	$O_1$	$X_1$ (treatment)	$O_2$
<b>Control</b>	$O_1$	$X_0$ (no treatment)	$O_2$

$O_1$  stands for the pre-test that was given to all the students

$X_1$  stands for the treatment (cognitive behavioural techniques) which was given to the experimental group.

$X_0$  stands for treatment that was not given to the control group.

$O_2$  stands for the post-test which was given to both the experimental and control groups.

### **Population and Sample**

The population for this study is comprised of all aggressive adolescents' students in Government Day Secondary school Potiskum for Boys, Government Girls Science and Technical College Potiskum for Girls in Yobe State.

The sample size employed for this study is 50 adolescents. Purposive sampling is utilized as there are few counselling centres/units where adolescents that meet the research diagnostic criteria for aggression are found. Among the 50 participants, 15 are randomly assigned into one experimental group (Cognitive behaviour therapy) and 10 in control group in Government Day Secondary

School Potiskum. Secondly, 15 students are assigned into experimental group (Cognitive behaviour therapy) and 10 in control group in Government Girls' Science and Technical College Potiskum. A total of 25 participants are involved at each of the Secondary schools selected. 50 participants are involved in the research as determined by their satisfying or



meeting the requirements. At the Government Girls' Science and Technical College Potiskum for Girls only 25 students are satisfied the required research criteria for aggression. To work with equal representation from the boy's centre, hence the participation of 25 adolescents only.

### **Instrument for Data Collection**

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

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

#### ***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 Aggression.

#### ***Parenting Style Scale***

The researcher used a 5-like likert scale to score the adopted version of Abubakar (2013) Parenting Style Scale. 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).

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 scale are based on the Likert-like scale (i.e. Never (1); Almost never (2); Sometimes (3); Often (4) and Always (5).

#### ***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.

### **Procedure for Data Collection**

The procedures for data collection are carried out as follows:

The researcher visits the two secondary school (Government Day secondary school Potiskum for boys, and Government girls' science and technical college Potiskum for girls. An application letter was presented to the concerned schools seeking for permission for the participation of adolescents in the two secondary schools in the research work.



### **Treatment Package**

The procedure that employed was the treatment package that lasted for a period of eight weeks. Each session of the treatment programme will last between one and two hours, twice a week (Tuesdays and Thursdays or Saturdays). In all, are eight sessions for the participants. This was principally to expose the one counselling intervention (Cognitive behavioural therapy) to the participants, **Cognitive Behaviour therapy on aggressiveness; experimental group sessions.**

Cognitive Behaviour Therapy 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 Behaviour Therapy 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.

### **Results and Discussion**

This chapter presents the results of various analyses carried out in the study. A total of 50 senior secondary school adolescence students were sampled for the study within Potiskum Local Government. Frequencies and percentage count were used to analyze the bio data of the respondents, Mean and standard deviation were also used to answer the research questions. Paired sample t-test was used to test the research hypothesis (1) while independent t-test was used to answer research hypotheses (2), (3) and (4) at 0.05 level of significance. All the results were presented in a tabular form based on the research questions and hypotheses and the summary of the findings were further discussed. Moreover, this chapter presented the data analysis under the following sub-headings:

### **Demographic characteristic of the respondents**

**Table 1: Distribution of Respondents based on Gender Frequency**

<b>Gender</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative Percent</b>
<b>Male</b>	25	50.0	50.0
<b>Female</b>	25	50.0	100.0
<b>Total</b>	50	100.0	

Table 1 above present the demographic characteristic of the respondent based on gender. The result reveals that 50.0% of the respondents are male and also 50.0% are female students.



**Table 2: Distribution of Respondents based on Class**

Class	Frequency	Percent	Cumulative Percent
SS 1	14	28.0	28.0
SS2	16	40.0	68.0
SS3	16	32.0	100.0
Total	50	100.0	

Table 2 above present the demographic characteristic of the respondent based on class. The result reveals that 28.0% of the respondents are in SS 1, 40.0% are in SS 2 and 32.0% were SS 3 students respectively

**Table 3: Distribution of Respondents based on Parental Socio-Economic Status SES**

SES	Frequency	Percent	Cumulative Percent
High	26	52.0	52.0
Low	24	48.0	100.0
Total	50	100.0	

Table 3 above present the demographic characteristic of the respondent based on Socio-Economics Status. The result reveals that 52.0% of the respondents have high Socio-Economic Status while 48.0% are in low Socio-Economic Status

**Table 4: Distribution of Respondents based on Parenting Style**

Parenting Style	Frequency	Percent	Cumulative Percent
Authoritative	21	42.0	42.0
Permissive	29	58.0	100.0
Total	50	100.0	

Table 4 above present the demographic characteristic of the respondent based on parenting style. The result reveals that 42.0% of the respondents were under authoritative parent while 58.0% are under permissive parenting style.

**Table 5: Distribution of Respondents based on Age**

Age	Frequency	Percent	Cumulative Percent
14- 17 Years	31	62.0	62.0
18- Above	19	38.0	100.0
Total	50	100.0	



Table 5 above present the demographic characteristic of the respondent based one age. The result reveals that 62.0% of the respondents were between 14-17 years while 38.0% are between 18-above.

### Answering Research Questions

Answering Research Question 1: What is the mean difference in achievement scores of aggressive students expose to CBT and that of those to control group?

**Table 6: Mean Score and Standard Deviation of Students in Experimental and Control Group**

Groups	Type of Test	N	Mean	SD	Mean Gain
Experimental	Pretest	40	40.6750	14.62416	12.25
	Posttest	40	52.9250	12.65800	
Control	Pretest	10	64.8000	9.99778	2.1
	Posttest	10	66.900	6.15449	

From table 6 above, it can be observed that students in experimental group had mean scores of 40.6750 and 52.9250 in pre-test and post-test respectively and standard deviation of 14.62416 and 12.65800. Also, students in control group had mean score of 64.8000 and 66.900 in pre-test and post-test respectively and standard deviation of 9.99778 and 6.15449. It can also be observed that the mean gain of experimental group (12.25) is greater than the mean gain of the control group (2.1). It implies therefore, that students exposed to Cognitive Behaviour Therapy performed better that that exposed to placebo treatment. Hence, the CBT is effective in reducing aggressiveness among senior secondary school student in Potiskum Local Government

**Answering Research Questions 2: Does** aggression among senior secondary school adolescents' students expose to CBT vary according to gender?

**Table 7: Mean Score and Standard Deviation of Male and Female aggressive Students exposed CBT**

Gender	N	Mean	SD	Mean diff
Male	20	45.75	11.9622	-14.35
Female	.20	60.1	9.75435	

Table 7 above, reveals the mean score of male student with CBT on aggression (45.75) which is less than the mean score of female students with CBT (60.1). The mean difference is (-14.35) indicating that CBT has more effect on female aggressiveness. The implication



of this finding is that CBT has great effect on female students. This is evident in the high mean score of female students as compared to their male students' counterparts.

**Answering Research Questions 3:** Does parenting style affect the effectiveness of cognitive behaviour therapy in the treatment of adolescent conduct disorder?

**Table 8: Mean Score and Standard Deviation of parenting styles of aggressive Students expose CBT**

Parenting Style	N	Mean	SD	Mean diff
Authoritative	17	57.4706	13.44023	
				7.9054
Permissive	23	49.5652	11.17557	

Table 8 above reveals the mean score of student with authoritative parenting style (57.4706) which is higher than the mean score of students with permissive parenting style (49.5652). The mean difference is (7.9054) indicating that CBT is more effect on students with authoritative parenting style. Also standard deviation of students with authoritative parenting style (13.44023) has high degree of variability from the mean score of the distribution than students with permissive parenting style standard deviation score. The implication of this finding is that CBT has great effect on students with authoritative parenting style. This is evident in the high mean score of students with authoritative parenting style as compared to their permissive counterparts.

**Research Questions 4:** Does the effect of cognitive behaviour therapy on adolescents vary according to parental socio-economic status?

**Table 9: Mean Score and Standard Deviation of parental socio-economic status of aggressive Students in expose CBT.**

Socio-Economic Status	N	Mean	SD	Mean Diff.
Low	15	46.8667	13.72103	
				-9.6933
High	25	56.5600	10.66958	

Table 9 above reveals the mean score of student from low PSES (46.8667) which is less than the mean score of students with high PSES (56.5600). The mean difference is (-9.6933) indicating that CBT has more effect on students from high PSES. The implication of this finding is that CBT has great effect on students from high PSES. This is evident in the high mean score of students from high PSES as compared to their counterparts from low PSES.



**Testing of Research Hypotheses**

**Hypothesis 1:** There is no significant difference between pretest and posttest means scores of aggressive students expose to CRT

**Table 10: showing result of paired sample t-test on mean responses of pretest and posttest adjustment for effect of CBT on aggressive senior secondary school students**

Paired Difference								
	Mean	Std Deviation	Std Error Mean	95% Confidence Level of the difference		T	df	Sig(2tailed)
				Lower	Upper			
<b>Pre-AG</b>								
<b>Post-AG</b>	1.226	12.72	2.01	-16.31720	-8.18260	-6.09	39	.000*

Significance at  $P < .05$

LEGEND: AG=Aggressiveness

Table 10 shows mean difference of pre-test and post-test adjustment of aggressive behaviour of students as 1.226 with t-value -6.09. The t-value is significance since the p-value .000 is less than 0.05. Therefore, hypothesis 1 is rejected for there is no significant difference between **mean** responses of pre-test and post-test participants on the effect of the CBT on participants' aggressive behaviour.

**Hypothesis 2:** There is no significant difference between male and female senior secondary school adolescents' students for the effect of CBT on aggression in Potiskum Local Government

**Table 11: T-test for independent sample between male and female students**

Gender	N	Mean	Std	df	t-cal	P-value
<b>Male</b>	20	45.75	11.196	38	-4.322	0.000
<b>Female</b>	20	60.10	9.754			

$P < 0.05$ , calculated  $t < 2.02$  at

Table 11 shows independent t-test analysis of the aggressive behaviour mean scores of Male and Female students of senior secondary school in Potiskum Local Government. It shows that the t-value is (-4.322), the test is significance at 0.05 level of significance, 38 degree of freedom and p-value of (.000) as such the null hypothesis which state that, there is no significance differences between mean score of Male and Female senior



secondary school students in Potiskum Local Government is rejected. Therefore, this reveals that, there is significance difference between Male and Female Students.

**Hypothesis 3:** There is no significant difference in parenting style of senior secondary school adolescents' students for the effect of CBT on aggression in Potiskum Local Government

**Table 12: T-test for independent sample of parenting style of senior secondary school aggressive students in Potiskum Local Government.**

Parenting style	N	Mean	Std	df	t-cal	P-value
Authoritative	17	57.47	13.44	38	2.029	0.49
Permissive	23	49.56	11.17			

$P > 0.05$ , Calculated  $t > 2.02$ , at  $df$  38.

Result of the independent t-test statistic in table 12 above showed that, there is no significant difference between in parenting style of senior secondary school adolescent's in Potiskum Local Government, this is because the p-value of 0.49 is higher than 0.05 alpha level of significance while t-calculated value of 2,029 is higher than the t-critical of 2.02 at the different of 38. Hence the null hypothesis which states that there is no significance difference is hereby accepted and retained.

**Hypothesis 4:** There is no significant effect of Cognitive Behaviour Therapy on adolescent aggressiveness according to parental socio-economic status.

**Table 13: T-test for independent sample of parental socio-economic status of senior secondary school aggressive students in Potiskum Local Government. Socio-Economic Status**

Socio-Economic Status	N	Mean	Std	df	t-cal	P-value
Low	15	46.86	13.72	38	-2.497	0.17
High	25	56.56	10.66			

$P < 0.05$ , calculated  $t < 2.04$  at  $df$  38

Table 13 shows independent t-test analysis of the aggressive behaviour according to Parental Socio-Economic Status of senior secondary school students in Potiskum Local Government. It shows that the t-value is (-2.497), the test is significance at 0.05 level of significance, 38 degree of freedom and p-value of (.017) as such the null hypothesis which state that, there is no significance there is no significant effect of Cognitive Behaviour Therapy on adolescent aggressiveness according to parental socio-economic status is rejected. Therefore, this implies that, the null hypothesis is hereby rejected and the alternative hypothesis is accepted.



### **Discussion of Findings**

The main objective of this study was to find out the effectiveness of cognitive behavior Therapy (CBT) in reducing aggressive behaviour among senior secondary students in Potiskum Local Government, Yobe State. The use of psychotherapeutic therapy has been suggested by psychologists and guidance counsellors to treat some disorders. Cognitive behaviour therapy is one of those suggested treatment for aggressiveness. This treatment was employed in this study to find out its effectiveness in reducing aggressiveness among senior secondary school students in Potiskum Local Government, Yobe State. The study investigated the effect of age, gender, socio-economic status and parenting styles on the effectiveness of cognitive behaviour therapy in reducing aggressiveness among senior secondary school students in Potiskum Local Government, Yobe State. The discussion of findings of this study is based on the results emanating from the research questions and test of hypotheses and the relationship between the present results and the findings of previous related studies.

The study found out that significant differences existed in the pre-test and post-test mean scores of aggressiveness among senior secondary school students in the treatment group. The calculated pretreatment mean scores of cognitive behaviour therapy dropped significantly among senior secondary students in the treatment group after the application of cognitive behaviour therapy (CBT).

The present finding further mirrors the observation of Shapiro (2009) that in her experiment, participants receiving Cognitive Behavioural Technique treatment experienced a complete and nearly immediate reduction in aggressive symptoms related to their traumatic memories while those in the control group showed no such change. The result is equally consistent with the outcome of the experiments of Greenberg and his colleagues (1992) that self-esteem can be heightened through Cognitive Behavioural Therapy which can act as a buffer against anxiety and depression. Similarly, Beck's (2004) conclusion is upheld by the present findings. In his Cognitive Behavioural therapy model for depression cited in Baron and Kalsher (2005), Beck contends that cognitive tendencies (eg. distorted thinking) contribute to depression. That depressed individuals engage in illogical thinking and that this underlies their difficulties. They hold unrealistic negative beliefs and assumptions about themselves, the future and the world. Such patterns of thought often produce negative affect (mood) which then increases the likelihood of further negative thoughts. However, if such depressed individuals are helped to engage in healthy and positive thinking pattern through cognitive restructuring process, they will be treated. Beck maintains that Cognitive Behavioural Technique (CBT) has the instrumental character to achieve this.

Furthermore, in the study of Weersing and Brent (2010), it was reported that CBT appeared to be an efficacious short-term intervention for the treatment of aggressiveness in adolescents and older adults. In the original clinical trial conducted by



Brent, Holder Kolko, Birmaher, Baugher and Roth (1997). it was found out that 60% of teens and adults treated with CBT experienced clinical remission of depression, a significantly higher percentage than in Systemic-Behavioural Family Treatment SBFT (38%) or Non-Supportive Treatment NST (39%). Outcomes on dimensional measures of depression symptoms in both youth and adults also supported the superiority of CBT. Similarly, Parker et al, (2003) reviewed meta-analyses and primary studies in the area of CBT and aggression and concluded that CBT is not as effective as proponents of the therapy suggest. However, they excluded from their review high-quality clinical trials showing cognitive-behavioral therapy to be superior to alternative treatments at follow-up. Since Parker et al. did not report the criteria by which they selected research studies for their review, it is difficult to interpret their conclusions. Given the failure of Parker et al. in this direction, Dobson (1989) conducted the first meta-analysis on the effectiveness of CBT in reducing aggressive symptoms and found CBT to be superior to untreated controls, wait list, pharmacotherapy, behavior therapy, and a heterogeneous group other therapies.

### **Conclusion**

This study investigated the Effects of cognitive behaviour therapy on managing adolescents aggressiveness in Secondary schools. It has been observed that Cognitive behaviour therapy has effect in the treatment of aggression. The adolescents are peculiar individuals, as they stand midway between childhood and adulthood; hence they are not liable when involved in aggression. 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 aggression. 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 aggression, as participants from the medium and high socio-economic status also exhibited aggression.

### **Recommendations**

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

1. Counselling curriculum should be introduced, encouraged and promoted at the Secondary schools and other educational settings. This will go a long way in eradicating aggression in the adolescents that are admitted into the centres.
2. Counsellors, psychologists, social workers at the Secondary schools 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 behaviour and social learning therapies are tested and found effective in the treatment of aggression in adolescents, it is recommended that the use of these two interventions be encouraged to combat aggression.

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 aggression 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 Secondary schools 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 aggression. 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 aggression in clients,

12. The study revealed that participants from the low and medium parental Socio-Economic Status exhibited more aggression 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 behaviour therapy) on adolescents' aggression cases. In this way, the efficacy of the therapies would be improved upon.



Religious bodies (Christians and Muslims) should intensify teachings on good conduct. The study showed that there is significant effect of cognitive behaviour therapy on aggression of participants in religion. Churches and Mosques should initiate various programmes to educate parents, children and society at large - on the dangers of aggression. Furthermore, moral instructions should be offered by

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