Gender Difference in the Prevalence and Pattern of Conduct Disorder Among Adolescent Students of Senior Secondary Schools in Dala Education Zone, Kano State-Nigeria

Idris Salisu Rogo[1] and Ahmad Muhammad Garba[2]

[1] Department of Education, School of Continuing Education, Bayero University, Kano, Nigeria
[2] Department of Education, Bayero University, Kano, Nigeria

Abstract: The study investigated gender difference in the prevalence and pattern of conduct disorder among adolescent students of senior secondary schools in Dala Education Zone, Kano State-Nigeria. The objectives of the study were to determine the prevalence of conduct disorder among senior secondary school students in the study area and to determine gender difference in the rate and pattern of conduct disorder among senior secondary school students of the study area respectively. The study adopted cross-sectional survey design, 381 out of 57,238 students were selected as sample through multi-stage cluster sampling technique from the 42 senior secondary schools in Dala Education Zone, Kano state. The data collection instrument used in the study was Adolescent Conduct Disorder Scale (ACD-Scale) adapted from the American National Youth Survey Scale. The reliability of internal consistency of the scale was sought using Cronbach's alpha formula with alpha value (α) of 0.89. The findings of the study revealed that the most frequent conduct disorder among senior secondary school students of Dala education zone, Kano State-Nigeria are; fighting, destruction of school properties, telling lies, graffiti drawing, tearing examination report sheets and examination malpractice. The study also revealed that there is a significant gender difference in the rate and pattern of conduct disorder among senior secondary school students of Dala education zone, Kano State-Nigeria where male students are significantly higher than the female students in rate of conduct disorder in the study area. Based on the findings above, the study recommends that government should come up with the two early intervention strategies that have been tested by other developed countries such as Chicago Area Project in America and found them useful in minimizing conduct disorder among adolescents. The first one comprises interventions on parents who are at risk for neglecting their children and thereby stopping adverse consequences of such action on students.

Keywords: Gender, Conduct Disorder, Adolescents

I. BACKGROUND OF THE STUDY

The students of senior secondary schools of Kano state are generally within the adolescence period. This adolescence period is a very important period in the life of every individual. The period of adolescence has sometimes been viewed as filled with anxiety and uncertainty about self, riddled with unexpected and frequent disposition shifts, a time regarded as the identity crisis. Adolescents often engage in new ways of behaving and thinking that sometimes make them susceptible to conduct disorder.

As children grow steadily and consistently into adolescence, they tend to change in shape and size which occurs concurrently with the change in nature and

behaviour. They also develop a sense of personal identity as well as a desire to be independent by striving to make their own decisions and manage their life tasks without depending on others (Gardner, Roth, & Brooks-Gunn, 2009). This critical stage usually takes place between 10 to 19 years of age.

Conduct Disorder are currently the most prevalent mental health problems among adolescent students globally (Reeby, Moretti, Wiebe & Lessard, 2000). Conduct disorder is estimated to affect 51.1 million people globally as of 2015. The percentage of children affected by conduct disorder is estimated to range from 1-10%. However, among adolescents, rates of conduct

disorder are between 23% and 87% globally (Fairchild, Hagan, Passamonti, & Calder, 2013).

British survey of adolescents between the ages of 11 and 15, revealed that the overall conduct disorders occur in 70% of the population of adolescents and about 30% and 45% of the referrals in the clinical settings are for behavioural problems (Raine, 2002). Of all adolescents who were reported to Child and Adolescent Mental Health Services (CAMHS) for treatment in America, an estimated 60% of them had one form of conduct disorder or another (Gelhorn, Stallings, Young, Corley, & Rhee, 2005)**.** Similarly, Nwankwo, Nwoke, Chukwuocha, & Iwuagwu, (2000) reported that 58% of adolescents in the south eastern Nigeria were suffering from conduct disorder which ranges from cultism, fighting, alcohol use, stealing among others. However, the total population of young people in Nigeria constitute up to 40% of the population of the country. From the 40%, nearly 31% of the total population falls within the age bracket of 10-19, which are referred to as adolescents. The proportion of young adolescents aged between 10 to 14 years is the largest among all the young people (Nwankwo, Nwoke, Chukwuocha, & Iwuagwu, 2000).

Problems ranging from bullying, threatening and intimidation of others, fighting, use of weapons, rape, mugging, fire-setting, vandalism, shoplifting, running away from home, truancy from school, homosexuality and lesbianism etc., are some of the obvious challenges that need to be checked among senior secondary school students of Kano State. Other bad habits, like forgery, lynching, organized killings that were unheard of in the recent past are now very rampant among adolescents in Kano state. For instance, on 15th June, 2016 one (1) student was killed in a riot that took place in Maitama Sule Science College, Gaya between SS3 and SS2 students. Similarly, on 28th of June, 2006 students of Government Senior Secondary School Sumaila carried out a riot that claimed the lives of three (3) people including a police inspector. On September 13, 2010 Bello Garba Bello, an adolescent conventional school student was arrested for slaughtering his father, mother and his three younger ones in Zoo Road area of Kano state. Similarly, on March 15, 2014 four (4) adolescents who are equally senior secondary school students were arrested in Kumbotso L.G.A of Kano State in connection with kidnapping and subsequent killing of one Sadiq Waziri, a 7-year-old child (Ibrahim, 2014).

II. STATEMENT OF PROBLEM

The development of information and communication technology (ICT) and the advent of globalization have led to intercultural transmission across the globe. These negative developments paved way for many antisocial vices bedevilling the educational development of adolescents in Kano state and beyond. The students nowadays are imitating/copying some alien values and sometimes try to put them into practice which consequently affect the behavior of the students and finally lead to the decrease in their academic performance. The recent incidences of fire setting in a Kano state boarding school was found to be done by some students as revealed by the special panel set up to investigate the case by the ministry of Education in 2016.

Hence, senior secondary school students are at a higher risk of exhibiting chronic antisocial behaviour and criminality as adults, experience poor interpersonal functioning and marital difficulty, drop out of school; remain chronically unemployed, become financially dependent as adults. They exhibit developmental and/or physical health problems with greater frequency, they have higher rates of conduct disorder such as drug abuse as adults. As parents they are likely to pass along conduct disorder to their children who continue this cycle. Some people are of the belief, that senior secondary schools nowadays have become a breeding ground for unscrupulous and uncultured youth through negative peer influences.

Conduct disorder negatively affects the school environment in a number of ways. The behaviour of students with conduct disorder can lead to disruption in the classroom that prevents all students from learning in a conducive atmosphere which consequently affects the students' academic achievement. Hence, the need to identify students with conduct disorder can never be over-emphasized, because adolescent students with conduct disorder cut across traditional, educational, mental health, and juvenile justice boundaries. However, within the Nigerian educational system, students with these disorders do not fit neatly into the categories of special education based on learning, emotional, or behavioural deficits.

Therefore, the appropriate organisational structure for educating these students within the constraints mandated by state or federal guidelines is often unclear. As a result, intervention for students with these disorders typically need to be comprehensive and individualized. If this is not properly addressed, it can further complicate the development and implementation of workable strategies that can meet the educational needs of adolescent students with conduct disorder in Nigeria and Kano State in particular. These negative developments may be the reasons why senior secondary students of Kano state perform poorly in qualifying examination, WAEC, NECO and JAMB.

III. OBJECTIVES OF THE STUDY

1. To determine the prevalence of conduct disorder among senior secondary school students of Dala education zone, Kano State-Nigeria
2. To determine gender difference in the rate and pattern of conduct disorder among senior secondary school students of Dala education zone, Kano State-Nigeria

IV. Research Question

1. What is the prevalence of conduct disorder among senior secondary school students of Dala education zone, Kano State-Nigeria?
2. Is there gender difference in the pattern of conduct disorder among senior secondary school students of Dala Education Zone, Kano State-Nigeria?

V. RESEARCH HYPOTHESIS

Based on the above objectives, the following null hypothesis was formulated:

There is no significant gender difference in the rate and pattern of conduct disorder among senior secondary school students of Dala education zone, Kano State-Nigeria.

VI. REVIEW OF RELATED LITERATURE

A) Conceptual Review

The term "conduct disorder" can simply be referred to as the continuous and persistent pattern of antisocial behaviour in which the individual carries out aggressive and antisocial behaviour that upsets other people repeatedly (Kumar, 2009). In other words, conduct disorder is a repetitive and persistent pattern of behaviour in which the basic rights of others and societal norms are violated. It is a clinical problem among children and adolescents that comprises aggressive acts such as excessive level of physical fighting, theft, vandalism, arson, truancy from school and running away from home, severe temper tantrums and defiant, provocative behaviour, etc. (Kazdin, 2006). The behaviours that are associated with conduct disorder are major violations of age-appropriate social expectations, and are more severe than ordinary childish rebelliousness (Costello, Mustilo, Erkanli, Keeler, & Angold, 2003). Isolated criminal behaviours are not in themselves grounds for the diagnosis of conduct disorder; it requires an enduring pattern of a range of difficult behaviour of at least 6 months prior to diagnosis. The diagnostic criteria for conduct disorder are similar but not identical to antisocial personality disorder. Conduct disorder usually occurs during childhood or adolescence, whereas antisocial personality disorder is not diagnosed in people under the age of 18(Schneider, Turner, Mond, & Hudson, 2016).In general, adolescents with conduct disorder are more likely to be living in ghetto areas, with poor family backgrounds and uneducated parents (Sylie & Micheal, 2009).

The essential feature of Conduct Disorder is a repetitive and persistent pattern of behaviour in which the basic rights of others or major age appropriate societal norms or rules are violated (DSM-IV TR, 2005 in APA, 2013). Adolescents with conduct disorder often react aggressively to others and also display bullying, threatening, or intimidating behaviours (Durand & Barlow, 2012). Symptoms of conduct disorder vary with age as the adolescent develops physical strength, cognitive abilities, and sexual maturity (Buchha, 2012). Some of the behaviours which are less severe such as, lying, shoplifting, and physical fighting tend to emerge initially at first, whereas more severe behaviours, such as burglary, drugs/substance abuse, queer sexuality, stealing etc are likely to surface at a later age (Coleman, 2008). The reason for aggressive behaviour of adolescents with conduct disorder was reflected in a study conducted by Schneider, Turner, Mond, & Hudson (2016) which revealed that functional magnetic character imaging during passive viewing of pictures with dispassionate or resilient negative affective violence was performed in 13 male adolescents with stark Conduct Disorder aged 10 to 18 years and in 14 healthy age-matched control subjects. The findings reflected a deficiency of both the recognition of emotional stimuli and the cognitive control of emotional behaviour in patients with Conduct Disorder which consequently leads to aggressive behaviour.

B) Diagnostic Criteria for Conduct Disorder in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)

Before a behavior can be referred to as conduct disorder, a repetitive and persistent pattern of behavior where the basic rights of others or societal norms are violated must be present. There must be the presence of at least 3 of the following 15 criteria in the last 12 months from any of the categories of conduct disorder below, that is to say at least one criterion must be present in the past 6 months:

Aggression to people and animals:

i. Has used a weapon that can cause serious physical harm to others (e.g., a bat, brick, broken bottle, knife, gun etc.)
ii. Often bullies, threatens, or intimidates others
iii. Often initiates physical fights
iv. Has stolen while confronting a victim (e.g., mugging, purse snatching, extortion, armed robbery)

v.   Has forced someone into sexual activity
vi.   Has been physically cruel to people
vii. Has been physically cruel to animals

Destruction of school properties:

i.   Has deliberately engaged in fire setting with the intention of causing serious damage to school
ii.   Has deliberately destroyed others' property such as friends, parents, etc.

Deceitfulness or theft:

i.   Has trespassed into someone else's house, building, or car etc.
ii.   Often lies to obtain goods or favours or to avoid obligations
iii. Has stolen items of insignificant value without confronting a victim

Serious violations of rules:

i.   Often stays out at night despite parental prohibitions, beginning before age 13 years
ii.   Has run away from home overnight at least twice while living in the parental or parental surrogate home, or once without returning for a lengthy period
iii. Is often truant from school, beginning before age 13 years

C) Theoretical Review

The Theoretical framework of the study focuses on the works conducted by scholars and psychologists in their different views. Hence, the study is guided by the theory below:

Problem Behaviour Theory

Problem behaviour theory was developed by Jessor (1998). The theory explains adolescent crises in a broader way. According to this theory behaviour emerges out of structure and interaction of three systems namely the *behaviour system, the personality system and the perceived environment system*. The behaviour system encompasses problem and conventional behaviour structures. Whereas the problem structure includes those behaviours that violate the social and legal norms of the society thereby leading to social-control responses from external sources, the conventional behaviours are those behaviors that are accepted in the society. The personality System entails a combination of continuous, stable psychological factors namely; *motivational-instigation structure* which is determined by the importance placed on achievement and independence, the *personal belief structure* which is related to self-image and self-concept relative to the society, and *personal control structure* which gives the individual rational

reasons for not participating in the problem behaviour. The *perceived environmental system* contains two structures, namely, distal structure and proximal structure. Distal structure deals with a support network of a person (peer group) while the proximal structure deals with the environment in relation to available models of behaviour. Problem behaviour in the environment is associated with peer group or support network approval which includes: peer models, lack of parental supervision, care and control as well as lack of compatibility between parental and peer expectations.

Problem behaviour theory posits that when personality system and perceived environment system clash, conduct disorder manifest in the behaviour of adolescents (McMahon & Frick, 2005). Khalifa, Duggan, Howard & Lumsden (2012) argue that Adolescents who are at high risk of becoming involved in conduct disorder may have the following features:

i.   Prevalent behaviour structure featuring normalized images of drugs/ substance use and other criminality
ii.   Placing low value on success and achievement
iii. Lack of personal control structure.
iv.   Perceived environment steeped in role models and opportunities (e.g. peers who approve of conduct disorder)

Although risk factors play a strong role in the determination of adolescent problem behaviours, their influence is regulated by protective factors which are determinants of adolescent adjustment. Jessor, et al., (2003) argue that the risk factors include low self-esteem, low success expectations, a sense of alienation and desperation; orientation towards friends with conduct disorder and parents as well as peer models with problem behaviour etc. These protective factors include the relationships with adults, supportive family relationships, and perception of a normative control from outside, conventional friends, good school results, involvement in pro-social groups and in positive social activities, positive attitude towards school and intolerance of deviance, religious faith, and volunteer activity. Jessor et.al (2003) argue that protective factors interact with risk factors in such a way that the higher the protective factors, the lower the risk factors and vice versa. That is, risk factors have little impact on problem behaviour. A linear relationship exists between risk factors and problem behaviour. This shows the importance of promoting protective factors rather than adopting more conventional approaches, which emphasizes on reduction of risk.

D) Empirical Review

A study conducted by Piquero, Macintosh, & Hickman (2012) which examines "self-repoted conduct disorder: comparison across gender, age and race" using 378 samples drawn from both gender in Chicago, USA revealed that the common conduct disorder among the students are: fighting, destruction of school property, telling lies, bullying, truancy, drug/substance abuse and sexual immorality.

Another study conducted by Muhammad (2010) titled " incidences of delinquent behaviours among senior secondary school students in Kano municipal education zone, Kano state" used 384 senior secondary school students as a sample. The findings of the study reveal that the common conduct disorders among senior secondary school students in the study area are: examination malpractice, fighting, carrying dangerous weapons and drugs/substance abuse.

In the same vein Rogo (2014) conducted another study to determine the incidences of antisocial behaviour among senior secondary school students of Kano municipal education zone, Kano state using 380 sample drawn from the 27,176 students population in the study area. The findings from the study reveal that the common antisocial behaviour among the students in the study area are: gossiping, stealing, jumping school fence, examination malpractice, abusing teachers/ parents and carrying dangerous weapons.

Between 1997-2000, a cross-sectional study was conducted by Beals, Manson, Whitesell, Spicer, Novins, & Mitchell(2005) in order to determine the lifetime and 12-months prevalence of common DSM-IV disorders, their demographic correlates, and pattern of help-seeking in 2 American Indian reservations. Three thousand and eighty-four (3084) adolescents were used for the study. The American Indian Service Utilization Psychiatric Epidemiology, Risk and Protective Factors Project (AI-SUPERPFP) was used to estimate the mental health burden and associated help-seeking in selected American Indian reservation communities. The results show the overall lifetime prevalence of AI-SUPERPFP DSM-IV disorders to 35.7% for southwest women and 50% for groups of men. Drugs/substance use and dependence were found to be the most common conduct disorder among the male population, and post-traumatic stress disorder are more common among the women.

With a view to investigating the prevalence of psychosocial problems among adolescents in Dehradun district, Uttarakhand, Muzammil, Kishore, & Semwal (2009) conducted a cross sectional study at Doiwala block, Dehradun by selecting 840 samples of adolescents using multistage random sampling. The result indicated that the overall prevalence of psychosocial problems among adolescents was found to be 31.2%. The psychosocial problems were more severe in males (34.77%) than females (27.6%). They further recommend that there is the need to improve the packages for adolescent's services in the educational policies of schools in the study area.

A school based descriptive cross sectional survey of 402 students in some selected secondary school students in public and private schools of Orlu, Imo State by Diwe, Aguocha, Duru, Uwakwe, Merenu, & Nwefoh (2016) on the topic "Gender difference in prevalence and pattern of conduct disorder among adolescent secondary school students in south east Nigeria". The results in the study indicated that 69.7% of the respondents have committed at least one form of conduct disorder or the other. Male students have higher prevalence of conduct disorder than their female counterparts ($\chi2$= 10.71 df=1, p=0.002). The most prevalent conduct disorder among male and female was stealing. There was a significant difference in causal factors among both genders ($\chi2$=9.54, df= 4, p=0.002). The study recommends that early intervention strategy should be given priority by the government.

Similarly, Sujit, Vinod, DeSarkar (2006) in a study titled "Prevalence of Conduct Disorder in School Children of Kanke, India" used of 240 students in four schools as sample. The result reveals that 27% of adolescents in the study area are suffering from conduct disorder with the lifetime prevalence of 16% for males and 2% for females.

Another study was conducted by Costello, Mustillo, Erkanli, Keeler &Angold (2003) in a longitudinal community study on the topic "Prevalence and development of psychiatric disorder in childhood and adolescence". The study assessed the prevalence and development of psychiatric disorder from 9 to 16 years with a view to examining homotypic and heterotypic continuity. The study used 1420 children aged 9 to 13 years at intake were examined annually for DSM-IV disorders up to 16 years. The result revealed that 36.7% of the subjects (31% of girls and 42% of boys) had one form of conduct disorder or the other. Similarly, children with a history of conduct disorder were 3 times more likely to have conduct disorder during adolescence than those with no previous history of conduct disorder. Risk from a previous diagnosis was high among both genders (boys and girls), but it was significantly higher among girls. Continuity of the same disorder (homotypic) was significant for all disorders except specific phobias. Continuity from one diagnosis, from ADHD, oppositional defiant disorder, and from anxiety and conduct disorder to substance abuse. Almost all the heterotypic continuity was seen in girls.

VII. METHODOLOGY

1. Research Design

The study adopts cross-sectional survey design. Cross-sectional survey design involves the collection of data from a sample drawn from a specific population whose concern was to document the prevalence of particular characteristics in a population (Penny, Visser, Krosnick, Paul, & Lavrakas, 2015). Hence, cross-sectional survey design was used by the researchers to find out the prevalence and patterns of conduct disorder among senior secondary school students in Dala education zone of Kano state in relation to gender.

2. Population of the study

The population of the study consists of the entire 57,238 senior secondary school students of public or government schools in Dala education zone across the 42 public senior secondary schools of the Zone.

3. Sample Size

The sample of this study consists of 381students' drawn from public senior secondary schools of Dala Education zone. Decision for the selection of the above sample size is in line with Research Advissor (2006) table of sample size. The sample will be divided proportionately according to the school population sampled; the higher the size of the school population the more questionnaires that were allocated to the school.

4. Sampling Procedure

Multistage cluster Sampling was used to select 2 male and 2 female schools from each of the 2 local governments in Dala education zone i.e. Dala LGA and Gwale, making the total schools sampled to be 8. Bichi (2004) defines multistage cluster sampling technique as a situation where the target population is divided into clusters, and then further sampling takes place within the clusters until the target individuals are sampled. In line with the above, the entire senior secondary schools in Dala Education zone were grouped into 2 clusters i.e. Gwale and Dala. Within each cluster the schools were subdivided into male and female clusters and simple random sampling was used to select 2 schools from male cluster and 2 schools from female cluster from each of the 2 local governments in the zone.

5. Description of the Data Collection instrument (Adolescent Conduct Disorder-Scale)

The Adolescent conduct disorder scale (ACD-Scale) was adapted from the American National Youth Survey which was originally named Youth self-report scale designed by Achenbach system of empirically based assessment (ASEBA). In the scale target conduct disorder were assessed using self-report items. Respondents were asked to indicate how often they had engaged in a variety of conduct disorder using a 5-point scale ranging from 0 (Never) to 4 (Very often). After a careful study of the original NYS scale keeping into consideration the culture, environment and religious factors, the researcher developed twenty-five (25) items questionnaire named conduct disorder Scale. The questionnaire was divided into two sections (A and B). Section A consists of personal data and section B consists of the items measuring conduct disorder of the respondents.

In the original ADC-Scale designed and developed by National Youth Survey (NYS), the internal consistency reliability estimate for the ADC-Scale scale was 0.88 in the standardization sample of 793 individuals. This reliability estimate indicates that the total raw score on the scale possesses good internal consistency reliability as provided in the U.S department of Youth (2009) for interpreting a reliability coefficient. In order to ascertain the level of culture fair and culture free nature of the adapted instrument, reliability for internal consistency of the Scale was sought using Cronbach's Alpha formula, which is the extent to which items in a single test are consistent among themselves and with the test as a whole. The reliability index was found to be 0.89.

6. Data Analysis Procedures

Data collected from the study was statistically analyzed using descriptive statistics and Chi-square test of goodness of fit.

VIII. DATA PRESENTATION AND ANALYSIS

To study the gender difference in the prevalence and pattern of conduct disorder among adolescent students of senior secondary schools of Dala education zone, Kano State-Nigeria. One research question was answered and one hypothesis was raised at 0.05 level of significance, the results are summarized, presented and interpreted below, using descriptive statistics to answer the research question and chi-square test of goodness of fit for the hypothesis.

1. Research Question

What is the prevalence of conduct disorder among senior secondary school students of Dala education zone, Kano State-Nigeria?

TABLE 1. THE MOST PREVALENT CONDUCT DISORDERS AMONG SENIOR SECONDARY SCHOOL STUDENTS OF DALA EDUCATION ZONE, KANO STATE-NIGERIA

S/N	CONDUCT DISORDER	MALE	FEMALE	TOTAL	AVERAGE	REMARKS
1	Staying away from school without permission	578	365	943	2.5	Sometimes
2	Gossiping	194	627	821	2.2	Sometimes
3	Fighting	618	542	1160	3.05	Often
4	Carrying dangerous weapons	308	114	422	1.1	Once
5	Destruction of school properties	627	418	1042	3.0	Often
6	Intimidation and extortion	593	152	745	2.0	Sometimes
7	Stealing	551	376	927	2.4	Sometimes
8	Reckless driving	198	61	259	1.0	Once
9	Cheating	285	182	467	1.2	Once
10	Telling lies	616	627	1243	3.3	Often
11	Selling stolen properties	211	171	382	1.0	Once
12	Throwing objects at people	260	91	351	1.0	Once
13	Detained by police	148	34	182	0.5	Never
14	Selling illegal drugs/substance	110	38	148	0.4	Never
15	Consuming illegal drugs/substance	481	386	867	2.3	Sometimes
16	Convicted in the court of law	152	15	167	0.4	Never
17	Going out at night to catch fun	359	114	473	1.2	Once
18	Graffiti drawing	608	536	1144	3.0	Often
19	Sexual immorality	190	361	551	1.5	Once
20	Tearing Examination report sheet	532	627	1159	3.1	Often
21	Examination Malpractice	667	722	1389	3.7	Often
22	Abusing teachers/parents	357	580	937	2.5	Sometimes
23	Watching pornographic films	342	397	739	2.0	Sometimes
24	Jumping school fence	498	17	515	1.4	Once
25	Participating in the school riot	418	106	524	1.4	Once

Source: Field Survey (2017)

The table above reveals the students' response on the prevalence of conduct disorder among senior secondary school students of Dala education zone, Kano State. Three hundred and eighty-one (381) students were issued with ACD-Scale, which contain 25 items. The respondents were asked to indicate how often they had engaged in a variety of conduct disorder using 5-point scale ranging from 0 (Never) to 4 (Very often). Thus, among the 25 conduct disorders contained in the scale only 6 were identified to be most frequent whose averages were 3 and above.

Therefore, the most frequent conduct disorder in the study area are; fighting, destruction of school properties, telling lies, graffiti drawing, tearing examination report sheets and examination malpractice.

2. Hypothesis Testing

There is no significant gender difference in the rate and pattern of conduct disorder among senior secondary school students of Dala education zone, Kano State-Nigeria.

TABLE 2. CHI-SQUARE TEST OF GOODNESS OF FIT SHOWING GENDER DIFFERENCE IN THE PATTERN OF CONDUCT DISORDER AMONG SENIOR SECONDARY SCHOOL STUDENTS OF DALA EDUCATION ZONE, KANO STATE- NIGERIA.

S/N	CONDUCT DISORDER	Chi-square Calculated	Chi-square Critical	REMARK
1	Staying away from school without permission	48.111	3.841	Significant to male
2	Gossiping	228.367	3.841	Significant to female
3	Fighting	4.979	3.841	Significant to male
4	Carrying dangerous weapons	89.185	3.841	Significant to male
5	Destruction of school properties	41.800	3.841	Significant to male
6	Intimidation and extortion	261.048	3.841	Significant to male
7	Stealing	33.037	3.841	Significant to male
8	Reckless driving	72.467	3.841	Significant to male
9	Cheating	22.717	3.841	Significant to male
10	Telling lies	0.097	3.841	Not significant
11	Selling stolen properties	4.188	3.841	Significant to male
12	Throwing objects at people	81.370	3.841	Significant to male
13	Detained by police	71.407	3.841	Significant to male
14	Selling illegal drugs/substance	35.027	3.841	Significant to male
15	Consuming illegal drugs/substance	10.407	3.841	Significant to male
16	Convicted in the court of law	112.389	3.841	Significant to male
17	Going out at night to catch fun	126.903	3.841	Significant to male
18	Graffiti drawing	4.531	3.841	Significant to male
19	Sexual immorality	53.069	3.841	Significant to female
20	Tearing Examination report sheet	7.787	3.841	Significant to female
21	Examination Malpractice	2.178	3.841	Not significant to male
22	Abusing teachers/parents	53.073	3.841	Significant to female
23	Watching pornographic films	4.093	3.841	Significant to female
24	Jumping school fence	449.245	3.841	Significant to male
25	Participating in the school riot	185.771	3.841	Significant to male

Source: Field Survey (2017)

The above table shows the chi-square test of goodness of fit of the gender difference in the rate and pattern of conduct disorder among senior secondary school students of Dala education zone, Kano State. The result shows that the rate of conduct disorder among male students is significantly higher than the female students in the study area, because 18 out of the 25 conduct disorder contained in ACD-scale are significant in favour of male students. This indicates that there is higher level of conduct disorder among male students than the female students. Therefore, the null hypothesis which says "There is no significant gender difference in the rate and pattern of conduct disorder among senior secondary school students of Dala education zone, Kano State-Nigeria" is rejected, while the alternate hypothesis that say that "There is a significant gender difference in the rate and pattern of conduct disorder among senior secondary school students of Dala education zone, Kano State-Nigeria" is accepted.

The pattern of conduct disorder among male students include; staying away from school without permission, fighting, carrying dangerous weapons, destruction of school properties, bullying, stealing, reckless driving, cheating, selling stolen properties, throwing objects at people, detained by the police, graffiti drawing, jumping school fence, and participation in the school riot. While the pattern of conduct disorder among female students include: gossiping, sexual immorality, tearing examination report sheets, abusing teachers/parents and watching pornographic films.

3. Summary and Discussion of the Research Findings

Based on the data collected, analysed and presented above, the findings of the study are summarized as follows:

i. The most frequent conduct disorders among senior secondary school students of Dala education zone, Kano State-Nigeria are: fighting, destruction of school property, telling lies, graffiti drawing, tearing examination report sheets and examination malpractice. This was in line with the findings of Piquero, Macintosh, & Hickman (2012), Muhammad (2010), Reeby, Moretti & Lessard (2000), Raine (2002) and Rogo (2014)

where they found the common and the most frequent conduct disorders among senior secondary school students to be: stealing, fighting, drugs/substance abuse, truancy, bullying, examination malpractice and lack of respect for teachers/parents, etc. Literature from Indian studies shows a high level of conduct disorder among adolescents. Aaron, Joseph, Abraham, Muliyi, Prasad, Minz, Abraham, & Bose (2004) have reported the prevalence of conduct disorder to be 1 1.13%, further, Anita, Vohra, Subash, &Khurana (2003) reported the prevalence rate of conduct disorder to be 7.1%, while recently, Anker &Carrol (2011) have reported a prevalence as low as 0.2%. In southern Nigeria, the major conduct disorders among adolescents were cultism (68.7%), property damage (32%), fighting (20%), driving car without permission (15%), smoking (13.4%), truancy (12.3%), alcoholism (3.0%), and drug abuse (2.6%). Meanwhile in Northern Nigeria, Idris &Sambo (2009) found that adolescent students are the major segment involved in the use of psychoactive substances in Zaria, Kaduna State- Nigeria. Similarly, in Kano state Muhammad (2010) and Rogo (2014) argue that adolescents constitutes the army of conduct disordered segment in the society.

ii. There is a significant gender difference in the rate and pattern of conduct disorder among senior secondary school students of Dala education zone, Kano State-Nigeria where male students are significantly higher than the female students in rate of conduct disorder in the study area. And the pattern of conduct disorder among male students include; staying away from school without permission, fighting, carrying dangerous weapons, destruction of school properties, bullying, stealing, reckless driving, cheating, selling stolen properties, throwing objects at people, detained by the police, graffiti drawing, jumping school fence, and participation in the school riot. While the pattern of conduct disorder among female students include; gossiping, sexual immorality, tearing examination report sheets, abusing teachers/parents and watching pornographic films. This is in line with the findings of; Costello, Mustillo, Erkanli, Keeler &Angold (2003), Beals, Manson, Whitesell, Spicer, Novins, Michell (2005) and Miller & Lynam (2005), Muzammil, Kishore & Semwal (2009), and Diwe, Aguocha, Duru, Uwankwe, Merenu, & Nwefoh (2016), Sujit, Vinod, DeSarkar (2009) which all reveal that male students are significantly higher than female students in conduct disorder and the dominant conduct disorder among male students are: fighting, bullying, truancy, destruction of school properties among others. While, the dominant conduct disorder among female students are gossiping, noisemaking, sexual immorality, and abusing teachers/parents, etc.

IX. CONCLUSION

The development of information and communication technology (ICT) and the advent of globalization have led to intercultural transmission across the globe. These negative developments paved way for many antisocial vices bedevilling the educational development of adolescents in Kano state and beyond. The students nowadays are imitating/copying some alien values and sometimes try to put them into practice which consequently affects the behaviour of the students and finally leads them to conduct and personality disorders. These disorders negatively affect the school environment in a number of ways. The behaviour of students with conduct disorder can lead to disruption in the classroom that prevents all students from learning in a conducive atmosphere which consequently affects the students' academic achievement. Hence, the need to identify students with conduct disorder can never be over-emphasized, because they cut across traditional, educational, mental health, and juvenile justice boundaries. However, within the Nigerian educational system, students with these disorders do not fit neatly into the categories of special education based on learning, emotional, or behavioural deficits.

Some of the factors responsible for the prevalence of conduct disorder among students of the study area include; peer influence, social media, poverty, maternal deprivation and poor parental style.

X. RECOMMENDATIONS

Based on the findings of this study, the following recommendations have been made:

1. The Policy makers, teachers, parents, educational administrators and school managers in Kano state should focus on the effective strategies, not corporal punishment, in curbing the conduct disorder among senior secondary school students with special emphasis on; fighting, destruction of school properties, telling lies, graffiti drawing, tearing examination report sheets and examination malpractice etc.

2. The Government should come up with the two early intervention strategies that have been tested by other developed countries such as Chicago Area Project in America and found them useful in minimizing conduct disorder among adolescents. The first one comprises interventions on parents who are at risk for neglecting their children and thereby stopping adverse consequences of such action on students. And the second is to intervene later with families and the students either together or just with the students in schools with more emphasis on male students.

REFERENCES

Aaron, R., Joseph, A., Abraham, S., Muliyil, J, George, K., Prasad, J., Minz, S,, Abraham, V.J., & Bose, A., (2004). Suicides in young people in rural southern India.Lancet;363,1117.

American Psychiatric Association (2013).*Diagnostic and Statistical Manual for MentalDisorders-5.* Washington D.C: American Psychiatric Association Press.

Anita, G., Vohra, A., Subash, S., & Khurana, H. (2003). Prevalence of psychiatric morbidity among 6-14 years old children. *Indian Journal of community medicine*, 133-137.

Anker, J., & Carroll, M. (2011). Females are more vulnerable to drug abuse than male: Evidence from preclinical studies and role of ovarian hormones. *Behavioural Neuroscience* , 73-96.

Beals, J., Manson, S., Whitesell, N., Spicer, P., Novins, D., & Mitchell, C. (2005). Prevalence of DSM-IV disorders and attendant help seeking in 2 American Indian reservation populations . *Archives of General Psychology* , 62 (1): 99-108.

Bichi, M. (2004). *Introduction to research Methods and Statistics.* Kano: Debisco Press & PublishingCompany Ltd.

Buchha, A. (2012). Importance of Surya Namaskar for healthy life during adolescence. *Research Analysis and Evaluation* , 19-33.

Coleman, J. (2008). *Abnormal Psychology andmodern life.* Bombay: Traporevala Sons &Company.

Costello, E., Mustilo, S., Erkanli, A., Keeler, G., & Angold, A. (2003). Prevalence and development of psychiatric disorders in childhood and adolescence. *Journal of General Psychiatry* , 60 (8):837-844.

Diwe, K., Aguocha, C., Duru, C., Uwakwe, K., Merenu, A., & Nwefoh, E. (2016). Gender differences in prevalence and pattern of conduct disorder among adolescent secondary school students in south east Nigeria. *Asian Journal of Social Sciences and Humanities* , 5 (1): 49-55.

Durand, V., & Barlow, D. (2012). *Abnormal Psychology: An integrated approach (Sixth edition).* Belmont: Wadsworths.

Fairchild, G., Hagan, C. W., Passamonti, L., & Calder. (2013). Brain structure and abnormalities in adolescent girls with conduct disorder. *Journal of child Psychology* , 54 (1): 86-95.

Gardner, M., Roth, J., & Brooks-Gunn, J. (2009). Sports participation and juvenile delinquency: the role of the peer context among adolescent boys and girls with varied histories of problem behaviour. *Developmental Psychology* , 38(7): 1021-1032.

Gelhorn, H., Stallings, M., Young, S., Corley,R., & Rhee, S. H. (2005). Genetic and environmental influences on conduct disorder: symptom, domain, and full-scale analyses. *Journal of Child Psychology and Psychiatry* , 46 (6): 580-591.

Idris, S., &Sambo, M. (2009). Psycho-activesubstance use among in-school adolescents in Zaria, north western Nigeria: What are the triggers. *Niger Journal of Medicine* , 18 (3): 291-294.

Ibrahim, Y. (2014, August 3). Kill me if you can. *Daily Trust Newspaper* , p. 4. Jessor, R., Mark, S., Turbin, M., Frances, M., Costa, E., Dong, Q., et al. (2003). Adolescent Problem Behavior in China and the United States: A Cross-National Study of Psychosocial Protective Factors. *Journal of Research on Adolescence* , 13(3), 329–360.

Johson, V., Olino, T., Klein, D., Dyson, M., Bufferd, S., CE, D., et al. (2016). A longitudinal investigation of predictors of suicidal addiation and drug abuse among adolescents of Texas. *Journal of Adolescence* , 51-61.

Kazdin, A. (2006). Conduct Disorder in Childhood and Adolescence. *Developmental Clinical Psychology and Psychiatry Volume 9* , 54-76.

Khalifa, N., Duggan, C., Howard, R., & Lumsden, J. (2012). The relationship between childhood conduct disorder and adult antisocial behaviour is partially mediated by early-onset alcohol abuse. *Personality disorders* , 423-432.

Kumar, V. (2009). Impact of Rational Emotive BehaviourTheraphy (REBT) onAdolescents with Conduct Disorder. *Journal of the Indian Academy of Applied Psychology* , 103-111.

McMahon, R., & Frick, P. (2005). Evidenced-based assessment of conduct problems in children and adolescents. *Journal of Clinical Child and Adolescent Psychology* , 477-505.

Miller, J., & Lynam, D. (2001). Structural models of personality and their relation to antisocialbehaviour: A meta-analytic review. *Criminology* , 765-798.

Muhammad, H. (2010). *incidences of delinquent behaviors among senior seconday school students in Kano municipal education zone.* Kano: Unpublished Dissertation (M.ed) Bayero University, Kano.

Muzammil, K., Kishore, S., & Semwal, J. (2009). Prevalence of psychosocial problems among adolescents in district Dehradun, Uttarakhand. *Indian Journal of Public Health* , 53 (1): 18-21.

Nwankwo, B.O, Nwoke, E., Chukwuocha, U., A.O, O., & Iwuagwu, U. (2000). Prevalence and predictors of factors influencing antisocial behaviours in secondary school students of Owerri Municipal. *Pakistan Journal of Social Science* , 7 (1): 129-136.

Penny, S., Visser, J., Krosnick, A., Paul, J., & Lavrakas, M. (2015). *Research Methodology in behavioural sciences.*Texas: University of Texas Press.

Piquero, A., Macintosh, R., & Hickman, M. (2012). *Self-reported conduct disorder: comparison across gender, age and race.* Chicago: University of Chicago Press.

Raine, A. (2002). Biosocial Studies of Antisocial and Violent Behaviour in Children and Adult. *Journal of Abnormal Child Psychology* , 311-326.

Reebye, P., Moretti, M., Wiebe, V., & Lessard, J. (2000). Symtoms of posttraumatic stress disorder in adolescents with conduct disorder: sex differences and onset patterns. *Canadian Journal of Psychiatry* , 45 (8): 746-751.

Rogo, I. (2014). Incidences of antisocial behaviour among senior secondary school students of Kano municipal education zone, Kano state. *Kano journal of Educational Studies* , Vol 4 (1) 133-146.

Schneider, S., Turner, C., Mond, J., & Hudson, J. (2016). Prevalence and correlates of body dysmorphic disorder in community sample of adolesents. *Australian Journal of Psychiatry* , 120-129.

Sylie, M., & Micheal, W. (2009). Parental,Teachers, and peer influence on adolescent behaviour.*Journal of early adolescence* , 29: 512-540.