



EFFECTS OF SELF-MANAGEMENT AND SOCIAL SKILLS TRAINING ON THE REDUCTION OF ADOLESCENTS' CONDUCT DISORDER

Egbochuku Elizabeth Omotunde¹ --- Oizimende Philomena² --- Josephine Oliha^{3†}

^{1,2,3}Department of Educational Psychology and Curriculum Studies University of Benin, Benin City, Edo State, Nigeria

ABSTRACT

The thrust of this paper is on the effects of two instructional techniques, self-management and social skills training, on the reduction of adolescents' conduct disorder. One research hypothesis was raised and was tested at 0.05 level of significance. A pretest-posttest control group experimental design was adopted in the study. The population consisted of 184 identified conduct disorder adolescents' in a mixed school that was purposively selected from the senior secondary schools in Ikpoba-Okha Local Government Area in Benin City with the assistance of 12 subject teachers who have had contact with the students' for at least six months. The study made use of a sample of 90 senior secondary school three (SS III) adolescent students. The instrument used for data collection was the Conduct Disorder Assessment Scale (CDAS) constructed in accordance with the American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders (DSM-IV). The instrument was face validated by three experts in the field of educational psychology and counselling. Cronbach Alpha as a measure of internal consistence reliability was used to establish the reliability of the instrument. The coefficient obtained were 0.80 for aggressive behaviour, 0.81 for destructive behaviour, 0.76 for stealing and 0.84 for serious violation of rules. The data collected were analyzed using one-way Analysis of Variance (ANOVA) and Analysis of Co-variance (ANCOVA) to determine the proportion of the variance of the criterion which existed before the experimental and what was obtained after. By using ANCOVA, also errors in the variance were substantially minimized in the final scores. The results obtained indicated significant differences in conduct disorder (four subsets) adolescent students exposed to treatment intervention (self-management and social skills training) and control group. The post-hoc analysis on aggressive and stealing behaviours showed that the mean differences were significant at the 0.05 level. That significant differences existed in destructive and rules violation behaviours among adolescents' exposed to both treatments and those in control group ($p < 0.05$). Based on these findings, it is concluded that self-management and social skills training are effective packages for the reduction of conduct disorder among adolescents'. The researcher recommends that school councellers embrace self-management and social skills training to effectively reduce conduct disorder among secondary school adolescents.

Keywords: Self-management, Social skills training, Adolescents, Behaviour, aggression, Conduct disorder reduction.

Received: 15 September 2014/ Revised: 18 November 2014/ Accepted: 22 January 2015/ Published: 26 February 2015

Contribution/ Originality

This study has contributed to the body of existing knowledge in the following ways: It reveals that conduct disorder among adolescents can be treated or corrected with both self-management and social skills. The study will also assist professional, counselors, psychologists, clinicians, teachers and the community at large to have a better perception of conduct disorder among adolescents.

1. INTRODUCTION

Conduct disorder has been identified as one of the abnormal behaviour disorders of adolescents'. It disrupt students' academic progress, creates problem of non conformity to codes of behaviour and peaceful co-existence in the school system. The [American Psychiatric Association \(2000\)](#) Diagnostic and Statistical Manual of Mental Disorder (DSM-IV) defined conduct disorder as a repetitive and persistent pattern of behaviour in which the basic rights of others or major age appropriate social norms and rules are violated. Conduct disorder in adolescence is diagnosed by the presence of three or more of the following characteristic symptoms: aggression to people, destruction of property, stealing and serious violations of rules, with at least one criterion present in the past six months of behaviour. In the process of acquiring formal education in the school system, some students manifest these behaviours which often are detrimental to their education, social and interpersonal relationships. These behaviours do not ensure the actualization of the potentials of the students. Some of these behavioural problems common in some secondary schools today are consequent upon societal, peers and family influences while others reflect the frustrations and confusions in students. These behavioural problems range from stealing, aggression, violent protest, fighting, rule violations, vandalism, other property crime and assaults which are aspects of conduct disorder ([Kolo, 1997](#)).

In some secondary institutions, conduct disorder are found virtually everywhere. They often assault students, bully, threaten and intimidate others, destroy their properties and others' properties, tell lies to obtain goods or favours, sneak out of class during lessons. During the pilot study as observed by the researcher, many conduct disordered adolescent students often engage in many risks taking behaviour. For example, a 15 year old student of a senior secondary school, was brought by her class teacher to the school counsellor for conduct disorder related problem such as aggression towards others, fighting with teachers, pocket picking, coming late to school and leaving school at will. These behaviours had affected her school attendance, academic performance as well as her interaction with peers. Thus, conduct disorder is of serious concern for schools, school counsellors and the society at large. Thus, conduct disorder among adolescent students in Nigeria institutions has been on the increase over the years. Recently, in Edo State, the State Government set up a committee to monitor and check the alarming rate of serious

violation of rules and other unwholesome habits of students and teachers during school hours. Also, studies revealed that the reported prevalence of conduct disorder among 169 street youths in Ibadan showed about 47% (Olley, 2006). In general, it is not unusual to see adolescents' with conduct problems in institutions and many of them are left unassisted.

Attempts to treat the adolescent with a conduct problem have taken a variety of forms ranging from simple punishment to psychotherapy which includes Self- Management Skills (SMS) and Social Skills Training (SST). Self-management Skills (SMS) are skills used in teaching students how to manage their own behaviour. These skills are Student-Operated Interventions (SOIs) which require students to take over the responsibility for monitoring and reinforcing their own behaviour which results in improved generalization, maintenance of behaviour and change of locus of control. Self-Management Skills (SMS) involve the use of three basic skills of Self-Assessment (SA), Self-Monitoring (SM) and Self-Reinforcement (SR). In SA, the student assesses behaviour to determine whether it should be reinforced. The student assesses his or her own behaviour and makes that decision. In SM, progress is monitored by the student in order to control and modify his or her behaviour in response to the demands of the situation. In SR, the student reinforces his or her behaviour. Self-management has been successfully used by several researchers and was found to be effective in the reduction of conduct disorder. Review of self-management skills as applied in a study using self-management in the reduction of conduct disorders of pupils by Adediran (2011) was found to be effective. In another study, Aderanti and Hassan (2011) investigated the differential effectiveness of self-management on adolescent rebelliousness. The result showed that self-management was found to be effective in reducing conduct disorder. Similarly, Webster-Stratton and Taylor (2007) in an attempt to prevent substance abuse, delinquency and violence in adolescence, self-management techniques found a significant improvement of participants. Martin (2008) investigated a small group of junior high school students with pervasive conduct disorder across multiple domains for some domains such as stealing, lying and relational aggression; self-management had main effect on their identified conduct disorder. Webster-Stratton *et al.* (2004) and Kazdin (1995), in their findings was a further affirmation of the effect of self-management in treating behaviour problems.

Social Skills Training (SST) is a fundamental factor for the formation of relationships. These include the building and maintenance of relationships, the ability to handle the unreasonable behaviour of others and be able to *get along with* their peer group and with adult authority figures. Social Skills Training (SST) is therefore a set of skills or technique that is used to harmonize or develop a positive interpersonal relationship among individuals. It is a constructive process that involves assertive communication, modelling and management of feeling. In this study, the skills of assertiveness, modelling and focus group discussion were employed. Assertiveness involves communicating one's feelings and needs without violating the rights of other people. Focus group discussion is a research method in which the researcher and several participants meet as a group to discuss identical or similar interests and assess a broad range of views on a specific topic to develop and meet the needs of the participants. Modelling is a process through which the behaviour of one person, the observer is modified through exposure to the behaviour of the model.

These skills are Teacher-Operated Interventions (TOIs). Social skills training has been successfully used by several researchers and was found to be effective in the reduction of conduct disorder. Review of social skills training as applied by Cook (2003) in her study on the socially impaired child used social skills training in helping adolescent students to become more competent in social skills and it was found to be effective and successful. Azimah and Khairani (2009) in their studies on the managements of an adolescent with conduct problems in a primary care clinic: A case report. The result showed that social skills training were found to be effective in changing the student's socially unacceptable behaviour and she resumed her function as a student. Also, Teodoro *et al.* (2005) in their studies of the Matson evaluation of social skills with youngsters and its adaptation for Brazilian adolescents' showed that social skills are found to be effective. In fact, both SMS and SST may serve as veritable instruments for counsellors to use in remedying the problems of conduct disorders among adolescents'.

In fact, both self-management and social skills training may serve as variable instruments for counsellors to use in remedying the problems of conduct disorders among adolescents'. In view of these, this study was conducted to assist counsellors and teachers update their knowledge on the principles and application of behavioural techniques in order to achieve the desired change in students' behaviour. It is hoped that the result obtained from this research could assist the counsellors and teachers to know the value of treatment interventions that can address the multiple influences operating in conduct disordered adolescents' and knowing which treatment will be the most effective. The study could also assist the counsellors and teachers in changing maladaptive behaviour in school, thereby creating conducive learning environment which will ensure that adolescents' do not emerge into the world of adulthood as damaged individuals but as assets to the society.

2. STATEMENT OF THE PROBLEM

Conduct disorder is creating an obvious threat to adolescent student's academic progress. In some secondary institutions, specifically schools in Edo State, the growing number of adolescents' with conduct disorder are likely to be lacking interest in school work and are reluctant to conform to codes of behaviour relating to the school system. A lack of commitment to school work is a risk factor for multiple problems such as poor performance and dropping out of school. Conduct disorder adolescent students often exhibit a lack of personal and educational ambition, lack of self-esteem, unmet mental health needs, substance abuse and so on. These students are not only likely to fail to maintain academic pace with their peers but also are at risk of becoming involved in delinquent activities such as aggression, stealing, destruction of property, rules violations and other forms of lawlessness. It is not unusual to see signs of stress in the teachers and other students when a student has conduct disorder, as it is a very difficult problem to live with. It would be very unusual to see a school where this does not cause grave distress to the teachers and the school authority. In spite of the prevalence of conduct disorder among Nigerian adolescents', much effort has not been made to provide effective psychological intervention to remedy the problem. For this reason, two behaviour modification techniques were used in the management of

conduct disorder. Also, find out which group is likely to be rated higher in the management of conduct disorder. Therefore the research seeks to find answers to the following questions:

- Can conduct disorder be reduced among adolescents' using self- management and social skills training?
- The problem of this study is what is the precarious implication of conduct disorder on the individuals and society at large?
- Of what relevance is the problem on ground (conduct disorder)?

This study intends to close this gap.

2.1. Hypothesis

In order to carry out this study, one hypothesis was formulated and tested at 0.05 alpha level of significance.

1. There is no significant difference in the reduction of adolescents' conduct disorder among secondary school adolescents' trained using self-management, social skills straining and control group.

2.2. Purpose of the Study

The main purpose of the study was to determine the relative effects of self-management and social skills training in reducing conduct disorder among adolescents' in senior secondary school in Benin-City.

Specifically to determine the:

- Relative effects of self-management and social skills training in reducing aggressive behaviour among adolescents';
- Relative effects of self-management and social skills training in reducing destructive behaviour among adolescents';
- Relative effects of self-management and social skills training in reducing stealing behaviour among adolescents'; and
- Relative effects of self-management and social skills training in reducing rules violation behaviour among adolescents' in secondary schools.

2.3. Scope and Delimitation of the Study

The study was designed to investigate the extent to which self-management skills and social skills training could help to reduce incidents of conduct disorder among adolescents' in senior secondary schools in Benin City. The independent variables of self-management skills and social skills training are separate behaviour modification techniques that have been found efficacious in reducing behaviour problems in people. They are chosen for this study because they are amenable to group counselling processes.

The dependent variable of conduct disorder consists of distinct behaviour problems among which are emphasized in APA-DSM-IV. These are aggression to people, destruction of property, stealing and serious violation of rules. These four behavioural problems were measured and

assessed in the study. The adolescents' for this study were drawn from one mixed senior secondary school in Ikpoba-okha Local Government Area in Benin City. They were all in Senior Secondary three (SS III) at the time of the study.

3. METHOD OF STUDY

3.1. Design of the Study

This study used the pretest-posttest control group experimental design. This was because the students who were initially identified with conduct disorder were randomly assigned to the three groups used for the study. The dependent variable was conduct disorder (CD) with four subsets: aggression to people, destruction of property, stealing and serious violations of rules.

3.2. Population of the Study

The population of the study comprised all secondary school adolescents in one mixed senior secondary school in Benin City who have exhibited conduct disorder of various forms. For this study, the population consisted of 184 adolescents' who were identified as having conduct disorder in this school. They consisted of 138 male and 46 female students.

3.3. Sample and Sampling Techniques

The mixed school used for the study was purposively selected from Ikpoba-Okha Local Government Area which is one of the three Local Government Areas in Benin City. From the 184 identified conduct disorder adolescents in this school, proportionate sampling technique was used to select 90 students which consisted of 57 male and 33 female students that participated in the study. The participants were assigned into three groups using a systematic random sampling technique to allocate 19 boys and 11 girls to each of the groups. Each group had 30 participants.

3.4. Instrumentation

The instrument used for data collection was the Conduct Disorder Assessment Scale (CDAS). The conduct disorder assessment scale had two sections (A and B). Section A solicited for the bio-data of the respondents while section B had 36 conduct assessment items subdivided into four subsets. Subset B₁ focused on aggression to people, Subset B₂ focused on destruction of property, Subset B₃ focused on stealing and Subset B₄-focused on serious violations of rules.

3.5. Validity of the Instrument

The instrument was face validated by three experts in the field of Educational Psychology and Counselling.

3.6. Reliability of the Instrument

A measure of reliability was obtained by administering the conduct disorder assessment scale to 50 SS II students in a school in Benin City that was not used for the final study. The items were analyzed using Cronbach Alpha as a measure of internal consistency reliability. The

coefficient obtained were 0.80 for aggression to people, 0.81 for destruction of property, 0.76 for stealing and 0.84 for serious violation of rules.

4. METHOD OF DATA COLLECTION

The researcher and four trained research assistants who are counsellors gave assistance during treatment. The researcher used prepared manuals for the programme. The programme lasted for six weeks and was made up of eight sessions. The method of data collection involved the experimental and control groups at the beginning and end of the treatment programme.

4.1. Treatment Procedure

The treatment programme was packed into two experimental and one-control groups:

- i. Self-Management Skills (SMS) group
- ii. Social Skills Training (SST) group
- iii. The control group.

The adolescents' that participated in the treatment programme sections were 90 students. These students were proportionately selected out of 184 students. This consisted of 57 male and 33 female students. The 90 students were assigned into the three groups using a systematic random sampling technique to allocate 19 boys and 11 girls to each of the groups. Each group had 30 participants. These participants were assigned into classes and labeled experimental group I, II and control group. The treatment programme lasted for six weeks with eight sessions and an average of two sessions weekly for each of the group. Each session for each group lasted for fifty minutes after school hours at different day of the week. Administration of the treatment took the following format:

- i. Pre-treatment
- ii. Treatment
- iii. Post-treatment.

For the three groups, first sessions were on briefing the participants on the purpose and nature of the research and the first administration of the instrument (pre-treatment) to form the baseline data. The second session for the experimental groups (self-management and social skills training) covered education of students on conduct disorder. The third session for the two experimental groups covered establishing the baseline behaviour. The remaining four sessions for self-management group were training sessions on Self-management Skills (SMS), Self-Assessment (SA), Self-Monitoring (SM) and Self Reinforcement (SR). While the last session covered the second administration of the instrument (post-treatment) to assess if the treatment was effective in reducing conduct disorder during treatment programme. The next four sessions for social skills training group were training sessions on Social Skills Training (SST), assertiveness, focus group discussion and modelling. While the last session covered the second administration of the instrument (post-treatment) to assess if the treatment was effective in reducing conduct disorder during the treatment programme.

The next six session for the control group covered teaching of some core subjects (English and Mathematics). This group served as a control for the experimental groups. Members of this group were not treated with any counselling method but with teaching of some core subjects (English and Mathematics). After students have been randomized into this group, the conduct disorder assessment scale was administered to them in a normal classroom situation. The students' of this group were pre-assessed like the experimental groups at the beginning of the treatment programme. At the end of the treatment programme the students in the control group were assessed like members of the experimental groups. Their scores in the conduct disorder assessment scale were used to evaluate the effectiveness of self-management and social skills training on the reduction of conduct disorder employed in the study.

5. METHOD OF DATA ANALYSIS

The hypothesis of this study was tested at 0.05 level of significance. In this study, the responses to the items of the pretest and posttest conduct disorder assessment scale were analyzed using one-way ANOVA and ANCOVA to determine the proportion of the criterion which existed before the experimental and what was obtained after. By using ANCOVA, also errors in the variance were substantially minimized in the final scores.

6. RESULTS

The results are presented in forms of tables and explanations were made with references to the tables.

Table-1. Distribution of sample in the study

Groups	Sex		Total
	Male	Female	
Group 1: Self-management	19	11	30
Group 2: Social skills training	19	11	30
Group 3: Control	19	11	30
Total	57	33	90

Table-2. Distribution of means and standard deviation of pre and posttest scores of students on conduct disorder types

Conduct disorder types	Groups	Mean		Std. Deviation	
		Pretest	Posttest	Pretest	Posttest
Aggressive Behaviour	Group 1: Self-management Skills	19.27	33.07	4.433	2.420
	Group 2: Social Skills Training	21.13	33.43	6.837	1.755
	Group 3: Control	21.80	21.70	5.215	5.174
Destructive Behaviour	Group 1: Self-management Skill	20.17	34.40	4.735	1.429
	Group 2: Social Skill Training	22.67	33.93	7.034	1.413
	Group 3: Control	25.73	25.37	6.346	6.446
Stealing Behaviour	Group 1: Self-management Skill	20.40	33.40	5.177	1.958
	Group 2: Social Skill Training	22.03	33.60	5.391	1.522
	Group 3: Control	22.77	22.27	5.673	4.719
Rules violation Behaviour	Group 1: Self-management Skill	19.67	32.67	5.222	2.523
	Group 2: Social Skill Training	19.13	33.03	5.218	1.991
	Group 3: Control	24.73	24.50	5.564	5.444

Table 2 showed the pre and posttest mean scores on aggressive, destructive, stealing and rules violation behaviours of the experimental and control groups. To test the significance of the

differences in the pretest mean scores, inferential statistics ANOVA was used. This was summarized in table 3.

Table-3. Pretest One-way ANOVA summary on conduct disorder types

Conduct disorder types	Groups	Sum of Squares	df	Mean Square	F	Sig.
Aggressive Behaviour	Between Groups	103.467	2	51.733	1.658	.196
	Within Groups	2714.133	87	31.197		
	Total	2817.600	89			
Destructive Behaviour	Between Groups	466.422	2	233.211	6.238	.003
	Within Groups	3252.700	87	37.387		
	Total	3719.122	89			
Stealing Behaviour	Between Groups	88.067	2	44.033	1.500	.229
	Within Groups	2553.533	87	29.351		
	Total	2641.600	89			
Rules violation Behaviour	Between Groups	573.156	2	286.578	10.061	.000
	Within Groups	2478.000	87	28.483		
	Total	3051.156	89			

*Significant at $p < 0.05$ for destructive and rules violation behaviour

The results of the One-way ANOVA summary on destructive and rules violation behaviours in Table 3 showed that the mean scores differences of the three groups in each behaviour were significant at $p < 0.05$. This was not so for aggressive and stealing behaviours. For the three groups, the mean scores differences on aggressive and stealing behaviours were not significant at $p > 0.05$. For this reason, ANOVA was used for the posttest scores obtained on aggressive and stealing behaviours because the two experimental and control groups were equal at pretest. While ANCOVA was used for the posttest scores obtained on destructive and rules violation behaviours because there were significant differences in the two experimental and control groups at pretest.

Table-4. One-way ANOVA summary on aggressive behaviour after treatment intervention and control group

Groups	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2670.067	2	1335.033	112.162	.000
Within Groups	1035.533	87	11.903		
Total	3705.600	89			

*Significant at $p < 0.05$

Table 4 showed an F-value of 112.162 which was significant at $p < 0.05$. The null hypothesis, which states that there is no significant difference in the reduction of aggressive behaviour among secondary school adolescents' trained using treatment intervention and control group, is rejected. That means there was significant treatment effect in reducing aggressive behaviour of adolescent students. To determine the direction of the significant difference, a post Hoc test was carried out on the mean scores of the different groups. Turkey multiple comparisons method was used since the groups have the same number of sample size. The result of the post Hoc test is summarized in Table 5.

Table-5. Turkey Post HOC on aggressive behaviour after treatment intervention and control group.

(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Group 1: Self-management Skill	Group 3: Control	11.367*	.891	.000	9.24	13.49
Group 2: Social Skill Training	Group 1: Self-management Skill	.367	.891	.911	-1.76	2.49
	Group 3: Control	11.733*	.891	.000	9.61	13.86

*The mean difference is significant at the 0.05 level

From the Post HOC comparison as shown in Table 5, no significant difference was found between the mean scores of SMS and SST. Comparing the mean scores of the two treatment groups each with the mean scores of the control group, they were found to be significantly different at 0.05 level of significance. It was concluded that there was significant difference in the reduction of aggressive behaviour among secondary school adolescents' trained using treatment intervention and control group. That means there were significant treatment effects in reducing aggressive behaviour of adolescent students.

Table-6. ANCOVA summary on destructive behaviour after treatment intervention and control group.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2006.859	3	668.953	66.337	.000
Intercept	2997.532	1	2997.532	297.251	.000
Totpredestrsco	454.793	1	454.793	45.100	.000
Group	1955.033	2	977.516	96.936	.000
Error	867.241	86	10.084		
Total	90671.000	90			
Corrected Total	2874.100	89			

*Significant at p<0.05

Table 6 showed an F-value of 96.936 which was significant at p<0.05. The null hypothesis which states that there is no significant difference in the reduction of destructive behaviour among secondary school adolescents' trained using treatment intervention and control group is rejected. It was concluded that there was significant difference in the reduction of destructive behaviour among adolescents' trained using treatment intervention and control group. That means there was a significant treatment effect in reducing destructive behaviour of adolescent students.

Table-7. One-way ANOVA summary on stealing behaviour after treatment intervention and control group.

Groups	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2524.356	2	1262.178	133.221	.000
Within Groups	824.267	87	9.474		
Total	3348.622	89			

*Significant at p<0.05

Table 7 showed an F-value of 133.221 which was significant at $p < 0.05$. The null hypothesis which states that there is no significant difference in the reduction of stealing behaviour among secondary school adolescents' trained using treatment intervention and control group is rejected. That means there was significant treatment effect in reducing stealing behaviour of adolescent students. To determine the direction of the significant difference, a post Hoc test was carried out on the mean scores of the different groups. Turkey multiple comparisons method was used since the groups have the same number of sample size. The result of the post Hoc test is summarized in Table 8.

Table-8. Turkey Post Hoc on stealing behaviour after treatment intervention and control group.

(I) Groups	(J) Groups	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Group 1: Self-management Skill	Group 3: Control	11.133*	.795	.000	9.24	13.03
Group 2: Social Skill Training	Group 1: Self-management Skill	.200	.795	.966	-1.70	2.10
	Group 3: Control	11.333*	.795	.000	9.44	13.23

*The mean difference is significant at the 0.05 level

From the Post Hoc comparison as shown in Table 8, no significant difference was found between the mean scores of SMS and SST. Comparing the mean scores of the two treatment groups each with the mean scores of the control group, they were found to be significantly different at 0.05 level of significance. It was concluded that there was significant difference in the reduction of stealing behaviour among secondary school adolescents' trained using treatment intervention and control group. That means there were significant treatment effects in reducing stealing behaviour of adolescent students.

Table-9. ANCOVA summary on rules violation behaviour after treatment intervention and control group

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1702.992	3	567.664	57.259	.000
Intercept	2663.079	1	2663.079	268.617	.000
Totpreviolasco	306.526	1	306.526	30.918	.000
Group	1702.833	2	851.416	85.880	.000
Error	852.608	86	9.914		
Total	83916.000	90			
Corrected Total	2555.600	89			

*Significant at $p < 0.05$

Table 9 showed an F-value of 85.880 which was significant at $p < 0.05$. The null hypothesis which states that there is no significant difference in the reduction of rules violation behaviour among secondary school adolescents' trained using treatment intervention and control group is rejected. It was concluded that there was significant difference in the reduction of rules violation

behaviour among adolescents' trained using treatment intervention and control group. That means that there was significant treatment effect in reducing rules violation behaviour of adolescent students.

7. DISCUSSION OF FINDINGS

The findings of this study showed that there was a significant reduction in aggressive, destructive, stealing and rules violation behaviours among secondary school adolescents' trained using treatment intervention (self-management and social skills training). Information from the results revealed that both treatments were effective in the reduction of conduct disorder among secondary school adolescents'. The reason why the treated students improved significantly in the reduction of conduct disorder can be explained with the agreement that conduct disordered adolescents' maladjustment behaviour is amenable to treatment intervention approaches which make use of learning activities in treatment. Conduct disorder is a learned behaviour and it can be unlearned by using the behaviour therapy techniques to modify the behaviour. It is not surprising that the treated students showed reduction on aggressive, destructive, stealing and rules violation behaviours than students in the control group. These findings corroborate the findings of [Adediran \(2011\)](#); [Aderanti and Hassan \(2011\)](#) and [Ninness *et al.* \(1991\)](#). The results of their studies showed that there was a significant difference between those exposed to treatment intervention (self-management) and control group. [Adediran \(2011\)](#) in his study, investigated the use of self-management in the reduction of conduct disorders of 45 pupils who were identified with conduct disorder. He opined that the students were divided into two groups, experimental and control. The control did not receive any intervention. The experimental group was trained on Self-Monitoring, Self Instruction, Self Observation and Self Evaluation. The results obtained indicated significant differences in conduct disorders of pupils exposed to treatment strategies and those in control group ($P < 0.05$). Also, it was discovered that this finding has affinity with the investigation made by [Aderanti and Hassan \(2011\)](#) on conduct disorders using self-management as an intervention. In their studies, they investigated the differential effectiveness of self-management on adolescent rebelliousness. Participants consisted of 72 inmates (36 males and 36 females) from two Remand homes in an urban city of south-western Nigeria. The result showed that self-management was found to be effective in reducing conduct disorder.

[Ninness *et al.* \(1991\)](#) observed that in a class, the behaviour of all 3 subjects improved during the course of the 5 weeks self-management training off task and socially inappropriate behaviour in the classroom during baseline averaged 92%, 95% and 76% for subjects 1, 2 and 3 respectively. An immediate and dramatic reduction in off task and socially inappropriate behaviour of subjects was accompanied by a more gradual decline for the other 2 subjects than the control group. They concluded that experimental and field research are likely to contribute to an adequate analysis of the behavioural processes involved in the acquisition and maintenance of interlocking repertoires of self-managed and self-managing behaviour. Such an analysis appears to offer potential solutions to a variety of social problems. This also confirms the findings of [Teodoro *et al.* \(2005\)](#) and [Cook \(2003\)](#) who found significant effects of social skills training in the reduction of the

socially impaired child. Azimah and Khairani (2009) in their studies on the managements of an adolescent with conduct problems in a primary care clinic: A case report. The result showed that social skills training were found to be effective in changing the student's socially unacceptable behaviour and she resumed her function as a student. It would be possible to infer from these studies (including the present study) that adolescents' conduct disorder can be modified and reduced. Based on these findings, it is concluded that self-management and social skills training are effective packages for the reduction of conduct disorder among adolescents'. The treatments can effectively be applied to adolescents' whether male or female in senior secondary schools.

8. CONCLUSION

The extent of the effect of conduct disorder on the personality of adolescents has necessitated its remediation. Hence in this study, it has been found that both self-management and social skills training groups benefited immensely from the training provided and this accounted for the post intervention abilities of these two groups over the control group. It needs to be emphasized that the success of the two behaviour modification techniques in reducing conduct disorder among adolescents' depend on the adolescent motivation to visit the school counsellor's office regularly for counselling in order to achieve the desired change in individuals' behaviour.

9. RECOMMENDATIONS

Based on the findings of this study which brought into limelight attendant conduct disorders among school adolescent students, and the designed intervention programme such as self-management and social skills training were effectively addressed. The researcher recommends that:

1. School counsellors should embrace self-management and social skills training. It is hoped that this will help as an effective strategy for the reduction of adolescents' conduct disorder.
2. Counsellors should use the findings of this study to update their knowledge on the principles and application of behavioural techniques in order to be more effective in counselling conduct disordered adolescent students and other students with similar behaviour problems. To this end, they should initiate programmes such as talks, seminars and other recreational activities that could help students adjust to school environment without exhibiting conduct disorder.

Funding: This study received no specific financial support.

Competing Interests: The authors declare that they have no competing interests.

Contributors/Acknowledgement: All authors contributed equally to the conception and design of the study.

REFERENCES

- Adediran, O.A., 2011. Using contingency management and self-management in the reduction of conduct disorders of pupils. *Journal of Education in Developing Areas. (JEDA)*, 19(1): 1-11.

- Aderanti, R.A. and T. Hassan, 2011. Differential effectiveness of cognitive restructuring and self-management in the treatment of adolescents' rebelliousness. *The Romanian Journal of Psychology, Psychotherapy and Neuroscience*, 1(1): 193-217.
- American Psychiatric Association, 2000. *Diagnostic and statistical manual of mental disorders (DSM-IV)*. 4th Edn., Washington DC: American Psychiatric Association.
- Azimah, M.N. and M.D. Khairani, 2009. The management of an adolescent with conduct problems in a primary care clinic. A case report. *4(2&3)*: 88-90.
- Cook, M.N., 2003. Social skills training in schools: Counselling and human development. Research Report No. 932. Available from <http://findarticles.com/p/articles/miqu3934> [Accessed October 19, 2010].
- Kazdin, A.E., 1995. Risk factors, onset and course of dysfunction. In *conduct disorders in childhood and adolescence*. 2nd Edn., Thousand Oaks, CA: Sage Publication. pp: 50-74.
- Kolo, F.D., 1997. *Conditions techniques and skills for an effective counselling process*. Jos: Jofegan Associate.
- Martin, H., 2008. *Clinical child psychology. Social learning. Development and behaviour*. 2nd Edn., England: John Wiley & Sons Ltd.
- Ninness, H.A., J. Furrst, R.D. Rutherford and S.S. Glenn, 1991. Effects of self-management training and reinforcement on the transfer of improved conduct in the absence of supervision. *Journal of Applied Behaviour Analysis*, 24(3): 499-528.
- Olley, B.O., 2006. Social and health behaviours in youth of the street of Ibadan Nigeria. *Child Abuse & Neglect: The International Journal Elsevier USA*, 30(3): 271-282.
- Teodoro, M.L.M., K.C. Kapper, J.L. Rodrigues, P.M. Frertas and V.G. Haase, 2005. The matson evaluation of social skills with youngsters (MESSY) and its adaptation for Brazilian children and adolescents. *The Journal of Psychology*, 39(2): 239-246.
- Webster-Stratton, C. and T. Taylor, 2007. Nipping early risk factors in the bind: Preventing substance abuse, delinquency and violence in adolescence through interventions targeted at young children 0-8 years. *Prevention Science*, 2(3): 165-192.
- Webster-Stratton, C., M.J. Reid and M. Hammond, 2004. Treating children with early-onset conduct problems: Intervention outcomes to parent, child and teacher training. *Journal of Clinical Child & Adolescence Psychology*, 33(1): 105-124.

Views and opinions expressed in this article are the views and opinions of the author(s), International Journal of Education and Practice shall not be responsible or answerable for any loss, damage or liability etc. caused in relation to/arising out of the use of the content.