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Can Assertiveness Skills Training (AST) and Dialectical Behaviour Therapy Treat Social Skills Deficit of Peer Rejected in-School -Adolescents in Ibadan, Nigeria?

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Abstract

Students with deficit social skills tend to have problems of interactions with peers and teachers which indirectly affect their academic performance. Literature on management of social skill deficit among peer rejected adolescents in Oyo state is limited. This study therefore, utilized Assertiveness Skills Training (AST) and Dialectical Behaviour Therapy (DBT) to manage deficit social skills among students diagnosed as peer rejected in junior secondary schools in Ibadan, Oyo State. Pre-test-post-test control group, quasi experiment design with 3x2x3 factorial matrix was adopted. Ninety students (Males= 40; Females=50) with age range of 10 to 15 years were purposively drawn from three public secondary schools in Ibadan. Social Peer Rejection Scale (α =0.81) was used to draw peer rejected students, while Social Skills Rating Scale (α = 0.86) and Self-consciousness Scale (α=0.70) were utilized as outcome measures. The students were randomly assigned to treatment conditions. The Experimental groups were exposed to 10 sessions of therapies while the control group served as the comparison group. Results showed that there was a significant main effect of treatments [$F_{(2, 75)} = 8.761$, $p< 0.05$, $\eta^2= 0.189$] on social skills of the participants. Those treated with AST had superior mean gain ($\bar{x} = 68.64$) over DBT ($\bar{x} = 66.09$) and Control Group ($\bar{x} =55.40$). There was interaction effect of treatments and gender [$F_{(2, 75)} = 11.123$, $p<0.01$, $\eta^2= 0.229$]. The interaction effect of treatments and levels of self-awareness was also significant [$F_{(4,75)}= 3.081$, $p<0.05$, $\eta^2= 0.141$] on social skills. There was no three way interaction effect of treatments. This outcome provides empirical supports for the use of AST and DBT to remediate social skill deficit. The researchers recommended the use of the therapies for the enhancement of social skills in school settings.

Keywords: Assertiveness skills, dialectical behaviour therapy, peer-rejected adolescents, social Skills,

Introduction

Social relationship is a vital skill one needs to interact adaptively in any environment including the school setting. In the school, in addition to learning how to read, write and calculate, the students also learn how to get along with others. Although, they don't obtain grades on social tests from their teachers, their peers are constantly giving them "grades" on social tests. If a student does well on these "tests", he will be well liked and happy and as such enjoy school activities and look forward to attending school. If a student fails these tests, he is apt to feel disconnected and has the tendency to likely drop out of school. Failing a social test can be more painful to a student than failing a reading or science test. For some students, social skills can be the hardest subject to pass in school. Social status represents the students' relative position among peers. The

outcome of social skill test is that students that are popular are well liked by all or most of their peers. Expectedly, students who fail the test are rejected by their peers and this would make them to be unhappy. Peer rejection is reported to be positively associated with deficit social skills. Lodder, Goossens, Schlte, Engels and Verhagen (2016) documented that students with deficit social skills tend to have problems of interactions with peers and teachers which affect their academic performance. Social skill deficit is also indirectly linked to other negative mental and physical outcomes including obesity, aggression, risky sexual behaviours (Ofole,Awoyemi, Siokwu, Ojukwu & Uwakwe, 2015; Ofole, 2015; Ofole, 2016); depression, cardiovascular diseases as well as suicidal ideation (Cacioppo & Cacioppo, 2015; Holt-Lunstad, Smith & Baker, 2015). A recent study show that students with social skills deficit view acting out as their only way to get the attention they desire from others (Lodder, Goossens, Schlte, Engels & Verhagen, 2016). Lodder et al (2016) opined that in order to get attention, some peer rejected students may join gangs, use drugs and even commit crimes to gain peer acceptance and a sense of belonging in a group.

Walker (1983) defines social skills as "a set of competencies that (a) allow an individual to initiate and maintain positive social relationships, (b) contribute to peer acceptance and to a satisfactory school adjustment, and c) allow an individual to cope effectively with the larger social environment" (p. 27). Social skills can also be defined within the context of social and emotional learning — recognizing and managing our emotions, developing caring and concern for others, establishing positive relationships, making responsible decisions, and handling challenging situations constructively and ethically (Zins, Weissbert, Wang, & Walberg, 2004; Dowd & Tierney, 2017).

As a result of the fact that social skills acquisition is associated with positive youth development and healthy lifestyle it has attracted the attention of numerous scholars. For example, Isawumi and Oyundoyin (2016) examined the influence of home and school as determinant of social skills among learners with intellectual disability from Lagos State, Nigeria. The findings of the survey revealed that the independent variables jointly contributed to social skill deficits among learners with intellectual disability. Similarly, Adeniyi and Omigbodun (2016) investigated the effect of classroom-based intervention on the social skills of pupils between 15.70 ± 1.89 years old with intellectual disability in Southwest Nigeria. Results show that the intervention reduced the number of participants with sever social skills impairment to 20 % and it resulted to 13.3 % increase in the social skills of participants in the 'none or minimal' social skills category after 8 weeks of intervention. Moreover, Abdulmalik, Ani, Ajuwon and Omigbodun (2016) investigated the effects of problem-solving interventions on modifying social deficit of aggressive primary school pupils aged 12 years (SD = 1.2, range 9–14 years) in Ibadan, Nigeria.

Results show that Group-based problem solving intervention was effective in managing social skill deficit of the target population. Recently, Obiageri (2018) reported that rational emotive behavioural therapy and cognitive behaviour therapy were effective in reducing social skill among secondary school students in Abia State. A gap identified in literature was that most previous studies focused on managing the social skills deficit of students with different types of medical disorders like autism, hyperactivity disorder, non-verbal learning disability, asperger syndrome among others. In addition, there is paucity of study which jointly examined the effectiveness of the two therapies (Assertiveness skill training and Dialectic behaviour therapy) on enhancing social skills of peer rejected students in junior secondary schools in Ibadan, Oyo state. Therefore, in order to contribute to existing literature on social skills, this study was conceptualized.

There are preliminary evidences to suggest that Assertiveness Skills Training (AST) has the potential to improve attributes such as initiating greetings, conversations, understanding others, listening to others, interpreting stimulus, apologizing, empathizing and other social cues (Speed. Goldstein & Goldfred, 2017; Omura, Maguire, Levett-Jones, Stone, 2017; Karimi, Mahmoodi & Hashemi, 2014; Tannous, 2015). Assertiveness skill training is rooted in the

behavioural therapy known as Cognitive Behavioural Therapy (CBT) developed by Beck (1967). It is based on a structured technique that utilizes highly participatory methodologies to enhance the capacity of the clients to have effective social relationships skills. Wolpe opined that assertiveness is a "socially justified motor or verbal expression of feelings" (Peneva & Mavrodiev, 2013, p.18) and he called non-assertiveness as "social fear". This study is therefore, premised on the assumptions that when fear of speaking assertively from the participants is removed by exposure to treatments, the students can thereafter interacts effectively with peers and teachers. It was envisaged that assertiveness skill training will assist the participants change their negative self-image, express their thoughts and ideas appropriately, act according to their interests and stand up to their desires without feeling anxious.

Another therapy that has the potency to enhance the social skills of peer rejected adolescents is Dialectical Behaviour Therapy (DBT) originally developed by Linehan (2014) to treat Borderline Personality Disorders (BPD). Wyk (2015) defined Dialectical Behaviour therapy (DBT) as a comprehensive treatment that blends cognitive–behavioural approaches with acceptance-based practices. The objectives of dialectical behaviour therapy are acceptance and change, and these objectives can be applicable in the lives of the peer rejected student. It was designed to enable peer rejected students to accept themselves rather than feeling worthless (Van Dijk, 2012). DBT has the potency to provid clients with new skills to manage painful emotions and decrease conflict in relationships by specifically focusing on four key areas, namely; mindfulness, (works on improving the participants' ability to accept the prevailing circumstances of their lives), distress tolerance (has to do with enhancing the individual's ability to tolerate negative emotions), emotion regulation (involves all the strategies necessary to assist the individual mange and change negative emotions that are debilitating) and finally, interpersonal skills (which involves enhancing the participants interpersonal skills and ability to communicate assertively with others), (Panos, Jackson, Hasan & Panos, 2014). DBT has several evidence-based effectiveness in reducing suicidal behaviour, self-injurious behaviours, managing substance use, anger and irrational belief (Asmand, Mami & Valizadeh, 2014; Oluwole, 2016). These evidences suggest that Dialectical Behaviour Therapy may possibly enhance social skills of peer rejected students. This study is anchored upon social cognitive theory which proposes that learning precedes behaviour, that is, whatever a student displays is as a result of what he or she has observed, imitated and modelled. Social cognitive theorist believes that human learning and acquisition of social skills is dependent upon the triadic relationship of the person, the environment and behaviours and this triadic relationship can influence the acquisition and development of social skills.

Researches show that there are many factors that could moderate the efficacy of assertiveness skills training and dialectical behaviour therapy. Such factors include personal variables (eg self-efficacy), family factors (eg. parenting styles) and environment factors (eg school climate) (Womiloju, 2014; Kauppi, 2015, Ofole & Agokei, 2016; Ofole, 2018). For the purpose of this study, the moderating Effect of gender and levels of self-awareness in enhancing the social skills of peer rejected students was examined. The choice of the variables was anchored on report of previous studies which suggest gender difference in levels of social skills (Sonja, Valenčič, Kalin and Peklaj, 2009; Abdi, 2010). Akbari and Akbari (2013) provided preliminary evidence that self-awareness has the likelihood of predicting social skills. They argue that since self-awareness helps an individual to tune into their feelings, as well as to the behaviours and feelings of others it will therefore assist them to "think about their thinking" in interpersonal cooperation and social interactions.

Purpose of the Study

Broadly speaking, this study investigated the efficacy of Assertiveness Skills Training and Dialectical Behaviour Therapy in enhancing the social skills of peer rejected adolescents in Junior Secondary Schools in Ibadan North, Ibadan, Oyo State, Nigeria. Thus the specific objectives of this study were to investigate:

1. Main effect of therapies in enhancing social skills of peer rejected adolescents in Junior

Secondary Schools in Ibadan North, Ibadan, Oyo State, Nigeria.

2. Interaction effect of gender in enhancing social skills of peer rejected adolescents in Junior Secondary Schools in Ibadan North, Ibadan, Oyo State, Nigeria.
3. Interaction effect of self-awareness in enhancing social skills of peer rejected adolescents in Junior Secondary Schools in Ibadan North, Ibadan, Oyo State, Nigeria.
4. Three- way interaction effect of therapies, gender and self-awareness in enhancing the social skills of peer rejected adolescents in Junior Secondary Schools in Ibadan North, Ibadan, Oyo State, Nigeria.

Hypotheses

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

1. There will be no significant main effect of Therapy on social skills of Junior Secondary School Students in Ibadan North, Ibadan, Oyo State, Nigeria.
2. There will be no significant interaction effect of gender on social skills of Junior Secondary School Students in Ibadan North, Ibadan, Oyo State, Nigeria.
3. There will be no significant interaction effect of self-awareness on social skills of Junior Secondary School Students in Ibadan North, Ibadan, Oyo State, Nigeria.
4. There will be no significant interaction effect of therapy, gender and self-awareness on social skills of Junior Secondary School Students in Ibadan North, Ibadan, Oyo State, Nigeria.

Materials and Methods

Research Design

This study adapted a pre-test, post-test control group, quasi experiment design with a 3x2x3 factorial matrix. The researchers guided against the effect of extraneous variables through the following appropriate randomization of the participants into two intervention groups and the control group, adhering to inclusion criteria and treatment module. Below is a schematic representation of the design;

O_1 XA_1 O_4

O_2 XA_2 O_5

O_3 O_6

Where O_1, O_2 and O_3=Represents pre-tests across the groups

O_4, O_5, O6 =Represents post-tests across the groups

XA_1= Represents treatment with Assertiveness Skill Training

XA_2 = Represents treatment with Dialectical Behaviour Therapy

X_3 =Represents the control group not exposed to treatment

Sample and Sampling Technique

A total of ninety junior secondary school students consisting forty (44.4%) and fifty females (55.5%) with age range of 10 to 15 years were drawn from junior secondary classes (JSS 1-3) participated in the study. Intact classes were used in order to avoid distractions on the school activities. Simple random sampling technique was used to select Ibadan North from eleven LGAs in Ibadan, Oyo State. In the second stage, three secondary schools were selected from schools in Ibadan North LGA using ballot system. In the final stage, purposive sampling technique was used to select students who scored 35 and above on the social peer rejection scale by Lev-Wiesel, Sarid and Sternberg (2013). The instrument is positively worded, the higher the score, the higher the likelihood of being peer rejected.

Instrumentation

Three instruments were adopted for data collection, namely;

Social Peer Rejection Scale (SPRS) by Lev-Wiesel, Sarid and Sternberg (2013) was adopted to screen students who had experienced or were experiencing rejection. This scale consists of 21 self-report items. The original scale has two columns where clients are expected to indicate response such as *"I was ignored"* however, it was a adapted and the responses pattern was change to a Likert scale on the basis of how often they occur (1—never happened, 4—happens all the time).The questionnaire was categorized according to Asher's (2001) six types of social rejection which are (a) preventing relations (b) preventing access to: friends, playtime activities, toys, important information; (c) aggression (d) bossiness (e)

blaming and (f) involving a third party (Lev-Wiesel, et al, 2013). The authors reported reliability co-efficient of 0.92. However, for the purpose of this study a pilot study was conducted in Ibadan, Oyo State and three items which were not culturally relevant were deleted thereby reducing the original 21 items to 19 items. It yielded a total reliability index of r= of 0.81. This provided evidence that the scale was stable to be used as a selection tool for peer rejected students.

Social Skills Rating Scale (SSRS) developed by Gresham and Elliott in 1990 was used to assess the participants' social skills. It consists of 39 items anchored on a 3-point Likert scale. It was originally designed to measure social skills from three domains; students' perspective, parents' perspective and teachers' perspective of social skills, however, for the purpose of this study, only the students' perspective was adopted for this study. This social skills domain measures assertion, cooperation, responsibility, and self-control. The authors reported a reliability coefficient of 0.95. This scale was further revalidated in Ibadan, Oyo State in which nine items were removed on the basis of experts' recommendations. It yielded a total reliability co-efficient of 0.86. This index was considered suitable for the study.

Self-Consciousness Scale (SCS) developed by Fenigstein, Scheier, and Buss, (1974) was used to categorise the participants according to their level of self-awareness. it consist of 17 items anchored on a 4 point Likert scale ranging from not at true (0) to always true (4). It has three subscale which are public self-consciousness (*I'm concerned about my style of doing things*; 7 items), private self-consciousness (*I'm aware of the way my mind works when I work through a problem;* 10 items. The authors reported a satisfactory (0.86) reliability index. This scale was further revalidated in Ibadan, Oyo State in which an item was deleted making it 16 items in all. It yielded a total reliability co-efficient of 0.70 and was considered suitable for the present study.

Inclusion criteria

The study inclusion criteria include;

i. The student must be in Junior secondary classes
ii. Must obtained 35 and above in self-awareness scale
iii. Must bring parental consent form
iv. Names must appear regularly on class attendance register (to avoid truants)
v. Be willing to be photographed

Treatment Procedures

The study was carried out in three phases. The first phases consist of obtaining introduction letter from the Department of Counselling and Human Developmental Studies, University of Ibadan. With the introduction letter, approval was obtained from the principals of the participating schools who referred the researchers to the school counsellor. The school counsellor fixed the training two times a week (Wednesday and Saturday). The inclusion of Saturdays made it necessary for the students to seek their parents' approval to leave home to school. The researchers were supported by two master degree holders who graduated from the Departments of Counselling. In the second phase the three schools were randomly assigned to treatment conditions as follows; Assertiveness Skills Training, Group 1; Dialectical Group Therapy, Group 11 and the Control Group, Group 111. The Assertiveness Skills Training package was designed along Wolpe (1960) while Dialectical Group Therapy package was designed based on Linehan's (1993) conceptualization. The experimental groups were treated for ten sessions which lasted for ten weeks with either assertiveness skills training or dialectical behaviour therapy. Each session lasted one hour. The sessions have specific treatment goals and objectives and the sessions were facilitated with participatory methodologies (role plays, drama, discussions, film shows, presentations etc).The control group served as comparison group and was not exposed to therapy. However, they were given a lecture on 'showing respect as compensation for participating in the study''. They were not exposed to any therapy in other prevent contamination of study outcomes. The third phase consists of evaluation of treatment outcomes. The summary of the treatment sessions is outlined below;

Summary of Session for Experimental Group 1: Assertiveness Skills Training (AST)

Session One: General orientation of baseline questionnaires.
Session Two: Discussion on concepts and meaning of assertiveness skill
Session Three: Case studies on styles of communication
Session Four: ABC of assertiveness skills (How to give and receive compliments)
Session Five: Importance of assertiveness skills
Session Six: Role plays on assertive behaviours
Session Seven: Demonstrations on how to handle criticisms and disappointments
Session Eight: Identification of personal and social competence
Session Nine: Production of action plan on how to be assertive in school
Session Ten: Summary, post- test administration, appreciation and termination of the Therapy

Summary of Session for Experimental Group 2:
Dialectical Behaviour Therapy (DBT)
Session One: Introduction and general orientation of baseline questionnaire
Session Two: Pre-treatment exercise to identify beliefs that would reduce therapy effectiveness
Session Three: Identification of the participants' thoughts, beliefs and assumptions
Session Four: Role plays on interpersonal communication/effectiveness
Session Five: Group work on why individuals are rejected
Session Six: Demonstration/rehearsal of mindfulness skill
Session Seven: Film show on interpersonal communication/effectiveness
Session Eight: Development of stress tolerance skill by identification of distressed areas Session Nine: Emotion regulation skills
Session Ten: Summary, post- test administration, appreciation and termination of the therapy.

Summary of Session for Control Group:
Session One: Administration of pre-test instrument
Session Two: Showing respect
Session Three: Administration of post-test instrument

Analysis of Data

Analysis of Covariance (ANCOVA) and Bonferonni Pair-wise comparison were adopted for data analysis. ANCOVA tested the main and interaction effects of treatments while Bonferonni Pair-wise comparison was used as post hoc analysis to determine the source of the significant difference in the groups.

Results

Hypothesis One: The results of the first hypothesis which stated that there will be no significant main effect of therapy in enhancing social skills of peer rejected adolescents in junior secondary schools is presented on Tables 1, 2 and 3

The results of hypothesis one presented in Table 1, shows that there was a significant main effect of therapies on test scores on social skills of peer rejected adolescents in junior secondary school. $F_{(2,75)}= 8.761$, $p< 0.05$, $\eta^2= 0.189$.The table also shows the contributing effect size of treatments on social skills to be 18.9%. Based on this result the null hypothesis was rejected. The coefficient of determination (Adjusted R-squared = .729) also indicates that the differences that exist in the group account for 72.9% in the variation of adolescents social skills, while 17.1 % is accounted for by other variables not included in this model. In order to determine the magnitude of the significant main effect across treatment groups, the estimated marginal means of the treatment groups was carried out and the result is presented in Table 2.

The estimated marginal means in Table 2 revealed that students in Assertiveness skill Training group (AST) had the highest adjusted post-hoc means score ($\bar{x}$ =68.4), followed by the Dialectic Behaviour Therapy (DBT) group ($\bar{x}$ =66.09), while the Control group (CG) had the least adjusted post –treatment mean score ($\bar{x}$ =55.40). This order is represented diagrammatically thus; AST>DBTG>CG. This implies that Assertiveness Skills training was more potent in enhancing social skills in the participants than the dialectical behaviour therapy. In order to determine the source of the significant difference, Bronferroni Post-hoc Analysis was computed as presented in Table 3

Bronfrener post hoc analysis result presented in Table 3 shows that the participants exposed to

Assertiveness Skill Training were not statistically significantly different from their counterparts treated with Dialectic Behaviour Therapy but statistically different from those in control group in their post-treatment scores. In addition, those exposed to Assertiveness Skill training were different from those participants in the Dialectic experimental group at .05 level of significance. This indicated that Assertiveness and Dialectic Behaviour Therapy was the main sources of significant differences.

Hypothesis Two: The second hypothesis stated that there will be no significant interaction effect of gender on social skills of Junior Secondary School Students in Ibadan North, Ibadan, Oyo State, Nigeria. The result is presented in Tables 1 and 4.

Table 1: Summary of 3x2x3 Analysis of Variance (ANCOVA) showing the main effect of treatment groups on social skills post-test score of peer rejected adolescents.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	2495.538[a]	14	178.253	18.121	0	0.772
Intercept	1093.945	1	1093.945	111.211	0	0.597
Pre-test social skill	98.988	1	98.988	10.063	0.002	0.118
Treatment	172.364	2	86.182	8.761	0	0.189
Gender	4.898	1	4.898	0.498	0.483	0.007
Self-awareness	176.77	2	88.385	8.985	0	0.193
Treatment * gender	218.83	2	109.415	11.123	0	0.229
Treatment * Self-awareness	121.209	4	30.302	3.081	0.021	0.141
Gender * Self-awareness	11.627	1	11.627	1.182	0.28	0.016
Treatment * gender *Self-awareness	0.444	1	0.444	0.045	0.832	0.001
Error	737.751	75	9.837			
Total	368298	90				
Corrected Total	3233.289	89				

a. R Squared = .772 (Adjusted R Squared = .729)

Table 2: Estimated Marginal Mean for Assertiveness Skills Training, Dialectical Behaviour Therapy and Control Group

Treatment	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Control Group (CG)	55.402[a,b]	2.826	49.773	61.031
Assertiveness Skill Group (AST)	68.644[a,b]	1.371	65.913	71.375
Dialectical Behaviour Therapy Group (DBTG)	66.095[a,b]	1.507	63.094	69.096

a. Covariates appearing in the model are evaluated at the following values: pretest social skill = 37.5667.

Table 3: Bonferonni Pair-wise Comparison Showing the Significant Differences among various Treatment Groups and Control group

(I) treatment	(J) treatment	Mean Difference (I-J)	Std. Error	Sig.[d]	95% Confidence Interval for Difference[d]	
					Lower Bound	Upper Bound
Control Group	Assertiveness skill group	-13.242[*,b,c]	4.061	0.005	-23.186	-3.297
	Dialectical behaviour group	-10.693[*,b,c]	4.177	0.037	-20.922	-0.464
Assertiveness skill group	control group	13.242[*,b,c]	4.061	0.005	3.297	23.186
	Dialectical behaviour group	2.549[*,b,c]	0.945	0.026	0.235	4.863
Dialectical Behaviour Group	Control group	10.693[*,b,c]	4.177	0.037	0.464	20.922
	Assertiveness skill group	-2.549[*,b,c]	0.945	0.026	-4.863	-0.235

*Based on estimated marginal means; *. The mean difference is significant at the .05 level; b. An estimate of the modified population marginal mean (I); An estimate of the modified population marginal mean (J); d. Adjustment for multiple comparisons: Bonferroni.*

Table 4: Estimated Marginal Means for Therapy and Gender

Treatment	Gender	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Control Group	Male participant	57.915[a]	2.892	52.155	63.675
	Female participant	51.633[a,b]	2.975	45.706	57.559
Assertiveness Skill Group	Male participant	61.712[a,b]	1.659	58.408	65.016
	Female participant	75.576[a,b]	1.346	72.895	78.257
Dialectical Behaviour Group	Male participant	63.890[a]	1.666	60.572	67.209
	Female participant	69.402[a,b]	1.59	66.235	72.569

a. Covariates appearing in the model are evaluated at the following values: pretest social skill = 37.5667.: b. Based on modified population marginal mean

The result presented on Table I shows that there was a significant interaction effect of treatments and gender on adolescents social skills; $F_{(2, 75)} = 11.123$, $p<0.01$, $\eta^2= 0.229$. Hence the null hypothesis was rejected. This implies that gender significantly impacted on the effect of treatments on social skills of the participants**.** The results presented on Table 4 also reveals that

assertiveness skill intervention was more effective in improving social skills among female participants ($\bar{\chi}$=75.51) than their male counterparts ($\bar{\chi}$=61.56). Similarly, Dialectical Behaviour therapy intervention was more potent in improving the social skills of female participants ($\bar{\chi}$=69.08) than their male participants ($\bar{\chi}$= 64.16).This implies that the female participants exposed to therapy gained more than their male counterpart. The interaction is depicted on figure 1.

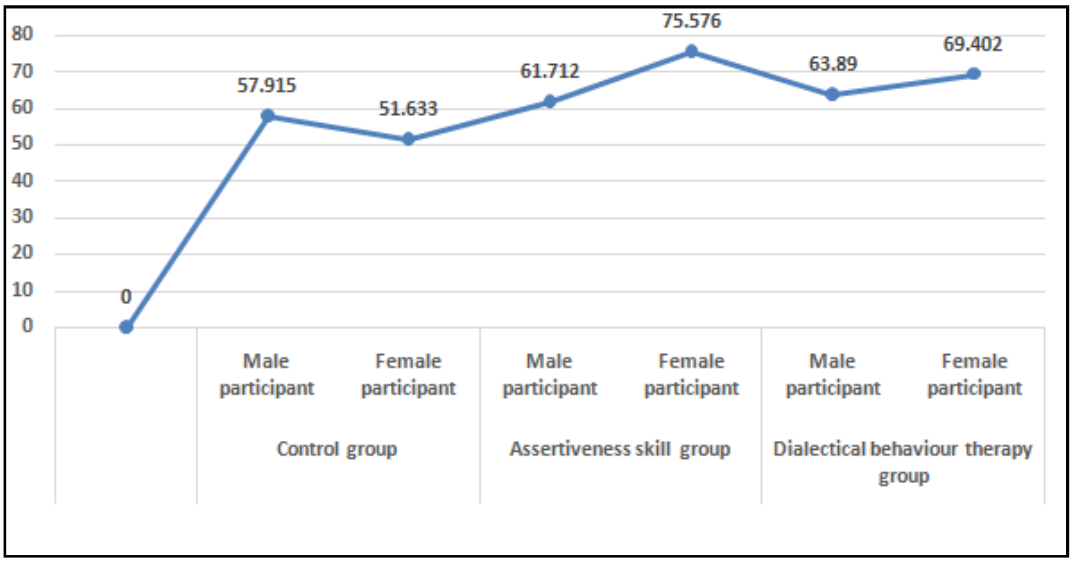

Figure 1: Interaction effect of treatments and Gender by marginal Mean

Hypothesis Three: The result of the third hypothesis when hypothesized no significant interaction effect of treatments and self-awareness on social skills of Junior Secondary School Students in Ibadan North, Ibadan, Oyo State, Nigeriais presented in Tables 1and 5.

Table 1 shows that there is a significant interaction effect of self-awareness on social skills of participants ($F_{(1,101)}$ = 4.05, p= 0.30 < 0.05, η^2=0.304). $F_{(4,75)}$= 3.081, p<0.05, η^2= 0.141. Hence the null hypothesis was rejected. Further, the results presented on Table 5 shows that participants with high self awareness benefitted more in therapy ($\bar{\chi}$=65.984) than their counterparts with moderate and low self awareness ($\bar{\chi}$=62.398) and ($\bar{\chi}$=59.255) respectively. The interaction is depicted in figure 1.

Figure 2 shows the pattern of the two-ways interaction effect of treatments and self-awareness. There is evidence of interaction across the experimental groups, but not at the control group. This pattern of interaction is disordinal. This is because the three group means switch or crossed as depicted on the figure 2.

Table 5:Estimated Marginal Means for Therapy and Self Awareness

Self-awareness	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
High self-awareness	65.984[a,b]	0.672	64.646	67.322
Moderate self-awareness	62.396[a]	0.834	60.734	64.058
Low self-awareness	59.255[a,b]	0.755	57.752	60.758

a. Covariates appearing in the model are evaluated at the following values: pretest social skill = 37.5667. b. Based on modified population marginal mean.

Hypothesis Four: Hypothesis four predicted no interaction effects of treatments, gender and self-awareness in enhancing social skills of peer rejected adolescents in junior secondary schools. The hypothesis was retained because the result ($F_{(1,75)}$= .045, p>0.05, η^2= 0.001) showed that there was no significantly interaction effect of treatments, gender and self-awareness; hence, the hypothesis was retained. The implication of this result is that treatments gender and self-awareness did not jointly contribute to the difference observed in the social skills of the participants.

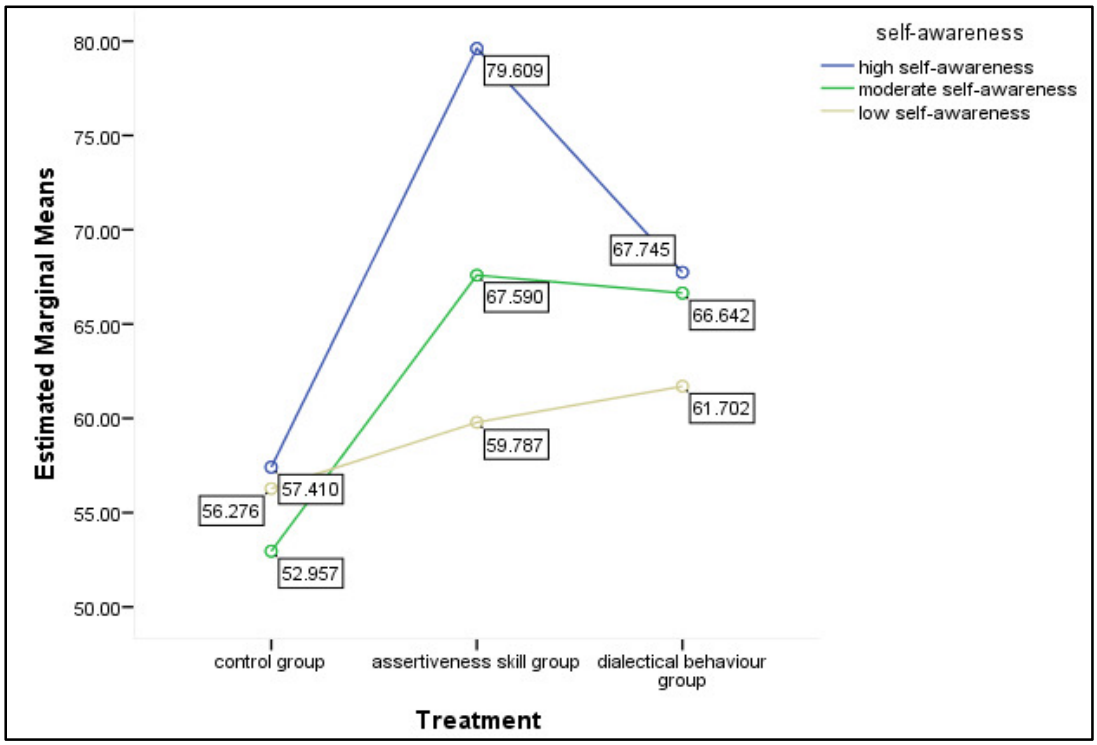

Figure 2. Estimated marginal means of post-test social skill

Discussion

The findings that emerged from this study show that there is a significant main effect of treatments among the three groups; assertiveness skills training, dialectical behaviour therapy and the control group in the post-test scores on social skills. This result therefore, provided evidence to suggest that the peer rejected adolescents who participated in this study benefitted from the treatment unlike their counterpart in the control group. This outcome corroborates the findings of previous studies which bolstered the argument that assertiveness training can enhances successful relationships skills with families and colleagues (Animasahun & Oladeni 2012; Ofole, & Okopi, 2012; Sakine Karimi, Mahmoodi & Hashemi, 2014; Steffel, 2014; Abed *et a*l. 2015; Speed. *et al.,* 2017;Omura,*et al.* 2017; Tannous, 2015)

This outcome is plausible given that Assertiveness Skill Training would have successfully enhanced the participants' ability to overcome social fear and increased the awareness of their rights and assisted them to substitute aggressive behaviours for assertive ones. Similarly, Dialectical Behaviour Therapy would have been effective in enhancing the participants social skills because of the robust treatment package utilized which tackled the participants' problematic and unhelpful behaviours. Specifically, mindfulness skills addressed the participants' confusion about oneself while emotion regulation also known as de-escalation skills was used to restore their emotional stability. In addition, distress tolerance and interpersonal effectiveness were utilized to strengthen the participants' crisis survival skills and interpersonal relationships skills respectively. This outcome corroborates numerous previous studies which provided evidence that cognitive - based therapies have clinical effectiveness for treating diverse psychological problems (Panos, Jackson, Hasan & Panos, 2014; Asmand, Mami & Valizadeh, 2014; Oluwole, 2016).

Another finding that emerged from this study is the superiority of Assertiveness Skill Training over Dialectic Behaviour Therapy in the treatment outcome. This finding is not surprising given that expressing ones rights is a legitimate and inalienable right which could be spontaneous, less cumbersome and less expensive to foster in training such as the present one. The study also showed that there was a significant interaction effect of treatments and gender on enhancing social skills of Junior Secondary School Students. There is mixed results concerning the moderating effect of gender on treatment outcomes. For instance, some researchers (Ofole & Okopi, 2012; Ayodele & Sotonade, 2014; Ofole & Omole, 2018) reported that male participants in their study benefited more from therapies than their female counterparts. On the other hand, other scholars (Ayodele, 2011; Ofole, & Ofor, 2012; Kumar & Fernandex 2017) reported that females benefitted more from treatments than their male counterparts. On the contrast, Okoiye (2012) reported no significant difference in the effect of gender in the post-test of his study. The possible explanation for this result is that male and female are different biologically, psychologically and socially.

Furthermore, there was a significant interaction effect of treatments and self-awareness on social skills, hence the hypothesis was rejected. The implication of the finding is that the benefits the participants derived from the treatments is dependent upon their level of self-awareness. This finding is in consonant with previous studies such as Unal (2012); Mofrad and Mehrabi (2015); Kalaiyarasan and Solomon (2016) who reported that self-awareness played a role in social skills acquisition. This outcome is predictable given the avalanche of literature suggesting that people who have good level of self-awareness know their value**s,** strengths and weaknesses and know how manage their own thoughts and feelings of others (Ofole, 2013; Ofole & Falaye, 2011).

Further, the study revealed that there was no significant three-way interaction effect of treatment, gender and self-awareness on social skills of peer rejected adolescents on their posttest scores. This finding is corroborated by Oluwole (2016) and Hohendorff et al, (2013), This implies that the treatments, gender and self-awareness did not interact jointly to the participants social skills. Stated differently, it means that changes in the dependent variable (social skills) of the participants cannot be explained by the interaction

effects treatments, gender and level of self-awareness when combined.

Counselling Implications of the Study

This study has several counselling implications. The outcome suggests that social skills deficit is amenable to treatment using psychotherapies. This study provided empirically supported evidence to support the use of Assertiveness skill Training and Dialectical Behaviour Therapy in remediating social skills deficit among peer rejected students. This treatment package can be adapted or used as a prototype for the training of counselling psychologist in Nigeria. The evidence from this study shows that, all other things being equal, gender and self-awareness can moderate treatment of social skills independently but not jointly. It has contributed to the understanding of the three concepts used in this study namely; assertiveness skills training and dialectical behaviour therapy as well as social skills. This study provided evidence-based practices to move the profession of counseling out of its theoretical boxes into an era of integrated practices which involves counselling psychologists using evidence based clinical experiences to successfully assist clients overcome life challenges. These research outcomes reported in this study will undoubtedly serve as an agenda for the next evolution of counseling practices.

Conclusion and Recommendations for Further studies

Conclusively, this study provided evidence that Assertiveness skill Training and Dialectical Behaviour Therapy can remediate social skill deficit of peer rejected students in junior secondary school. In addition, the study shows that in a resources constrained environment assertive skill training should be prioritized given its superiority over dialectical behaviour therapy. These outcomes notwithstanding, the result from this work should be interpreted with respect to some limitations. One of the limitations of this research study was the composition of the sample using purposively sampling technique However, to prevent any form of bias, the schools were randomly assigned to treatment conditions. The sample was not heterogeneous because participants live mostly in Ibadan metropolis. Therefore, the results might not generalize to other student populations, particularly those in a rural community with greater diversity in social class. Counselling psychologists need to continue research to ascertain factors such as situational, environmental and personality traits that contribute to developing social skills deficit. There is also need to identify the types of social skills deficit that the students mostly exhibit and compare it across type of schools e.g. private/public, rural/urban/semi urban.

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