EUROPEAN ACADEMIC RESEARCH
Vol. IX, Issue 3/ June 2021

Impact Factor: 3.4546 (UIF)
DRJI Value: 5.9 (B+)

ISSN 2286-4822
www.euacademic.org

Effects of Psychotherapeutic Interventions on Reduction of Social Anxiety Disorder among In-School Adolescents in Rivers State

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Abstract:

This study examined the effects of Cognitive Behavioural Therapy (CBT) and Acceptance and Commitment Therapy (ACT) in reduction of social anxiety disorder among in-school adolescents in Rivers State. The quasi-experimental research design was adopted for the study. A sample of sixty in-school adolescents from a population of sixty-three thousand seven hundred and thirty-one mid-school adolescents in public secondary schools was drawn using purposive sampling technique. A twenty-four items questionnaire on social anxiety disorder developed by Liebowitz in 1987 was used for data collection. The instrument was divided into two sub-sections, one on fear and the second on avoidance. The validity of the instrument was ascertained by three experts Reliability of the instrument was established using the Cronbach alpha which yielded a coefficient of .867 and .890 for the 2 subscales. Data generated were analyzed with mean, standard deviation and t-test. Result from findings revealed that both psychotherapeutic techniques effectively reduced social anxiety disorder despite gender. Recommendation among others was that therapist should use any of the techniques in the management of social anxiety disorder. Also same attention should be given to male and female clients as both gender anxiety levels reduced equally at post - treatment evaluation.

Keywords: Psychotherapeutic Interventions, Social Anxiety Disorder, In-School Adolescents, Rivers State

INTRODUCTION

Observation has shown that some individuals are not comfortable with speaking in the public no matter the population of the audience. This is attributed to irrational fear or anxiety over possible negative scrutiny or evaluation by others. A condition called social anxiety disorder (SAD) or social phobia. Social anxiety disorder is a chronic mental health condition where every day interactions cause significant anxiety, self-consciousness and embarrassment because of perceived fear of being scrutinized or judged by others (www.mayoclinic.org). This condition leads to avoidance that disrupt normal daily life functions and severe stress that affects school and other activities. Irrational fear of social situation is part of individual lives when addressing/speaking in front of an audience or waiting to play in a game. Such feelings can deter one from making eye contacts or avoid talking to someone. This state can also be classified as shyness or stage freight. For some people, the uneasiness is not intense and persistent, but if it becomes so, then it becomes a disorder. (Myers 2002) describes the disorder as being marked by distressing, persistent anxiety or maladaptive behaviors. Meyer sees anxiety as both a condition and a cognition – a doubt – laden appraisal of one's safety or social skill. The disorder affects people without age limit. Children express anxiety by crying, throwing temper tantrum, freezing, clinging, failing to speak in social situations and others. In-school adolescent exhibit SAD by displaying difficulties engaging in conversations, anxious over meeting unfamiliar people, inability to read or answer questions in class. Adult sufferers are afraid of even seminar presentation as undergraduate/post graduate students. People with this disorder encounter challenges in daily life engagements. Students are unable to effectively participate in class room learning which eventually negatively affect academic performance.

Feelings of discomfort or shyness in some situations may not be indices of SAD as comfort levels in social situations vary according to life experiences and personality traits. Some people are outgoing while

some are naturally reserved. Bernstein, Penner, Clarke-Stewart and Roy (2006) define SAD as anxiety about being criticized by others or acting in a way that is embarrassing or humiliating. The anxiety must be intense and persistent that it impairs the person's normal functioning. Santrock (2005) views anxiety as a vague, highly unpleasant feeling of fear and apprehension capable of significantly impairing adolescents' abilities to achieve or excel in tasks. Impairment in social skills is seen as one of the paramount aspects of social anxiety disorder. Myer (2002) agreed with other definitions and also sees social phobia as an intense fear of being scrutinized by others that leads to the person avoiding potentially embarrassing social situations, but added that social phobia is shyness taken to an extreme.

DSM-V, (2013, pg. 202) outlined the following diagnostic criteria for social anxiety disorder:

- Marked fear about one or more social situations in which the individual is exposed to possible scrutiny by others; social interactions, being observed and performing in front of others.
- The person is afraid that he or she will act in a way or show anxiety symptoms that will be negatively evaluated.
- The social situations always provoke fear.
- Social situations are avoided or endured with intense fear or anxiety.
- The anxiety is out of proportion to the actual threat posed by the social situation.
- The fear or avoidance is not better explained by the symptoms of another mental disorder such as panic disorder, autism spectrum disorder, etc.
- If another medical condition e.g. obesity, disfigurement from burns or injury is present, the fear, anxiety or avoidance is clearly unrelated or is excessive.

People with the performance only type of social anxiety disorder have performance fears that are typically most impairing in their professional lives for instance, musicians, performers or in roles that need regular public speaking. Performance fears can also manifest in school, work or academic settings in which frequent public presentations are required. Individuals with performance only social anxiety do not avoid or fear non-performance social situations.

Symptoms of SAD according to (mayoclinic.org) can be classified into two groups: emotional / behavioural symptoms and physical symptoms. The emotional symptoms include:

- Fear of situations that require judgments.
- Worry or fear about embarrassing or humiliating self.
- Intense fear of interacting or communicating with strangers.
- Worry that people notice one's anxiety.
- Fear of physical symptoms that may cause embarrassment.
- Avoidance of situations where one might be at the center.
- Having anticipated anxiety.
- Enduring a social situation with intense fear.
- Evaluating one's performance and identifying flaws.
- Expecting the worst possible outcome from a negative experience during a social situation.

The physical symptoms of SAD include: Blushing, Trembling, Fast heartbeat or palpitation, Sweating, Nausea, Panting, Dizziness, Blank mind and Muscle tension.

Though not much had been done on SAD in Nigeria, the few research on it in Nigeria showed a high rate of prevalence. The 12 months prevalence estimate in the United States is approximately 7%, median prevalence in Europe is 2.3%. Prevalence rates in children and adolescents are comparable to those in adults (DSM-5). Social anxiety disorder has a media onset age of 13 years and 75% have an age at onset between 8 and 15 years. Onset may follow a stressful or humiliating experience e.g. being bullied. Adult onset is relatively rare and is likely to occur after a stressful humiliating experience or after life changes that require new social roles e.g. marrying someone from a different social class. Adolescents exhibit a broader pattern of fear and avoidance including but not limited to dating compared with younger children.

Biological or psychological factors may cause SAD. Biologically, social anxiety sometimes runs in families though it is still a mystery how some individual with same parent do not have while others do. Kendler 1995 (as cited in Bernstein et al; 2006). The tendency may be due to environmental factors that affect members of the same family but also suggests that people may inherit a predisposition to develop anxiety disorder. Traits that predispose individuals to SAD such as behavioural inhibition are strongly genetically influenced. Also, it is

subject to gene–environment interaction. Social anxiety disorder is heritable though less for performance only anxiety. People who display anxiety disorders most likely have inherited an autonomic nervous system that is over-sensitive to stress, thus susceptible to reacting with anxiety to a wide range of situations (Zinbarg & Barlow, 1996).

The psychotherapeutic techniques for this investigation were the cognitive behavioural therapy and Acceptance/Commitment therapy. These were the independent variables for the study, gender was a moderator variable, while social anxiety disorder was the dependent variable.

CBT is a form of psychotherapy that focuses on how a person's thoughts, beliefs and attitudes affect the feelings and behaviours. It is a problem-focused approach or technique aimed at assisting individuals or sufferers identify and change dysfunctional beliefs, thoughts and behaviour patterns to contribute to their problems. CBT combines cognitive therapy and behaviour therapy for problem solving. Behavioural treatments can take many patterns or forms, but the treatment that focuses on changing thinking patterns as well as overt behaviours is called cognitive behaviour therapy (Bernstein 2006). A learning – based treatment method that helps clients change the way they think as well as the way they behave. CBT helps people learn different ways of reacting to thoughts and feelings and also learn to engage in different behaviours that result in decreased fear. It helps people learn and practice skills when there is a deficit.

In CBT, the patient learns new ways of thinking and behaving in situations which create anxiety so that he/she can review such situations to be harmless. The initial step in CBT involves assessment or getting through history of the client's life experiences and psychological functioning. Therapists note what triggers anxiety in a patient. For instance, situations in which a client fells being alone may trigger his/her maladaptive patterns, which then causes anxiety. (Perry 2004). The second step is to learn about the nature and peculiar experiences at onset of anxiety. This includes learning how to better observe record and report anxiety-related trigger thoughts, feelings and behaviours. This helps the therapist have a clearer understanding of the person's specific anxiety problems and so be able to design a better cognitive-behavioural interaction. Once these cognitive obstacles are highlighted, the therapist encourages the client to develop and practice

new and more adaptive ways of thinking. With these new learned cognitive skills, it becomes easier and more rewarding for the client to behave in accordance with them (Merchenbaum, 1995). The next stage is usually one or more variations of therapeutic exposure. At this stage, the client is made to face his or her fears. The therapist guides the client through this and unlike everyday exposure, it is usually gradual. Lastly, reviews are made on long-term maintenance of gains, relapse prevention and lapse response protocols. In case of comorbid conditions existing or coming up in the cause of the therapy as separate problems but related to the anxiety condition like depression or substance abuse, they can be addressed in treatment as required. Issues of self-esteem should be addressed as part of the treatment and development of support systems outside therapy promoted. Respect, support and encouragement in the therapy relationship are very important and crucial to the success of the therapy.

Acceptance and Commitment therapy (ACT) is an empirically based psychological intervention that uses acceptance and mindfulness strategies mixed in different ways with commitment and behaviour-change strategies to increase psychological flexibility. In the views of Dewane (2008), ACT is an action-oriented approach to psychotherapy that stems from traditional behaviour therapy and CBT. Clients learn to stop avoiding, denying and struggling with their inner emotions and instead, accept the deeper feelings as appropriate responses to certain situations that should not prevent them from leading/living normal lives. ACT emphasizes on changing behaviour regardless of accompanying emotion. It further suggests that both behaviour and emotion can independently and simultaneously exist.

The goal of ACT is to help clients consistently choose to act effectively-concrete behaviours as defined by their values - in the presence of difficult or disruptive "private" (cognitive or psychological) events (Dewane 2008). ACT as an acronym describes what takes place in therapy: ***accept*** the effects of life's hardship, ***choose*** directional values and ***take*** action. It is a unique psychotherapeutic approach based on rational frame theory (RFT). ACT has at its core, a change in both internal (self-talk) and external (action) verbal behaviour. Observing oneself having feelings, recognizing and accepting that feelings are a natural outgrowth of circumstances freeing. To ACT, fighting emotions makes them worse. "If you can't accept the feeling for

now, you will be stuck with it but if you can, you can change your world so you will not have that feeling later" (Hayes & Wilson, 1994). According to Mattaini (1997), techniques in ACT have metaphors, paradoxes and experiential exercises frequently in use. Many interventions are playful, creative and clever. ACT protocols vary from short interventions to long-term sessions. Myriad techniques categorized under five protocols are assembled by Gifford, Hayes and Stroshal (2005). They are: Facing the current situation (creative hopelessness), Acceptance, Cognitive defusion or deliteralization, Valuing a choice, Self as context:- teaches client to view his/he r identity as separate from the content of his/her experience.

ACT has been empirically tested and believed to be beneficial for a treatment of variety of disorders. Preliminary research suggested it to be useful for at-risk adolescents, mood disorders and substance abuse (Wilson, 1996).

This plan was in 3 phases to form a total of 6 weeks and 12 sessions running twice weekly on the framework of the 6 core processes of ACT which are:

(1) Contracting the present moment (Be here now)
(2) Cognitive Defusion (Watch your thinking)
(3) Acceptance (Open up)
(4) Self as context (Pure awareness)
(5) Values (know what matters)
(6) Committed Action (do what it takes)

There are some obvious cases of individual's inability to function optimally in social situations which eventually rob them of potential benefits, be it job opportunities, appointment and others. Of course the problem must have developed over time sometimes before or from adolescence. SAD is disruptive to daily life. Sufferers take to drugs as a solution but it provides a temporary relief as the effect wear of overtime and repeated use leads to drugs dependence and addiction. Since drugs do not proffer lasting solution, the researcher dimmed it imperative to find an alternative which could contribute to the reduction of SAD among adolescents. It is for this reason that the researchers embarked on this study to determine the effects of cognitive behavioural therapy and acceptance and commitment therapy on reduction of social anxiety disorder among in-school adolescents in Rivers State.

AIM AND OBJECTIVES OF THE STUDY

The aim of this study was to determine the effects of CBT and ACT on reduction of SAD among in- adolescents. Specifically, this study was designed to achieve the following objectives:

1) Determine the effects of CBT on reduction of SAD among in-school adolescents in Rivers State based on their pretest and post-test mean scores.
2) Find out the effects of ACT on reduction of SAD of the in-school adolescents in Rivers State based on their pretest and post-test mean scores.
3) Ascertain the effect of CBT on SAD reduction among in-school adolescents based on gender.
4) Determine the effect of ACT on SAD reduction among in-school adolescents based on gender.

RESEARCH QUESTIONS

The following research questions guided this study:

1) What is the effect of CBT on reduction of social anxiety disorder (SAD) among in-school adolescents in Rivers State as determined by their pre and post test mean scores?
2) How does ACT affect reduction of SAD among the in-school adolescents in Rivers State as determined by their pretest and post test mean scores?
3) What is the effect of CBT on reduction of SAD among in-school adolescents in Rivers State based on gender?
4) To what extent does ACT affect the reduction of SAD among in-school adolescents in Rivers State based on gender.

HYPOTHESES OF THE STUDY

The following null hypotheses were tested at 0.05 level of significance

1) CBT as a psychotherapeutic intervention does not have any significant effect on reduction of SAD among the in-school adolescents in Rivers State as determined by their protest and post-test mean scores.

2) There is no significant effect of ACT on reduction of SAD among in-school adolescents in Rivers State as determined by the pre- and post test mean scores.
3) CBT does not have any significant effect on SAD reduction among in-school adolescents based on gender.
4) There is no significant effect of ACT on the reduction of SAD among in-school adolescents based on gender.

METHOD

The study adopted a quasi-experimental research design. Population consisted of all the 63,731 mid in-school adolescents in all the 263 public secondary schools in Rivers State. A sample of 60 subjects (29 males and 31 females) clustered into 2 treatment groups of 30 each (CBT and ACT) and within the age range of 14-16 were the participants. The procedure / treatment spanned 6 week of 12 sessions (twice weekly). The treatment for CBT was divided into 3 modules of 4 sessions each based on the interrelationship of thoughts, actions, and feelings. Also, ACT was in 3 phases based on the framework of the 6 core processes of ACT which are: contracting the present moment, cognitive diffusion, acceptance, self as context, values and committed action.

Instrument used for data collection was an adopted standardized instrument: Leibowitz's Social Anxiety Scale (LSAS). It is composed of 24 items, divided into 2 subscales. 13 items relate to performance anxiety while 11 items pertain to social situations. They are rated on a 4-point Likert scale from 0 to 3 on fear experienced during situations. Same items equally rated regarding avoidance of situations. Fear is rated none – 0, mild – 1, moderate – 2 and severe – 3, while avoidance is rated never – 0, occasionally – 1, often – 2 and usually – 3. Combined overall maximum score was 144 points and minimum of 0 points. The cut-off point at which SAD is probable being 60 – 144 points. Only the subjects that scored within this mark range were chosen for the study. The items were scrambled at post-test evaluation to avoid familiarity of questions by subjects. Both the reliability and validity of the instrument was establish using Cronbach Alpha and by experts respectively.

RESULTS

Research question 1: What is the effect of CBT on reduction of social anxiety disorder (SAD) among in-school adolescents in Rivers State as determined by their pre and post test means scores?
Hypothesis 1: CBT as a psychotherapeutic intervention do not have any significant effect on reduction of SAD among in-school adolescents in Rivers State as determined by their pre-test and post-test mean scores.

Table 4.1: Mean, standard deviation and paired t-test on the effect of CBT on reduction of SAD.

Variables	N	Mean	SD	Df	Mean diff	t-cal	p-value	Decision
SAD/CBT pretest		101.27	15.02					Ho rejected
SAD/CBT posttest	30	60.27	6.36	29	41	13.18	0.0005	

Results in table 4,1 show that the students that were exposed to CBT psychotherapeutic intervention had the mean scores of 101.27 (SD = 15.02) and 60.27 (SD = 0.36) respectively for their pretest and post test on LSAS. These mean scores indicated that from the pretest to the post test, there was a reduction in the mean scores, hence the mean difference value of 41.00. Furthermore, when the mean difference was subjected to paired t-test, a calculated value of 13.18 was obtained at a p-value (level of significance) of 0.0005. Since this p-value is less than 0.05, the chosen alpha level, it is then deduced that CBT had a significant effect on reducing SAD of the in-school adolescents. Thus the null hypothesis is rejected.

Research question 2: How does ACT affect SAD of the in-school adolescents in Rivers State as determined by their pretest and post means scores?
Hypothesis 2: There is no significant effect of ACT on SAD of in-school adolescents in Rivers State as determined by the pre-and post test mean scores.

Table 4.2: Mean, standard deviation and paired t-test on the effect of ACT on SAD.

Test	N	Mean	SD	Df	Mean diff	t-cal	p-value	Alpha	Decision
SAD/ACT pretest	30	121.17	19.26	29	64.27	18.35	0.0005	0.05	Ho rejected
SAD/ACT posttest		56.90	7.621						

In table 4.2, it is revealed that the in-school adolescents who received psychotherapeutic intervention using ACT had the mean scores of 121.17 (SD = 19.26) and 56.90 (SD = 7.62) for their pretest and posttest on LSAS. This is an indication that at post-test the level of SAD reduced by a mean difference of 64.27. Again the results in table 4.2 further revealed that when the mean difference was subjected to paired t-test statistics, a calculated value of 18.35 was obtained at df of 29 and p-value of 0.0005. Since the p-value (0.0005) is less then he chosen alpha level of 0.05, it is then deduced that there is a significant effect of ACT on SAD of in-school adolescents in Rivers State. Thus, the null hypothesis is rejected.

Research question 3: What is the effect of CBT on reduction of SAD among in-school adolescents based on gender?

Hypothesis 3: CBT does not have any significant effect on SAD reduction among in-school adolescents based on gender as determined by their post-test mean scores.

Table 4.3: Mean, standard deviation and paired t-test on the effect of CBT on SAD reduction based on gender as determined by their post-test scores

Gender	N	Mean	SD	Df	Mean diff	t-crit	p-value	Alpha	Decision
Male	13	58.00	7.15						**Ho retained**
Female	17	62.00	5.24	28	4	1.960	1.77	0.05	

Result in table 4.3 show that the males that were exposed to CBT treatment had the mean scores of 38.00 (SD 7.15) while the females had a mean score of 62.00 (SD 5.24) based on their post-test mean scores on LSAS. It could be deduced that the mean difference from the two groups is 4 in favour of the females. Hence, the effect of CBT was more on the females than the males. However, when the mean was subjected to a t-test analysis; a significant calculated t-value of 1.77 was obtained at df of 28. Therefore, since sig (p=1.77 > 0.05) is greater than 0.05 alpha, the null hypothesis is retained or accepted meaning that there is no

significant difference in effect of CBT on SAD reduction among male and female in-school adolescent.

Research question 4: To what extent does ACT affect the reduction of SAD among in-schools in Rivers State by gender?
Hypothesis 4: There is no significant affect of ACT on the reduction of SAD among in-school adolescents in Rivers State by gender.

Table 4.4: Mean, standard deviation and paired t-test on the effect of ACT on SAD by gender

Gender	N	Mean	SD	Df	Mean diff	t-crit	p-value	Alpha	Decision
Male	16	57.13	9.96						**Ho**
Female	14	56.64	3.88	28	4	1.96	0.71	0.05	**retained**

Result in table 4.4 show that the males that were exposed to ACT treatment had the mean scores of 51.13 (SD 9.96) while the females had a mean score of 56.64 (SD 3.88) based on their post-test mean scores on LSAS. It could be deduced that the mean difference from the two groups is 5.51 in favour of the females. However, on subjecting the mean to a t-test analysis, an insignificant t-value of 0.71 was obtained at df of 28. Therefore, since sig (p-0.71 > 0.05) is greater than 0.05 alpha, the null hypothesis is accepted meaning that there is an insignificant difference in effect of CBT on SAD reduction among male and female in-school adolescents.

DISCUSSION OF RESULT

Discussion of findings from the study is done based on issues. Research findings one as revealed in table 1 showed that CBT as a psychotherapeutic intervention approach had a significant effect on reduction of SAD among in-school adolescents in Rivers State as determined by their pretest and post-test mean scores on LSAS. The mean difference of 41.00 between the pretest and post test indicates a reduction of the anxiety level of subjects.

The mean scores of the in-school adolescents were higher at their pre-test than their post test. This give a mean difference of 41, which when subjected a paired t-test, a significant t-value was obtained. This finding connotes that CBT can be used by therapist effectively in the management of in-school adolescents diagnosed with

SAD. Result collaborates with that of Yuko, Naski and Eiji (2014). Who in their studies found CBT to be more effective as compared with the control group. In a related study, Sorenson, Birket-Smith, Watter Buemann and Salkovskis (2011) also confirmed CBT to have helped adolescents overcome anxiety compared to those that were in the control group.

Research findings two on table 4.2 revealed that in-school adolescents who were exposed to ACT psychotherapeutic intervention approach experienced a reduction in the SAD level as indicated in their pretest and post test mean difference of 64.27 in LSAS. Further investigation by subjecting the mean difference to paired t-test statistics revealed a significant t-value. There is the practical applicability that when adolescents face social anxiety, therapist can use ACT as an approach in managing the clients to reduce anxiety level. The findings is not surprising to the researcher because social acceptance skills have over the year proven to be effective in managing social behavioural problems. This finding collaborates with that of Abolmaali (2014) whose research revealed the effectiveness of ACT in reduction of symptoms of social anxiety among young people.

CONCLUSION

It is obvious that various psychotherapeutic approaches have over the years been proven to be effective in helping adolescents to manage their social anxiety problems. Some of these interventions which include cognitive behavioural therapy and acceptance and commitment therapy have proven to be effective in reducing social anxiety among adolescents. It is also noticed that the treatment CBT and ACT effectively reduced SAD among male and female adolescents.

IMPLICATION OF THE STUDY

The study revealed that Social Anxiety Disorder is prevalent among adolescents in secondary schools in Rivers State, especially in Obio/Akpor Local Government Area where the study was carried out despite the urban nature of the area with so many institutions of learning. For the students, the knowledge of the likely causes of social anxiety disorder will help them avoid the predisposing factors. It will

as well help them engage in healthy behaviour that promote high-self esteem. There is an implication that they will seek voluntary counselling services for those that are having this problem. The study also indicated that the therapies were effective in reducing social anxiety and so can be used in place of pharmacotherapy with its various negative side effects.

Since these psychotherapeutic interventions have been found to be effective in managing social anxiety, there is an implication that therapist and counselling psychologist will utilize them effectively in managing social anxiety problems of students. There is also an implication that most schools may seek the services of qualified counselors in helping their students modify these problematic behaviour. There is an implication that psychologist will do better in handling social anxiety disorders irrespective of gender, and thus a wake-up call for all hands to be on deck to curb this menace.

RECOMMENDATIONS BASED ON FINDINGS

1. Psychologist, counsellors and therapist should apply eclecticism-eclectic therapy (use of multiple approaches in dealing with clients problem) in order to help them achieve the needed result.
2. Therapist should ensure that they apply CBT and ACT where necessary in helping client to adjust socially in school.
3. Therapist should give equal attention to both male and female clients during treatment sessions.

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