

EFFICACY OF COGNITIVE BEHAVIOURAL THERAPY ON THE REDUCTION OF DEPRESSION AMONG SECONDARY SCHOOL STUDENTS IN IKPOBA-OKHA LOCAL GOVERNMENT AREA OF EDO STATE

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ABSTRACT : This study sought to investigate the efficacy of cognitive behavioural therapy on the reduction of depression among secondary school students in Ikpoba-Okha Local Government Area of Edo State. To guide the study, four research questions were raised and their corresponding hypotheses formulated. The research questions were answered while the hypotheses were tested at 0.05 alpha level of significance. Two research designs were used for the study. The first was the descriptive survey, which was used to collect the baseline data. The second design was a pre-test post-test non-equivalent control group quasi- experimental design used for the study. The population of the study consisted of all the public mixed Senior Secondary 11 students in Ikpoba-Okha Local Government Area of Edo State with counsellors and the sample used for the study comprised 98 students with high level of depression discovered with the use of the instrument to collect the baseline data. The instrument for data collection for the study was a questionnaire titled Adolescent Depression Scales (ADS), validated by two experts, with reliability index of 0.79. during treatment procedures, the two groups were pretested, the experimental group was exposed to Cognitive behavioural therapy while the control group was not exposed to any treatment and after treatment administration, both groups were post tested and the finding, among others, showed that there is a significant difference in the level of depression of adolescents in the experimental (those exposed to CBT) and control groups after treatment among secondary school students in Ikpoba-Okha Local Government Area of Edo State as there was a great decrease in the depression level of the experimental group as a result of the treatment administered. Based on the findings therefore, it is recommended that counsellors should employ cognitive behavioural therapy in the treatment of depression so to enable students to achieve their maximum potential in life.

KEYWORDS: *Cognitive Behavioural Therapy, Depression, Experimental Group, Control group and Counselling*

I. Background to the Study

Depression is classified as a mood disorder. It may be described as feelings of sadness, loss, or anger that interfere with a person's everyday activities. People experience depression in different ways. It may interfere with your daily work, resulting in lost time and lower productivity. It can also influence relationships and some chronic health conditions. Depression types include clinical depression, bipolar depression, dysthymia, seasonal affective disorder and others. Healthcare providers name depression types according to symptoms and causes. These episodes often have no obvious cause. In some people, they can linger much longer than in others for no clear reason.

Types of depression include Major depressive disorder (MDD). This has intense or overwhelming symptoms that last longer than two weeks. These symptoms interfere with everyday life. Bipolar depression is the type of depression that those that have it have alternating periods of low mood and extremely high-energy (manic) periods. During the low period, they may have depression symptoms such as feeling sad or hopeless or lacking energy. Another one is what is called Perinatal and postpartum depression: "Perinatal" means around birth. Many people refer to this type as postpartum depression. Perinatal depression can occur during pregnancy and up to one year after having a baby. Symptoms go beyond "the baby blues," which causes minor sadness, worry or stress.

Persistent depressive disorder (PDD): PDD is also known as dysthymia is another type of depression. Symptoms of PDD are less severe than major depression. But people experience PDD symptoms for two years or longer.

Also, there is another type of depression called Premenstrual dysphoric disorder (PMDD). This is a severe form of premenstrual disorder (PMS). It affects women in the days or weeks leading up to their menstrual period. Psychotic depression occurs when there are severe depressive symptoms and delusions or hallucinations. Delusions are beliefs in things that are not based in reality, while hallucinations involve seeing, hearing, or feeling touched by things that aren't actually there and finally there is another one called Seasonal affective disorder (SAD) which usually starts in late fall and early winter. It often goes away during the spring and summer.

According to Soriano(2017), causes of depression include the brain's physical structure or chemistry; serotonin levels are out of balance, history of depression in the family, abnormal genetic code, history of other disorders or concurrent mental health conditions, stressful or major life events, hormone changes, certain physical conditions like chronic pain and certain medications like blood pressure medication.

Although depression may occur only once during one's life however, people typically have multiple episodes. During these episodes, symptoms occur most of the day, nearly every day and may include feelings of sadness, fearfulness, emptiness or hopelessness, angry outbursts, irritability or frustration, even over small matters, loss of interest or pleasure in most or all normal activities, such as sex, hobbies or sports, sleep disturbances, including insomnia or sleeping too much, tiredness and lack of energy, so even small tasks take extra effort, reduced appetite and weight loss or increased cravings for food and weight gain, anxiety, agitation or restlessness, slowed thinking, speaking or body movements, feelings of worthlessness or guilt, fixating on past failures or self-blame, trouble thinking, concentrating, making decisions and remembering things, frequent or recurrent thoughts of death, suicidal thoughts, suicide attempts or suicide and unexplained physical problems, such as back pain or headaches.

There are some human factors that could be mediating between depression and the adolescents. One of these is age. In childhood, children may tend to be free from deep thinking about life. As the children grow, they learn about things like intrinsic (inner) characteristics and psychological differences due to the fact that they now have a larger network of peers and mentors to compare themselves with. Later in life (teenager-adulthood) the thinking changes into a more nebulous idea that is organized by what is relevant to the individual and when these needs are not met could lead to depression. Another factor is gender. This has a powerful effect on how one perceives him/herself for all sorts of reasons especially the way they are treated differently depending upon gender from an early age.

These identified factors can either have positive or negative influence on one's personality which may lead one to develop negative perception, leading to depression. In Nigeria, it has established that more than 50% of the adolescents have been exhibiting low self-concept that led to depression (Agboola, 2013). Adolescents are mostly students in the senior secondary school and their depressive exhibition could be as a result of the family they came from, the environment and peer group. Depression is considered a serious medical condition that can get worse, leading to suicidal attempt or suicide itself if without proper treatment and one of the counselling techniques that could be used in the treatment of depression is Cognitive Behavioural Therapy.

Cognitive Behavioural Therapy or CBT, is a common form of talk therapy. Unlike some other therapies, CBT is typically intended as a short-term treatment, taking anywhere from a few weeks to a few months to see results. Although the past is certainly relevant, CBT focuses on providing you with tools to solve your current problems. And there a lot of ways to get there with this type of therapy. The key principle behind CBT is that your thought patterns affect your emotions, which, in turn, can affect your behaviors. For instance, CBT highlights how negative thoughts can lead to negative feelings and actions. But, if you reframe your thoughts in a more positive way, it can lead to more positive feelings and helpful behaviors.

In using CBT, the therapist facilitates positive thinking in the client using different approaches which include, identifying specific problems or issues in client's daily life, becoming aware of unproductive thought patterns and how they can impact client's life, identifying negative thinking and reshaping it in a way that changes how you feel and learning new behaviours and putting them into practice. After speaking with client and learning more about the issue the client wants help with, the therapist decides on the best CBT strategies to use in tackling the problem and one of these CBT strategies is Cognitive Restructuring Therapy.

It was observed from literature review that Del and O'Leary, (2004) and Saini, (2009) carried out two meta-analyses and the findings from these meta-analyses suggested that CBT is moderately effective at reducing anger problems. In the same vein, Miller & Berman, (1983) assessed the effectiveness of cognitive behavior therapies. Analyses indicated that cognitive behavior therapies were superior to no treatment; however, there was no firm evidence that these therapies were superior to other psychotherapies. Analyses failed to find cognitive behavior therapies emphasizing behavioral techniques to be more effective than primarily cognitive approaches. There was no evidence that sex or age of patient, experience of therapist or even duration of therapy were related to treatment effects.

However, Haoyao, Hualal, Shengjun, Xiaochen, Yongqing, Fengian and Jinchang (2019) examined the efficacy of cognitive behavioral therapy to treat depression and anxiety and improve quality of life among early-stage breast cancer patients and found Improvement in anxiety was observed in patients treated with CBT however,

Depression and quality of life improvement was not observed in the CBT group within or after 4 months of treatment. Also, Arto J. Hiltunen, Elo Kocys, and Renée Perrin-Wallqvist (2013) investigated the effectiveness of cognitive behavioral therapy to examine the levels of symptom change and satisfaction with therapy in a heterogeneous population of clients treated using cognitive behavioral therapy (CBT) by less experienced trainee therapists with limited theoretical education. The results suggested a statistically significant reduction in symptoms, measured using the Symptoms Checklist. In the study of Beattie S. and Beattie D. (2018) into the efficacy of a cognitive behavioural therapy group for low self-esteem in a primary care setting and they found that there were statistically significant improvements in levels of depression, anxiety and self-esteem post-treatment.

Since study has shown that some adolescents in secondary schools exhibit depression and this could negatively affect their total decisions and in turn rob them of their life's maximum fulfilment, it then becomes imperative to fight depression among these students' using a functional and therapeutic counselling therapy and one these therapies is Cognitive Restructuring Therapy. This study therefore seeks to investigate the efficacy of Cognitive Restructuring Therapy in the reduction of depression among senior secondary school students in Ikpoba-Okha Local Government Area of Edo State.

To guide the study, three research questions were raised and their corresponding hypotheses were formulated and were tested at 0.05 alpha level of significance.

Research Questions

1. Is there a difference in the level of depression of adolescents in the experimental and control groups before treatment?
2. Is there a difference in the level of depression of adolescents in the experimental and control groups after treatment?
3. Is there a difference in the level of depression between male and female adolescents in the experimental group after treatment?
4. Is there a difference in the level of depression of adolescents in the experimental group after treatment based on age?

Hypotheses

1. There is no significant difference in the level of depression of adolescents in the experimental and control groups before treatment
2. There is no significant difference in the level of depression of adolescents in the experimental and control groups after treatment
3. There is no significant difference in the level of depression between male and female adolescents in the experimental group after treatment
4. There is no significant difference in the level of depression of adolescents in the experimental group after treatment based on age.

II. Methodology

Two research designs were used for the study. The first was the descriptive survey, which was used to collect the baseline data. The second design was a pre-test post-test non-equivalent control group quasi- experimental design used for the study. One independent variable (Cognitive Restructuring Therapy) was involved in this study, two (02) intervening variables (sex and age) and one dependent variable (Depression). These intervening variables (sex and age) are of two levels while all the samples used for this study were of the same cultural background since they are all from the same Local Government Area. The independent variable is manipulable variable since the samples were exposed to the different levels respectively, the dependent and the intervening variables are selection variables in the sense that subjects were selected based on scores obtained from their pretest to determine the level of depression exhibited, sex and age boxes were used to determine their gender and age brackets. This study involved only one dependent variable namely depression. This variable is of two levels which are high and low. The two levels were measured in this study using the pretest score. The participants at the pretest with score of 45 and above were regarded as those with high level of depression while those with 44 and below were regarded as those with low level of depression. At the point of analysis, it was only those with high level of depression that were of interest to the researcher. As a result, treatment was only given to students with high level of depression and they were post tested. The independent variable of the study was Cognitive restructuring therapy. This variable was manipulated through the sensitization and training of the counsellors on the skills and usage of CBT and the control group was not exposed to any treatment.

Table 1: Showing the Design Over Variables

Groups	Design
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Experimental Group	O_1 X_1 O_2
Control Group	O_1 O_2

Key: O_1 & O_2 is pre-test and post test.
 ----- No randomization of subjects to groups.
 X_2 is the used for solution focused brief therapy

Population for the Study

The population of the study consisted of all the public mixed Senior Secondary 11 students in IkpobaOkha Local Government Area of Edo State with counsellors. There are 5 public mixed schools that have counsellors with 2,761 numbers of students (**Post Primary Education Board, New Lagos Road, Benin City**).

Sample and Sampling Technique.

The sample of the study consisted of 493 Secondary School II students among which 98 were identified with high level of depression at the pre-test in the two schools randomly selected in Ikpoba-Okha Local Government from the five (5) schools with counsellors in the local government and consequently, these 98 students became the treated sample for the study. Out of these schools, two (02) of them were randomly selected using simple random technique through balloting. In doing this, the names of the schools were written on a sheet of paper, folded and put into a blind bag from which the researcher picked. The first two schools picked became the sample used for the study. From these two schools selected, school A was randomly assigned as experimental groups and while school B was the control group. School A was exposed to Cognitive Behavioural Therapy, school B was not exposed to any therapy. Out of the 98 students, 50 students comprising of 27 males and 23 females were exposed to Cognitive Restructuring Therapy in school A, 48 students comprising of 28 males and 20 females were not exposed to any therapy in school B.

Research Instrument

The instrument for data collection for the study was a questionnaire titled Adolescent Depression Scales (ADS), which was constructed by the researcher, is made up of two sections. Section A contains the information about the students' bio-data such as sex and age while section B consists of twenty (20) items on depression on a five-point Likert scale of Completely true of me (CTM), Mostly true of me (MTM), Partly true of me (PTM), Mostly untrue of me (MUM) and Completely untrue of me (CUM).

Validity of the Instrument

In order to the instrument, drafted copies were given to the two experts, one in Counselling Psychology while the other in the field of measurement and evaluation to ascertain its validity. Suggestions by the two experts were inculcated into the final draft of the instrument and this made the instrument valid.

Reliability of the instrument

In establishing the reliability of the instrument used for this study, firstly, the test-re-test method was used. In using this procedure, the researcher administered forty (40) copies of the instrument to senior secondary school II students outside the sampled students used for the study. Among these students, 10 were found to score below 45 in the adolescent depression scale and based on the benchmark score used for the study, these students were categorized as exhibiting high level of depression. After three weeks, the same instrument was re-administered to the same students. The data collected were analyzed, using Pearson Product Moment correlation statistical procedure to determine its reliability and it had an r-value of 0.79. This showed that the instrument was reliable since the r-value was higher than 0.70.

Treatment Procedure

Step I: Pre-Testing

The two groups were pre-tested on the first two days using the Adolescent's Depression Scale (ADS) questionnaire.

Step II: Treatment Packages

(a) Sensitization of the students in Group A using the Cognitive Behavioural Therapy.

In order to sensitize the experimental group using the cognitive behavioural therapy, the counsellor took the experimental group students through the following sessions.

Session 1: In this session, the following sub-heading were discussed: the concept of Cognitive Restructuring Therapy (CDT).

Session 2: These sub-heading were discussed: Key Rules of CDT, and The Basic Tenets That Inform Cognitive Behavioural Therapy.

Session 3: These sub-headings were discussed: the Process of Cognitive Behavioural Therapy, Rules of Cognitive Behavioural and The Therapeutic process

Session 4: These sub-headings were discussed: the Techniques that help clients imagine the possible, Format And Session Structure For Cognitive Behavioural Therapy

Session 5: These sub-headings were discussed: Building client self-helpfulness with Positive exceptions and finally,

Session 6: Depression and factors contributing to depression and all questions raised were answered.

Step III: **Post-test**

Control of Extraneous Variables

They are those factors which could confound and influence the findings of the study which could pose serious threats to the internal validity of an experimental design if not controlled. The researcher emphasized confidentiality among students throughout the treatment sessions to minimize contaminations.

In this study, the extraneous variables that might contaminate the study were identified and were controlled as follows:

Attrition/Experimental Mortality

The researcher controlled this by discussing with the students and agreed on a convenient time of meeting before the treatment session commenced. The participants were encouraged and sensitized to be punctual and regular to all session. To further reduce the chance of this error, participants were informed of regular refreshment throughout the periods of meeting.

Subject Bias

The participant's perception of the nature of the study can affect the outcome. This was controlled by not revealing the nature of the experiment to the participants. They did not know whether they were in the treatment or control group.

Experimental Expectancy Effects

There is no doubt that the researcher has some ideas about how participants responded to the experiment. These expectations altered the result of the interpretation of the behaviour of the participants. To reduce this bias, a standard pattern was used in presenting the different treatment packages and detailed explanation of questions on the various treatment packages was used.

Experimenter Bias

The nature and techniques the researcher used in the presentation of the treatments to students might bring about bias on the researcher's part and this would affect the result of the study. To control for this, the researcher strictly followed the treatment package designed for each of the groups.

Administration of Instruments

The instrument titled "The Adolescent's Depression Scale Questionnaire (ADSQ) was administered as pre-test, followed by the treatment. The experimental groups was treated by the researcher in school A to avoid subject interaction with the students in the control group in school B. And at the end of the treatment, both the experimental and the control groups were post tested using the same questionnaire by the researcher and the completed questionnaire were collected instantly.

Method of Data Analysis

In analyzing the data collected, the scoring of the items follows thus: Positive worded items in the instrument were scored 5.4.3.2.1 on the scale while negative worded items were scored 1.2.3.4.5 on Completely true of me (CTM), Mostly true of me (MTM), Partly true of me (PTM), Mostly untrue of me (MUM) and Completely untrue of me (CUM) respectively. There are twenty (20) items on scale. If a respondent rates himself 5 on every item, the maximum of one hundred scores would be recorded and this would represent the lowest level of depression. Scores of 45 and above represented low level of depression while scores below 45 represented high level of depression.

In analyzing the data collected, all research questions were answered using the descriptive statistics of mean, standard deviation and percentage count while all the hypotheses were tested using the students' independent t-test Statistics at 0.05 alpha level of significance.

III. Data Analysis and Results

Research Question 1: Is there a difference in the level of depression of adolescents in the experimental and control groups before treatment?

Table 1: showing the descriptive statistics of difference in the level of depression of adolescents in the experimental and control groups before treatment

The summary of the result is presented in table 1

GROUPS	N	SD	Mean	Mean Difference
EXPERIMENTAL	50	1.41	22.78	0.06
CONTROL	48	1.37	22.72	

Table 1 above showed that the students in the experimental group had depression mean score of 22.78 with standard deviation of 1.41 while the those in the control group had depression mean score of 22.72, standard deviation of 1.37 with a mean difference of 0.06 in favour of the students in the experimental group. It can be concluded from the table therefore, that, there is a difference in the level of depression of adolescents in the experimental and control groups before treatment, however, the experimental group had the higher depression mean score than their counterparts in the control group before treatment administration.

Research Question 2: Is there a difference in the level of depression of adolescents in the experimental and control groups after treatment?

Table 2: showing the descriptive statistics of difference in the level of depression of adolescents in the experimental and control groups after treatment

The summary of the result is presented in table 2

GROUPS	N	SD	Mean	Mean Difference
EXPERIMENTAL	50	3.32	46.90	23.96
CONTROL	48	1.62	22.93	

Table 2 above showed that the students in the experimental group had depression mean score of 46.90 with standard deviation of 3.32 while those in the control group had depression mean score of 22.93, standard deviation of 1.62 with a mean difference of 23.96 in favour of the students in the experimental group. It can be concluded from the table therefore, that, there is a difference in the level of depression of adolescents in the experimental and control groups after treatment, however, the experimental group had the higher depression mean score than their counterparts in the control group after treatment administration.

Research Question 3: Is there a difference in the level of depression between male and female adolescents in the experimental after treatment after treatment?

Table 3: showing the descriptive statistics of difference in the level of depression between male and female adolescents in the experimental after treatment

The summary of the result is presented in table 3

GENDER	N	SD	Mean	Mean Difference
MALE	27	2.87	46.29	1.31
FEMALE	23	3.72	47.60	

Table 3 above showed that the male students in the experimental group had depression mean score of 46.29 with standard deviation of 2.87 while female students in the same group had depression mean score of 47.60, standard deviation of 3.72 with a mean difference of 1.31 in favour of the female students in the experimental group. It can be concluded from the table therefore, that, there is a difference in the level of depression of male and female adolescents in the experimental after treatment, however, the female had the higher depression mean score than their male counterparts in the group after treatment administration.

Research Question 4: Is there a difference in the level of depression of adolescents in the experimental group after treatment based on age?

Table 3: showing the descriptive statistics of difference in the level of depression of adolescents in the experimental group after treatment based on age

The summary of the result is presented in table 4

AGE	N	SD	Mean	Mean Difference
12-15 Years	24	3.33	47.16	0.51
16 Yrs and Above	26	3.36	46.65	

Table 4 above showed that the students in the experimental group within the age range of 12 -15 years had depression mean score of 47.16 with standard deviation of 3.33 while those of 16years and above in the same group had depression mean score of 46.65, standard deviation of 3.36 with a mean difference of 0.51 in favour

of those within the age range of 12 -15 years in the group. It can be concluded from the table therefore, that, there is a difference in the level of depression of adolescents in the experimental group after treatment based on age. However, the students within the age range of 12 -15 years had the higher depression mean score than their counterparts of 16 years and above in the group after treatment administration.

Testing of Hypotheses

1. There is no significant difference in the level of depression of adolescents in the experimental and control groups before treatment.

The summary of the test of this hypothesis is presented in table 5

Table 5: t-test statistics on the difference in the level of depression of adolescents in the experimental and control groups before treatment

GROUPS	N	t	Mean	Mean diff.	df	Sig.(2-tailed)	Decision
EXPERIMENTAL	50	0.18	22.78	0.06	96	0.85	Accept Ho
CONTROL	48		22.72				

Table 5 shows that the observed difference in the level of depression of adolescents in the experimental and control groups before treatment is not significant at 0.85 ($t = 0.18$; $df=96$). Since 0.85 is higher than 0.05, the observed difference in the level of depression of adolescents in the experimental and control groups before treatment is not significant. With this, the null hypothesis which says there is no significant difference in the level of depression of adolescents in the experimental and control groups before treatment is accepted. This showed that there is no significant difference in the level of depression of adolescents in the experimental and control groups before treatment among secondary school students in Ikpoba-Okha Local Government Area of Edo State.

2. There is no significant difference in the level of depression of adolescents in the experimental and control groups after treatment.

The summary of the test of this hypothesis is presented in table 6

Table 6: t-test statistics on the difference in the level of depression of adolescents in the experimental and control groups after treatment

GROUPS	N	t	Mean	Mean diff.	df	Sig.(2-tailed)	Decision
EXPERIMENTAL	50	44.98	46.90	23.96	96	0.00	Reject Ho
CONTROL	48		22.93				

Table 6 shows that the observed difference in the level of depression of adolescents in the experimental and control groups after treatment is significant at 0.00 ($t = 44.98$; $df=96$). Since 0.00 is less than 0.05, the observed difference in the level of depression of adolescents in the experimental and control groups after treatment is significant. With this, the null hypothesis which says there is no significant difference in the level of depression of adolescents in the experimental and control groups after treatment is not accepted. This showed that there is a significant difference in the level of depression of adolescents in the experimental and control groups after treatment among secondary school students in Ikpoba-Okha Local Government Area of Edo State.

3. There is no significant difference in the level of depression between male and female adolescents in the experimental group after treatment.

The summary of the test of this hypothesis is presented in table 7.

Table 7: t-test statistics on the difference in the level of depression between male and female adolescents in the experimental after treatment

GENDER	N	t	Mean	Mean diff.	df	Sig.(2-tailed)	Decision
MALE	27		46.29				
		-1.40		1.31	96	0.16	Accept Ho
FEMALE	23		47.60				

Table 7 shows that the observed difference in the level of depression between male and female adolescents in the experimental group after treatment is not significant at 0.16 ($t = -1.40$; $df=96$). Since 0.16 is higher than 0.05, the observed difference in the level of depression between male and female adolescents in the experimental group after treatment is not significant. With this, the null hypothesis which says there is no significant difference in the level of depression between male and female adolescents in the experimental group after treatment is accepted. This showed that there is no significant difference in the level of depression between male and female adolescents in the experimental group after treatment among secondary school students in Ikpoba-Okha Local Government Area of Edo State.

- There is no significant difference in the level of depression of adolescents in the experimental group after treatment based on age.

The summary of the test of this hypothesis is presented in table 8.

Table 8: t-test statistics on the difference in the level of depression of adolescents in the experimental group after treatment based on age

AGE	N	t	Mean	Mean diff.	df	Sig.(2-tailed)	Decision
12-15 Years	24		47.16				
		-0.54		0.51	96	0.59	Accept Ho
16 Yrs And Above	26		46.65				

Table 8 shows that the observed difference in the level of depression of adolescents in the experimental group after treatment based on age is not significant at 0.59 ($t = 0.54$; $df=96$). Since 0.59 is higher than 0.05, the observed difference in the level of depression of adolescents in the experimental group after treatment based on age is not significant. With this, the null hypothesis which says there is no significant difference in the level of depression of adolescents in the experimental group after treatment based on age is accepted. This showed that there is no significant difference in the level of depression of adolescents in the experimental group after treatment based on age among secondary school students in Ikpoba-Okha Local Government Area of Edo State.

Summary of Findings

Four significant findings are obtained from this study and these include that:

- there is no significant difference in the level of depression of adolescents in the experimental and control groups before treatment among secondary school students in Ikpoba-Okha Local Government Area of Edo State.

there is a significant difference in the level of depression of adolescents in the experimental (those exposed to CBT) and control groups after treatment among secondary school students in Ikpoba-Okha Local Government Area of Edo State. This finding is in agreement with the findings of Haoyao, Hualai, Shengjun, Xiaochen, Yongqing, Fengian and Jinchang (2019) who examined the efficacy of cognitive behavioral therapy to treat depression and anxiety and improve quality of life among early-stage breast cancer patients and found improvement in anxiety was observed in patients treated with CBT and Del and O'Leary, (2004) and Saini, (2009) who carried out two meta-analyses and the findings from these meta-analyses suggested that CBT is moderately effective at reducing anger problems. Also, Arto J. Hiltunen, Elo Kocys, and Renée Perrin-Wallqvist (2013) investigated the effectiveness of cognitive behavioral therapy to examine the levels of symptom change and satisfaction with therapy in a heterogeneous population of clients treated using cognitive behavioral therapy (CBT) by less experienced trainee therapists with limited theoretical education. The results suggested a statistically significant reduction in symptoms, measured using the Symptoms Checklist. In the study of Beattie S. and Beattie D. (2018) into the efficacy of a cognitive behavioural therapy group for low self-esteem in a primary care setting and they found that there were statistically significant improvements in levels of depression, anxiety and self-esteem post-treatment. However, this finding is in contrast with the findings of Miller & Berman, (1983) who assessed the effectiveness of cognitive behavior therapies and found that cognitive behavior therapies were superior to no treatment; there was no firm evidence that these therapies were superior to other psychotherapies. Analyses failed to find cognitive behavior therapies emphasizing behavioral

techniques to be more effective than primarily cognitive approaches. There was no evidence that sex or age of patient, experience of therapist or even duration of therapy were related to treatment effects.

It is also found that there is no significant difference in the level of depression between male and female adolescents in the experimental group after treatment among secondary school students in Ikpoba-Okha Local Government Area of Edo State and finally, it is found that there is no significant difference in the level of depression of adolescents in the experimental group after treatment based on age among secondary school students in Ikpoba-Okha Local Government Area of Edo State.

Conclusion

It can be concluded from the study that Cognitive Behavioural Therapy (CBT) is effective in the reduction of depression among secondary school students in Ikpoba-Okha Local Government Area of Edo State.

Recommendation

Based on the findings therefore, it is recommended that counsellors should employ cognitive behavioural therapy in the treatment of depression so to enable students to achieve their maximum potential in life.

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