

# ACTIVITY SCHEDULE AND ANTICIPATION TRAINING AS COUNSELLING STRATEGIES IN MANAGING MILD-DEPRESSION AMONG NIGERIAN ADOLESCENTS

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## ABSTRACT

This study investigated the impact of Activity Schedule and Anticipation Training as counselling strategies in managing mild depression among Nigerian adolescents. Six Senior Secondary Schools were randomly selected from three Education Districts in Lagos State. The total population of SS 2 students available for the study in the six schools was 2,982. To select the participants for the study, The Self-Rating Depression Scale (SDS) was administered to assess the cognitive, affective, psychomotor, somatic and social interpersonal dimensions of depression in the students. The SDS has a test-retest reliability coefficient of 0.93, showing good stability. After the baseline assessment, the total sample for the study comprised 96 participants. The sample accommodated all the characteristics of participants in terms of age and gender from the senior secondary schools chosen for the study. The two counselling techniques (Activity Schedule AS and Anticipation Training AT) were effective in managing mild depression (lack of concentration, feelings of guilt and worthlessness, persistent sad and empty moods). There was no significant gender difference in the post-test scores of participants across the three experimental conditions.

**Key words: Mild depression, Activity Schedule Therapy and Anticipation Training Strategy**

## INTRODUCTION

Adolescence, the transition period from childhood to adulthood, is a stage that is characterized with emotional instability. Adolescents tend to experience stress, as they get conflicting messages; have conflicts within the family and school with difficulties in establishing self-identity

and self-esteem. It is a period of increased thinking, emotionality and mood swings ranging from depression to the height of elation (Nair, Paul & John 2004). Adolescents hardly schedule their activities, yet they would like to engage in a thousand and one tasks at the same time. Muddled up activities often produce negative results.



Continuous failure may result in pessimistic anticipation of events by the affected teens.

The most turbulent state of human development is agreeably the adolescent stage. The adolescent is characterized by identity crisis, aggressive, hostile and manifest destructive behaviour (Nwadinigwe, 2004). The problems of Nigerian adolescents cannot be overemphasized. Apart from being the most difficult of the stages of development, the challenges in every area of the nation adds more to the burden of this important group of the society. It may lead to a pessimistic anticipation of future events. Some may even think that life is not worth living or worth the effort to even maintain their appearance or hygiene.

Depression according to Khan (1995) is an illness when the feelings of sadness, hopelessness and despair persist and interfere with an individual's ability to function. Though the term "depression" can also be described as a normal human emotion, it also can refer to a mental health illness. Depressive illness in children and teens is defined when the feelings of depression persist and interfere with the child or adolescent's ability to function. Adolescent depression is a mood condition occurring during the teenage years marked by persistent sadness, discouragement, loss of self worth and loss of interest in usual activities.

Depression can be disabling to the point where the depressed

adolescent can no longer function in the daily rigors of life. Absence from school is common, for the severely depressed individual does not have enough energy or motivation to participate in or enjoy previously pleasant events (Comer, 1992). Life can be a lonely experience for depressed adolescents. Their sense of humour is lost and they seldom smile. They are often tired from either too little or too much sleep. They are continually having intense feelings of shame and guilt because they believe that everything that goes wrong is their fault. Feelings of inadequacy may eventually lead to feelings of hopelessness. Due to their negative anticipation of events, they believe nothing can go right and nothing will ever improve. While some depressives may shy away from family and friends, some display an overdependence on others. When they are shunned by those they depend on, they become even more depressed (Schwartz & Schwartz, 1993).

Fridolin (1983) stated that it has been well established that, regularly administered most antidepressant treatment-pharmacotherapy and electroconvulsive therapy (ECT)-reduce the sensitivity of the sensitive adenylyate cyclase in the brain linked to the down-regulation of the beta andreceptor subpopulation. The negative side effect of the antidepressant drugs cannot be overemphasized. In his report, Baldessarini (1984) affirms that the therapeutics of major depression has been dominated by agents and theories

based on neurotransmission. All effective antidepressants have transmission-en-

What this alone cannot depression though depended for too drugs. If some anxiety or stress comparable value correct the situation psychotherapy v help for people in

In looking to this psychology Nigerian adolescents interested in the strategies as against drugs. While debilitating condition treatment rate is as many as 85 percent depressives who better (Fritz, 1991) the therapist acting depressed. He counselling techniques available views (example in dealing client, there should regular emphatic in time as this will someone is taking seriously and this feeling that the co The therapist to help the client



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based on monoamine neurotransmission in the central nervous system (CNS) and that virtually all effective medical treatment for depression have important monoamine transmission-enhancing effects.

What this implies is that drugs alone cannot totally eliminate depression though many people have depended for too long on antidepressant drugs. If someone is suffering from anxiety or stress, there are no drugs of comparable value to ease or totally correct the situation. Additionally, psychotherapy would be of immense help for people in this category.

In looking for possible solutions to this psychological problem of the Nigerian adolescent, the researchers are interested in the use of counselling strategies as against antidepressant drugs. While depression can be a debilitating condition, successful treatment rate is encouragingly high. As many as 85 percent to 95 percent of depressives who seek treatment get better (Fritz, 1995). Psychotherapy has the therapist acting as a confidant to the depressed. He often employs counselling techniques from the available views of depression. For example in dealing with a depressed client, there should be assurance of a regular emphatic hearing up to a point in time as this will create the feeling that someone is taking their condition seriously and this will facilitate the feeling that the condition is explicable.

The therapist can act as a catalyst to help the client understand their

problems clearly and explore possible solutions (Olusakin, 1990).

Attempts made before now, in addressing depression among Nigerian adolescents, were done in Psychiatric Hospitals for adolescents who have severe depressive symptoms. This condition often requires admission into the hospitals as the depressed cannot function efficiently in any task.

It is against this background that a need arises to try out intervention measure to manage mild depression-as characterized by increase in feelings of guilt, worthlessness, reduced concentration, indecision, memory loss, apathy, low self-esteem and difficulty in concentration among Nigerian adolescents.

### Hypotheses

The following hypotheses gave direction to the study:

1. There will be no significant difference in the post-test depression scores of participants across Activity Schedule, Anticipation Training and Control groups.
2. There will be no significant gender difference in the post-test depression scores of participants across the three experimental conditions.

### Method

#### Research Design

The research design used for this study was a 3 X 2 factorial design. The two



treatment strategies, Activity Schedule and Anticipation Training, as well as the control group made up the 3 rows. The two columns are made up of two levels

of male and female students. There were consequently six groups consisting of four treatment and two control groups

**Table 1: Distribution of**

### Participants by Experimental Condition and Gender

EXPERIMENTAL GROUP	GENDER		TOTAL
	MALE	FEMALE	
ANTICIPATION TRAINING	16	16	32
ACTIVITY SCHEDULE	16	16	32
CONTROL	16	16	32
TOTAL	48	48	96

### The Study Area

The study was carried out in Lagos State. Adolescents from secondary schools in Education Districts 11, 111 & 1V constitute the sample. As the economic capital of Nigeria, there are some unique features that easily predispose adolescents to depression in Lagos State. Some of these are:

- High cost of living
- Absence or fluctuating social services like water, electricity,
- Unemployment
- Reckless display of affluence by the rich

### Sample and Sampling Technique

Participants for the study were drawn from three randomly selected Education

Districts, out of the six, in Lagos State. The hat and draw method was used to select the three districts. Two senior secondary schools were thereafter randomly selected from each Education District. The schools were selected through the table of random sampling method.

The Self-Rating Depression Scale was administered on all available 2,982 (SS II) students in the selected schools to identify mildly depressed teens (These were participants with a score of 40 and above in the Self-Rating Depression Scale). Secondly, the students were stratified into male and female before the random sampling method was employed to select the 96 students (48 males and 48 females) for the study.

### Instrumentation

Two major instruments were used to obtain relevant data for the study:

1. Self-Rating Inventory (SDS)
2. Depression Inventory (DI)

### Self-rating Depression Scale (SDS)

This is a 20 item instrument developed by Zung (1982) for participants to rate themselves on a four-point scale. It is a specifically designed instrument to measure cognitive, affective, somatic and social dimensions of depression. It provided the origin and properties for American samples. Obiora (1995) provided data for Nigerian samples.

The internal consistency of the scale was 0.85 for the two studies; and the reliability coefficient was 0.85 for good stability (Obiora, 1995). The coefficient of concurrence was obtained by Zung (1982) for Nigerian samples, the coefficient was 0.85 obtained by Obiora (1995) and 47.87 for males and 47.87 for females respectively.



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### **Depression Inventory (DI)**

This 22 item questionnaire was adapted from Weissman & Paykel's (1974) The instrument has a test-retest reliability of 0.89. This inventory, administered on the participants on pre-test post-test levels was useful in evaluating the outcome of the treatments on the participants.

### **Data Analysis and Result**

The data collected from the two instruments was analyzed with ANCOVA. The level of significance was determined at 5% level.

### **Hypothesis 1:**

**There will be no significant difference in the depression scores of participants in the three experimental conditions.**

Analysis of Covariance was utilized. In the ANCOVA analysis, the independent factor was experimental condition; the dependent variable was post-test depression scores, while the pre-test depression scores were entered as covariate. The results of the analysis relating to this hypothesis are presented in Tables 2 and 3.



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**Table 2: Descriptive Statistics of Pre and Post-test Depression Score difference across the Experimental conditions with ANCOVA Test of between Subjects Effect.**

Group Difference	N	Pre-test Scores		Post-test Scores		Mean SD
		Mean	SD	Mean	SD	
Activity Schedule	32	39.46	9.61	26.25	3.59	13.21
Anticipation Training	32	41.06	7.22	26.03	2.85	15.03
Control Group	32	41.19	5.83	38.84	7.20	2.35
Total	96	40.57	7.55	30.38	7.75	10.19
Source	SS	df	MS	F		
Corrected Model	3465.01(a)	3	1155.00	47.53*		
Covariate	21.69	1	21.69	0.89		
Exptal Condition	3357.95	2	1678.98	69.10*		
Error	2235.50	92	24.99			
Total	94274.00	96				

a R Squared = .608 (Adjusted R Squared = .595)

\*The mean difference is significant at the .05 level.

Table 2 shows a pre-test grand mean of 40.57 (SD=7.55) as against 30.38 (SD=7.75) obtained at post-test thus yielding a pre-test post-test mean difference of 10.19. a disaggregation according to experimental conditions shows a pre-test post-test mean difference of 13.21 for the Activity Schedule Group, 15.03 for the Anticipation Training Group and 2.35

for the Control Group. The computed  $(2, 92) = 69.10$ ,  $P < 0.05$  for experimental condition was statistically significant at the 5% level, thus suggesting that the treatment conditions were effective in reducing mild depression among adolescents. To determine where the significant differences lie, pair wise comparisons were performed with the following results;



**Table 3: Least Significant Difference (LSD) Pair wise Comparisons of Depression Score Difference in Depression Level of Participants across Groups of between**

	1) Treatment Groups	(J) Treatment Groups	Mean Difference (I-J)	Std. Error	Sig. <sup>a</sup>
<b>Mean SD</b>	Activity Schedule	Anticipation Training	.39	1.25	.76
	Activity Schedule	Control	12.41*	1.25	.00
	Anticipation Training	Control	12.80*	1.23	.00

based on estimated marginal means the mean difference is significant at the 5 level.

**F** adjustment for multiple comparisons

an inspection of the p-values shows that both activity schedule and anticipation training strategies differ significantly ( $p < 0.05$ ) from the control group. The two treatment groups were however indifferentiated. It means that the two treatment groups are homogeneous. This result means that the two

treatment conditions were effective in the reduction of mild depression among Nigerian adolescents.

Hypothesis Two: There will be no significant gender difference in the post-test depression scores of participants across the three experimental conditions.

For this hypothesis, participants were categorized into Male and Female gender. The participants included 16 Male and 16 Female for each of the treatment groups.

**Table 4: Descriptive Statistics of Participants' Pre and Post-test Depression Scores by Gender Across the Experimental Conditions.**

GROUP	GENDER	N	PRE-TEST		POST-TEST		MEAN DIFF.
			MEAN	SD	MEAN	SD	
ACTIVITY SCHEDULE	MALE	16	40.19	4.51	25.75	3.02	14.94
	FEMALE	16	39.81	3.59	26.75	4.12	13.06
	TOTAL	32	39.48	3.94	26.25	3.59	13.23
ANTICIPATION TRAINING	MALE	16	41.13	3.58	26.12	3.46	15.01
	FEMALE	16	40.75	3.97	25.94	2.18	14.81
	TOTAL	32	40.94	2.10	26.03	2.85	14.91
CONTROL	MALE	16	39.06	7.66	39.31	7.11	-0.25
	FEMALE	16	43.56	6.73	38.38	7.49	5.18
	TOTAL	32	41.76	7.08	38.84	7.20	2.92
TOTAL	MALE	48	34.79	6.54	30.40	7.97	4.39
	FEMALE	48	35.38	5.77	30.35	7.60	5.03
	TOTAL	96	40.72	6.09	30.38	7.75	10.34



The descriptive data presented above indicates that the three groups were similar before the treatment, with respective mean scores ranging between 39.48 and 40.19. At post test however, male participants in anticipation training group, with 15.01, recorded the most reduction in means

followed by male participants in Active Schedule group with mean difference 14.94. The control group recorded insignificant reduction in the mean scores with a mean difference of 2.92. To show whether these differences were significant, ANCOVA results in table 5 is displayed

**Table 5: ANCOVA Results of Gender Difference in the Post-test Scores of Participants Across the Experimental Conditions.**

Source	Sum of Squares	df	Mean Square	F
Model	3482.29 <sup>a</sup>	5	580.38	23.27*
Covariate	23.67	1	23.67	.95
Exptal Condition	3353.40	2	1676.70	67.27*
Gender	.00	1	.00	.00
Exptal Cond. vs Gender	17.28	2	8.64	.35
Error	2218.21	89	24.92	
Total	94274.00	96		

$$^a R^2 = .61 \text{ (Adjusted } R^2 = .59)$$

**The mean difference is significant at the .05 level.**

The results displayed above showed F to be significant at 0.05 level for the experimental conditions. F-cal 67.27 is greater than F-critical (2/89) at  $P < 0.05$ . The gender effect alone is insignificant with calculated F-value of .000 given the critical F-value of 3.94 at 1 and 89 degrees of freedom. The null

hypothesis is thereby accepted and concluded that there was no significant gender effect in the post test scores of participants across the experimental conditions.

### Discussion

Hypothesis 1 tested the difference in the post-test depression scores of participants across Active Schedule, Anticipation Training

control groups. The significant difference in the efficacy of Anticipation Training outcome agrees with what was stated that reinforcement is physically involving the participant or stimulus contingent upon a response which increases the probability that the response will occur.

The result is as reported by (Gross, 1973) that both Anticipation Training and Active Schedule were found to have a significant effect on the treatment of depression. The outcome is also consistent with (Gross, 1973) when it was found that depression can be treated successfully under this condition, successfully high. In fact, as many as eighty five percent of depressed participants got better.

Hypothesis two was that there will be no significant difference in the post-test scores of participants across the experimental conditions. The hypothesis was rejected because of the significant covariance.

As shown in the results, male participants in the Active Schedule group with 15.69 recorded the most reduction in mean scores. Male participants in Anticipation Training group with a mean difference of 14.94, followed by male participants in Active Schedule, Anticipation Training



participants in Activity Schedule and Anticipation Training groups. Results revealed a significant difference in the mean post-test scores between the two groups. This outcome agrees with Kahn (1995) who stated that reinforcement operations basically involving an environmental event or stimulus consequence that is contingent upon a particular response increases the probability that the response will occur again.

#### Post-Test Scores

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accepted as no significant difference in the post-test scores between the two experimental groups.

tested the null hypothesis that there was no significant difference in the post-test scores between the two experimental groups.

control groups. Results revealed a significant difference. This is a proof of the efficacy of Activity Schedule and Anticipation Training strategies. This outcome agrees with Kahn (1995) who stated that reinforcement operations basically involving an environmental event or stimulus consequence that is contingent upon a particular response increases the probability that the response will occur again.

The result is also in line with the one reported by Lewinson and Graf (1973) that both Activity Schedule and Anticipation Training strategies have been found to have significant effect on the treatment of depression generally. The outcome is also in agreement with Litvitz (1995) when he stated that while depression can be a debilitating condition, successful treatment rate is encouragingly high. This is because as many as eighty five and ninety five percent of depressives who seek treatment get better.

Hypothesis two which stated that there will be no significant gender difference in the post-test scores of participants across the three experimental conditions was accepted. The hypothesis was tested using analysis of covariance.

As shown in the analysis, male participants in the Anticipation Training group with 15.69 recorded the most reduction in mean followed by male participants in activity schedule group with a mean difference of 14.94. However, when the main post-test scores

of both gender were compared, female participants had a lower mean post-test score than the males. The calculated F value of .000 as shown in table 12 was found to be insignificant.

The result disagrees with Nystul (1995) who found out that girls have higher self-concept than males; have a more positive feeling about their identity than males and have less basic personality defects and weaknesses with less tendency to avoid reality than males.

The result is against the views of Coleman & Hendry (1990) when they concluded that. "... Although it has not been shown that these behaviours trigger depression, it may be that screening for substance abuse and other behaviours in teens may provide enough information to the health care provider to also warrant screening for depression, particularly for girls," "Both substance abuse and sexual activity may alter a girl's social context, which could induce stress and or change self-perceptions which could contribute to depression. In addition, there may be differences in how boys and girls physically respond to substance abuse that help explain the gender differences".

#### Conclusion and Recommendations

Findings of this research work confirm the effectiveness of Activity Schedule and Anticipation Training as counselling strategies in managing mild depression among Nigerian adolescents.



Activity Schedule used in this study entails restoring an adequate schedule of positive reinforcement for the depressive by altering the level, the quality and the range of his/her activities and interactions. This could be in form of reinforcement given not only continuously after each response but intermittently on various schedules in terms of time intervals that must elapse before reinforcement or in terms of the number of responses per reinforce or ratio schedules.

In Anticipation Training, the researchers emphasized the deliberate anticipation of positive consequences by a depressive to alleviate the gloomy attitude and lighten the sad mood. It is recommended that:

1. Counsellors in training should be introduced to the practice of Activity Schedule and Anticipation Training strategies which should be integrated into the curriculum of the trainers. It is very crucial as on completion of their courses some of them would in most cases be placed in charge of people with psycho-social problems and will benefit from having access to the operation of the two treatment strategies.
2. Parents/teachers should adequately reward their wards and students' success and see that their failures are effectively corrected. From the psychological point of view, motivation is vital in anything one does including academics.

Therefore students should be well motivated to learn and reinforced when the performance is satisfactory. Their activities should be appropriately scheduled for optimum performance. This is because the future of the country depends on the wellbeing of the adolescents and therefore in ability and willingness of parents and non-parents to provide them.

## References

- Baldessarini, R. J. (1984). Treatment of depression by altering monoamine metabolism preclusions and metabolic inhibition. *Psychopharmacology Bulletin*, 224-23.
- Coleman, J. C. & Hendry, B. (1990). *Nature of Adolescence*. London: New York: Routledge.
- Comer, R. J. (1992). *Abnormal psychology*. New York: W. Freeman & Company.
- Fridolin, S. (1983). Molecular mechanism in antidepressant action. *Psychopharmacology bulletin*, 19 (3), 300-304.
- Fritz, G. (1995). Child adolescent depression distinct from the adult version. *The Brown University Child and Adolescent Behavior Letter*, 11, 1-3.
- Khan, J. (1995). An overview of the University of Lagos. *Prevalence of adolescent depression in Nigeria* [serial online], 523-524.
- Nwadinigwe, I. (1995). The role of fathers in the orientation of adolescents. *Shomolu Journal of Education*, 111-126.
- Nystul, M. S. (1995). The size of the achievement gap in behavior.



- 76, 1241-2.
- Khan, J. (1995). Adolescent depression: an overview. Salt Lake City: University of Utah Press.
- Obiora, M. E. (1995). Incidence, psychological assessment and treatment of childhood depression. Unpublished manuscript, Department of Psychology, University of Lagos.
- Nair M. K., Paul M. K., John R. (2004) Prevalence of depression among adolescents. *Indian J Psychiatry* [serial online] [cited 2007 Mar 23]; 523-524.
- Olusakin, A. M. (1990). Activity schedule and anticipation training strategies in the management of depression among Nigerian women. Unpublished Ph D. Thesis University of Ibadan.
- Nwadinigwe, I. P. (2004). The influence of fathering style on social orientation of adolescents in Shomolu L. G. A. of Lagos State. In E. O. Obe & G. C. Ilogu (Eds.) *Lagos Journal of Education Research*. 2 (1), 111-126.
- Schwartz, A. & Schwartz, R. (1993). *Depression: theories and treatments*. New York: Gardener Press.
- Zung, W. K. (1982). *The clinical measurement package: A field manual*. Chicago: Dor
- Adolescents should be encouraged to learn and enhance the performance of their activities. Their activities should be appropriate for optimum development. This is because the country depends on the performance of the adolescents and therefore in the willingness of parents to provide appropriate supervision and guidance.
- 84). Treatment of adolescent depression: a review of the literature. *Journal of the American Academy of Child and Adolescent Psychiatry*. 33 (1), 1-10.
- 92). *Abnormal psychology*. New York: W. H. Freeman & Co.
- 93) Molecular biology of depression. *Journal of Molecular Psychiatry*. 10-304.
- Child adolescents with depression: a review of the literature. *Journal of the American Academy of Child and Adolescent Psychiatry*. 33 (1), 1-10.
- Brown University. *Adolescent Behavior*. 10-304.