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Effects of Acceptance-Commitment Therapy and Social Skills Training on Depression of Adolescent Students from Father-Absent Families in Lagos State

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Abstract. The home provides the initial training for the child and the parents act as models for their children since the process of socialization depends on both parents playing complementary roles in bringing up the child. However, some socialization difficulties are encountered where these models are missing due to death, divorce, separation or abandonment. Adolescents from father absent households manifest a number of internalizing and externalizing problem behaviour, including sadness, depression, delinquency, anxiety, interpersonal difficulties and low self-esteem. Thus, this study investigated the effects of Acceptance-Commitment Therapy (ACT) and Social Skills Training (SST) on depression of adolescent students from father-absent families. The research work was hinged on Relational frame theory (RFT) and Social Learning theory. Quasi-experimental pre-test/ post-test group design was used for the study. The population of the study comprised all Senior Secondary two (SS11) students in Lagos state. Simple random sampling was used to select a sample size of 157 Senior Secondary two students comprising of eighty two (82) males and seventy five (75) females. The instruments used to obtain relevant data for the study were Kessler Psychological Distress Scale (K10), Father-Absence Questionnaire (FAQ) and The depression, anxiety and stress scale (DASS). Two research questions were raised and two research hypotheses were generated to guide the study. The pre-test and post test scores were analysed using Analysis of Covariance (ANCOVA) at 0.05 level of significance. The study revealed that Acceptance-Commitment Therapy and Social Skills Training significantly reduced depression among adolescents from father-absent families. It was also revealed that gender did not have any significant impact on depression of the participants in the experimental groups. In the light of the study`s results, the researchers presented a number of recommendations and proposals the most important of which are: There should be awareness and enlightenment workshops and campaigns for parents on the effects of father absence on the increasing risk of depression resulting to escalating rate of suicide among adolescents in secondary schools. The Ministry of education and other stakeholders should provide counselling centers equipped with materials for Acceptance-Commitment Therapy and other psychological therapies used in the treatment of depression as an integral and functional part of primary health care centres.

Keywords: Acceptance-Commitment Therapy, depression, Social Skills Training, Adolescent students, father-absent family, gender.

1. Introduction

1.1 Background to the Study

Traditional definition of a nuclear family is a family unit that includes two married parents of opposite genders and their biological children living in the same residence. Each component part has a unique role to play especially in the overall development of their offspring. The family functions as a system in which each component part acts on the others. Family environments constitute the basic ecology where children's behaviour is manifested, learned, encouraged and suppressed (Dishion & Patterson, 2006). In the words of Osarenren (2002), the manifestation and enhancement of traits and dispositions a child is born with, hinge on the kind of environment the child grows in. Omoegun (2004) posited that a child is first of all the product of his immediate environment, which is the family.

However, Almond (2006) believed that the family is fragmenting. She argued that there has been a shift away from concern with the family as a biological institution based upon the rearing of children, towards the family as an institution which emphasizes two people in emotional need or desire for one another. There is an increased emphasis on the needs of individuals and less emphasis on society's need for the rearing of children in stable relationships. This traditional structure of the family is facing challenges as evidenced by low marriage rates, high divorce rates, same-sex marriages, polygamy and migration to the cities for better job opportunities and life (Mabusela, 2014). This is a threat to the marriage, which is the bedrock of a stable and civilized society and of all nations (Makinde, 2004). Families are among the strongest socializing forces in life (Wright & Wright, 1994). They teach children to control unacceptable behaviours, to delay gratification and to respect the rights of others. Conversely, the families can teach children aggressive, anti-social, violent behaviours and other forms (Wright & Wright, 1994). This statement alone could explain how the juvenile may end up becoming a delinquent. When the emotional climate at home is questionable, the children's emotional development will be fixated and distorted which can lead to cases of delinquency (Makinde, 2004). The home provides the initial training for the child and the parents act as models for their children since the process of socialization depends on both parents playing complementary roles in bringing up the child (Azuka-Obieke, 2013).

Moreover, socialization difficulties are encountered where these models are missing due to death, divorce, separation or abandonment. Some families now consist of more than one adult of blood relation, with or without children, mothers or children head other families as the father becomes the absent parent or family member (Mabusela, 2014). Families are now defined by relations and not by their constituency. There is no satisfying substitute for a mother or a father because it is often argued that troubled homes are more likely to produce troubled children. These alterations (such as father absence among others) in our society have weakened the ability of families to successfully raise children. Fathers are absent in nearly a third of the household in most of the African countries and from more than half of all households in Namibia and South Africa (Mabusela, 2014). It is evident that there is significant number of absent fathers and the number is not static, it is steadily increasing not only nationally but internationally. In developing societies including Africa, adolescents from father-absent homes tend to be stubborn, depressed, angry and violent in behaviour. Sometimes they show impulsive –control disorders with mixed disturbance of emotions and conduct or other conditions that may be a focus for clinical attention (Ogbuja, 2008).

A recent research indicates that fathers play a unique and integral role in children's socialization (Lam, McHale & Crouter, 2012). For instance, in a study carried out in the US on parental involvement during the transition from childhood to adolescence found that the social time (time with parents in the presence of others) that teenagers spent with fathers was significantly associated with increased social competence (e.g social skills, effective social interactions) but the same effect was not observed for mothers (Lam, McHale & Crouter, 2012). A father is a sub-set of the family and emerges from the family. Men become fathers, not simply by virtue of their gender or by procreating, but because of their involvement in bringing up their children (Richter & Morrell, 2006). The Longman's dictionary (2018) defines absence as "a state or condition in which someone is missing or not at the place where they are expected to be". Father-absence relates to physical or emotional absence of the father or both to his children. Not all men accept the role of fatherhood, and may avoid it through abandonment, flight, and denial (Morrell, Posel & Devey, 2003).

Adolescence is a time of learning and exploring during which healthy attitudes and behaviour are established for life (Olusakin & Makinde, 2008), with the help of parental guidance. This is the transitory stage from childhood to adulthood characterized by emotional turbulence. The transition through puberty and into adolescence is a challenging time for many young people, with heightened risk of mental health issues. During this period, the father-child relationship can be a significant protective factor. For example, youths who spend more one-on-one time with their fathers have been found to have higher general self-worth than those spending less time with their fathers (Lam, McHale & Crouter, 2012). Fathers are also important to their teenage's health seeking behaviours, with a study demonstrating adolescents were more likely to seek treatment for depression when their fathers demonstrated warmth and supportiveness (Reeb & Conger, 2011). One issue that is usually critical for adolescents, who are already undergoing multiple changes, is parents' divorce which can add to an already stressful situation. Adolescents from father absent households manifest a number of internalizing and externalizing problem behaviour, including depression, sex role

difficulties, early initiation of sexual activities and teen pregnancy, as well as poor social and adaptive functioning.

Adolescents begin building their own self-concept through observing the reactions directed toward them by vital individuals in their lives (Gibson & Jefferson, 2006). Personal experiences that evolve from the parent-adolescent relationship are the initial source that sets in motion adolescents' psychological wellbeing. Father absence in early childhood is a risk factor for the development of adolescent depressive symptoms, particularly in girls (Culpin, Heron, Araya, Melotti, & Joinson, 2013).

Depression a common mental disorder that manifest in depressed mood, loss of interest or pleasure, decreased energy, feelings of guilt or low self-worth, disturbed sleep or appetite, and poor concentration. It also leads to impairment of an individuals' ability to function and carry out everyday tasks and responsibilities, and could lead to suicide (WHO, 2012). Globally, 322 million people in the world are suffering from depression (WHO, 2017). Over 7 million Nigerians are currently suffering from depression (WHO, 2017). Studies conducted among different populations have alluded to fact that depression is prevalent among young adults in Nigeria (Peltzer, Pengpid, Olowu, & Olasupo, 2013; Gureje, Kola, & Afolabi, 2007). Although depression is a common mental disorder globally, there exists a disparity prevalence among genders. The burden of depression is 50% higher in females than in males (WHO, 2012). While 5.95% of females suffer from depression, compared to 4.9% among males in Africa (WHO, 2012). Studies in Nigeria have also reported that being female is a significant risk factor of depression (Obadeji, Ogunlesi, & Adebowale, 2014). The literature review showed the varieties of negative outcomes of adolescents students from father-absent families, which include depression, interpersonal difficulties among others. There are however, few available studies on how to help these adolescents from father-absent families.

Acceptance-Commitment Therapy (ACT) and Social Skills Training (SST) are used to address depression of adolescent students from father-absent families. The choice of these two treatments is based on the premise that they can effectively be used to manage the psychological problems of adolescents from father-absent families. The Acceptance-Commitment Therapy (ACT) is a metacognitive psychotherapeutic approach that stems from behavioural and cognitive methods and emerged as the third wave of behavioral therapy (Saedy & Judi, 2012). From an ACT perspective, a major problem of adolescents lies in their limited and inflexible sources of the behaviour. The clients devote most of their time and energy to flee from personal and annoying experiences. This keeps them from being engaged in life activities. Willingness to experience unpleasant emotions and not avoiding them is a key process in ACT. ACT is an intervention that helps individuals to accept difficult experiences and commit to behaviour that is consistent with their values. Recently, ACT has been used for a wide range of psychological problems including depression, anxiety disorders, substance abuse disorders, psychosis, chronic diseases, eating disorders, and work-related problems, among others (Hayes, Masuda & De Mey, 2003). Social Skills Training (SST) is a form of behaviour therapy to help persons who have difficulties relating to other people to enable them to compensate or eliminate the environmental and interpersonal barriers as well as the functional deficits created by their challenges of life.

Burckhardt, Manicavasagar, Batterham, Hadzi-Pavlovic and Shand (2017) studied Acceptance and commitment therapy universal prevention programme for adolescents: A feasibility study. Their sample comprised 48 year 10 high school students who were randomly selected from the students population of private high school located in sydney, Australia. Their instrument comprised the depression anxiety and stress scale (DASS-21) and flourishing scale (FS). The data was subjected to statistical analysis with the use of mixed model with repeated Measures (MMRM), independent samples t-tests and Chi-Square test. The result indicated that the intervention was acceptable to students and feasible to administer in a school setting. They concluded that ACT-based prevention programme delivered in school setting led to moderate to large effect size differences between the conditions at the 5-month follow-up and that the programme was feasible and acceptable to participants. This study suggested that an ACT-Based programme should be examined further in a larger and more representative sample. Ataie Moghanloo, Ataie Moghanloo & Moazezi (2015) studied the effectiveness of Acceptance and commitment therapy for depression, psychological wellbeing and feeling of guilt in 7-15 years old Diabetic children. They concluded that the use of Acceptance-Commitment Therapy was effective in reducing depression and feeling of guilt and increasing the psychological wellbeing of diabetic children.

In the study titled "The effectiveness of social skill training program on self-esteem, depression and

interpersonal difficulties among schizophrenic patients by El Malky, Atia and Alam (2016). Quasi-experimental design (one group pretest posttest design) was used to achieve the aim of the study. A convince sample of 50 hospitalized patients who had psychotic disorders were selected from the Psychiatric Hospital in Tanta and the Psychiatric Hospital in Mit-Khalf at Menoufyia, Egypt. Their instrument comprised a semi-structured interviewing questionnaire, the depression, anxiety and stress scale (DASS), Self-Esteem Inventory Scale and Relationship Scales Questionnaire. The data were statistically analyzed by SPSS version 16 (SPSS Chicago.Inc). Student's t-test, one a way ANOVA (F test), t test and paired t tests were used for parametric data. Kruskal-Wallis, Mann-Whitney and Wilcox in signed rank tests were used for non-parametric data. Pearson's Correlation analysis was used to show strength and direction of association between two quantitative variables. P value < 0.05 is considered significant. They concluded that social skills training program had a positive effect on interpersonal difficulties, depressive symptoms and self-esteem of the schizophrenic patients after receiving social skill training program.

1.2 Statement of the Problem

Adolescents from father-absent families seem to have a risk factor more than that of fathered adolescents for a wide range of negative outcomes including depression, low self-esteem and becoming delinquent juveniles. This massive erosion of fatherhood contributes mightily to many of the major psychological and social problems of adolescents of our time especially depression.

Adolescents from father-absent families may seem to be at a greater risk of becoming involved in drug and alcohol abuse, mental illness, suicide, poor educational performance, teenage pregnancy and poverty. Thus, mental, social and behavioural correlates of health problems seem to have resulted in lowered quality of life and becoming misfits in the society. Adolescents today tend to encounter difficulties and more life challenges than previous generations which results into depression and ultimately affect their quality of life and relationships.

This has been a source of concern to families, government, non-governmental organizations and society at large. It is therefore necessary to interrupt the ugly trend of suicide, poor quality of life and personal relationships among adolescent students from father absent families by treating their depression which has been observed to be a major deterrent of their general well-being. Therefore, this study sets out to find out the effects of Acceptance-Commitment Therapy and Social Skills Training on depression of Adolescent students from father-absent families in Lagos State.

1.3 Purpose of the Study

The main purpose of this study is to determine the effects of Acceptance-Commitment Therapy and Social Skills Training on psychological distress of Adolescent students from father-absent families in Lagos State.

The specific objectives of the study are to:

- Determine the difference in the post- test mean scores on depression among adolescents from father-absent families exposed to Acceptance-Commitment Therapy, Social Skills Training and the control group.
- Examine if there would be significant gender difference in the post-test mean scores on depression among adolescents from father-absent families across the treatment and the control groups.

1.4 Research Hypotheses

The following research hypotheses were tested based on the research questions at 0.05 level of significance.

There is no significant difference in the post- test mean scores on depression among adolescents from father-absent families exposed to Acceptance-Commitment Therapy, Social Skills Training and the control group.

There is no significant gender difference in the post-test mean scores on depression among adolescents from father-absent families across the treatment and the control groups.

2. Methodology

This section focused on the research methodology used under the following sub- headings: research design, area of study, population for the study, sample and sampling techniques, research instruments, reliability and validity of instruments, administration of instruments and method of data analysis.

2.1 Research Design

The research design for this study was quasi-experimental, pre- test, post- test control group

design. Three experimental groups were used for the study. There were two treatment groups and one control group. One group was exposed to Acceptance-Commitment Therapy (ACT) while the second group was exposed to Social Skills Training (SST). The control group was not exposed to any treatment.

2.2 Population of the Study, Sample and Sampling Procedure

The target population for this study comprised all adolescent students from father-absent families in the public Senior Secondary Schools in Lagos metropolis, Nigeria. The SS 2 students were used for this study because they were the most stable class for this research and were considered to be free from the pressure of the Senior Secondary School Certificate Examination.

Multi-stage sampling process was used to select Senior Secondary School Two (SS2) students for the study. The first stage of the multi- stage sampling process was the selection of three Education districts in Lagos State out of six Education districts using hat and draw method. The three Education districts are: Education district II, Education district III and Education district IV. The second stage involved the selection of three zones from each of the selected Education districts using hat and draw method. The three zones are: Kosofe zone from Education district II, Lagos Island zone from Education district III and Mainland zone from Education district IV. The third stage involved the selection of one Senior Secondary School from each of the three zones using simple random sampling technique. One Senior Secondary School was selected from fourteen senior secondary schools in Kosofe zone, one Senior Secondary School from eleven senior secondary schools in Lagos Island zone and Senior Secondary School from nine senior secondary schools in Mainland zone. The fourth stage involved the identification of adolescents from father-absent families from the Senior Secondary School Two (SS2) students from the selected Senior Secondary Schools using Father-Absence Questionnaire (FAQ). A total number of two hundred and twenty-one (221) students were identified as adolescents from father-absent families from one thousand and sixty three (1063) Senior Secondary School Two (SS11) students who participated. The Kessler's Psychological Distress Scale (K10) was administered to the adolescents that were identified as adolescents from father-absent families. A total number of 157 students scored above 25 which indicated those that are psychologically depressed. The three selected senior secondary schools were randomly assigned to the three treatments. Fifty six (56) participants which comprised twenty (20) males and thirty six (36) females belonged to Group A were given Acceptance-Commitment Therapy, fifty five (55) participants, forty one (41) males and fourteen (14) females were in Social Skills Training Group B while forty six (46) participants, twenty one (21) males and twenty five (25) females were in Group C, the control group were not given any treatment during the study but were given the treatment that worked better after the study to enable them benefit from the treatment.

Table 1: Distribution of sample in pre-assessment selection for baseline data.

SCHOOL	TOTAL	PRE-ASSESSMENT SCORES	
		LOW SCORE	HIGH SCORE
A	83	27	56
B	75	20	55
C	63	17	46
TOTAL	221	65	157

The table above showed the students that have low and high scores from the test assessment conducted by the researcher so as to identify the students that will participate in the study using Father-Absence Questionnaire (FAQ). The sample of 221 students were administered Kessler's Psychological Distress Scale (K10) and only 157 students were identified as having high scores, that is they are psychologically distressed. These 157 students formed the participants that were administered the depression, anxiety and stress scale (DASS).

Table 2: Number of students who participated in the study and their training group

School	Type of Intervention	Type of group	Male	Female	Total number of participants
A	Social Acceptance-Commitment Therapy	Training I	20	36	56
B	Social Skills Training	Training II	41	14	55
C	Control Group	Control group	21	25	46
	Total		82	75	157

Here in table 2, selected male participants were 20, 41 and 21 respectively for school A, B and C making a total of 82 male participants and 36, 14 and 25 female participants were randomly selected from school A, B and C respectively making a total of 75 female participants. 157 participated in the study.

2.3 Research Instruments

The following research instruments were used to obtain relevant data for the study:

- Kessler Psychological Distress Scale (K10) by Kessler et al., 2002
- Father-Absence Questionnaire (FAQ)
- The depression, anxiety and stress scale (DASS) by Lovibond & Lovibond, 1995

All the instruments were revalidated through a pilot study carried out on secondary school students in public Senior Secondary School in Lagos State (this was not part of the sample).

2.3.1 Kessler's Psychological Distress Scale (K10)

The scale was developed by Kessler. Psychological distress was measured using the 10-item screening scale K10, as used in national and state-wide surveys in Australia (Kessler et al., 2002). The items are based on the level of anxiety and depressive symptoms experienced in the most recent four-week period, for example: "how often did you feel nervous" and "how often did you feel hopeless". Subjects report the frequency of each experience on a five-point scale ranging from 'all of the time' to 'none of the time'. The scoring system used is based on the method developed by the Clinical Research Unit for Anxiety and Depression at the University of New South Wales (Kessler et al., 2002). In this method, each item is scored from one 'none of the time' to five 'all of the time'. Scores of the 10 items are then summed, yielding a minimum score of 10 and a maximum score of 50. Low scores indicate low levels of depressive symptoms and high scores indicate high levels of depressive symptoms. This results in individual's K10 scores being restricted to a range of 10–50. 10 - 19 Likely to be well, 20 - 24 likely to have a mild disorder, 25 - 29 likely to have a moderate disorder while 30 - 50 Likely to have a severe disorder.

2.3.2 Father-Absence Questionnaire (FAQ)

The instrument which contains 25-items split into two sections was designed by the researcher. Section A focuses on personal data of the participant's demographic information such as age, gender, name of school, Biological father presence or absence and Reason for Absence. Section B contains 20-items designed on a two-point scale to identify adolescents from father-absent families. The content validity was determined by the researcher's supervisors and experts from Measurement and Evaluation. The responses were Yes and No. Yes=2 and No=1. The maximum scores was 40 while the minimum scores was 20.

2.3.3 The depression, anxiety and stress scale (DASS)

The depression, anxiety and stress scale (DASS) by (Lovibond &Lovibond, 1995) is a 42- questionnaire which includes three self-report sub-scales designed to measure the negative emotional states of depression, anxiety and stress. The DASS is available in a 21-item short form with seven items in each of the subscales, which was used in this study. In this study the researcher used the depression subscale only which consists of 7 items of the 21-item DASS. There are 21 items in this scale with four response options: 0 "Did not apply to me at all–Never", 1 "Applied to me to some degree, or some of the time–Sometimes", 2 "Applied to me to a considerable degree, or a good part of time–Often" to 3 "Applied to me very much, or most of the time–Almost always". Scores for depression was calculated by summing the scores for the relevant items. The total score ranges from 14-56. The higher score indicates negative emotional status. During the pilot study, the instrument obtained a test retest reliability coefficient of 0.88 for depression within four weeks interval.

3. Pilot Study: Validation and Reliability of Test Instruments

Copies of the questionnaire were given to the researcher's supervisors, who are experts in Guidance and Counselling for content validity. The instruments were vetted and adjudged suitable for the study, A pilot study was carried out by the researcher in a senior secondary school outside the study area using a sample of 20 senior secondary school two students consisting of 10 males and 10 females randomly selected to participate in the study to determine the

reliability of the instruments. The instruments were administered to the participants and after four weeks it was re-administered to the same set of participants. The results of the two tests were analyzed using Pearson Product Moment Correlation statistics to determine the test- retest reliability coefficient.

Table 3: Test – Retest Reliability Coefficient of the Research Instruments (N=20).

Instrument	No. of Items	Variable	N	Test Position	Mean	SD	r_n
DASS	7	Depression	20	1st 2nd	6.105 5.947	3.619 3.440	0.88

Table 3 show that the test-retest reliability index of The depression, anxiety and stress scale (DASS) was 0.88 for depression. The values of the instrument was adjudged to be high; hence were suitable and reliable for the study.

4. Administration of Research Instruments

A preliminary investigation was done by sorting out students who scored above average on father absence and above average on psychological distress to justify their eligibility and satisfy the criteria for randomization. The administrations of the research instruments were in three phases and were administered to the participants by the researcher and the research assistants. The phases are as follows:

Phase 1: Pre-treatment Assessment:

The researcher with the help of the research assistants administered all the research instruments to the participants as pre- test a week before the treatment session.

Phase 2: Treatment Phase:

There were two treatment groups and one control group. The selected schools were randomly assigned to treatment and control groups. Group one was exposed to Acceptance and Commitment Therapy (ACT), Group two was exposed to Social Skills Training (SST), while Group three, the control group did not receive any intervention. The treatment groups met once a week for eight weeks.

Phase 3: Post –test Assessment:

At the end of the treatment which lasted for eight weeks, all the research instruments were re-administered as posttest to the same treatment and control groups.

Control of Extraneous Variables

The researcher controlled some extraneous variables that could affect the outcome of the experiments. The researcher ensured that randomization was used in selecting the participants for the study. Other unidentified extraneous variables will be taken care of through the adoption of Analysis of Covariance (ANCOVA) and repeated measures.

Method of data analysis

Data collected for this study were analyzed using descriptive and inferential statistics. All the hypotheses were analyzed using Analysis of Covariance (ANCOVA) statistics. The hypotheses were analyzed at 0.05 level of significance using Statistical Product for Service and Solution (SPSS) version 24.

Control Group

Students in this group received the baseline assessment after which they were left without treatment. The control group was not given any treatment during the study but was given the treatment that worked better after the study to enable them benefit from the study. No special cognitive enhancement technique was administered to them throughout the eight weeks. Eight weeks after, a post-test was administered.

5. Results

The data collected from the various instruments were analyzed using both descriptive and inferential statistics appropriate for each hypothesis. The means and standard deviations for pre and post-tests assessment measures were computed while Analysis of covariance was used to test the hypotheses. All hypotheses were tested at 0.05 level of significance.

Hypothesis One: There is no significant difference in the post- test mean scores on depression among adolescents from father-absent families exposed to Acceptance-Commitment Therapy, Social Skills Training and the control group.

The results of the analysis are presented on Tables 4 and 5

Table 4: Descriptive Data on Pre and Post – test mean scores of the participants' depression in the Experimental Groups.

Experimental Group	N	Pre-test Mean	S.D	Post-test Mean	S.D	Mean Differences
Acceptance-Commitment Therapy	56	12.57	2.76	7.59	2.18	-4.98
Social Skills Training	55	11.84	2.97	6.56	2.32	-5.28
Control	46	10.87	4.42	10.65	4.31	-0.22
Total	157	11.82	3.44	8.13	3.43	3.49

The results presented on Table 4 shows the pre-test mean scores for depression of the participants exposed to Acceptance-Commitment Therapy is 12.57, Social Skills Training is 11.84 and the control group 10.87. After the treatment, the mean depression score of the participants were 7.59 with the use of Acceptance-Commitment Therapy, 6.56 for the use of Social Skills Training and 10.65 with the control group. Mean difference of -4.98, -5.28 and -0.22 was recorded on the depression score of the participants in Acceptance-Commitment Therapy group, Social Skills Training group and the control group respectively. To determine whether significant difference exists in depression of among secondary school students due to training conditions, Analysis of covariance statistics (ANCOVA) was done and the result presented in Table 5 below.

Table 5: Analysis of Covariance on the Difference in Participants' Depression across the experimental group and the control

Sources	Sum of Square	Degree of Freedom	Mean of Square	F	Sig
Corrected Model	1419.353[a]	3	473.118	175.654	.000*
Intercept	2.502	1	2.502	.929	.337
Covariate (Pre_Depression)	975.416	1	975.416	362.142	.000*
Experimental Condition	664.500	2	332.250	123.354	.000*
Within Group	412.100	153	2.693		
Total	1831.452	156			

*Significant, P < 0.05; F-critical at 0.05 (2, 153) = 3.06 < 123.354

Table 5 shows that a calculated F-value of 123.354 resulted as the difference among the three experimental groups. This is statistically significant since it is greater than the critical value of 3.06 given 2 and 153 degrees of freedom at 0.05 level of significance. Hence, the null hypothesis was rejected because the interventions were effective in reducing anxiety of the participants. Based on the significant F, value obtained above, further analysis of data was carried out with the use of the least significant difference (LSD) test where in a pair wise comparison of group means was carried out to determine the trend of the difference among the three experimental groups in their depression. The result of the analysis is presented in Table 6.

Table 6: LSD Pairwise Comparison of Students' Depression based on experimental groups

(I) Depression	**(J) Depression**	**Mean Difference (I-J)**	**Sig.[b]**
Social Skills Training	Acceptance-Commitment Therapy	-.480	.127
	Control	-4.806*	.000
Acceptance-Commitment Therapy	Social Skills Training	.480	.127
	Control	-4.326*	.000

Control	Social Skills Training	4.806*	.000
	Acceptance-Commitment Therapy	4.326*	.000

Table 6 indicates that participants exposed to Acceptance-Commitment Therapy do not significantly differ in depression from those exposed to the social skills training (Mean difference = -0.480, $p > 0.05$). Participants exposed to social skills training significantly manifested a decrease in depression than those in the control group (Mean difference = 4.806*, $p < 0.05$). similarly, participants exposed to Acceptance-Commitment Therapy significantly manifested a decrease in depression than the control group (Mean difference = 4.326*, $p < 0.05$). Other comparisons were not significant. It was observed that Acceptance-Commitment Therapy and Social Skills Training were effective in decreasing depression among participants.

Hypothesis Two: There is no significant gender difference in the post-test mean scores on depression among adolescents from father-absent families across the treatment and the control groups.

Table 7: Descriptive Data on Pre and Post – test mean scores of the participants' depression in the Experimental Groups based on gender

Gender	Experimental Group	N	Pre-test		Post-test		Mean Differences
			Mean	S.D	Mean	S.D	
Male	Acceptance-Commitment Therapy	20	12.40	3.56	7.85	2.56	-4.55
	Social Skills Training	41	12.05	3.22	6.76	2.53	-5.29
	Control	21	9.90	4.06	9.86	4.25	-0.04
	Total	82	11.45	3.61	8.16	3.11	-3.29
Female	Acceptance-Commitment Therapy	36	12.67	2.24	7.44	1.96	-5.23
	Social Skills Training	14	11.21	2.05	6.00	1.47	-5.21
	Control	25	11.68	4.62	11.32	4.34	-0.36
	Total	75	11.85	2.97	8.25	2.59	-3.60

The result of the descriptive data presented in Table 7 indicates that the pre-test mean value of level of depression for male participants were 12.40 for acceptance-commitment therapy, 12.05 for social skills training and 9.90 for the control group. Likewise, the pre-test mean score value for female participants were 12.67 for acceptance-commitment therapy, 11.21 for Social Skills training and 11.68 for the control group.

Also, at post-test male participants in acceptance-commitment therapy, social skills training and control group had mean score of 7.85, 6.76 and 9.86 respectively. Their female counterpart in acceptance-commitment therapy, social skills training and control group had mean score of 7.44, 6.00 and 11.32 respectively.

The table further indicates that the male secondary school students from ACT group (7.85) and from SST group (6.76) reduced in their rate of depression with the average mean difference of 4.55 and 5.29 respectively while the female secondary school students from ACT group (7.44) and from SST group (6.00) reduced in their rate of depression with the average mean difference of 5.23 and 5.21 respectively. The table further indicates that under ACT, depression of females (5.23) reduced than the male (4.55). However, in SST, the depression for male (5.29) slightly reduced than the female (5.21). However, in the control group both male and female participants had the lowest mean difference when compared with other groups with 0.04 and 0.36 respectively. It can therefore, be concluded that the females' depression in acceptance-commitment therapy decreased than that of the males. However, social skills training has more impact on the males in decreasing their depression than the females. To determine whether significant difference exists in depression among the participants due to gender, Analysis of covariance (ANCOVA) statistics was computed and the result of the analysis is presented in Table 8 below.

Table 8: Analysis of Covariance on effects of Experimental Conditions and Gender on Post-test Participants' Depression.

Source	Sum of Squares	df	Mean Square	F	Sig
Corrected Model	1424.47[a]	6	237.412	87.503	.000*
Intercept	2.157	1	2.157	.795	.374

Covariates (Pre_Depression)	948.032	1	948.032	349.416	.000*
Experimental Conditions	612.558	2	306.279	112.885	.000*
Sex	1.344	1	1.344	.495	.483 N.S
Experimental Group * Sex	3.481	2	1.741	.642	.528 N.S
Within Group	406.979	150	2.713		
Corrected Total	1831.452	156			

*=Significant, p < 0.05; NS = Not Significant; F-critical at 0.05 (2, 150) =3.06 < 112.885; F-critical at 0.05 (2, 150) =3.06 >0.642

Table 8 shows that a calculated F-value of 112.885 resulted as the difference in depression among participants in the three experimental groups. The F-calculated value of 112.885 is statistically significant since it is greater than the critical F- value 3.06 given 2 and 150 degree of freedom at 0.05 level of significant. This shows that the experimental condition significantly decrease depression among participants. The result also shows that a calculated F-value of 0.642 result as the influence of gender and experimental conditions on depression. This calculated F- Value is not significant since it is less than the critical F-value of 3.06 given 2 and 150 degree of freedom at 0.05 level of significance. Hence, hypothesis five was accepted. Therefore, there is no significant difference in the post-test mean scores of participants' depression due to their gender.

6. Discussion of findings

The findings revealed that there is significant differences in post- test mean scores on depression among adolescent students from father-absent families exposed to Acceptance-Commitment Therapy, Social Skills Training and the control group. The reason for the impact of Acceptance-Commitment Therapy could be attributed to the contents of the intervention package that entailed teaching the participants the importance of mindfulness skills with the express purpose of facilitating valued action: to help people live by their values. Also, psychological flexibility which is the ability to accept our thought and feelings and be in the present moment with full awareness and openness, to our experience, and to take action guided by our values. Put more simply, it's the ability to "be present, open up, and do what matters.

These findings were supported by Ataie Moghanloo, Ataie Moghanloo & Moazezi (2015) who found out that the use of Acceptance-Commitment Therapy was effective in reducing depression and feeling of guilt and increasing the psychological wellbeing of diabetic children. These findings are also in agreement with a study conducted by Burckhardt, Manicavasagar, Batterham, Hadzi-Pavlovic and Shand (2017) on a high school students. They concluded that ACT-based prevention programme delivered in school setting led to moderate to large effect size differences between the conditions at the 5-month follow-up and that the programme was feasible and acceptable to participants. Result indicated that participants receiving ACT had reduction in depression. The impact of Social Skills Training in reducing depression was supported by El Malky, Atia &Alam (2016) in a study titled "the effectiveness of Social Skills Training on depressive symptoms, self-esteem and interpersonal difficulties among schizophrenic patients. They concluded that social skills training program had a positive effect on depressive symptoms.

Furthermore, the findings also revealed that there is no significant gender difference in the post-test mean scores on depression among adolescent students from father-absent families across the treatment and the control groups. The finding of the analysis indicated that there were no significant differences in the post test mean scores of depression among adolescents from father-absent families due to their gender. This finding is further corroborated by Monteiro, Matos & Oliveira (2015) in the study that involved 319 adolescents aged between 13 and 15 years old. It was reported that female gender had higher level of depressive symptoms. This finding is corroborated by the finding of El Malky, Atia &Alam (2016) who examined the effectiveness of social skill training program on self-esteem, depression and interpersonal difficulties among schizophrenic patients. The result indicated there was no statistical significant difference in the post test scores of depression among participants based on male and female participants.

7. Conclusion

According to the findings of this study, Acceptance-Commitment Therapy (ACT) and Social Skills Training (SST) are effective, simple and practical methods for reducing depression among adolescents from father-absent families.

8. Recommendations

The following recommendations are put forward based on the findings of this study:

- There is a need for the implementation of Acceptance-Commitment Therapy (ACT) and Social Skills Training (SST) for adolescents from father-absent families especially in public secondary schools by the Ministry of Education. This could be done through the counsellors in various schools. In this way, depression problems of the adolescents will be determined and reduced ultimately reducing the alarming rate of suicide among adolescent students in recent times.
- There should also be awareness and enlightenment workshops and campaigns for parents on the effects of father absence on the increasing risk of depression resulting to escalating rate of suicide among adolescents in secondary schools. Moreover, the Ministry of education and other stakeholders should provide counselling centres equipped with materials for Acceptance-Commitment Therapy, Social Skills Training and other psychological therapies used in the treatment of depression as an integral and functional part of primary health care centres, to ensure universal access in different Local Government Areas in order to solve the depression problem of the adolescents from father-absent families.

There is also a need for more professional counsellors in the country in order to meet the needs of the ever growing number of adolescents in secondary schools at the risk of depression who will need to be treated. Professional counsellors need to be properly and regularly sensitized about depression. There is also a dearth of data on depression, emphasizing the need for more research in this area, especially in the community, as data is needed for timely and appropriate intervention.

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