

Research Article

© 2024 Andrew A. Adubale and Ayotunde Eghogho Tokurah. This is an open access article licensed under the Creative Commons Attribution-NonCommercial 4.0 International License (https://creativecommons.org/licenses/by-nc/4.0/)

Received: 2 September 2024 / Accepted: 3 November 2024 / Published: 20 November 2024

Effectiveness of Dialectical Behaviour and Schema-Focused Therapies in the Management of Depressive Disorders among In-School Adolescents in Edo State

Andrew A. Adubale1*

Ayotunde Eghogho Tokurah²

'Ph.D, Dept. of Educational Evaluation and Counselling Psychology,
Faculty of Education,
University of Benin,
PMB 1154, Benin City, Nigeria
'Dept. of Educational Evaluation and Counselling Psychology,
Faculty of Education,
University of Benin,
Benin City, Nigeria
*Corresponding Author

DOI: https://doi.org/10.36941/mjss-2024-0055

Abstract

The study investigated the effectiveness of Dialectical Behaviour and Schema-Focused Therapies in managing depressive disorders in in-school adolescents in Benin Metropolis. The study was a quasi-experimental research design that adopted the pre-test-post-test, non-equivalent control group. The population for this study consisted 14,473 senior secondary school students in all the public secondary schools in Benin Metropolis. A sample size of seventy-six (76) adolescents was used. The instrument for the study was Adolescent Depressive Disorder Questionnaire (ADDQ). Three (3) research questions were raised, their corresponding hypotheses were formulated and tested at 0.05 alpha level of significance. The data obtained were analyzed using t-test and Analysis of Variance (ANOVA). The findings of the study revealed no significant effect of both Dialectical Behaviour and Schema-Focused Therapies in managing depressive disorders in in-school adolescents. However, there was a significant effect of Dialectical Behaviour on the depressive disorders of in-school adolescents than those not exposed to any treatment (Control Group). It was concluded that although both Dialectical Behaviour and Schema-Focused Therapies were not statistically significant in managing depressive disorders in in-school adolescents in Benin Metropolis, there was a difference in the depressive disorders mean scores at pre-test and post-test.

Keywords: Depressive Disorder, In-School Adolescents, Therapies

1. Introduction

Depressive disorders are negative patterns of emotional and behavioural symptoms of depression that manifest differently. These differences can be attributed to their aetiology, durations and severities. They are consider as subtype of mood disorders whose main characteristic manifestation is a

disturbance in a person's mood that sometimes fluctuates between extreme excitement and sadness. An individual experiencing a depressive disorder exhibits symptoms of persistent sadness, guilt, and heaviness of spirit, lack of energy and in some cases find it difficult to leave the house or to even get out of bed for an extended time.

Adolescents in secondary school seem to express some common traits which qualify them to be classified under any of the following; major depressive disorders (MDD), persistent depressive disorder (PDD) and disruptive mood dysregulation disorder (DMDD). The major depressive disorder (MDD) appears to be the most common manifestation of depressive disorder among students. It is characterized by an irritable mood causing a remarkable loss of interest in activities for at least 2 weeks. The prevalence of this disorder among a sample of 1,713 school adolescents in Oyo State, Nigeria was revealed to be 21.2% (Fatiregun & Kumapayi, 2014).

The in-school adolescents may never seek positive measures but may rather choose negative and violent behaviours such as suicidal attempts, lashing out in anger, using biting remarks, instigating fights, and the use of crude language are some ways in-school adolescents deal with depressive episodes. The school is therefore a pivotal setting for implementing interventions that can help these adolescents manage depressive disorders which could lead to depression in adulthood if not managed effectively. It is against this background that this study seeks to find out how to manage the impact of the depressive disorders among in-school adolescents can be achieved by employing Dialectical Behaviour Therapy (DBT) and Schema Focused Therapy (SFT) for the treatment of depressive disorders in the adolescents.

Dialectical behaviour therapy (DBT) is an empirically supported form of cognitive behaviour therapy developed by Marsha Linehan in 1993. It was initially designed for suicidal adult women diagnosed with Borderline Personality Disorder (BPD) but it has since been adapted for use with other disorders. A modified version of DBT was adapted for adolescents by Miller et al. (2006). DBT is based on the assumption that clients' lives are currently unbearable to them and so there is a need to focus on acceptance and change (Linehan, 1993b). DBT focuses on balancing acceptance with change where a disorder is viewed as a pattern of learned behaviours to be unlearnt. DBT focuses on four primary targets; decreasing behaviours that threaten life, decreasing behaviours that interfere with the therapy, decreasing behaviours that interfere with the quality of life and increasing behavioural skills to help them enjoy life. These targets are achieved through the use of individual therapy; psycho-educational skills, group training and telephone coaching. Skills of mindfulness, interpersonal effectiveness, distress tolerance, and emotion regulation are developed through psycho-educational skills and group training to change these behaviours. Adolescents are at a developmental milestone when they can learn to manage their emotions effectively and independently. Evidence in literature revealed that a study was carried out by Akhondi and Mojtabaei (2018) on the effectiveness of emotion regulation skill training based on dialectical behaviour therapy on depressed orphans in Malard, Iran. The study used a quasi-experimental pretest-posttest design with a control group. Twenty (20) students were purposefully sampled using a Beck Depression Inventory to determine those who were depressed and they were selected into two groups, experimental and control for 8 weeks of treatment. Data were analyzed and a covariance analysis showed that emotional regulation skills training based on dialectical behaviour therapy was effective in managing depression in these adolescents.

In a study of Vafaei et al. (2021) on the effectiveness of group training in emotional regulation on adolescents' depression, self-injury and anger using a pre-test-post-test quasi-experimental design was done. The instruments were; deliberate Self-Harm Inventory, Kutcher Adolescent Depression Scale, and State and Trait Anger Expression Inventory. The sample of 30 adolescents aged 13-15 years living in Shiraz City, Iran were identified to exhibiting the symptoms. The multistage cluster sampling method was used and participants were randomly assigned to the two groups of experimental and control (each 15 members). Data were analysed using the multivariate covariance test which revealed a significant difference between the experimental and control groups regarding depression, self-injury, and anger. Thus, confirming the effectiveness of emotion-regulation skill

group training on emotions and dysfunctional behaviours of adolescents. Similarly, Lenz et al. (2016) investigated the effectiveness of emotional regulation and interpersonal as mechanisms of change for treatment outcomes within a DBT program for adolescents. 66 adolescents referred from their community with a mean age of 15.38 years were selected to complete a 7-week manualized DBT intervention at a partial hospitalization program located in Texas, USA. The Symptom Checklist was used to identify participants' subjective perceptions of anxiety and depression. Using a regression analysis, results revealed that emotion regulation and interpersonal effectiveness were predictors of change in the symptoms of anxiety and depression.

Similarly, Saito et al. (2020) carried out a study to examine the efficacy of Dialectical Behaviour Therapy (DBT) to decrease suicidal ideation, incidents of non-suicidal self-injurious behaviour, and suicide attempts in an adolescent outpatient population compared with Treatment As Usual (TAU). The study had 801 participants. Data were obtained using the Hamilton Depression Rating Scale (HAMD), Young Mania Rating Scale (YMRS), Clinical Global Impressions-Severity for Symptoms (CGI-S), and Dynamic Appraisal of Situational Aggression (DASA). Patients who received DBT had significantly lower scores compared with patients who received TAU. This showed that DBT for adolescents seems to significantly decrease depressive symptoms during a relatively short time compared with TAU.

Harvey et al. (2023) provided the first large-scale examination of a universal DBT-based intervention and to also determine the extent to which home practice of DBT skills predicted changes in social and emotional outcomes over time. A non-randomised controlled trial design was employed whereby 1071 participants (51.30% Male; M age = 13.48 years) completed either an adapted eight-session DBT skills-training intervention ('WISE Teens) (n = 563) or class-as-per-usual (n = 508). The results revealed that DBT skills-training intervention ('WISE Teens) did not improve outcomes.

Schema-Focused Therapy (SFT) is an integrative therapy that draws from cognitive-behavioural therapy, attachment theory, psychodynamic concepts, and emotion-focused therapies. It was developed by Doctor Jeffrey Young and colleagues in 2003 and is effective in treating clients with personality disorders, eating disorders, and relationship problems. Schema-Focused therapy is also effective in preventing relapse in depression, anxiety, and substance abuse in adults (Farrell et al., 2014). Recent adaptations of SFT for children and adolescents have been designed by Loose et al. (2013). This therapy focuses on lifelong patterns, affective change techniques, and the therapeutic relationship, with special emphasis on limited and adaptive re-parenting.

There are two phases in the treatment of depressive disorders in Schema-focused therapy. They are the assessment and education phase and the change phase. During the assessment and education phase, past life experiences are obtained through imagery exercises, life history interviews, schema questionnaires, and self-monitoring assignments. Clients learn to identify their maladaptive coping styles and at the end of that phase, a complete schema case conceptualization would have been developed by the client and therapist. A schema-focused treatment plan is also agreed upon by the client and therapist and this plan will cover the simultaneous use of cognitive, experiential, and behavioural strategies which will be executed in the change phase. Karbasdehi et al. (2020) investigated the effectiveness of schema-focused therapy on psychological resilience and social empowerment in students with depression symptoms. This study was quasi-experimental with a pretest, post-test and a control group. The sample consisted 28 adolescents 15 to 17 years with depression symptoms in a high school in Rasht City, Iran. They were selected using the convenience sampling method into experimental and control groups each group had 14 participants. The Connor-Davidson Psychological Resilience Scale and Gresham and Elliott Social Empowerment Rating System were used to collect the data. A multivariate analysis of covariance showed that schema-focused therapy improved psychological resilience and social empowerment in students with depression symptoms. Karimipour et al. (2022) investigated the effectiveness of schema mode therapy for children and adolescents with internalizing behaviours problems among adolescents referred to consulting centre in Ahvaz, Iran. The quasi-experimental design with a pre-test and post-test and a control group was used. The sample consisted 30 adolescents; 11 boys and 19 girls, aged 12-14 years selected using convenience sampling into experimental and control groups. The Child Behaviour Checklist (CBCL) was used to obtain the data. The findings revealed a significant effect on the improvement of the internalizing problems (anxiety depression, withdrawal depression, and somatic complaints). Thus, suggesting the effectiveness of the therapy, SFT. Similarly, Van Vreeswijk (2014) investigated whether schema therapy in a group setting was associated with changes in symptom and schema and mode severity. Sixty-three (63) outpatients who attended the SCBT-g were included as participants. Instruments used were the Symptom Checklist 90, the Schema Questionnaire and the Young-Atkinson Mode Inventory. Results revealed that outcome measurements showed changes with moderate to high effect sizes, with 53.2% of the patients showing a significant reduction in severity of symptoms and schemas and modes. It also revealed short-term schema therapy may provide some significant improvements in mood and anxiety disorders but the benefits of long-term schema therapies may be more permanent.

2. Statement of the Problem

Secondary school adolescents seem to exhibit symptoms of Depressive disorders which often times interfere with their academic and social activities. Elia (2021) noted that depressive disorders in adolescents are associated with negative outcomes such as poor academic performance, poor social activities, substance abuse, early pregnancy and parenthood, increased suicide risk, and depression in adulthood. Evidence in literature revealed a high prevalence of depression among students in Edo State. A study conducted by Ogboghodo et al. (2018) to assess the prevalence and risk factors of depression revealed 44.2% prevalence of depression in a sample of 504 respondents within the age levels of 10 to 25. When some adolescents find it difficult to cope with the symptoms and the attending challenges, they may seek out drastic measures to alleviate the symptoms.

More often, people associate stigma with the term 'depression' and the idea of 'receiving therapy'. Hence, they believe that it is only meant for "mentally unstable" people. This could suffice for the reason why most adolescents do not seek help but rather choose to deal with the symptoms themselves in either silence, isolation or extreme measure attempting suicide. Most in-school adolescents may also be unaware of what depressive disorders and their symptoms are and so will not seek help when faced with it. In Nigeria, it is often perceived to be a spiritual attack and consequently, traditional healers or religious leaders are usually the first points of consultation (Adeosun, 2016).

The high risk of mortality involved with depression among adolescents according to WHO (2014) is alarming as a majority of affected adolescents do not seek or receive the appropriate help or care needed. Some treatment options for adolescent depressive disorders include lifestyle adjustments, psychotherapy, and medication depending on the severity. Dialectical Behaviour Therapy (DBT) and Schema-Focused Therapy (SFT) are some interventions used to manage anxiety, self-harm, suicidal ideation, borderline personality disorder (BPD) and depressive disorders in adults. Not many studies on the management of depressive disorders in adolescents using DBT and SFT in Nigeria have been done. Therefore, this study intends to investigate the effectiveness of Dialectical Behaviour Therapy and Schema-Focused Therapy in managing depressive disorders in in-school adolescents in the Benin Metropolis.

To guide the study, the following hypotheses were formulated and tested at a 0.05 level of significance.

3. Hypotheses

- 1. There is no significant difference in the pre-test and post-test depressive disorders mean scores of in-school adolescents exposed to Dialectical Behaviour Therapy.
- 2. There is no significant difference in the pre-test and post-test depressive disorders mean scores of in-school adolescents exposed to Schema-Focused Therapy.

3. There is no significant difference in the pre-test and post-test depressive disorders mean scores of in-school adolescents exposed to Dialectical Behaviour Therapy, Schema-Focused Therapy and those not exposed to any treatment (Control Group).

4. Methodology

The study adopted the pre-test, post-test, non-equivalent control group quasi experimental research design. The target population for the study consisted fourteen thousand four hundred and seventy-three (14,473) senior secondary two (SS2) students in Benin Metropolis. The simple random sampling technique was used to select 3 out of the 4 Local Government Areas: Egor, Oredo and Ovia North-East in Benin Metropolis. Then simple random sampling technique was used again to select a school each from the three Local Government Areas. Adopting the balloting without replacement method, two of the three co-educational schools were selected for the experimental groups: (Dialectical Behaviour Therapy comprising 29 students) and (Schema-Focused Therapy comprising 18 students) and the third for the (Control group comprising 29 students). In each of the schools, the intact class of students which constituted the subjects for the study was pretested using the Adolescent Depressive Disorder Questionnaire (ADDQ). A selection criterion was used to identify and select those with depressive disorder traits; those who scored above 83 points formed the experimental and control groups.

The research instrument employed for the collection of data was Adolescent Depressive Disorder Questionnaire (ADDQ). The ADDQ comprised three subscales to assess the depressive disorders; major depressive disorder (MDD), disruptive mood dysregulation disorder (DMDD) and persistent depressive disorder (PDD) respectively. The subscales were Kutcher Adolescent Depression Scale (KADS) by Brooks et al, (2003), Dysregulation Mood Depressive Disorder Questionnaire (DMDDQ) by Boudjerida, et al. (2022) and Cornell Dysthymia Rating Scale (CDRS) by Mason et al. (1993). For the purpose of this study, the instrument retained the four-point Likert scale with response options; never (1), rarely (2), sometimes (3) and always (4) adopted for ease of responses for the participants. The instrument was modified and adapted to be culture friendly for the present respondents. The instrument yielded a composite reliability coefficient of 0.931 for ADDS, with the component sub-scales coefficient values of 0.760 for KADS, 0.796 and 0.923 for DMDDQ and CDRS respectively. The treatment was carried out for six weeks with two sessions per week for 45 minutes per session. The data collected were analysed using paired sample t-test for hypotheses 1 and 2, Mean and Standard Deviation for hypothesis 3 and a one-way analysis of variance (ANOVA) for hypothesis 4. All hypotheses were tested at a 0.05 level of significance.

4.1 Treatment package and procedure

Dialectical behaviour (DBT) and schema-focused (SFT) Therapies were used for a period of six weeks of two sessions per week for 45 minutes per session. This gave a total of twelve (12) sessions of 45 minutes per session. The principal objective of the treatment programmes was to assist students understand and master both self and environment for healthier living. Consequently, the participants were exposed to the basic concepts of DBT like mindfulness exercise, distress tolerance, emotional regulation and interpersonal effectiveness. Similarly, the participants of SFT were exposed to the major concepts like schema, its modes and identification with creating awareness and assessing healthy adult modes which will help to resolve the dysfunctional individual's thoughts that predominantly guide the negative thoughts/actions.

The consequences of depressive thoughts and the influence of early maladaptive experiences leading to depressive disorders were equally explained to the participants. Finally the participants were exposed to the Dialectical Behaviour Therapy strategies of DEAR MAN (Describe the situation, Express your feelings using "I", Appear confident- as for what you want or say "no" clearly, Reinforce the person ahead of time, be Mindful of what you want, be Assertive and willing to Negotiate).

Consequently, the participants in Schema Focused Therapy were exposed to Happy Child Mode (HCM) and Healthy Adult Mode (HAM) which will help to the participants to establish healthy relationship with others. The participants were post tested after the six weeks of treatment.

The control group was given placebo treatment package by exposing the participants to general topic in career choice, career planning, study habits, budgeting and etiquette. The students were also post-tested at the end of the six weeks on the same instrument to obtain post-test scores. Data collected were analysed using Mean and Standard Deviation, paired t test and ANOVA.

5. Results

Hypothesis 1. There is no significant difference in the pre-test and post-test depressive disorders mean scores of in-school adolescents exposed to Dialectical Behaviour Therapy.

Table 1: Paired Sample t-test of Difference in Depressive Disorder Mean Scores of In-School Adolescents Exposed to Dialectical Behaviour Therapy at pre-test and post-test

Groups	Mean	Std. Dev.	Mean Difference	df	t-value	p-value (Sig. 2-tailed)
Pretest	112.55	14.72				
			2.93	28	1.050	.303
Posttest	109.62	19.52				

N= 29

Table 1 shows the difference in the pre-test and post-test depressive disorders mean scores of inschool adolescents exposed to Dialectical Behaviour Therapy. Their mean scores were 112.55 \pm 14.72 standard deviation at the pretest and 109.62 \pm 19.52 standard deviation at the posttest while the mean difference was 2.93. The t-value of 1.050 is not significant, because, the p-value (.303) is greater than the alpha level. Therefore, the null hypothesis is retained. This implies that the level of depression of the participants was not significantly affected by the Dialectical Behaviour Therapy treatment intervention. However, there is a little difference in the mean scores of pretest and posttest as evident in Table 1 (2.93) that suggests the posttest mean score is less than the pretest.

Hypothesis 2: There is no significant difference in the pre-test and post-test depressive disorders mean scores of in-school adolescents exposed to Schema-Focused Therapy.

Table 2: Paired Sample T-test of Difference in Depressive Disorder Mean Scores of In-School Adolescents Exposed to Schema-Focused Therapy at Pre-Test and Posttest

Groups	Mean	Std. Dev.	Mean Difference	df	t-value	p-value (Sig. 2-tailed)
Pretest	114.11	16.76				
			3.17	18	1.082	.294
Posttest	110.94	20.28				

N=19

Table 2 shows the difference in the pre-test and post-test depressive disorders mean scores of in school adolescents exposed to Schema-Focused Therapy. Their mean scores were 114.11 ± 16.76 standard deviation at the pretest and 110.94 ± 20.28 standard deviation at the posttest while the mean difference is 3.17 The t-value of 1.082 is not significant, because, the p-value (.294) is greater than alpha level. Therefore, the null hypothesis is retained. This implies that the level of depression of the participants was not affected by the Schema-Focused Therapy treatment intervention. However, in observing the mean score of the pretest and posttest there is a little difference as indicated in Table 2 (3.17) suggesting that the posttest mean score is lower than the pretest.

Hypothesis 3: There is no significant difference in the depressive disorders mean scores of inschool adolescents exposed to Dialectical Behaviour Therapy, Schema-Focused Therapy and those not exposed to any treatment (Control Group).

Table 3: Descriptive Statistics of Depressive Disorders Mean Scores in the Experimental and Control Groups at Post-test

Groups	N	Mean	Std. Deviation
Dialectical Behaviour Therapy	29	109.62	19.52
Schema Focused Therapy	18	110.94	20.28
Control	29	121,21	11.73
Total	76	114.36	17.79

Table 3 shows the descriptive statistics of Dialectical Behaviour Therapy, Schema Focused Therapy and Control Groups. From the table, Dialectical Behaviour Therapy (N = 29, Mean = 109.62 Std. Dev. = 19.52). Schema Focused Therapy, (N = 18, Mean = 110.94 Std. Dev. = 20.28) while Control Group (N=29, Mean = 121.21 Std. Dev. = 11.73). Total participants (N = 76, Mean = 114.36 Std. Dev. = 17.79).

Table 4: One-way ANOVA of Difference in Post-Test Means of Experimental and Control Groups

	Sum of Squares	Df	Mean Square	F	Sig. (p-value)
Between Groups	2220.877	2	1110.439	3.767	.028
Within Groups	21520.531	73	294.802		
Total	23741.408	75			

Table 4 contains the ANOVA result of significant differences in posttest means of experimental and control groups. From the table the F-value is = 3.767 and a p-value of .028 Testing at an alpha level of .05 the p-value is less than the alpha value; (.028 < .05), the null hypothesis is rejected; hence there is a significant difference in the mean scores. The post-hoc test of multiple comparisons becomes necessary, to ascertain where the difference lies.

Table 5: Post-Hoc Test of Multiple Comparison of the Experimental and Control Groups

(I) Group	(J) Group	Mean Difference (I- J)	Std. Error	Sig.
Dialectical Behavioural Therapy	Schema Focused Therapy	-1.32375	5.15203	.798
Dialectical Behavioural Therapy	Control	-11.58621 [*]	4.50901	.012
Schema Focused Therapy	Control	-10.26245	5.15203	.050

The post-hoc Table 5, shows no significant difference Between Dialectical Behaviour Therapy and Schema Focused Therapy. However, Dialectical Behaviour Therapy was significantly different from the Control Group.

6. Discussion

The result of the finding in hypothesis one revealed that there was no significant difference in the pre-test and post-test mean scores of the depressive disorders of the in-school adolescents exposed to Dialectical Behaviour Therapy as a treatment for managing depressive disorders in

adolescents. This implies that Dialectical Behaviour Therapy was not an effective treatment intervention for depressed in-school adolescents as there was no significant influence of the therapy on the depressive disorder. This finding corroborates the assertion of Harvey et al. (2023) that DBT intervention did not improve or have positive impact on the depressive disorders of adolescents. The finding of this current study is in contrast to the finding of Vafaei et al. (2021), Lenz et al (2016) and Saito et al (2020) on the effectiveness of DBT intervention in managing depression disorders. The outcome of this finding can be attributed to some cultural differences which existed in the participants of this present study and the previous ones that were done out the shore of Africa. It may be due to the limited vocabulary of the adolescents who were exposed to the modules of DBT in group skills training.

The result of the study revealed no significant effect in the pre-test and post-test mean scores of the depressive disorders of the in-school adolescents exposed to Schema-Focused Therapy. This suggests that the level of depression of the participants was not affected by the Schema-Focused Therapy treatment intervention. This is in contrast to the findings of Karbasdehi et al. (2020) and Karimipour et al. (2022) who noted that there was a significant positive effect on depression among adolescents with schema-focused therapy. Van Vreeswijk et al. (2014) reported that although short-term schema therapy may provide some significant improvements in mood and anxiety disorders, the benefits of long-term schema therapies may be more permanent. The finding of this study may be attributed to in-school adolescents' interest in their academic activities and not paying particular attention to the therapy sessions. It could also be due to the duration of the treatment sessions (six weeks at two sessions per week).

It was observed in the finding of hypothesis three that a significant difference exists between Dialectical Behaviour Therapy and Control Group. The finding revealed a significant difference between the experimental and control groups. This is in consonant with the assertion of Saito et al. (2020) and Vafaei et al. (2021) who affirmed the effectiveness of DBT as it seemed to significantly decrease depressive symptoms in a relatively short time in adolescents. This difference could be due to the treatment packages and in-school adolescents' disposition the therapeutic interventions.

7. Conclusion

Sequel to the findings, it was revealed that the therapies individually were not statistically significant in managing depressive disorders in in-school adolescents in Benin Metropolis. Although, the mean scores of the two treatment packages were low, there was however a statistical difference among them when the two therapies were jointly analysed with the control group. Dialectical Behaviour Therapy was found to be more effective in managing depressive disorder in in-school adolescents than Schema Focused therapy in Benin Metropolis. It was concluded that the two therapies could not sufficiently manage in school students' depressive disorder in Benin Metropolis.

References

- Adeosun, I. I. (2016). Adolescent students' knowledge of depression and appropriate help-seeking in Nigeria. *International Neuropsychiatric Disease Journal*, 6(3), 1-6.
- Akhondi, M., & Mojtabaei, M. (2018). Effectiveness of emotion regulation skill training based on dialectical behavior therapy on depression of orphans. *Psychological Research*, 21(1), 83-96. http://rimag.ricest.ac.ir/fa/Article/32812
- Boudjerida, A., Labeele, R., Bergeron, L., Berthiaume, C., Guile, J., & Breton, J. (2022). Development and initial validation of the disruptive mood dysregulation disorder questionnaire among adolescents from clinic setting. *Frontier in Psychiatry*, 13,243-250.
- Elia J. (2021, April). Depressive disorders in children and adolescents. https://www.msdmanuals.com/profess ional/pediatrics/mental-disorders-in-children-and-adolescents/depressive-disorders-in-children-and-adolescents

- Farrell, J. M., Reiss N., & Shaw, I. A. (2014). The schema therapy clinician's guide. A complete resource for building and delivering individual, group and integrated schema mode treatment programs. Wiley-Blackwell.
- Fatiregun, A., & Kumapayi, T. E. (2014). Prevalence and correlates of depressive Symptoms among in-school adolescents in a rural district in southwest Nigeria. *Journal of Adolescence*, 37(2), 197–203.
- Harvey, L. J., White, F. A., Hunt, C., Abbott, M. (2023). Investigating the efficacy of a Dialectical behaviour therapy-based universal intervention on adolescent social and emotional well-being outcomes. *Behaviour Research and Therapy*, 169. https://doi.org/10.1016/j.brat.2023.104408
- Karbasdehi, F. R., Abolghasemi, A., & Karbasdehi, E. R. (2020). The effectiveness of schema therapy on psychological resilience and social empowerment in students with depression symptoms. *Journal of Psychological Studies*, 15(4), 73-90.
- Karimipour, A., Asgari, P., Makvandi, B., & Johari F. R. (2022). Effectiveness of schema mode therapy for children and adolescents in the internalizing behaviours problems among adolescents referred to consulting center in Ahvaz, Iran. *Razavi International Journal of Medicine*, 10(3), 41-49.
- Lenz, A. S., Del C. G., Hollenbaugh, K. M., & Callender, K. A., (2016). Emotional regulation and interpersonal effectiveness as mechanisms of change for treatment outcomes within a program for adolescents. *Counselling Outcome Research and Evaluation*, 7(2), 73-85.
- Linehan, M. M. (1999b). Skill training manual for treating borderline personality disorder. The Guild Press.
- Loose, C., Graaf, P., and Zarbock, G. (2013). Schema therapy for children and adolescents. Wiley-Blackwell.
- Mason, B. J., Kocsis, J. H., Leon, A. C., Thompson, S., Francis, A. J., Morgan, R. O., & Parides, M. K. (1993). Measurement of severity and treatment response in dysthymia. *Psychiatric Annals*, 23(11) 625-631.
- Miller, A. L., Rathus, J. H., & Linehan, M. M. (2006). *Dialectical behaviour therapy with suicidal adolescents*. Guilford Press.
- Ogboghodo, E., Osadiaye, E., & Omosun-Fadal, T. (2018). Depression and suicidal ideation among young persons in Benin City, Edo State: An assessment of prevalence and risk factors. *Journal of Mental Health and Human Behaviour*, 23(2), 93-98.
- Saito, E., Tebbett-Mock, A. A., & McGee M. (2020). Dialectical behaviour therapy decreases depressive symptoms among adolescents in an acute-care inpatient unit. *Journal of Child Adolescent Psychopharmacology*, 30(4), 244-249. doi: 10.1089/cap.2019.0149.
- Vafaei, T., Samavi, S. A., Whisenhunt, J. L., & Najarpourian S. (2021). The effectiveness of group training of emotional regulation on adolescent's self-injury, depression, and anger. *Journal of Research and Health*, 11(6), 383-392. http://dx.doi.org/10.32598/JRH.11.6.1602.4:
- Van Vreeswijk, M. F., Spinhoven, P., Eurelings-Bontekoe, E. H. M., Broersen, J. (2014) Changes in symptom severity, schemas and modes in heterogeneous psychiatric patient groups following short-term schema cognitive-behaviour group therapy: a naturalistic pre-treatment and post-treatment design in an outpatient clinic. *Clinical Psychology and Psychotherapy*, 21(1), 29-38.
- WHO (2014). Recognizing adolescence. https://apps.who.int/adolescent/second-decade/section2/page1/recogn izing-adolescence.html
- Young, J. E., Klosko, S., & Weishaar, M. E. (2003). Schema therapy a practitioner's quide. The Guilford Press.