Examining the Efficacy of Cognitive Behavioral Therapy for Youth with Anxiety: A Long-Term Follow-Up Study

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Abstract

Introduction: In terms of effectiveness studies, cognition, and behaviour treatment (CBT) has shown lasting benefits in young individuals with anxiety issues. Uncertainty surrounds the long-term consequences of CBT administered in a public environment.

Objectives: The long-term effects of a person and group of cognitive behavioural therapy on youthful sufferers of anxiety disorders who received treatment in public mental health facilities were studied in this research. With a major diagnosis of a separation anxiety disorder (SAD), social anxiety disorder (SOP), and/or generalized anxiety disorder (GADA), 139 young people with a median age at evaluation of 15.5 years and a range of 11 to 21 years were assessed on a 3.9-year average following therapy (between 2.2 and 5.9).

Methods: The major worry diagnostic was eliminated, along with all other anxiety diagnoses, and the symptoms of young people's anxiety as described by their parents and peers were altered as a consequence. Following up for a while, there were 8 substantial declines in all anxiety symptom measures, removal of all diagnoses of inclusion trepidation in 53% of people, also a lack of the primary anxiety diagnosis in 63% of people. Between ICBT and GCBT, the outcomes did not vary statistically significantly.

Results: Compared to those whose primary diagnosis was SAD or GAD, those whose primary diagnosis was SOP had worse recovery probabilities.

Conclusions: In conclusion, CBT for adolescents with improvement in the results of treatment at outpatient mental health centres for anxiety disorders about 4 years later, and long-term recovery rates were similar to trials evaluating efficacy.

Keywords: cognitive behavioural therapy (CBT), separation anxiety disorder (SAD), generalized anxiety disorder (GAD), social anxiety disorder (SOP)

1. Introduction

Anxiety problems in young people and adolescents (hereafter youth) are well-established candidates for cognitive behavioural therapy (CBT). Nearly 60% of adolescents with anxiety problems, according to metaanalyses improve and have considerable symptom reduction after receiving therapy [1]. However, the question of whether therapeutic results last over time has gotten less attention. Early-life anxiety disorders are a strong indicator of later mental, social, intellectual, and vocational problems; hence, relapse may have a severe impact on an individual, their family, and society at large. Conversely, effective CBT for young people with anxiety disorders offers protection against long-term consequences [2]. Furthermore, evaluating the success of anxiety treatment disorders in young people needs to look at long-term outcomes. A popular definition of long-term observation is monitoring for at least two years following treatment. The long-term advantages of CBT techniques on adolescents experiencing several forms of anxiety, such as (SAD), (SOP), and/or generalized anxiety disorder (GAD), has been studied in five studies based on independent populations [3]. These studies demonstrate that long-term follow-up results after therapy either remained the same or enhanced, containing 46.5-85.7% of research individuals who did not anymore fit the evaluation standards for anxiety disorders. In a

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recent examination of extensive follow-up studies, it was shown that 64.6% of young people who had undergone treatment for any anxiety illness (apart from both obstructive behaviours together with post-traumatic stress disorder, had subsided [4]. This is in line with earlier short-term research studies' meta-analyses outcomes that revealed comparable effect values for ICBT and GCBT [5]. The outcome measures that are reported in long-term outcome studies vary greatly, for example, whether there is a lack of the primary inclusion anxiety diagnostic, a lack among all diagnoses for anxiety included, or a lack of all anxiety disorders. However, the lack of other anxiety-related deficits does not always follow the removal of one anxiety diagnosis [6]. Furthermore, the difficulty of making comparisons across long-term follow-up studies due to variability in reported outcomes puts the generalizability of the research results in jeopardy. As a result, more thorough data on diagnostic outcomes should be provided, including losing the primary anxiety treatment [7]. The presence of any comorbid anxiety diagnoses, and the results of symptom measures

Literature Review

The study [6] looked at the long-term effects of both group and individual (ICBT) (GCBT) CBT for young individuals together with anxiety problems who received treatment at outpatient mental health centers. The study [7] used comprehensive analysis and meta-review of the literature to evaluate the success rate of CBT modalities compared to childhood anxiety disorders to control scenarios. Studies that were randomized controlled trials that used mineralized or modular CBT, either by themselves or with other medications were considered. The study [8] mentioned for teens and adults with autism spectrum disorder who experience anxiety and sadness (ASD) places particular emphasis on the evidence in favor of various psychosocial interventions, practical modifications to conventional treatments, and the involvement of potential therapeutic mechanisms. The research [9] examined was to evaluate the efficacy of a shorter (16-session) ERT program in a sample of young people from various racial and cultural backgrounds. Participants (N = 31) were commuter college students who agreed to receive therapy for depression, anxiety, or both at an on-campus counselling service. The research [10] compared an intervention condition (EC) to a control condition (CC) to assess the efficacy y of a transdiagnostic program (EMOTION, Coping children that targets signs of sadness and anxiety in school-aged children. School districts served as the randomization unit in a clustered randomized scheme. The research [11] examined adolescents who were admitted to an acute-care psychiatric inpatient hospital compared to DBT and treatment as usual (TAU). To investigate variations in outcome variables across groups, Mann-Whitney U tests were used. Cost reductions' possible advantages were examined. According to the research [12], the author utilized data from the Treatment for Teenagers with Depression research (TADS), which included 439 US teenagers between 12 and 17 years old who were identified as having serious depressive disorder according to the DSM-IV. The study [13] updated the evidence for psychosocial therapies, discusses the factors that predict or influence their success and assesses how the body of research has changed since the previous update in 2014. An extra framework for classifying studies based on key research issues rather than treatment style is being proposed as a secondary objective.

2. Methodology

2.1 Participants

A randomized controlled study (RCT) examining 9.8 years after treatment ended in treating mixed anxiousness in young people issues in outpatient mentally sound facilities in comparison to a waitlist control that included 179 young people in total. The research was carried out between 2008 and 2012. The ages of the participants upon recruitment varied from 8 to 15 years of age. SAD, SOP, or GAD was necessary as the first analysis of inclusion. Persistent developmental abnormality and psychosis, extreme behaviour problem, and inability to think was the sole requisites for exclusion. Before, throughout, and one year following treatment, participants completed the evaluation. In another paper, the original sample, process, and outcomes are thoroughly discussed. The current research included 139 young people in total. Children were assessed on a 3.9-year average after therapy. Participants ages (PA) at the ongoing monitoring were ages 11 to 21 old, and 54.7% of them were female. Table-1 depicts cognitive behavioral therapy.

	PA (To	tal = 139)			NPA (Total = 39)				
	М	(SD)	n	%	М	(SD)	n	%	р
Pre-treatment									
characteristics									
Gender									0.7
									1
Female			74	54.5			20	11.0	
Age, mean (SD)	10.44	3.12			11.81	2.04			0.1
									5
Age range (in years)									0.4
									1
8-12			93	67.7			21	58.0	
12–15			48	32.1			17	39.0	
household socioeconomic									0.9
class									2
High			61	48.2			14	35.3	
Middle			45	31.4			13	24.2	
Low			12	10.7			4	5.0	
Not disclosed			19	8.3			10	31.1	
primary identification									0.1
									1
SAD			44	35.1			9	21.4	
SOP			66	46.6			21	51.0	
GAD			21	18.4			12	26.3	
CSR is the primary	6.02	2.11			6.90	1.15			0.6
diagnostic									0
Number of diagnoses for	4.03	1.77			1.84	0.74			0.0
anxiety included									8
SCAS-C	37.74	15.84			31.62	13.59			0.5
									1
SCAS-P	34.25	11.71			34.41	12.95			0.4
	<i>c</i> 10		_		5.62				5
SMFQ-C	6.42	4.42			7.62	6.11			0.8
SMEO D	6.51	4.05			7.01	4.02			/
SMFQ-P	0.51	4.05			/.81	4.92			0.7
Various comorbiditios									0.2
v ai ious comorbidities									8
Additional anxiety disorder			22	15.2			6	15.4	0
Depression			18	11.1			4	11.7	
Disorders with			17	10.1			2	24	
externalization			1,	10.1					
disordered tic			10	7.8			6	2.1	
Anorexia		1	0	0.0			5	5.0 ^c	
Features the following			(n =				$(n = 14^{b})$		
treatment			134)						
Principal diagnosis CSR	3.72	3.34	,		4.54	2.84		1	0.7
-									9

Table 1: PA and NPA long-term follow-up characteristics before and after the treatment were compared.

Diagnoses for comorbid	0.55	0.71			0.21	0.42			0.0
inclusion anxiety									1 ^{<u>c</u>}
Loss of the primary			55	40.1			6	46.9	0.6
diagnosis									4
Loss of all inclusion			34	26.5			4	26.5	1.0
anxiety diagnose ^d									0
SCAS-C	23.14	16.01			21.43	13.71			0.3
									5
SCAS-P	25.57	13.65			24.84	11.51			0.3
									7
SMFQ-C	5.61	5.92			3.18	4.14			0.0
									1
SMFQ-P	5.45	4.94			5.14	6.53			0.8
									5

2.2 Treatment, setting, and therapists

A FRIEND for Life, 4th edition was the therapy handbook used in the RCT. This initiative is a descendant of the Coping Koala program in Australia, which was created using the First Coping Cat by Kendall guidebook. The procedure was divided into two groups: children (8–12 years old) and twelve to fifteen-year-olds). Depending on how the physician evaluated the young person's maturity level, 12-year-olds are either the children (n = 34) or the teenage form of the treatment (n = 5). Seven public non-hospital settings for children and adolescents' mental health participated in the RCT. Participating were seventeen therapists, 12 of whom had little or no prior CBT training and five who had successfully finished a comprehensive, 2-year term-graduate CBT training program. All therapists underwent receiving instruction in the FRIENDS for Life methodology and were overseen by certified FRIENDS therapists during the therapy sessions. All therapy sessions were conducted as a component of the therapist's regular caseload. 16 practitioners at the clinics, who did the assessment, were involved. A 7-point scale with a range of 0 (no skills) through 6 (complete/excellent skills) was used to evaluate the treatment adherence and competency of the therapists. The minimal requirement for sufficient therapist commitment and skill was established at a predefined score of 3.0. The protocol's other specifics are mentioned in the preceding sentence.

2.3 Measures

2.3.1 The Anxiety Disorders Interview Schedule child and parent version (ADIS-C/P)

A clinical diagnostic must have a CSR score of at least 4 on a scale of 0 to 8, which has eight possible outcomes. Based on the composite score for the child and parents, the diagnosis and CSR were given. When there are numerous diagnoses for anxiety, the one with the greatest level of obstruction is determined based on the CSR regarded as the primary diagnosis. It has already been shown that this interview has strong interpreter reliability and retest reliability. The ADIS interview was somewhat changed for the ongoing monitoring study's purposes to identify whether children got extra therapy after the protocol for their first treatment was finished.

2.3.2 The Anxiety Disorders Interview Schedule for DSM-IV (ADIS-IV-L)

The CSR scale, which has a range of 0 to 8 like the ADIS-C/P, requires a CSR score of at least 4 to make a clinical diagnosis. This interviewing technique has previously shown high to exceptional dependability. Expert raters who were not informed of the assessors' assessments reevaluated a haphazardly chosen sample of 20% of the videotaped interviews. The CSR ratings for the diagnosis of anxiety had correlatives between classes (ICCs) of 0.97 for the whole group, whereas SAD, SOP, and GAD had ICCs of 1.00, 0.94, and 0.93 for the main anxiety diagnosis. Table 2: Reliability & Descriptive Statistics

2.4 The Short Moods and Feelings Questionnaire child and parent version (SMFQ-C/P)

The SMFQ-C/P was used to assess the depression indicators of young people. There are 13 items in the SMFQ, each of which is scored on a 3-point scale (0 being untrue, 1 being sometimes accurate, and 2 being true), with higher ratings suggesting more severe symptoms. For a diagnosis of depression in a sample of the general public, a threshold score of less than 8 was shown to provide the optimum balance of Sensitivity and particularity. It has previously been shown that the SMFQ in children over 2 weeks has great internal harmony and strong test-retest consistency. In a broad population, the SMFQ does an excellent job of differentiating between psychiatric and no psychiatric people. The present sample's internal consistency (parent = 0.92, children = 0.93) was quite good.

2.5 Procedure

All 179 participants gave their agreement must be contacted for ongoing monitoring when they were accepted into the initial RCT. 154 adolescents finished the post-treatment and intervention evaluation at that point in the treatment process. 145 of them completed the 1-year follow-up examination. All 179 original Contact was made with participants by phone or mail throughout long-term follow-up. 15 of the 154 people who completed the therapy (n) did not want to take part in the extended follow-up. Thus, 139 young people, or 77.7% of the entire initial sample and 90.3% of patients who completed therapy, made up the current research sample. Figure 1 depicts the Participant flowchart. Separate youth and parent evaluations were organized for adolescents and families who consented to participants. The majority of interviews occurred in person, including in neighborhood outpatient clinics. Due to participants moving outside the area, 14 interviews were done over the phone. The interviews were done by two psychologists and one child psychiatrist who are all qualified ADIS-C/P interviewers. as opposed to receiving and returning the surveys by mail for individuals who were interviewed by phone. A gift card (worth US\$60) was given to each participant's parent and adolescent as payment.



Figure 1: Participant flowchart.

2.6 Data analysis

Analysis was done using a sample of 139 young people. Regarding the diagnostic interviews, no information was missing. According to Little lacking missing symptom measurements during random tests happened haphazardly. Utilizing SPSS 23, group studies that include descriptive statistics distinctions of Participants' differences from non-participants were carried out. Mplus 7.4 was used for all other studies, a robust estimator to no normality violations, to take into consideration the nonnormality inherent in the data. The research had seven clinics as participants. Each of the seven clinics had an average of 20 participants (range: 10-25). As opposed to the GCBT format's 16 distinct treatment groups. As a result, the design was somewhat modeled, and data were grouped and modified to account for any clustering effects. When doing multiple tests, the mistake rate connected to experiments was controlled for at 0.05 using the Holm-Bonferroni technique. For the main anxiety diagnosis, analyses were adjusted for age, gender, and pre-treatment CSR score. Following the conclusion of trial therapy, 38 individuals, or 27.3%, reported getting further treatment for anxiety. All outcome analyses were conducted both with and without the inclusion of these subjects to see if extra therapy had an impact on study results. Participants receiving extra therapy were included in all subsequent analyses since it was determined that doing so would not change the outcomes (Non-displayed data is available upon request.). Extra regression analyses evaluating the utilization of extra therapy and the follow-up response to diagnostic treatment were conducted. The results of the GCBT served as the reference group, and an equivalency interval of 15% was established about a zero difference. Differences deemed to be insufficiently clinical or useful significance lie within this equivalency range.

ADIS-C/P combined diagnosis			Post-treatment								
	Total sample (N = 139)		ICBT (<i>n</i> = 70)		GCBT (<i>n</i> = 69)		X^2	ICBT (<i>n</i> = 70)		GCBT (<i>n</i> = 69)	
	n	%	n	%	n	%		n	%	n	%
Loss of all inclusion anxiety diagnoses	72	53.1	37	54.4	32	49.5	0.57	21	32.2	18	23 .2
Loss of principal anxiety diagnosis	85	63.1	44	65.3	44	59.7	0.58	28	42.7	24	37 .6

Table 2: Loss of inclusion diagnosis after ICBT or GCBT and comparison of different treatment modalities.

We estimated the odds ratio (OR) for losing the primary analysis of each unique principal diagnosis using logistic regression analysis to research the effects of the principal anxiety diagnosis on outcomes. Using a model for the latent growth curve, we then calculated the odds ratio (OR) for losing the primary diagnosis and the growth rates of the symptom measures for young people with a primary diagnosis of SOP or SAD compared to those with a primary diagnosis of GAD.

3. Results

3.1 Primary research aim: diagnostic status at long-term follow-up

At long-term follow-up for an extended period, 53% (n = 73) of the 139 teenagers did not meet the standards for any of the anxiety diagnoses they were given, and 63% (n = 87) did not meet the requirements for their primary anxiety treatment. The proportion of these for the same sample is individuals were, respectively, 27% (n = 37) and 40% (n = 56) at post-treatment (see Table 2). Loss of main and loss of all inclusion diagnoses indicated a substantial improvement between post-treatment and long-term follow-up (p 0.05).

3.2 Diagnostic change during follow-up

In total, 19% (n = 27) of the 139 teenagers had no longer received any including the diagnosis of anxiety after treatment and over time, compared to 40% (n = 56), who still had at least one diagnosis. 45% (n = 46) of the 102 young people who had not lost their inclusion trepidation at a sustained follow-up, diagnoses at the end of therapy had entirely recovered... Regression analysis showed no correlation between the use of further interim therapy and these 46 children. At both the post- and long-term assessments, 31% (n = 43) of the 139 teenagers lost their primary anxiety diagnosis, while 28% (n = 39) had kept it at both periods of assessment. A recovery rate of 53% (n = 44) was seen at a sustained follow-up among the 83 children who retained their primary anxiety treatment post-treatment. Regression analysis established that there was no notable correlation between the uses of further interim therapy by these 44 children.

3.3 Clinical severity rating and symptom measures

In The serious evaluations of the primary, diagnostics in the secondary and tertiary of anxiety as well as symptom measurements at baseline, post-treatment, and ongoing monitoring are shown in Table-3 In addition to a substantial decrease in symptoms in ratings for all symptomatic treatments after therapy to there was a big improvement over the long term decrease in CSR for the primary, Secondary and tertiary diagnosis of anxiety (p 0.05). As a result, both treatment forms (ICBT and GCBT) showed statistically equal rates of Symptom relief during long-term monitoring, and both treatment formats also showed comparable improvement ranges across time.

Measure	All p	oatients	ICBT	(n = 70)	GCBT (n = 69)			Pre-post		Post-LTFU	
	Mean	(SD)	Mean	(SD)	Mean	(SD)		β	Z	β	Z
SMFQ-P											
Pre-treatment (n = 134)	7.52	(4.04)	7.42	(4.62)	7.52	(5.54)	G	0.36	0.70	0.65	0. 92
Post-treatment	5.47	(4.46)	5.91	(5.07)	5.05	(4.77)	Т	-0.30	-4.34**	-0.02	-2 .8 0 ^{**}
LTFU	4.36	(3.39)	4.54	(5.29)	4.11	(4.81)	Ι	0.32	2.03	-0.04	-1 .7 1
SCAS-C											
Pre-treatment (n = 131)	35.78	(13.85)	36.20	(15.91)	37.75	(17.81)	G	-1.33	-0.53	0.34	0. 13
Post-treatment	26.67	(14.53)	27.21	(16.34)	28.09	(14.70)	Т	-1.41	-6.54 ^{***}	0.06	-2 .4 $2^{\frac{*}{2}}$
LTFU	25.14	(11.01)	24.7	(14.11)	23.38	(17.74)	Ι	0.04	0.14	0.07	0. 81
CSR, tertiary anxiety diagnosis											
Pre-treatment (n = 45)	5.53	(1.25)	5.35	(1.04)	5.75	(1.35)	G	-0.11	-0.22	0.11	0. 15
Post-treatment	3.92	(2.43)	4.02	(2.31)	3.84	(2.57)	Т	-0.16	-3.63***	-0.03	-6 .2 6

Table 3: severity assessments and symptom measurements during post-treatment and long-term	follow-up.
Principal impacts of the group by time and group-by-group interaction	

F			•		•						
LTFU	1.43	(2.81)	1.44	(2.83)	1.42	(2.81)	Ι	0.01	0.32	0.00	-0 .3 0
Pre-treatment (n = 133)	34.27	(11.20)	34.79	(11.31)	36.81	(11.04	G	0.21	0.11	1.44	0. 71
Post-treatment	25.56	(12.65)	28.18	(11.04)	28.04	(12.15)	Т	-1.23	-7.23	-0.11	-6 .3 8 ^{**} / <u>*</u>
LTFU	22.58	(11.24)	21.31	(15.61)	21.98	(12 .91)	Ι	0.02	0.16	0.05	0. 84
SMFQ-C											
Pre-treatment (n = 128)	6.41	(5.41)	6.34	(5.19)	7.54	(4.63)	G	-0.23	-0.30	-0.03	-0 .0 6
Post-treatment	5.98	(5.33)	4.94	(5.10)	6.04	(4.62)	Т	-0.22	-2.95**	-0.01	-0 .6 2
LTFU	5.67	(5.97)	4.71	(5.67)	5.57	(6.22)	Ι	-0.03	-0.16	0.00	0. 13
CSR, secondary anxiety diagnosis											
Pre-treatment (n = 99)	6.30	(1.08)	5.21	(1.01)	6.39	(2.11)	G	0.05	0.18	-0.22	-0 .6 1
Post-treatment	4.00	(2.44)	3.14	(2.55)	3.88	(1.41)	Т	-0.13	-3.64***	-0.05	-6 .2 4 ^{**} <u>*</u>
LTFU	1.28	(2.62)	0.91	(2.14)	1.61	(3.99)	Ι	0.06	0.90	-0.01	-0 .8 1
CSR, principal anxiety diagnosis											
Pre-treatment (n = 139)	6.90	(1.14)	5.92	(1.09)	6.87	(1.18)	G	0.05	0.19	-0.12	-0 .3 3
Post-treatment	4.72	(2.37)	3.72	(2.47)	4.71	(2.29)	Т	-0.31	-10.57 ***	-0.05	
LTFU	2.29	(3.10)	2.16	(3.11)	1.45	(3.12)	Ι	0.02	0.31	0.00	-0 .3 1

As shown in Table 4, we looked at the correlation between post-treatment CSR scores and ongoing monitoring results for the patients' primary anxiety diagnosis. The participants were divided into four groups based on the

standards for clinically meaningful change and their clinical state at a sustained follow-up and post-treatment. Using their CSR ratings in contrast to their CSR ratings before treatment. Deterioration: The CSR score grew by two factors; no change: The CSR score changed by one point; response. Out of the 26 individuals who were categorized as post-treatment therapy responders, 17 (65%) had improved following up for a long time, five had their position as a patient responding to therapy, and four had become worse and showed no improvement before therapy.

	Status at long-term follow-up									
Status at post-treatment	Response	Total	Recovery	No change	Deterioration					
Response	6	25	19	3	5					
Total	14	137	84	31	4					
Recovery	7	50	42	5	2					
No change	5	51	27	17	0					
Deterioration	0	2	5	1	2					

 Table 4: Comparison of clinical improvement rates for principal diagnosis from pre- to post-treatment and long-term follow-up

4. Conclusion

Our research shows that CBT is helpful over the long term for treating children combined with anxiety disorders. These results support the expansion of CBT usage and the use of outpatient mental health centers. Additionally, while treating young people with SAD, SOP, and/or GAD, practitioners have freedom in their choice of therapy style because of the similar results for ICBT and GCBT. The choice of therapy style might be centered on the child's or the parent's choices, resources available at community clinics, or referral rates rather than on adolescent clinical criteria. Our study's findings show that the influence of the latter disparities on the results of therapy may be overstated over the long run, even if a community context varies from a college clinic environment in many ways and may be attributed to worse treatment outcomes.

Refrences

- [1] Bieling, P.J., McCabe, R.E. and Antony, M.M., 2022. Cognitive-behavioral therapy in groups. Guilford publications.
- [2] Totsika, V., Liew, A., Absoud, M., Adnams, C. and Emerson, E., 2022. Mental health problems in children with intellectual disability. The Lancet Child & Adolescent Health.
- [3] Gottschalk, M.G. and Domschke, K., 2022. Genetics of generalized anxiety disorder and related traits. Dialogues in clinical neuroscience.
- [4] Andreasen, N.C., 2022. What is post-traumatic stress disorder?. Dialogues in clinical neuroscience.
- [5] Kikuchi, S., Oe, Y., Sasaki, Y., Ishii, H., Ito, Y., Horikoshi, M., Sozu, T., Seno, H. and Furukawa, T.A., 2020. Group cognitive behavioural therapy (GCBT) versus treatment as usual (TAU) in the treatment of irritable bowel syndrome (IBS): a study protocol for a randomized controlled trial. BMC gastroenterology, 20(1), pp.1-11.
- [6] Brunton, R.J., Dryer, R., Saliba, A. and Kohlhoff, J., 2019. The initial development of the Pregnancyrelated Anxiety Scale. Women and Birth, 32(1), pp.e118-e130.
- [7] Noonan, S., Zaveri, M., Macaninch, E. and Martyn, K., 2020. Food & mood: a review of supplementary prebiotic and probiotic interventions in the treatment of anxiety and depression in adults. BMJ nutrition, prevention & health, 3(2), p.351.

- [8] Kodal, A., Fjermestad, K., Bjelland, I., Gjestad, R., Öst, L.G., Bjaastad, J.F., Haugland, B.S., Havik, O.E., Heiervang, E. and Wergeland, G.J., 2018. Long-term effectiveness of cognitive behavioral therapy for youth with anxiety disorders. Journal of anxiety disorders, 53, pp.58-67.
- [9] Kose, L.K., Fox, L. and Storch, E.A., 2018. Effectiveness of cognitive behavioral therapy for individuals with autism spectrum disorders and comorbid obsessive-compulsive disorder: A review of the research. Journal of developmental and physical disabilities, 30, pp.69-87.
- [10] White, S.W., Simmons, G.L., Gotham, K.O., Conner, C.M., Smith, I.C., Beck, K.B. and Mazefsky, C.A., 2018. Psychosocial treatments targeting anxiety and depression in adolescents and adults on the autism spectrum: Review of the latest research and recommended future directions. Current psychiatry reports, 20, pp.1-10.
- [11] Renna, M.E., Quintero, J.M., Soffer, A., Pino, M., Ader, L., Fresco, D.M. and Mennin, D.S., 2018. A pilot study of emotion regulation therapy for generalized anxiety and depression: findings from a diverse sample of young adults. Behavior therapy, 49(3), pp.403-418.
- [12] Martinsen, K.D., Rasmussen, L.M.P., Wentzel-Larsen, T., Holen, S., Sund, A.M., Løvaas, M.E.S., Patras, J., Kendall, P.C., Waaktaar, T. and Neumer, S.P., 2019. Prevention of anxiety and depression in school children: Effectiveness of the transdiagnostic EMOTION program. Journal of Consulting and clinical psychology, 87(2), p.212.
- [13] Tebbett-Mock, A.A., Saito, E., McGee, M., Woloszyn, P. and Venuti, M., 2020. Efficacy of dialectical behavior therapy versus treatment as usual for acute-care inpatient adolescents. Journal of the American Academy of Child & Adolescent Psychiatry, 59(1), pp.149-156.
- [14] Kahlon, S., Lindner, P. and Nordgreen, T., 2019. Virtual reality exposure therapy for adolescents with fear of public speaking: a non-randomized feasibility and pilot study. Child and adolescent psychiatry and mental health, 13(1), pp.1-10.
- [15] Freeman, J., Benito, K., Herren, J., Kemp, J., Sung, J., Georgiadis, C., Arora, A., Walther, M. and Garcia, A., 2018. Evidence base update of psychosocial treatments for pediatric obsessive-compulsive disorder: Evaluating, improving, and transporting what works. Journal of Clinical Child & Adolescent Psychology, 47(5), pp.669-698.