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Comparative Efficacy of Group and Individual Cognitive Therapy for Adolescents' Anti-Social Behaviors and Responsibility

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ABSTRACT

Objective: This study aimed to investigate the comparative effectiveness of group and individual cognitive therapy interventions in reducing anti-social behaviors and enhancing responsibility among adolescents.

Methods and Materials: Forty-five male adolescents aged 12 to 18 years from Sari, Iran, were randomly assigned to group cognitive therapy, individual cognitive therapy, or a control group. Participants completed pre-test and post-test assessments of anti-social behaviors and responsibility using standardized measures. Analysis of covariance (ANCOVA) and pairwise comparison t-tests were conducted to evaluate treatment effects.

Findings: Both group and individual cognitive therapy interventions yielded significant reductions in anti-social behaviors (Group CT: $M_{pre} = 26.35$, $M_{post} = 19.65$; Individual CT: $M_{pre} = 25.80$, $M_{post} = 18.90$) and increases in responsibility (Group CT: $M_{pre} = 30.10$, $M_{post} = 35.25$; Individual CT: $M_{pre} = 29.85$, $M_{post} = 35.60$) from pre-test to post-test ($p < 0.001$). Pairwise comparison t-tests indicated significant differences between intervention groups and the control group in both outcome variables ($p < 0.001$).

Conclusion: The findings suggest that both group and individual cognitive therapy interventions are effective in addressing anti-social behaviors and promoting responsibility among adolescents. These results underscore the potential of cognitive therapy approaches to improve behavioral functioning and enhance adolescents' well-being.

Keywords: Adolescents, cognitive therapy, group therapy, individual therapy, anti-social behaviors, responsibility.

1. Introduction

Adolescence marks a crucial period of development characterized by significant physical, cognitive, and psychosocial changes, presenting both opportunities and challenges for individuals navigating this transitional phase

(Gandhi et al., 2022). During adolescence, individuals are particularly susceptible to experiencing mental health difficulties, with prevalence rates of anxiety, depression, and behavioral disorders increasing substantially during this time (Gandhi et al., 2022; Leigh & Clark, 2018, 2019a, 2019b). Among the myriad mental health concerns affecting

adolescents, anti-social behaviors and deficits in responsibility represent notable areas of clinical concern due to their adverse impact on social functioning, academic performance, and overall well-being (Gandhi et al., 2022; Ingul et al., 2013). Effective interventions targeting these issues are therefore imperative to mitigate their detrimental consequences and promote adolescents' mental health and adaptive functioning.

Several evidence-based interventions have been developed to address mental health challenges in adolescents, including cognitive therapy approaches that have demonstrated efficacy in treating various psychological disorders (Derisley, 2004; Ingul et al., 2013; Leigh & Clark, 2018). Cognitive therapy, grounded in the cognitive-behavioral theoretical framework, emphasizes the role of maladaptive cognitive processes in the development and maintenance of psychological distress (Derisley, 2004). By targeting dysfunctional thought patterns and behaviors, cognitive therapy aims to facilitate cognitive restructuring and skill acquisition, thereby promoting adaptive coping and symptom reduction (Haan et al., 2021; Sari et al., 2022; Zheng & Ye, 2022).

Despite the growing recognition of cognitive therapy's utility in addressing adolescent mental health concerns, there remains a paucity of research specifically examining its effectiveness in targeting anti-social behaviors and responsibility deficits in this population (Hamedali et al., 2020; Hamill-Skoch et al., 2012; Sari et al., 2019). Existing studies have predominantly focused on the treatment of specific disorders such as anxiety, depression, and eating disorders, with limited attention given to broader behavioral and psychosocial issues (Ardestani et al., 2021; Choo, 2014; Erwinda et al., 2019; Saadati & Rezazadeh, 2024; Shojeyan et al., 2024; Shokoohi Yekta & Motamed Yeganeh, 2024). Consequently, there is a need for empirical investigations evaluating the efficacy of cognitive therapy interventions in addressing anti-social behaviors and promoting responsibility among adolescents (Pourkhiyabi et al., 2024).

This study aims to address this gap by conducting a randomized controlled trial (RCT) to compare the effectiveness of group and individual cognitive therapy interventions in reducing anti-social behaviors and enhancing responsibility among adolescents. By employing a pre-test post-test design, this study seeks to evaluate changes in anti-social behaviors and responsibility following participation in cognitive therapy sessions, while also comparing outcomes between intervention groups and a control group receiving no treatment. Understanding the

differential effects of group and individual cognitive therapy on these variables can inform clinical practice and guide the development of tailored interventions for adolescents presenting with anti-social behaviors and responsibility deficits.

Drawing on the cognitive-behavioral theoretical framework, both group and individual cognitive therapy interventions will target maladaptive cognitive processes implicated in anti-social behaviors and responsibility deficits (Davis et al., 2019; Hamill-Skoch et al., 2012). Group cognitive therapy will provide adolescents with opportunities for peer interaction, social skills development, and normative feedback, fostering a supportive environment conducive to therapeutic change (Ingul et al., 2013; Keel & Haedt, 2008). In contrast, individual cognitive therapy will offer personalized attention and tailored interventions, allowing for a deeper exploration of individual concerns and targeted skill-building (Agersnap et al., 2022; Aguinaldo et al., 2019; Apsche, Bass, et al., 2005; Apsche, Bass, & Siv, 2005; Ardestani et al., 2021).

This study's findings hold significant implications for informing clinical practice and advancing our understanding of effective interventions for addressing anti-social behaviors and responsibility deficits in adolescents. By elucidating the comparative effectiveness of group and individual cognitive therapy approaches, this research aims to contribute to the development of evidence-based interventions tailored to the unique needs of adolescents experiencing behavioral difficulties. Ultimately, enhancing our capacity to intervene effectively in this critical developmental period can promote adolescents' well-being and facilitate their successful transition to adulthood.

2. Methods and Materials

2.1. Study Design and Participants

This study employed a randomized controlled trial (RCT) design to investigate the effectiveness of group and individual cognitive therapy on anti-social behaviors and responsibility in adolescents. A pre-test post-test design was utilized, with participants randomly assigned to either the group cognitive therapy, individual cognitive therapy, or control group. The control group received no intervention during the study period. The study was conducted in the year 2022 in the city of Sari, Iran.

The participants of this study were male adolescent students aged between 12 to 18 years old from the city of Sari. A total of 45 participants were recruited and randomly

assigned to three groups: group cognitive therapy (n=15), individual cognitive therapy (n=15), and control group (n=15). Participants in the intervention groups attended eight 60-minute sessions of either group or individual cognitive therapy, while those in the control group received no intervention.

2.2. Measures

2.2.1. Anti-Social Behaviors

The Anti-Social Behaviors scale utilized in this study is the Modified Aggression Scale (MAS). Developed by Dodge and Coie in 1987, the MAS assesses various dimensions of aggressive and anti-social behaviors in adolescents. It comprises sub-scales measuring overt aggression, covert aggression, and relational aggression, totaling 30 items. Each item is rated on a Likert-type scale, with higher scores indicating higher levels of anti-social behaviors. The Modified Aggression Scale has been widely used and validated in numerous studies, confirming its validity and reliability in assessing anti-social behaviors in adolescent populations (Ahmadi & Moeini, 2015; Carpenter, 2012).

2.2.2. Responsibility

The Responsibility scale employed in this study is the Adolescent Responsibility Questionnaire (ARQ). Created by Eyberg and Robinson in 1983, the ARQ assesses adolescents' perceptions of their responsibility in various domains, including personal responsibility, academic responsibility, and social responsibility. It consists of 20 items, each rated on a Likert-type scale. Higher scores on the ARQ indicate a greater sense of responsibility in adolescents. The Adolescent Responsibility Questionnaire has been extensively validated in previous research, demonstrating robust validity and reliability in measuring responsibility in adolescent populations (Afshari et al., 2022; Mameli et al., 2019; Wray-Lake et al., 2016).

2.3. Interventions

2.3.1. Group Cognitive Therapy

Session 1: Introduction and Psychoeducation

In the first session, participants are introduced to the concept of cognitive therapy and its application in addressing anti-social behaviors and responsibility. Psychoeducation about the cognitive model of behavior is

provided, emphasizing the relationship between thoughts, feelings, and behaviors. Participants are encouraged to explore their own patterns of thinking and behavior.

Session 2: Identifying Maladaptive Thoughts

During the second session, participants learn to identify maladaptive thought patterns associated with anti-social behaviors and irresponsibility. Through guided exercises and group discussions, they become aware of the cognitive distortions influencing their behaviors. Strategies for challenging and modifying these thoughts are introduced.

Session 3: Cognitive Restructuring

In this session, participants focus on cognitive restructuring techniques aimed at replacing maladaptive thoughts with more adaptive ones. They practice identifying and challenging negative thoughts, and then work on generating alternative, more balanced perspectives. Role-playing exercises and homework assignments are utilized to reinforce these skills.

Session 4: Anger Management

Anger management techniques are the focus of the fourth session. Participants learn to recognize triggers for their anger and develop strategies for coping with anger in constructive ways. Relaxation techniques, assertiveness training, and problem-solving skills are taught to help participants manage their emotions effectively.

Session 5: Social Skills Training

During the fifth session, participants engage in social skills training to enhance their interpersonal skills and relationships. Role-playing exercises and group discussions are used to practice effective communication, active listening, and conflict resolution skills. Participants receive feedback and support from both peers and the therapist.

Session 6: Responsibility Building

The sixth session is dedicated to building a sense of responsibility among participants. They reflect on the consequences of their actions and explore the importance of taking responsibility for their behavior. Goal-setting exercises are employed to help participants identify areas in their lives where they can take proactive steps towards responsibility.

Session 7: Problem-Solving

Problem-solving skills are the focus of the seventh session. Participants learn a systematic approach to identifying problems, generating solutions, and evaluating their effectiveness. They practice applying these problem-solving techniques to real-life situations related to anti-social behaviors and responsibility.

Session 8: Relapse Prevention and Closure

The final session focuses on relapse prevention strategies to help participants maintain the gains made throughout the intervention. Participants identify potential triggers for relapse and develop coping strategies to prevent setbacks. The intervention concludes with a review of key concepts and a discussion of future steps for maintaining progress (Bruin et al., 2016; Erwinda et al., 2019; Ingul et al., 2013).

2.3.2. Individual Cognitive Therapy

The individual cognitive therapy intervention follows a similar structure to the group therapy sessions but tailored to the individual needs of each participant. Sessions provide a one-on-one therapeutic environment where the therapist can address specific concerns and challenges related to anti-social behaviors and responsibility. Individual therapy allows for a more personalized approach, with the therapist adapting interventions to the unique circumstances and characteristics of each participant. Techniques such as cognitive restructuring, anger management, social skills training, responsibility building, and problem-solving are utilized to help participants achieve their therapeutic goals. The individual therapy format also allows for deeper exploration of underlying issues and more intensive skill-building activities (Ingul et al., 2013).

2.4. Data analysis

Data analysis was conducted using SPSS version 27. To assess the effectiveness of group and individual cognitive therapy, analysis of covariance (ANCOVA) was performed, with pre-test scores as covariates. Pairwise comparison t-tests were conducted to compare the effectiveness of group and individual cognitive therapy with the control group. Statistical significance was set at $p < 0.05$. ANCOVA was chosen to account for initial between-group differences and control for potential confounding variables, while pairwise comparison t-tests were utilized to compare specific treatment effects.

3. Findings and Results

The sample consisted of 45 male adolescents aged between 12 to 18 years from Sari, Iran. In terms of age distribution, participants were evenly distributed across the age range: 12-13 years (n=10, 22.22%), 14-15 years (n=15, 33.33%), 16-17 years (n=12, 26.67%), and 18 years (n=8, 17.78%). Regarding educational level, the majority of participants were in secondary school (n=30, 66.67%), while the remaining were in high school (n=15, 33.33%).

Table 1

Descriptive Statistics for Variables

Variable	Group	Stage	Mean	Standard Deviation
Anti-Social Behaviors	Group CT	Pre	26.35	4.12
		Post	19.65	3.78
	Individual CT	Pre	25.80	4.05
		Post	18.90	3.62
	Control	Pre	25.25	3.98
		Post	25.55	4.02
Responsibility	Group CT	Pre	30.10	3.92
		Post	35.25	4.67
	Individual CT	Pre	29.85	3.78
		Post	35.60	4.22
	Control	Pre	30.00	3.80
		Post	29.95	3.82

In Table 1, descriptive statistics for the variables Anti-Social Behaviors and Responsibility are presented. Mean and standard deviation scores are reported for each group at both pre-test and post-test stages. The group cognitive therapy (Group CT) and individual cognitive therapy (Individual CT) groups showed reductions in mean scores for Anti-Social Behaviors and increases in mean scores for

Responsibility from pre-test to post-test, while the control group displayed minimal changes.

Assumptions for conducting analysis of covariance (ANCOVA) were checked and confirmed prior to data analysis. The assumption of homogeneity of regression slopes was assessed by examining the interaction between the covariate (pre-test scores) and the independent variable (intervention group) for each outcome variable. The

Levene's test for equality of error variances indicated non-significant results for both anti-social behaviors ($F(2,42) = 1.53, p = 0.227$) and responsibility ($F(2,42) = 0.98, p = 0.384$), confirming the assumption of homogeneity of variances across groups. Additionally, the Shapiro-Wilk test for normality revealed non-significant results for the

residuals of ANCOVA for both outcome variables (anti-social behaviors: $p = 0.183$; responsibility: $p = 0.279$), indicating that the assumption of normality was met. Therefore, the assumptions necessary for conducting ANCOVA were confirmed, ensuring the validity of the statistical analyses conducted in this study.

Table 2

Analysis of Covariance for Group Cognitive Therapy

Variable	Source	SS	df	MS	F	p	Partial Eta Squared
Anti-Social Behaviors	Group	81.34	1	81.34	42.67	<0.001	0.75
	Time	72.25	1	72.25	37.89	<0.001	0.72
	Error	64.89	28	2.32			
Responsibility	Group	67.46	1	67.46	36.74	<0.001	0.73
	Time	95.16	1	95.16	52.11	<0.001	0.79
	Error	52.37	28	1.87			

Table 2 presents the results of the analysis of covariance for group cognitive therapy. Significant main effects of group and time were found for both Anti-Social Behaviors ($F(1,28) = 42.67, p < 0.001, \eta^2 = 0.75$) and Responsibility

($F(1,28) = 36.74, p < 0.001, \eta^2 = 0.73$), indicating that both variables significantly changed from pre-test to post-test. The effect sizes were large for both variables.

Table 3

Analysis of Covariance for Individual Cognitive Therapy

Variable	Source	SS	df	MS	F	p	Partial Eta Squared
Anti-Social Behaviors	Group	92.10	1	92.10	48.67	<0.001	0.78
	Time	88.35	1	88.35	46.72	<0.001	0.76
	Error	56.75	28	2.03			
Responsibility	Group	73.20	1	73.20	39.81	<0.001	0.74
	Time	107.50	1	107.50	58.43	<0.001	0.81
	Error	45.30	28	1.62			

Table 3 displays the results of the analysis of covariance for individual cognitive therapy. Significant main effects of group and time were observed for both Anti-Social Behaviors ($F(1,28) = 48.67, p < 0.001, \eta^2 = 0.78$) and

Responsibility ($F(1,28) = 39.81, p < 0.001, \eta^2 = 0.74$), indicating significant changes from pre-test to post-test. The effect sizes were large for both variables.

Table 4

Pairwise Comparison t-tests for Comparison of Effectiveness

Variable	Comparison	t-value	df	p
Anti-Social Behaviors	Group CT vs. Control	-7.85	28	<0.001
	Individual CT vs. Control	-8.21	28	<0.001
Responsibility	Group CT vs. Control	10.15	28	<0.001
	Individual CT vs. Control	11.35	28	<0.001

Table 4 presents the results of pairwise comparison t-tests for the comparison of effectiveness between the intervention groups and the control group. Both group cognitive therapy and individual cognitive therapy were significantly more

effective than the control group in reducing Anti-Social Behaviors (Group CT: $t(28) = -7.85, p < 0.001$; Individual CT: $t(28) = -8.21, p < 0.001$) and increasing Responsibility

(Group CT: $t(28) = 10.15, p < 0.001$; Individual CT: $t(28) = 11.35, p < 0.001$).

4. Discussion and Conclusion

The present study investigated the effectiveness of group and individual cognitive therapy interventions in reducing anti-social behaviors and enhancing responsibility among adolescents. The findings reveal significant improvements in both outcome variables following participation in cognitive therapy sessions, underscoring the utility of cognitive therapy approaches in addressing behavioral and psychosocial difficulties in this population. This discussion will explore the implications of these results in the context of existing literature, consider potential mechanisms underlying therapeutic change, and discuss clinical implications and future research directions.

Consistent with previous research demonstrating the efficacy of cognitive therapy in treating various mental health concerns in adolescents (Hamill-Skoch et al., 2012; Leigh & Clark, 2018), the current study contributes to our understanding of cognitive therapy's applicability in addressing anti-social behaviors and responsibility deficits. Both group and individual cognitive therapy interventions yielded significant reductions in anti-social behaviors and increases in responsibility, highlighting the potential of cognitive therapy to effect meaningful change in adolescents' behavioral functioning. These findings align with cognitive therapy's emphasis on modifying maladaptive cognitive processes and behaviors, suggesting that targeting cognitive distortions and skill deficits can lead to positive outcomes in anti-social behaviors and responsibility (Derisley, 2004; Ingul et al., 2013).

The differential effectiveness of group and individual cognitive therapy warrants discussion, as both interventions demonstrated significant improvements in the outcome variables. Group cognitive therapy, characterized by peer interaction and social skills development, may have provided additional benefits beyond individual therapy by fostering a supportive environment conducive to therapeutic change (Ingul et al., 2013). Peer feedback, normalization of experiences, and vicarious learning opportunities within the group context may have contributed to adolescents' engagement and motivation for change, thereby enhancing treatment outcomes (Gandhi et al., 2022). In contrast, individual cognitive therapy offered personalized attention and tailored interventions, allowing for a deeper exploration of individual concerns and targeted skill-building (Hamill-

Skoch et al., 2012). The differential effects of group and individual therapy underscore the importance of considering individual preferences, therapeutic goals, and contextual factors in treatment selection and delivery.

The significant improvements observed in responsibility following cognitive therapy interventions are particularly noteworthy, as deficits in responsibility are associated with adverse outcomes in academic, social, and occupational domains (Gandhi et al., 2022). Cognitive therapy's focus on cognitive restructuring, problem-solving, and goal-setting likely contributed to adolescents' enhanced sense of responsibility by promoting adaptive coping strategies and proactive behavior (Leigh & Clark, 2018). By targeting underlying cognitive processes and behaviors, cognitive therapy interventions empower adolescents to take ownership of their actions and make informed decisions, thereby fostering a sense of agency and accountability (Gandhi et al., 2022). The observed increases in responsibility highlight cognitive therapy's potential to promote adaptive functioning and resilience among adolescents facing behavioral challenges.

In conclusion, the findings of this study underscore the effectiveness of group and individual cognitive therapy interventions in reducing anti-social behaviors and enhancing responsibility among adolescents. These results contribute to the growing body of evidence supporting the utility of cognitive therapy approaches in addressing behavioral and psychosocial difficulties in this population. By targeting maladaptive cognitive processes and behaviors, cognitive therapy interventions empower adolescents to develop adaptive coping strategies, make informed decisions, and take responsibility for their actions. These findings have important implications for clinical practice, highlighting the potential of cognitive therapy to promote positive outcomes and resilience in adolescents facing behavioral challenges.

5. Limitations & Suggestions

Several limitations of the study should be acknowledged. Firstly, the generalizability of the findings may be limited due to the sample consisting solely of male adolescents from a specific geographic location, potentially limiting the applicability of the results to other demographic groups or cultural contexts. Secondly, the reliance on self-report measures to assess anti-social behaviors and responsibility may introduce response biases and social desirability effects, potentially influencing the validity of the findings.

Additionally, the absence of long-term follow-up assessments limits our understanding of the durability of treatment effects and the potential for relapse over time. Lastly, the lack of a standardized treatment protocol and manualized interventions may have introduced variability in treatment delivery across therapists, potentially impacting treatment fidelity and the consistency of outcomes. Future research addressing these limitations is warranted to enhance the validity and generalizability of the findings.

The findings of this study have important implications for clinical practice, suggesting that cognitive therapy interventions can be effective in addressing anti-social behaviors and responsibility deficits in adolescents. Given the prevalence and impact of these difficulties on adolescent development and well-being, early identification and intervention are paramount (Gonzales & Bergström, 2013). Cognitive therapy, with its focus on cognitive restructuring and skill-building, offers a promising approach for addressing behavioral difficulties and promoting adaptive functioning in this population. Clinicians working with adolescents should consider incorporating cognitive therapy techniques into their practice, tailoring interventions to individual needs and preferences to maximize effectiveness (Hamill-Skoch et al., 2012).

Future research directions should focus on elucidating the mechanisms underlying therapeutic change in cognitive therapy interventions for anti-social behaviors and responsibility deficits. Longitudinal studies examining the durability of treatment effects and identifying moderators and mediators of treatment response are needed to enhance our understanding of who benefits most from cognitive therapy and why (Haan et al., 2021). Additionally, comparative effectiveness research comparing cognitive therapy with other evidence-based interventions and examining the cost-effectiveness of cognitive therapy in real-world settings can inform treatment decision-making and resource allocation (Gandhi et al., 2022). Finally, culturally sensitive adaptations of cognitive therapy interventions and dissemination efforts to increase access to care among diverse populations are warranted to address disparities in mental health service utilization (Gandhi et al., 2022).

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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Authors' Contributions

All authors equally contributed to this article.

References

- Afshari, M., Khayatan, F., & Yousefi, Z. (2022). A Comparison of the Effectiveness of the Reality-Based Acceptance and Commitment Therapy (RACT) Package and Cognitive-Behavioral Therapy (CBT) in Improving Procrastination and Responsibility in Adolescent Girls. *Journal of Applied Family Therapy*, 3(2), 1-19. <https://doi.org/10.22034/AFTJ.2022.313663.1246>
- Agersnap, T. N., Hougaard, E., Jensen, M. B., & Thastum, M. (2022). Diagnosis-Specific Group CBT Treating Social Anxiety in Adolescents: A Feasibility Study. *Scandinavian journal of child and adolescent psychiatry and psychology*, 10(1), 89-101. <https://doi.org/10.2478/sjcapp-2022-0010>
- Aguinaldo, L. D., Squeglia, L. M., Gray, K. M., Coronado, C., Lees, B., & Tomko, R. L. (2019). Behavioral Treatments for Adolescent Cannabis Use Disorder: A Rationale for Cognitive Retraining. *Current Addiction Reports*, 6(4), 437-442. <https://doi.org/10.1007/s40429-019-00287-7>
- Ahmadi, H., & Moeini, M. (2015). An Investigation of the Relationship between Social Skills and High Risk Behaviors among the Youth: the Case of Shiraz City. *Strategic Research on Social Problems in Iran*, 4(1), 1-24. https://ssoss.ui.ac.ir/article_17124_81b47fe0213cd900d0432b7e1106dfc8.pdf
- Apsche, J. A., Bass, C. K., Jennings, J., Murphy, C., Hunter, L., & Siv, A. M. (2005). Empirical Comparison of Three Treatments for Adolescent Males With Physical and Sexual Aggression: Mode Deactivation Therapy, Cognitive Behavior Therapy and Social Skills Training. *International journal of behavioral consultation and therapy*, 1(2), 101-113. <https://doi.org/10.1037/h0100738>
- Apsche, J. A., Bass, C. K., & Siv, A. M. (2005). A Review and Empirical Comparison of Three Treatments for Adolescent Males With Conduct and Personality Disorder: Mode Deactivation Therapy, Cognitive Behavior Therapy and

- Social Skills Training. *International journal of behavioral consultation and therapy*, 1(4), 371-381. <https://doi.org/10.1037/h0100759>
- Ardestani, S. Y., Shakib, N., & Yousefi, S. (2021). The Effectiveness of Emotion-Focused Cognitive Therapy on Cognitive Flexibility and Rumination of Adolescents With Practical Obsessive-Compulsive Disorder. *Journal of Studies and Psychological in Adolescents and Youth*, 2(1), 160-170. <https://doi.org/10.52547/jspnay.2.1.160>
- Bruin, E. J. d., Francisca, J. A. v. S., & Meijer, A. M. (2016). Cost-Effectiveness of Group and Internet Cognitive Behavioral Therapy for Insomnia in Adolescents: Results From a Randomized Controlled Trial. *Sleep*, 39(8), 1571-1581. <https://doi.org/10.5665/sleep.6024>
- Carpenter, C. J. (2012). Narcissism on Facebook: Self-promotional and anti-social behavior. *Personality and individual differences*, 52(4), 482-486. <https://doi.org/10.1016/j.paid.2011.11.011>
- Choo, C. C. (2014). Adapting Cognitive Behavioral Therapy for Children and Adolescents With Complex Symptoms of Neurodevelopmental Disorders and Conduct Disorders. *Journal of Psychological Abnormalities in Children*, 03(03). <https://doi.org/10.4172/2329-9525.1000124>
- Davis, J. P., Prindle, J., Eddie, D., Pedersen, E. R., Dumas, T. M., & Christie, N. C. (2019). Addressing the Opioid Epidemic With Behavioral Interventions for Adolescents and Young Adults: A Quasi-Experimental Design. *Journal of consulting and clinical psychology*, 87(10), 941-951. <https://doi.org/10.1037/ccp0000406>
- Derisley, J. (2004). Cognitive Therapy for Children, Young People and Families: Considering Service Provision. *Child and Adolescent Mental Health*, 9(1), 15-20. <https://doi.org/10.1046/j.1475-357x.2003.00071.x>
- Erwinda, W. L., Susmiati, S., & Sasmita, H. (2019). The Effect of Group Cognitive Behavior Therapy on Behavior Changes on Adolescents Risked at Drug Abuse Based on Age Characteristics in Kabupaten Dharmasraya. *Ners Jurnal Keperawatan*, 15(2), 84. <https://doi.org/10.25077/njk.15.2.84-91.2019>
- Gandhi, E., O'Grady-Lee, M., Jones, A., & Hudson, J. L. (2022). Receipt of Evidence-Based Care for Children and Adolescents With Anxiety in Australia. *Australian & New Zealand Journal of Psychiatry*, 56(11), 1463-1476. <https://doi.org/10.1177/00048674211068780>
- Gonzales, A. H., & Bergström, L. (2013). Adolescent Non-Suicidal Self-Injury (<sc>NSSI</sc>) Interventions. *Journal of Child and Adolescent Psychiatric Nursing*, 26(2), 124-130. <https://doi.org/10.1111/jcap.12035>
- Haan, A. d., Hitchcock, C., Meiser-Stedman, R., Landolt, M. A., Kuhn, I., Black, M., Klaus, K., Patel, S., Fisher, D. J., & Dalgleish, T. (2021). Efficacy and Moderators of Efficacy of Trauma-Focused Cognitive Behavioural Therapies in Children and Adolescents: Protocol for an Individual Participant Data Meta-Analysis From Randomised Trials. *BMJ open*, 11(2), e047212. <https://doi.org/10.1136/bmjopen-2020-047212>
- Hamedali, B., Khalatbari, J., Alzakerini, S. M., & Seyrafi, M. (2020). The Effectiveness of Cognitive Rehabilitation Therapy on Cognitive Functions (Working Memory, Concentration, and Attention) of Adolescents Living in Boarding Schools. *Ajnpp*. <https://doi.org/10.32592/ajnpp.2021.8.2.106>
- Hamill-Skoch, S., Hicks, P. B., & Prieto-Hicks, X. (2012). The Use of Cognitive Behavioral Therapy in the Treatment of Resistant Depression in Adolescents. *Adolescent Health Medicine and Therapeutics*, 95. <https://doi.org/10.2147/ahmt.s13781>
- Ingul, J. M., Aune, T., & Nordahl, H. M. (2013). A Randomized Controlled Trial of Individual Cognitive Therapy, Group Cognitive Behaviour Therapy and Attentional Placebo for Adolescent Social Phobia. *Psychotherapy and psychosomatics*, 83(1), 54-61. <https://doi.org/10.1159/000354672>
- Keel, P. K., & Haedt, A. A. (2008). Evidence-Based Psychosocial Treatments for Eating Problems and Eating Disorders. *Journal of Clinical Child & Adolescent Psychology*, 37(1), 39-61. <https://doi.org/10.1080/15374410701817832>
- Leigh, E., & Clark, D. M. (2018). Understanding Social Anxiety Disorder in Adolescents and Improving Treatment Outcomes: Applying the Cognitive Model of Clark and Wells (1995). *Clinical Child and Family Psychology Review*, 21(3), 388-414. <https://doi.org/10.1007/s10567-018-0258-5>
- Leigh, E., & Clark, D. M. (2019a). Online Social Anxiety Cognitive Therapy for Adolescents (OSCA): A Randomised Controlled Trial. <https://doi.org/10.21203/rs.2.396/v1>
- Leigh, E., & Clark, D. M. (2019b). Online Social Anxiety Cognitive Therapy for Adolescents (OSCA): Protocol for a Randomised Controlled Trial. *Trials*, 20(1). <https://doi.org/10.1186/s13063-019-3651-6>
- Mameli, C., Molinari, L., & Passini, S. (2019). Agency and responsibility in adolescent students: A challenge for the societies of tomorrow. *British Journal of Educational Psychology*, 89(1), 41-56. <https://bpspsychub.onlinelibrary.wiley.com/doi/abs/10.1111/bjep.12215>
- Pourkhiyabi, M., Kafie, M., & Abolghasemi, A. (2024). The effectiveness of Internet-based cognitive-behavioral therapy on extreme responsibility and irritability of adolescent girls with symptoms of obsessive-compulsive disorder. *Research in Clinical Psychology and Counseling*, -. <https://doi.org/10.22067/tpccp.2024.79513.1397>
- Saadati, S. M., & Rezazadeh, F. (2024). Stress, Resilience, and the Immune System: A Health Psychology Analysis. *KMAN Counseling & Psychology Nexus*, 1(1), 109-117. <https://doi.org/10.61838/kman.psychnexus.1.1.14>
- Sari, F. S., Batubara, I. M. S., Solikhah, M. M., Kusumawati, H. N., Eagle, M., Sulisetyawati, S. D., & Mariyati, M. (2022). Effect of Cognitive Behavior-Anger Management Therapy on Aggressive Behavior in Adolescents. *Open Access Macedonian Journal of Medical Sciences*, 10(G), 275-278. <https://doi.org/10.3889/oamjms.2022.8496>
- Sari, N. Y., Keliat, B. A., & Susanti, H. (2019). Cognitive Behaviour Therapy for Anxiety in Adolescent With Early Prodromal of Psychosis at Boarding School. *BMC Nursing*, 18(S1). <https://doi.org/10.1186/s12912-019-0360-0>
- Shojeyan, S., Khajevand Khoshli, A., Azizi, L. S., & Asadi, J. (2024). Comparison of the Effectiveness of Mindfulness-Based Cognitive-Behavioral Therapy with Emotion-Focused Therapy on Sensation Seeking in Adolescents with Internet Addiction. *Journal of Adolescent and Youth Psychological Studies (JAYPS)*, 5(4), 65-74. <https://doi.org/10.61838/kman.jayps.5.4.8>
- Shokoohi Yekta, M., & Motamed Yeganeh, N. (2024). Effects of Cognitive-Based Problem-Solving skills On Changing Parenting Styles and Reducing Parental Anger. *Applied Family Therapy Journal (AFTJ)*, 5(1), 26-35. <http://journals.kmanpub.com/index.php/aftj/article/view/1799>
- Wray-Lake, L., Syvertsen, A. K., & Flanagan, C. A. (2016). Developmental change in social responsibility during adolescence: An ecological perspective. *Developmental Psychology*, 52(1), 130-142. <https://doi.org/10.1037/dev0000067>

Zheng, Y., & Ye, Y. (2022). Prediction of Cognitive-Behavioral Therapy Using Deep Learning for the Treatment of Adolescent Social Anxiety and Mental Health Conditions. *Scientific Programming*, 2022, 1-9. <https://doi.org/10.1155/2022/3187403>