Mental Health and Lifestyle Journal

Year 2024
Volume 2
Issue 1

The Effectiveness of Cognitive Behavioral Therapy on Emotion Regulation and Problem-Solving in Adolescents

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Article type:
Original Research

Article history:
Received 5 January 2024
Revised 22 February 2024
Accepted 26 February 2024
Published online 1 March 2024

ABSTRACT

The aim of the present study was to determine the effectiveness of Cognitive Behavioral Therapy (CBT) on emotion regulation and problem-solving in adolescents. The research method was quasi-experimental with a pretest-posttest control group design. The statistical population consisted of adolescents who referred to counseling centers in Rasht during the second half of the year 2023. Using convenience sampling, 30 individuals were selected and randomly assigned to experimental and control groups. The data collection instrument included the Emotion Regulation Questionnaire. Participants in the experimental group received CBT sessions for eight consecutive weeks, with one 90-minute session per week. No intervention was provided to the control group. The findings indicated that the mean score of emotion regulation in the posttest was significantly higher than in the pretest for the experimental group. Therefore, it can be concluded that Cognitive Behavioral Therapy is effective in enhancing emotion regulation and problem-solving among adolescents.

Keywords: Cognitive Behavioral Therapy, Emotion Regulation, Problem-Solving, Adolescents.

How to cite this article:
Kazemi, R., & Hoseyni, S. Z. (2024). The Effectiveness of Cognitive Behavioral Therapy on Emotion Regulation and Problem-Solving in Adolescents. *Mental Health and Lifestyle Journal, 2*(1), 1-9. https://doi.org/10.61838/mhfj.2.1.1

Introduction

Adolescence represents one of the most critical and valuable stages in an individual's life, acting as a bridge between childhood and adulthood. During this period, adolescents undergo a series of physical, psychological, and social changes that significantly influence their adult life and future. Adolescents are considered one of the most vulnerable social groups (1).

The adolescent period is deemed a critical transitional stage due to rapid and extensive physiological, cognitive, and psychological changes. During this phase, adolescents face hormonal fluctuations, cognitive development, and identity formation (2, 3). Additionally, emotional and affective balance—especially maintaining emotional and psychological stability in the face of environmental stressors and balancing emotion and reason—is among the most vital needs felt by adolescents (4, 5). Thus, emotion regulation strategies are one of the variables that can influence adolescents' inclination toward high-risk behaviors.

One of the factors affecting adolescents' propensity for risky behaviors is the way they manage and regulate their emotions. All individuals desire to control their emotions, but doing so is not always easy. Many people attempt to avoid situations that evoke negative emotions. While avoidance may sometimes be helpful, learning to manage and redirect emotions toward positive outcomes is a crucial skill. This process is known as emotion regulation, which enables us to better cope with life's challenges (6).

Behavior-based emotion regulation enables children and adolescents to control their behaviors. Emotion regulation can be considered a form of behavioral organization; accordingly, just as negative emotions are associated with risky behaviors (7-9), emotion regulation strategies can also play a mitigating role in the emergence of such behaviors (7, 10). In fact, emotion regulation, which is associated with assertiveness in adolescents (7), refers to the ability to understand, express, and moderate emotional experiences (11).

Problem-solving is a powerful skill that helps individuals identify problems logically and systematically, explore various solutions, and ultimately make the best decision. This skill is not only useful in personal life but also crucial in social interactions and conflict resolution (12). Enhancing problem-solving skills in children and adolescents undoubtedly leads to a wider range of alternative and potential responses, thereby equipping them to better cope with challenging situations. It also facilitates the selection of the most effective responses, allowing individuals to identify suitable strategies for confronting life's difficulties (13).

Problem-solving is one of the most effective methods for supporting education and achieving this goal, as its underlying philosophy is to teach learners a general approach to dealing with various problems rather than helping them with individual issues (14).

Cognitive Behavioral Therapy (CBT) is an interactive treatment method based on collaboration. It is structured, problem-focused, and based on an educational model that emphasizes the present. This approach teaches clients to evaluate and adjust their thoughts, replace ineffective thinking with more adaptive patterns, and acquire problem-relevant cognitions to address their interpersonal issues and enhance social skills through CBT exercises (15). CBT is relatively brief and time-limited, aiming to help clients independently develop self-help skills and overcome their fears. Furthermore, the CBT approach relies on a process of inquiry and exploration combined with strategy, rather than persuasion (16).

Therefore, the present study seeks to answer the following research question: Is Cognitive Behavioral Therapy effective in improving emotion regulation and problem-solving in adolescents?

Methods and Materials

Study Design and Participants

The research method was quasi-experimental with a pretest-posttest control group design. The statistical population consisted of adolescents who visited counseling centers in Rasht during the second half of the year 2023. Using a convenience sampling method, 30 individuals were selected and assigned to experimental and control groups. The data collection instrument included the Emotion Regulation Questionnaire. Participants in the experimental group received Cognitive Behavioral Therapy (CBT) in one 90-minute session per week for a duration of eight weeks. No treatment was provided to the control group.

Data Collection

The Emotion Regulation Questionnaire developed by Garnefski et al. (2001) is a multidimensional tool designed to identify individuals' cognitive coping strategies following exposure to negative events or situations. This self-report instrument contains 36 items and includes nine subscales: self-blame, acceptance, rumination, positive refocusing, planning-focused reappraisal, positive reappraisal, putting into perspective, catastrophizing, and other-blame. Each item is rated on a 5-point Likert scale ranging from 1 (almost never) to 5 (almost always). Each subscale comprises 4 items, and the total score is calculated by summing the subscale scores. The internal consistency of the subscales, as measured by Cronbach's alpha, ranged from .67 to .89. Test-retest correlations over a 2–4 week interval ranged from .57 to .76, all statistically significant at the .001 level. Additionally, Hosseini et al. (2012) reported Cronbach's alpha coefficients ranging from .76 to .92 and demonstrated concurrent validity through a correlation of .47 ($p < .01$) with the Schutte Emotional Intelligence Scale, indicating high validity.

Heppner and Krauskopf (1987, as cited in Larson, Pentura, & Wanstead, 1995) conceptualized problem-solving as a series of behavioral, cognitive, and emotional responses aimed at adapting to internal and external challenges. Heppner (1988) proposed that the problem-solving process involves three core structures: perceived problem-solving efficacy, personal control over emotions and behaviors, and approach-avoidance styles. Empirical and theoretical evidence highlights the role of metacognitive variables—particularly self-evaluation—as influential factors in problem-solving. The Problem-Solving Inventory consists of 35 items designed to assess respondents' perceptions of their problem-solving behaviors and how they typically react to everyday challenges.

Intervention

The intervention protocol implemented in this study was based on the standard structure of Cognitive Behavioral Therapy (CBT) and consisted of eight weekly group sessions, each lasting 90 minutes. The program was designed to address both emotion regulation and problem-solving skills in adolescents and was delivered in a structured, interactive format. In the initial sessions, participants were introduced to the basic principles of CBT, including the cognitive model, the interrelationship between thoughts, emotions, and behaviors, and the concept of automatic thoughts. Psychoeducation was provided to enhance awareness of how distorted cognitions contribute to emotional dysregulation and behavioral challenges. Subsequent sessions focused on identifying negative automatic thoughts and cognitive distortions, challenging and restructuring these thoughts using evidence-based techniques, and practicing cognitive reframing. Behavioral strategies, including activity scheduling and exposure to avoided situations, were introduced to help participants develop adaptive responses to emotional triggers. Problem-solving training was integrated into the protocol by teaching a step-by-step model that involved identifying the problem, generating alternative solutions, evaluating potential outcomes, and implementing the most effective solution. Participants were encouraged to apply these strategies to real-life situations and reflect on their experiences during group discussions. Emotion regulation techniques such as mindfulness, relaxation training, and cognitive defusion were also taught to help adolescents manage intense emotional responses. Throughout the program, homework assignments were given to reinforce session content and promote skill generalization outside of the therapy context. The therapist facilitated open dialogue, group cohesion, and

peer support, creating a safe and non-judgmental environment for sharing and practicing new skills. The final session focused on reviewing learned strategies, consolidating gains, and developing personalized relapse prevention plans to ensure the maintenance of therapeutic progress after the conclusion of the intervention.

Data analysis

Data analysis in this study was conducted using descriptive and inferential statistical methods. Descriptive statistics, including mean and standard deviation, were calculated for all variables in both pretest and posttest phases across experimental and control groups to provide an overview of the data distribution. To test the hypotheses and determine the effectiveness of Cognitive Behavioral Therapy (CBT) on emotion regulation and problem-solving, one-way Analysis of Covariance (ANCOVA) was employed. ANCOVA was used to control for the pretest scores and assess posttest differences between the groups. The assumptions of normality and homogeneity of variances were verified prior to conducting ANCOVA. Effect sizes (η^2) were also calculated to assess the magnitude of the intervention's impact. All analyses were performed using SPSS software, and statistical significance was set at $p < .05$.

Findings and Results

Table 1 presents the research variables in both pretest and posttest phases, separately for the experimental and control groups, including means and standard deviations.

Table 1. Descriptive Statistics of Research Variables by Experimental and Control Groups (n = 30)

Variable	Phase	Group	Mean	Standard Deviation
Problem-Solving	Pretest	Experimental	110.37	11.41
		Control	112.24	11.68
	Posttest	Experimental	102.78	10.57
		Control	109.52	11.41
Confidence in Problem-Solving	Pretest	Experimental	43.41	3.78
		Control	42.35	5.53
	Posttest	Experimental	32.78	6.31
		Control	43.12	4.57
Approach-Avoidance Style	Pretest	Experimental	58.12	5.78
		Control	56.35	5.35
	Posttest	Experimental	44.78	4.45
		Control	59.32	6.41
Personal Control	Pretest	Experimental	18.78	5.52
		Control	17.56	3.67
	Posttest	Experimental	11.13	3.45
		Control	18.45	4.37
Negative Emotion Regulation	Pretest	Experimental	31.57	3.45
		Control	29.35	3.78
	Posttest	Experimental	20.78	2.47
		Control	28.32	2.38
Positive Emotion Regulation	Pretest	Experimental	34.78	3.57
		Control	36.53	2.68
	Posttest	Experimental	85.71	3.74
		Control	34.45	4.12
Self-Blame	Pretest	Experimental	9.12	1.12
		Control	9.37	1.45
	Posttest	Experimental	5.57	1.12
		Control	8.68	1.69

Acceptance	Pretest	Experimental	8.14	1.45
		Control	7.32	1.23
	Posttest	Experimental	16.84	1.41
		Control	8.70	1.86
Rumination	Pretest	Experimental	7.53	1.27
		Control	8.41	1.41
	Posttest	Experimental	4.53	1.12
		Control	7.24	1.24
Positive Refocusing	Pretest	Experimental	7.53	1.14
		Control	7.12	1.54
	Posttest	Experimental	15.17	1.78
		Control	8.27	1.68
Planning Reappraisal	Pretest	Experimental	8.47	1.67
		Control	7.45	1.54
	Posttest	Experimental	16.45	1.68
		Control	7.12	1.41
Positive Reappraisal	Pretest	Experimental	8.78	1.23
		Control	7.58	1.41
	Posttest	Experimental	17.67	1.67
		Control	8.41	1.74
Perspective Taking	Pretest	Experimental	7.38	1.58
	Control	8.74	1.74	
	Posttest	Experimental	15.35	1.68
	Control	6.12	1.21	
Catastrophizing	Pretest	Experimental	8.78	1.21
	Control	9.45	1.36	
	Posttest	Experimental	4.55	1.21
	Control	8.32	1.12	
Other-Blame	Pretest	Experimental	8.45	1.12
	Control	7.31	1.32	
	Posttest	Experimental	4.45	1.21
	Control	7.31	1.18	

According to Table 2, the F-statistics for the components of self-blame, acceptance, rumination, positive refocusing, planning reappraisal, positive reappraisal, perspective taking, catastrophizing, and other-blame are significant at the .01 level. Therefore, Cognitive Behavioral Therapy is effective in improving emotion regulation among adolescents.

Table 2. One-Way ANCOVA Results Comparing Experimental and Control Groups in Emotion Regulation Styles

Component	SS Between	SS Error	MS Between	MS Error	F	p	Effect Size
Self-Blame	15.378	35.45	15.378	2.37	8.87	.002	.38
Acceptance	512.453	48.74	512.453	2.45	186.35	.001	.84
Rumination	21.745	24.32	21.745	2.27	24.37	.002	.44
Positive Refocusing	245.235	31.45	245.235	2.78	145.45	.001	.86
Planning Reappraisal	345.867	41.27	345.867	3.68	143.35	.001	.85
Positive Reappraisal	512.412	52.78	512.412	2.54	156.23	.001	.84
Perspective Taking	388.324	35.67	388.324	2.78	201.78	.001	.86
Catastrophizing	19.534	16.45	19.534	1.78	23.55	.001	.58
Other-Blame	12.127	19.23	12.127	1.86	12.37	.010	.35

According to Table 3, the F-statistics for the components of personal control, confidence in problem-solving, and approach-avoidance style are statistically significant. Therefore, Cognitive Behavioral Therapy is effective in enhancing emotion regulation and problem-solving in adolescents.

Table 3. One-Way ANCOVA Results Comparing Experimental and Control Groups in Problem-Solving Components

Component	SS Between	SS Error	MS Between	MS Error	F	p	Effect Size
Confidence in Problem-Solving	68.788	245.77	68.788	18.78	5.53	.070	.41
Approach-Avoidance Style	58.684	457.54	58.684	22.53	3.23	.210	.35
Personal Control	74.531	123.37	74.531	7.21	10.78	.002	.38

Discussion and Conclusion

The findings revealed that the mean score of emotion regulation in the posttest for the experimental group was significantly different compared to the pretest. This is consistent with previous findings.(17-23) Therefore, it can be concluded that Cognitive Behavioral Therapy (CBT) is effective in enhancing emotion regulation among adolescents. The CBT approach improves emotion regulation by assisting individuals in sharing their problems and receiving effective coping strategies from group members, challenging negative thoughts and perfectionistic beliefs, and applying techniques such as attention diversion, problem-solving, and behavioral strategies. In general, group-based CBT enables individuals to maintain emotional stability when confronted with intrusive automatic thoughts, which—if emotionally charged—can disrupt emotion regulation (17, 18). It helps them not to pay excessive attention to disturbing thoughts but rather to observe such thoughts as transient, preventing these thoughts from dominating their minds or impairing their emotion regulation.

CBT sessions also provide opportunities to identify current life situations that may contribute to maladaptive responses. By recognizing distorted patterns of thinking and perception that lead to dysfunction, the therapy facilitates more appropriate responses among participants. Furthermore, CBT strengthens adaptive emotion regulation skills, enabling individuals to manage their emotions more effectively and reduce the negative psychological consequences of those emotions (23).

The findings also showed that the mean score for problem-solving in the posttest for the experimental group was significantly different from the pretest. This is consistent with prior findings (24-29). Therefore, it can be concluded that CBT is effective in improving problem-solving skills in adolescents. CBT, with its focus on practical problem-solving, addresses specific difficulties by helping clients choose effective strategies to cope with challenges. The core objective of CBT is to alter and refine an individual's thinking and behavior patterns to bring about changes in emotional experiences. CBT can aid individuals in addressing physical health issues, social interactions, occupational challenges, and emotional difficulties. Indeed, extensive research has demonstrated that many psychological problems and emotional disorders stem from individuals' current beliefs and patterns of thinking. CBT, by targeting and restructuring cognitive distortions and automatic negative thoughts, helps clients transition their thinking toward more realistic and rational perspectives (27).

One of the primary limitations of the present study is the relatively small sample size, which may limit the generalizability of the findings to broader adolescent populations. Additionally, the use of convenience sampling restricts the representativeness of the sample, as participants were selected from a specific geographic location and from those already seeking counseling services. Another limitation lies in the reliance on self-report measures, which are subject to social desirability bias and may not accurately reflect participants' actual emotional regulation or problem-solving behaviors. Furthermore, the absence of a

follow-up phase prevents assessment of the long-term effectiveness and sustainability of the CBT intervention.

Future research should include larger and more diverse samples drawn from multiple regions to enhance the external validity of findings. It is also recommended that future studies incorporate follow-up assessments to evaluate the long-term impact of CBT on emotion regulation and problem-solving skills in adolescents. Employing multi-method assessment approaches, such as behavioral observations or reports from parents and teachers, could strengthen the reliability of outcome measures. Moreover, comparing CBT with other therapeutic approaches such as Acceptance and Commitment Therapy (ACT) or Dialectical Behavior Therapy (DBT) could offer insights into the relative effectiveness of various interventions tailored to adolescent needs.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

Authors' Contributions

All authors equally contributed to this study.

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. Written consent was obtained from all participants in the study.

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.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

References

1. Ahmadi A. Adolescent and Youth Psychology: Meshal Publications; 2019.
2. Khoshneshan S, Taghvai D, Pirani Z. The Effectiveness of Problem-Solving Skills Training Based on Tolman and Gestalt Theories on the Problem-Solving Styles of Secondary School Students. Journal of Psychological Studies of Adolescents and Youth. 2023;4(3):45-59.
3. Bagheripour Z, Erfani N, editors. Comparing the effectiveness of happiness training and problem-solving skills training on cognitive-emotional regulation strategies and self-compassion in adolescents2023.

4. Zhang Y, Hu Y, Yu M. Exploring Emotional Support and Engagement in Adolescent EFL Learning: The Mediating Role of Emotion Regulation Strategies. Language Teaching Research. 2024. doi: 10.1177/13621688241266184.
5. Sadeghzadeh R, Sheibeh Z, Solat F, Naeiji MR, Mirzai F, Damavandi M. Effectiveness of Emotional Regulation Training on Parenting Style Related to Parental Obesity and Weight Management in Adolescents with Bulimia Nervosa. Journal of Assessment and Research in Applied Counseling (JARAC). 2023;5(5):85-92. doi: 10.61838/kman.jarac.5.5.11.
6. SeviKoc M, Aka BT, Dogruy B, Cutiss J, Carpenter JK, Hofmann SG. Psychometric Properties of the Turkish Version of the Interpersonal Emotion Regulation Questionnaire (IERQ). Journal of Psychopathology and Behavioral Assessment. 2019;5(2):1-10.
7. Allahyari B, Jenaabadi H. The Role of Assertiveness and Self-Assertion in Female High School Students' Emotional Self-Regulation. Scientific Research. 2015;6(14):1-6. doi: 10.4236/ce.2015.614163.
8. Clarke GN, Rohde P, Lewinsohn PM, Hops H, Seeley JR. Cognitive-behavioral treatment of adolescent depression: Efficacy of acute group treatment and booster sessions. Journal of the American Academy of Child & Adolescent Psychiatry. 2009;38(3):272-9. doi: 10.1097/00004583-199903000-00014.
9. Goleman D. Working with Emotional Intelligence: Bantam Books; 2014.
10. Tabatabaei SM. The Effectiveness of Emotion Regulation Training on Emotion Regulation Strategies and Social Competence of Adolescents with High-Risk Behaviors. Clinical and Experimental Psychology. 2020.
11. Golestani S. The Relationship Between Personality Traits, Self-Efficacy, and Social Skills with Social Well-being in Adolescents in Bandar Abbas: Department of Sociology, Islamic Azad University, Bandar Abbas Branch; 2016.
12. Meshkani ZS. Prevalence of Anxiety and Its Contributing Factors Among High School Students. Medical University Journal. 2015;2(90):101-5.
13. Cakir M. Investigating prospective teachers' perceived problem-solving abilities in relation to gender, major, place lived and locus of control. Universal Journal of Educational Research. 2017;5(6):1030-8. doi: 10.13189/ujer.2017.050616.
14. Resing WC, Bakker M, Pronk CM, Elliott JG. Dynamic testing and transfer: An examination of children's problem-solving strategies. Learning and Individual Differences. 2016;49:110-9. doi: 10.1016/j.lindif.2016.05.011.
15. Saeedi M, Khalatbari J, Shiroudi S, Abolghasemi S. Comparing the Effectiveness of Cognitive Behavioral Therapy and Compassion-Focused Therapy on Impulsivity in Women Facing Divorce. Community Health Journal. 2020;14(1):73-83.
16. Rastgoo N, Herfe Dolat M, Khairjoo E. The Effectiveness of Group Cognitive Behavioral Therapy on Children's Anxiety. Biannual Journal of Cognitive Strategies in Learning. 2018;4(7).
17. Hosseini SA. Comparison of the Effectiveness of Cognitive Behavioral Therapy and Schema Therapy on Emotional Regulation and Resilience of Mothers with Children with Attention Deficit/Hyperactivity Disorder. Journal of Psychological Dynamics in Mood Disorders (PDMD). 2024;3(1):12-29. doi: 10.22034/pdmd.2024.442238.1045.
18. Gargari RY. Comparison of the Effectiveness of Mindfulness-Based Cognitive-Behavioral Therapy and Reality Therapy on Emotional Regulation and Self-Efficacy in Women Seeking Divorce. Psychology of Woman Journal. 2024;5(1):12-22. doi: 10.61838/kman.pwj.5.1.2.
19. Emami Khotbesara Z, Mahdian H, Bakhshipour A. Comparing the Effectiveness of Academic Buoyancy and Psychological Capital Training on Academic Procrastination in Female High School Students. Iranian Journal of Educational Sociology. 2024;7(3):149-60. doi: 10.61838/kman.ijes.7.3.18.
20. Egli S, Badenbach T, Emmerik Av, Stefan AM, Kopf-Beck J. Emotion Regulation and Attachment as Mechanisms of Change in Schema Therapy and Cognitive Behaviour Therapy for Depression. 2024. doi: 10.31219/osf.io/67vhn.
21. Ebrahimkhani M, Norouzi E, Hosseini A, Jamshidi F. A Randomized Controlled Trial on Cognitive Therapy's Role in Enhancing Pain Self-Efficacy and Reducing Catastrophizing in Breast Cancer Patients. Psychology of Woman Journal. 2024;5(2):114-23. doi: 10.61838/kman.pwj.5.2.15.
22. Duru E, Balkıs M. COVID-19 related negative life events and psychological distress: the role of emotion and cognitive emotion regulation strategies. Journal of Rational-Emotive & Cognitive-Behavior Therapy. 2024;42(1):69-91. doi: 10.1007/s10942-022-00488-6.
23. Barooti M, Chinaveh M, Saedi S. Comparison of the Effectiveness of Cognitive Behavioral Therapy and Schema Therapy on Cognitive Emotion Regulation in Patients With Major Depressive Disorder. Jayps. 2024;5(3):44-54. doi: 10.61838/kman.jayps.5.3.5.
24. Shokoohi Yekta M, Motamed Yeganeh N. Effects of Cognitive-Based Problem-Solving skills On Changing Parenting Styles and Reducing Parental Anger. Applied Family Therapy Journal (AFTJ). 2024;5(1):26-35.

25. Shabannezhad A. Comparison of Cognitive Behavioral Therapy and Mindfulness on Anxiety, and Positive and Negative Affect in Female Students. Journal of Adolescent and Youth Psychological Studies (JAYPS). 2024;5(1):133-41. doi: 10.61838/kman.jayps.5.1.16.
26. Abdelaziz EM, Alsadaan N, Alqahtani M, Elsharkawy NB, Ouda MMA, Ramadan OME, et al. Effectiveness of Cognitive Behavioral Therapy (CBT) on Psychological Distress among Mothers of Children with Autism Spectrum Disorder: The Role of Problem-Solving Appraisal. Behavioral Sciences. 2024;14(1):46. PubMed PMID: doi:10.3390/bs14010046.
27. Akbari M, Shokhmgar Z, Sanagoo A, Nasiri A, Ahange A, Khaleghi H, et al. Comparison of the Effectiveness of Schema Therapy and Cognitive Behavioral Therapy on CommunicationSkills and Problem Solving and Mental Health in Couples with Extra-Marital Experience. ijpn. 2021;9(1):1-10.
28. Kafi Nia F, farhadi h. The effectiveness of group cognitive - behavioral therapy on emotional self - awareness and problem - solving skill of students with internet addiction. Journal-of-Psychological-Science. 2020;19(85):111-20.
29. Baghbani Bigdiloo S, Rostamoghli Z. The effectiveness of play therapy on improving problem-solving skills and reducing aggressive behavior based on cognitive-behavioral approach in 6th-grade boys in Bileh Savar. 10th National Conference on Psychology, Educational Sciences, and Social Sciences. 2020:1-10.