International Journal of Applied Behavioral Sciences **2024; Vol. 11, No.1:8-15**
DOI: 10.22037/ijabs.v11i1.41785 **Online ISSN: 2423-5253**

Original Article

Investigating the Effectiveness of Socioemotional Competence Group Training on Social Adjustment, Alexithymia and Oppositional Defiant Disorder Symptoms among Adolescents

Fahimeh Mohamadpour[1*]

[1]*Department of Clinical Psychology, Shiraz University, Shiraz, Iran*

Received: 12 Feb 2024; Revised: 20 Feb 2024; Accepted: 31 Feb 2024

Abstract

Background and Aim: The most important characteristics of oppositional defiant disorder are two sets of emotional and behavioral symptoms that manifest themselves in individual and social form. Therefore, the aim of this research was to investigate the effectiveness of social-emotional competence group training on social responsibility, alexithymia and severity of oppositional defiant disorder in adolescents.

Materials and Methods: The current research was applied and semi-experimental with a pre-test-post-test and a control group. The research sample included 30 teenage girls with oppositional defiant disorder who were randomly divided into two groups of 15 people, experimental and control. The participants were tested on the scales of social adjustment, alexithymia and oppositional defiant disorder. Then, the treatment plan based on social-emotional competence group training was presented to the participants of the experimental group online in 9 two-hour sessions. Then, their scores were measured in the desired scales, after completing the treatment, and a three-month follow-up period. Descriptive statistics and covariance test were used to analyze the data.

Results: The participants showed a clear improvement in the severity of symptoms in all three variables. So that the scores of alexithymia and oppositional defiant disorder in the experimental group after receiving the treatment, as well as after a three-month follow-up period, were significantly reduced and the social adjustment scores were also increased ($p<0.001$).

Conclusion: In general, it can be concluded that social and emotional competence training can reduce the symptoms of oppositional defiant disorder in adolescents by correctly recognizing their own and others' emotions and helping to improve communication skills with others, and as a result, help to increase the adaptation of adolescents in society.

Keywords: Oppositional defiant disorder, Group therapy, Social adjustment, Social-emotional competence, Emotional dyslexia

***Corresponding Author:** FahimehMohamadpour, Ph.D. of Clinical Psychology, Department of Clinical Psychology, Shiraz University, Shiraz, Iran. Email: fmohamadpour.1212@gmail.com.
ORCID: 0000-0002-9728-8420

Please cite this article as: Mohamadpour F.Investigating the Effectiveness of Socioemotional Competence Group Training on Social Adjustment, Alexithymia and Oppositional Defiant Disorder Symptoms among Adolescents. Int. J. Appl.Behav. Sci. 2024;11(1):8-18.

Introduction

Behavioral and emotional problems among children and adolescents are one of the parents' and mental health professionals' concerns (1). Oppositional defiant disorder (ODD) is often considered a specific childhood disorder, occurring mostly in early school-age children with some symptoms that can lead to maladaptive behaviors in adolescence, such as irritability or disagreement with adults (2). This disorder is one of the common and destructive behavioral disorders, which is included in the set of externalizing disorders (3). The most important characteristics of this disorder are two sets of emotional and behavioral symptoms such as angry behavior patterns, disobedience, negativity, disobeying the orders and rules of adults and parents, deviant behaviors, arguing with adults and parents, aggression and spitefulness, doing impulsive things that cause resentment and hurt others as well as being irritable and sensitive, at least four of which must be present continuously within six months and cause a disturbance in the individual's personal, social or academic functioning (4).

Oppositional defiant disorder is one of the most common diagnoses of mental disorders in childhood, whose prevalence in the non-clinical population is estimated at 2-16% (5). Researches have not shown a specific difference in terms of the prevalence of this disorder between girls and boys, and its prevalence is not much higher in boys than in girls (6).

The presence of oppositional defiant disorder in adolescents can be a warning sign for a wide range of psychopathology in youth and adulthood (7). The relationship of this disorder with conduct disorder in the future has been well established, and research evidence also predicts its relationship with anxiety and depression (8). Children and adolescents with symptoms of this disorder usually do not progress well in school, are weak in interpersonal relationships, have attention problems and failure in executive functioning, and mostly lack the cognitive, social, and emotional skills needed to perform related activities (9). The prognosis of this disorder is not good, and academic and occupational problems, negative emotions, and social adaptation problems are among the problems associated with this disorder (10).

Social adaptation is the ability to change behavior in response to changes in the social environment so that a person can create a balance between his desires and the new conditions in the social environment (11). Social adaptation is defined as the ability to coordinate behavior with the aim of meeting environmental needs, which requires the modification of impulses, emotions and attitudes (12). Social adaptation is the most important aspect of social development, which is effective both on interaction with others and on academic and career success (13). In other words, social adaptation is reactions in harmony with society's criteria that a person does to comply with the social environment and to be recognized by the society (14). Social adaptation is a relationship that occurs between a person and the environment, especially the social environment, and allows a person to respond to their needs and motivations (15). When a person can establish a healthy relationship between his needs and the social environment and satisfy his motivations, he is considered a compatible person, otherwise, he is considered incompatible (16).

Another problem of adolescents with oppositional defiant disorder is emotional problems. Alexithymia is one of the emotional problems and a kind of mood deficiency that leads to the inability to cognitively process emotional information and as a result, difficulty in regulating emotions. Alexithymia can be defined as an inability to cognitively process information based on emotion and regulate them (17). Alexithymia is a multifaceted construct that consists of "difficulty identifying emotions", "difficulty describing emotions" and "objective cognitive style with extroverted thinking" (18). Alexithymia in the original sense refers to the lack of words to name and describe emotions. Although alexithymia shows coexistence with some mental disorders, the continuum of alexithymia symptoms is also observed in non-clinical populations (19). People with this trait have problems understanding the emotional states of others and show limited empathy in interpersonal relationships (20). According to the researches (21), when the level of emotional awareness

increases, the emotional differentiation of a person from others also increases. Otherwise, emotions remain general and undifferentiated, and as a result, it leads to the inability of a person to use emotions to produce adaptive behavior (22). Thus, this can be involved in maladaptive behaviors such as oppositional defiant disorder.

Different educational and therapeutic methods have been presented and used for children and adolescents suffering from oppositional defiant disorder. Many theories have mentioned the role of emotional dysregulation as the cause and persistence of various types of psychiatric disorders, and emotion regulation has been studied as a possible maintenance factor and a promising therapeutic target in a wide range of mental disorders (23).Social-emotional competence training is one of the educational methods whose effectiveness has been investigated on various emotional and social problems of children. This educational method is one of the ways that by focusing on the two dimensions of emotional skills and social skills and creating a sense of competence in a person in relation to his abilities, it can make a child or teenager achieve a higher level of growth and promotion. Perception of competence can act as a shield against the environment, life events and their cognitive, social and emotional development (24). The concept of social emotional competence consists of the components of self-awareness, empathy, self-regulation and social skills and appropriate interaction with people (25). Emotions play a unique role in human growth and development and have a decisive influence on the fate of each person. When faced with dangerous situations, emotions activate the warning system that guides a person on the path ahead and plays a leadership role in important aspects of life and adaptation or incompatibility with different situations (26).

The success of psychotherapy in the treatment of oppositional defiant disorder can provide professionals with important information about preventive planning. Because knowing the important psychological variables of this disorder and considering them from the very beginning of the treatment path can not only affect the treatment process. Rather, it has the potential to protect adolescents from experiencing all kinds of trauma and mental disorders in the future. Furthermore, given the severity of these disorders, interventions that target the entire structure of the disorders appear to be successful (27).

Research has shown that children and adolescents who have a lower positive competence perception, show more internal problems such as loneliness, social isolation, and anxiety, and experience more rejection by peers (28). Researchers have confirmed the effectiveness of this method on aggression, problem solving and optimism in students (29). Researchers indicated the effectiveness of this method in reducing behavioral disorders of children and adolescents (25). In other research, researchers have used this method to improve the academic performance of students and confirmed its effectiveness (30). Researchers also implemented this method on the social skills and psychological capital of students with oppositional defiant disorder and found that this method had a significant effect on the improvement of these two variables in this group (31).

Since many of the roots of the behavioral problems of this disorder can be transferred from childhood to adulthood and even become the basis of other mental disorders, and considering the relatively high prevalence of this disorder in childhood and adolescence and the risks and negative consequences associated with it, it is considered necessary to study the treatment of the symptoms of this disorder and its related factors. Considering that oppositional defiant disorder has social and emotional symptoms, and on the other hand, the effectiveness of social-emotional competence training has been investigated and confirmed in various studies in improving psychological, emotional and social components in different statistical communities; In addition, there is no sufficient research regarding the effectiveness of this type of training on the social and emotional dimensions of adolescents suffering from this disorder. The purpose of this research is to investigate the effectiveness of online social-emotional competence group training on social responsibility, emotional dyslexia, and the oppositional defiant disorder in adolescents.

Methods

The current research was applied and semi-experimental in the pre-test-post-test method with a control group. The statistical population in the present study was adolescent girls with oppositional defiant disorder living in Shiraz in 2022. In order to achieve reliable results in experimental designs, the presence of at least 15 people in each group is recommended (32). Therefore, among the statistical population of the research, 30 people were selected as the sample size and using the available sampling method from the statistical population. The criteria for entering the research included the age group between 11 and 18 years, female gender, not receiving other psychological treatments during the last three months, and having an education at least at the fifth elementary level. Reluctance to participate in psychotherapy sessions, having mental disorders of the psychotic group based on the implementation of psychological examination and absence of more than two sessions in therapy sessions were also the criteria for exiting the study. In order to comply with research ethics, people were informed about the research objectives, treatment method, the right to withdraw from the treatment process and the confidentiality of information and then completed the informed consent form. After that, the participants were randomly divided into two groups of 15 people, experimental and control. First, the participants were clinically evaluated in order to confirm the existence of this disorder, and then they were tested on the scales of oppositional defiant disorder, social adjustment, and emotional dyslexia. Then, a treatment plan based on social and emotional competence training was presented to the participants of the experimental group in 9 two-hour sessions. After completing the treatment sessions and after a three-month follow-up period, both groups were tested again and the results were analyzed. Descriptive statistics and covariance test were used to analyze the data.

Materials

Adolescent behavioral problems self-report scale

This scale is one of the self-report tools to screen common psychiatric disorders in adolescents (33). This scale is applicable for ages 11 to 18 with at least fifth grade education. The average time to answer it is 15 minutes and its items are made based on the diagnostic and statistical manual of mental disorders, which is also in accordance with the fifth edition (33). The validity of this scale has been reported as 0.93 for general problems and for the oppositional defiant subscale, it has been obtained as 0.88 using Cronbach's alpha method, which indicates its favorable validity (33).

Social Adjustment Scale

This scale is a self-report scale developed by Bell (1961). The number of test items is 32 two-choice items in the form of yes and no. For the yes option, a score of one and a zero score is considered for the no option, so the range of scores is between 0 and 32. Bell (1962) reported the reliability coefficient of this test as 0.88 (34). Also, in Iran, the reliability of this test has been reported as 0.89 by Cronbach's alpha method, which indicates its good reliability (35).

Alexithymia Scale

The Toronto Alexithymia Scale (FTAS-20) is a twenty-item test scored on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). The psychometric properties of the Toronto Alexithymia Scale-20 have been examined and confirmed in several studies (36). In the Farsi version of Toronto-20 emotional Alexithymia scale (37), Cronbach's alpha coefficient of this scale was calculated as 0.85, which is a sign of good internal consistency of the scale. The test-retest reliability of the scale was confirmed in a sample of 67 people on two occasions with an interval of four weeks, r=0.87 for alexithymia (37). Therefore, in the Iranian version of this scale, good reliability and validity have been reported.

Therapeutic Intervention

The researcher has tried to use the intervention program taken from the second step educational program of the Seattle Children and Adolescent Association to provide a model of intervention in the area of goals (38). This program was finalized and used in Iran by Ahmad pour and et al (39). This

intervention includes 9 sessions in a group training style. In each meeting, explanations were first given about the purpose of the meeting and the topics related to that meeting, and then the group members discussed and exchanged opinions. At the end of each session, the contents were summarized and exercises were given to them for the next session. In Table 1, the therapeutic intervention program is presented.

Table 1. Educational intervention program based on social-emotional competence**.**

Sessions	Purposes	Content
1	Empathy	Teaching the skills of empathy, teamwork and unity
2	Empathy	Discuss and compromise, assertiveness and problem solving
3	Preventing bullying	Recognizing bullying in relationships
4	Preventing bullying	Recognizing labeling and stereotypes
5	Preventing bullying	Risk assessment and safe avoidance of bullying
6	Emotion management	The effect of emotions on the brain, recognition of emotions
7	Emotion management	Stress coping strategies
8	Determining the goal	Prioritization and planning, program evaluation
9	Preventing substance use	The effects of drug abuse, assertiveness in drug prevention, positive self-talk

Results

The research sample included 30 adolescent girls with oppositional defiant disorder. The average age of the participants in this research was 14.39 with a standard deviation of 2.14, and they were randomly assigned to two control and experimental groups. Student's t-test was used to measure the equality of two groups. The results showed that there is no significant difference between the two groups in terms of average age (P=0.563; t28=0.461). In Table 2, the descriptive statistics of the research variables are presented separately for the control and experimental groups.

In order to implement the research hypotheses, Kolmogorov-Smirnov test was first performed to check the normality of the data and Leven's test was also performed to check the equality of variances. Due to the fact that these two tests were not significant in any of the groups, therefore, the assumption of normality of data and equality of variances was maintained for all variables.

Analysis of covariance test was used to investigate the research hypothesis. The scores of the measured tests were used in the post-test as the dependent variable and the group (control, experimental) as the independent variable, and the scores obtained in the pre-test were used as the covariate variable. Table 3 shows the effectiveness of social and emotional competence training on the scores of research variables.

As shown in Table 3, there is a significant difference between the groups in the scores of oppositional defiant disorders in the post-test (F=14.631 and P<0.001).

Table 3. The results of covariance analysis of the mean scores of oppositional defiant disorder, social adjustment and alexithymia in the experimental and control groups**.**

variable	groups	Pre-test		Post-test		Follow up	
		Mean	S.D	Mean	S.D	Mean	S.D
Oppositional defiant disorder	Experimental	25.621	5.510	16.229	7.372	15.131	4.951
	Control	24.835	5.433	25.751	5.316	24.822	7.792
Social adjustment	Experimental	59.136	8.571	66.845	9.015	68.532	9.121
	Control	58.932	8.511	56.561	8.216	58.213	9.673
Emotional dyslexia	Experimental	63.551	9.341	51.846	9.684	49.715	8.556
	Control	64.394	9.276	65.343	9.951	64.336	8.673

Table 4. The results of the covariance analysis of the difference in mean follow-up scores in the experimental and control groups with pre-test control**.**

variable	df	Mean of squares	F	P
Oppositional defiant disorder	27	50.259	14.684	0.001
Social adjustment	27	78.162	26.952	0.001
Emotional	27	146.790	5.533	0.001

This means that the scores of this scale in the post-test in the experimental group are significantly different from the control group and the effectiveness of the treatment was 58%. Also, the F value of the independent variable on social adjustment and alexithymia is also significant (P<0.001 and P<0.01). The effectiveness of treatment on these two variables was 56% and 51%, respectively**.**

Also, the scores of the participants after a three-month follow-up period were measured using the analysis of covariance test, the results of which can be seen in Table 4**.**As seen in Table 4, the effects of social and emotional competence group training on adolescent girls, on the research variables, remained after a 3-month follow-up period (P<0.001).

Discussion

The findings showed that social and emotional competence group training reduces the symptoms of oppositional defiant disorder and alexithymia and increases social adjustment in adolescent girls. Also, the results showed that this therapeutic approach was able to maintain its effect after the treatment period and over time. In line with the results of the present study, the results of previous studies have also indicated the effectiveness of this educational model on social and emotional symptoms in different groups (27, 30, 31, 39).

In the explanation of the findings of the present research on the effectiveness of training based on social and emotional competence on social adaptation in adolescents with oppositional defiant disorder, it can be said that this educational approach includes a set of psychological trainings about oneself and others, which these trainings aim at the way Looking at oneself and others can improve both communication skills and emotional skills in social situations, and this helps the teenager to establish a more effective relationship with others, and as a result, improves and expands interpersonal relationships (25). This educational approach, by changing the attitudes, values and behavior of teenagers, as well as helping to improve their self-esteem, leads to the creation and improvement of positive and constructive behaviors in the field of interpersonal communication, and therefore, by developing processes related to the field of social adaptation, it can cause to improve this dimension in teenagers.

Another finding of the research indicated the effectiveness of this educational and therapeutic approach on alexithymia in adolescents with oppositional defiant disorder. In explaining this finding, it can be said that alexithymia means the inability to identify one's own and others' emotions and the difficulty in regulating emotions (37). By emphasizing the correct identification of emotions in the path of empathy training in these people, this training can increase their positive emotions in addition to improving their emotional dyslexia. When a person does not have a proper emotional regulation, he uses non-constructive methods when dealing with problems, the negative consequences of which are reflected both in the person's own behavior and emotions, and in his personal and social communication and adaptation. This therapeutic approach, by targeting children's ability to interpret and regulate their emotions, increases their ability to manage emotions, as the results of the present study have shown.

Finally, the present study showed that this therapeutic approach has reduced the symptoms of oppositional defiant disorder in adolescents. In this regard, it can be said that the set of behavioral, social and emotional problems are important dimensions of oppositional defiant disorder. When a person accepts his emotions, by increasing the skill of empathy and regulation of emotions, a person can be successful in the skill of interpersonal relations and his social adaptation also increases. Also, this educational approach can help the

teenager to feel more competent and efficient in carrying out daily responsibilities and life challenges, and in this way, it can reduce their psychological pressure and consequently, more importantly, self-manage their behavior and, as a result, resolve conflicts in Behavioral, emotional and social set. In this way, by directly targeting the two main dimensions in this disorder, the set of symptoms caused by this disorder will also be reduced.

Conclusion

Awareness about positive abilities and training to use these abilities correctly can ultimately increase the flexibility of teenagers in choosing activities and efficient and appropriate solutions in stressful situations. In fact, the adolescent's power of choice in doing different activities changes from focusing on negative activities to paying attention to abilities that have been hidden until now. By simply replacing positive behaviors and capabilities, this can reduce attention to risky and harmful activities and thus increase the adaptation of adolescents in different situations. On the other hand, paying attention to self-confidence and self-esteem in adolescents increases their social skills, and according to this, adolescents can deal with problems with greater strength, especially in stressful situations. Therefore, this treatment approach can come into action from several different dimensions and help the teenager in reducing incompatible behaviors and signs of oppositional disobedience as a behavioral and emotional disorder. In general, it can be concluded that social and emotional competence training can help by correctly recognizing one's own and others' emotions, and as a result, reducing the symptoms of oppositional defiant disorder, increasing their adaptation in society, regulating emotions, effective presence in society, and also reducing their psychological pressure. In addition to the application of the present findings, the single-sex sample and the short-term follow-up period were among the limitations of the present study, which limits the generalization of the results of the present study. In order to develop the findings of this research, it is suggested to use male samples in future researches. Also, in order to evaluate the stability of scores, long-term follow-up periods should also be measured. Also, considering the effectiveness of this treatment approach, it is suggested to use this treatment approach in treatment clinics and educational psychological service centers.

Acknowledgment

I sincerely thank all the participants who helped the researcher in conducting this study.

Conflict of Interest

The authors declare that they have no conflict of interest.

References

1. Alimehdi M, Mohammdinia Z. The Effectiveness of Emotion Regulation Therapy on Cognitive Disturbance, Function, and Difficulty in Emotion Regulation among Adolescents. Int J Appl Behav Sci. 2022 Dec. 20;9(4):9-16.
2. Craig SG, Sierra Hernandez C, Moretti MM, Pepler DJ. The mediational effect of affect dysregulation on the association between attachment to parents and oppositional defiant disorder symptoms in adolescents. Child Psychiatry Hum Dev. 2021;52: 818-828.
3. Carr A, ed. The handbook of child and adolescent clinical psychology. A contextual approach. London and NewYork: Rutledge; 2017.
4. Association AP. DSM-5 task force. Diagnostic and statistical manual of mental disorders: DSM-5 5th ed Washington, DC: American Psychiatric Association; 2013.
5. Sadock BJ, Sadock VA, Ruiz P, Sadock BJ, eds. Kaplan &Sadock's Concise Textbook of Clinical Psychiatry. Philadelphia: Wolters Kluwer; 2017.
6. Kring A JS, Davison G, Neale J. Abnormal Psychology. ed t, editor. Washington: John Wiley & Sons; 2014.
7. Waldman ID, Rowe R, Boylan K, Burke JD. External validation of a bifactor model of oppositional defiant disorder. Mol. Psychiatry. 2021; 26(2): 682-693.
8. Lavigne JV, Bryant FB, Hopkins J, Gouze KR. Dimensions of oppositional defiant disorder in young children: model comparisons, gender and longitudinal invariance. J Abnorm Child Psychol. 2015;43:423–439.
9. Esmaeilpour K, Mir A, Zareei A. Relationship between Attachment Problems and Symptoms of Oppositional Defiant Disorder in Children. J Child Ment Health 2016; 3(3):73-83.
10. Leadbeater BJ, Ames ME. The Longitudinal Effects of Oppositional Defiant Disorder Symptoms on Academic and Occupational Functioning in the Transition to Young Adulthood. J Abnorm Child Psychol 2017; 45: 749-763.
11. Behamin M, Kouroshnia M. The mediating role of loneliness in the relationship between social skills and social adjustment among adolescents. Psychol. Methods. 2017; 8(29): 253-268.
12. Smoleva EO. Criteria and resources for social adaptation of

Russia's population. Economic and social changes: facts, trends, forecast; 2019;12(2):179-195.
13. Bagherian S, Naderi H, AsghariGanji A. The Effectiveness of Cognitive and Metacognitive Styles Training on the Learning, Social Self-efficacy and Social Adjustment of Students. Educ Strategy Med Sci; 2019; 12 (5) :39-50.
14. Banisi P. Effectiveness of self-regulation strategies training on resiliency and social adjustment in students with learning disorder. Empowering Exceptional Children. 2019;10(1):107-115.
15. Bachem R, Casey P. Adjustment disorder: a diagnosis whose time has come. J. Affect. Disord.. 2018;227:243-253.
16. Mejías JA, Jurado MM, Tafoya SA, Romo F, Sandoval JR, Beltrán-Hernández L. Effects of group psychotherapy on depressive and anxious symptoms, self-esteem and social adaptation in college students. Couns Psychother Res. 2020;20(1):46-56.
17. Luminet O, Nielson KA, Ridout N. Cognitive-emotional processing in alexithymia: an integrative review. Cogn. Emot. 2021;35(3):449-487.
18. Pisani S, Murphy J, Conway J, Millgate E, Catmur C, Bird G. The relationship between alexithymia and theory of mind: A systematic review. Neurosci Biobehav Rev. 2021;131:497-524.
19. Hemming L, Taylor P, Haddock G, Shaw J, Pratt D. A systematic review and meta-analysis of the association between alexithymia and suicide ideation and behaviour. J. Affect. Disord. 2019;254:34-48.
20. Di Tella M, Adenzato M, Catmur C, Miti F, Castelli L, Ardito RB. The role of alexithymia in social cognition: Evidence from a non-clinical population. J. Affect. Disord. 2020;273:482-92.
21. Preece DA, Mehta A, Becerra R, Chen W, Allan A, Robinson K, Boyes M, Hasking P, Gross JJ. Why is alexithymia a risk factor for affective disorder symptoms? The role of emotion regulation. J. Affect. Disord. 2022;296:337-341.
22. Tang W, Hu T, Yang L, Xu J. The role of alexithymia in the mental health problems of home-quarantined university students during the COVID-19 pandemic in China. Pers. Individ. Differ. 2020;165:110-131.
23. Sefidrood M, Hobbi MB. The Role of Attachment Styles and Cognitive Emotion Regulation in Predicting the Tendency to High-Risk Behaviors in Adolescents. Int J Appl Behav Sci. 2023 Mar. 15;10(1):1-8
24. Dehghan H, Naderi H, Baezzat F, Hashemi S. Effectiveness of Compassionate Mind-Based Cognitive Therapy on Adolescents' Behavioral Activation-Inhibition Systems and Theory of Mind. Int J Appl Behav Sci. 2022 Sep. 21;9(3):22-3.
25. Domitrovich CE, Durlak JA, Staley KC, Weissberg RP. Social-emotional competence: An essential factor for promoting positive adjustment and reducing risk in school children. Child Dev. 2017;88(2):408-416.
26. Farmani F, Gholami Sehchek S, Jahanshahloo M, Amirshahi A. The Effectiveness of Emotional Regulation Training on Aggression and Coping Styles of Methamphetamine Substance Abusers. Int J Appl Behav Sci. 2023 Jun. 20;10(2):18-26.
27. Mathews BL, Koehn AJ, Abtahi MM, Kerns KA. Emotional competence and anxiety in childhood and adolescence: A meta-analytic review. Clin Child Fam Psychol Rev. 2016; 19: 162-184.
28. Luo L, Reichow B, Snyder P, Harrington J, Polignano J. Systematic review and meta-analysis of classroom-wide social–emotional interventions for preschool children. TECSE. 2022;42(1):4-19.
29. Oberle E, Schonert-Reichl KA. Social and emotional learning: recent research and practical strategies for promoting children's social and emotional competence in schools. Handbook of social behavior and skills in children. 2017:175-197.
30. Dougherty D, Sharkey J. Reconnecting youth: Promoting emotional competence and social support to improve academic achievement. CYSR. 2017; 74: 28-34.
31. Shokri, L., Osmani, H. Effectiveness of teaching social-emotional competence on social skills and psychological capitals in the students with oppositional defiant disorder. CECIRANJ, 2018; 9(4): 27-17.
32. Kumar R. Research methodology: A step-bystep guide for beginners: Sage Publications Limited; 2019.
33. Fadaie, Z., Najafi, M., HabibiAsgarabad, M., Besharat, M. A. Confirmatory Factorial Structure, reliability and validity of the Achenbach Youth Self-Report Scale (YSR): Monozygotic and Dizygotic twins. J. Clin. Psychol, 2009; 1(1): 1-18.
34. Bell, H. M. The adjustment inventory: adult form. Palo Alto: Consulting Psychological Press; 1962.
35. Golestanibakht, T., Babaie, E., Karimi, M., Ahmadi, A. The Relationship between Self-Compassion and Optimism in Students: The Mediating Role of Social Adjustment. Soc. Psychol. Q, 2022; 12(45): 65-84.
36. Bagby RM, Parker JD, Taylor GJ. The twenty-item Toronto Alexithymia Scale—I. Item selection and cross-validation of the factor structure. J. Psychosom. Res. 1994;38(1):23-32.
37. Besharat, M. A. Toronto Alexithymia Scale: Questionnaire, Instruction and Scoring (Persian Version)., 2013; 10(37): 90-92.
38. Larsen T, Samdal O. Implementing second step: Balancing fidelity and program adaptation. J EducPsychol Consult. 2007; 17(1): 1-29.
39. AhmadpourTorki Z, Hakim Javadi M, SoltaniShal R. Effectiveness of Social-Emotional Competence Training on Problem Solving, Aggression and Optimism of Students with Low Economic Socio-Economic Status. J Child Ment Health. 2018; 5 (2) :107-118.