



The Effect of Emotion Regulation Skills Psychoeducation Program on Emotion Regulation Difficulties and Reactive-Proactive Aggressions of Adolescents *

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Abstract

This study was carried out to examine the effect of emotion regulation skills psycho-education program on emotion regulation difficulties and reactive-proactive aggression of adolescents. The research group of this study, which was formed by using a quasi-experimental design with pretest-posttest, experimental and control groups, consisted of 22 high school students, 11 of whom were in experimental group and 11 students were in control group. The study was completed as 9 people in the experimental group and 11 people in the control group. Difficulties in Emotion Regulation Scale, Reactive-Proactive Aggression Scale and "Personal Information Form" prepared by the researchers were used as data collection tools. Nine-week psycho-education program prepared by the researcher was applied to the experimental group once a week. No action was taken in the control group. According to the results, it was observed that after the intervention, the difficulty of emotion regulation and reactive aggression scores of the individuals in the experimental group differed significantly from the control group. In addition, it was determined that the effect of the training program continued after two months according to the results of the follow-up test.

Keywords

Adolescent
Skill of emotion regulation
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Introduction

Man completes his/her existence by passing through certain developmental stages from birth to death. In adolescence, which is perhaps the most complex period in this developmental process, the individual tries to find an identity for himself/herself in an effort to make sense of the world and life, and tries to complete his physical, cognitive and psycho-social developmental tasks. Along with the development tasks expected from him/her, effort to adapt to the changes brings negative emotions and behaviors such as anger, anger, introversion (Graig, 2002).

In addition to being effective determinants in our daily lives, emotions have also been at the center of many theories and models as an important factor in our understanding of the human mind.

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Many studies have shown that the ability to recognize and regulate emotions is directly related to psychological well-being and disorders (Aldao, Sheppes, & Gross, 2015; Gross & Munoz, 1995; Rittenhouse-Young, 2015). It shows that emotion regulation is a direct need for people to avoid negative emotions by turning to positive emotions starting from childhood, and even to use negative emotions, such as anger, sadness, to get what they need (Hsieh & Stright, 2012).

Emotion regulation is defined as methods, techniques and behaviors that balance, stop or increase the emotions and emotional expressions of the individual, voluntarily or involuntarily, automatically or with a certain effort (Calkins & Bell, 2010). The most comprehensive definition of the concept of emotion regulation is expressed by Gross (1998) as being able to recognize and accept emotions, control negative emotions, exhibit goal-oriented behavior and manage the process with appropriate strategic methods. The purpose of emotion regulation is not to eliminate or replace negative emotions with positive emotions, but to help the person create appropriate reactions to the circumstances. In this way, emotions play an auxiliary role in producing appropriate responses to the changing conditions of the environment (Aldao, 2013). Although emotions are thought to be a factor that triggers behavior, the individual experiences emotion regulation process by observing the results of attention, cognitive structure and emotions (Koole, 2009).

In the process of emotion regulation, person decides to what extent he/she will be affected by the emotions he/she experiences. If the individual wishes, he/she decreases or increases the level of negative affect or instead, he/she can go into a coping or reorganization process by continuing (Leahy, Tirsch, & Napolitano, 2011). While the formation of emotion regulation strategies is affected by the attitudes and attachment styles of adults who deal with and communicate with the person from the first years of life, the influence of temperament and genes cannot be denied (Kostiuk, 2011). It is seen that adolescents whose mothers have high difficulty in emotion regulation have more difficulty in emotion regulation compared to adolescents whose mothers have low levels of difficulty (Saritaş & Gençöz, 2012). Fox and Calkins (2003) suggest that three cognitive processes related to the child's emotion regulation. These are executive functions, efficient control, and attention. These three cognitive processes affect individual's ability to control their emotions. The neurobiological foundations of executive functions emerge as a result of early but also long maturation. The increase in executive functions has important effects on thinking, problem solving, behavioral and emotional self-control. These capacities, which develop in middle childhood, allow children to become more thoughtful, problem-solving, less impulsive and more strategic people (Alduncin, Huffman, Feldman, & Loe, 2014). While it is seen that emotion regulation capacity develops in line with age and it becomes more complex with age (Southam-Gerow, 2014), it has been stated that expressing emotions in early childhood contributes positively to emotion regulation and children who express their emotions can have positive effects on their surroundings (Charles & Carstensen, 2007).

With the development of cognitive skills in adolescence, diversity in emotion regulation strategies increases and emotion regulation skills have a critical role during adolescence, which is a period with rapid emotion changes. Developing the belief that the good-bad mood created by emotions can be changed in the process of dealing with adolescence complexes, paves the way for the formation of functional emotion regulation strategies (Smith et al., 2018). Undoubtedly, sociality and friendship relations are extremely valuable during adolescence. Especially in a period when emotional changes are experienced rapidly, adolescents want to avoid emotional storms that will harm their social relationships, otherwise they have to face failure in the social relations. Studies have shown that children and adolescents with low emotion regulation skills experience adaptation problems such as aggression, aggression in failure, displaying behaviors that do not conform to social areas, and withdrawal in times of stress in their relationships (Üney, 2016). Some studies have shown that during adolescence, when cognitive complexity is intense, difficulty in emotion regulation can lead to pathological consequences such as depression, self-harm, violence and anti-social orientations (Morris, 2015; Vine & Aldao, 2014).

Erikson states that interaction with other people has a key role in the critical identity formation process, which is one of the important developmental crises of adolescents (Holmbeck, O'mahar, Abad, Colder, & Updegrave, 2006; Steinberg, Belsky, & Meyer, 1991). In order to talk about psychologically compatible emotion regulation during adolescence, two important conditions must be taken into account. The first of these is to reduce the frequency, variation and negative emotional event as various variables of emotion; the other is the cognitive and behavioral methods used by the individual in the development process (Silk, Steinberg, & Morris, 2003). In a study, it was seen that adolescents who have problems such as depression or mood disorders prefer negative cognitive methods as coping strategies (Garnefski, Kraaij, & Van Etten 2005). In studies conducted with adolescents, it has been observed that while adolescents use emotion regulation strategies, they use maladaptive cognitive strategies such as catastrophizing, self-reflection, self-blame, and rumination more frequently (Garnefski & Kraaij, 2006). In a study on adolescents with anxiety disorder and school refusal, it was observed that adolescents used maladaptive regulation processes and it was determined that the suppression method was preferred more frequently than re-evaluation (Hughes, Gullone, Dudley, & Tonge, 2010).

Emotion regulation strategies have a direct determining effect on the outcome in positive or negative situations (Özdoğan, 2017). Therefore, besides whether the experience is positive or negative, it is also very important how emotions are expressed and to what extent they can be regulated. It is known that mental and emotional components change continuously during adolescence and social arousal is quite high (Diener, 2001). Emotions appear at the center of aggression and violence in many studies, models or theories (Spector, Fox, & Domagalski, 2005). While this intense struggle of the adolescent with his emotions enables him to turn to various strategies, having an internal negative attitude can cause him to approach others aggressively in his social life (Martinko, Gundlach, & Douglas, 2002).

It is seen that there are differences in the expression of aggression at various stages of life. In their study, Ersan and Tok (2020) stated that children's physical aggression was significantly predicted by their anger, sad and frightened expression levels, lability/negativity levels, which are the emotion regulation sub-dimension, and emotion regulation total levels. In adolescence, where rapid physical changes are experienced, developments that cannot accompany these developments cognitively can make this period the most dangerous period for aggression. Adolescents use the cognitive, affective and behavioral strategies which they have brought from childhood in the process of coping with their problems (Garnefski, Legerstee, Kraaij, Vanden Kommer, & Teerds, 2002). Individuals in adolescence show more aggressive behaviors compared to earlier ages, then frequency of aggression decreases (Verlinden, Hersen, & Thomas, 2000).

Studies show that adolescents with aggressive attitudes use emotion regulation strategies less than adolescents who do not adopt aggressive attitudes (Silk et al., 2003). There are many studies on aggression. Aggression has determinants such as socialization problems (Yeğen, 2008), lack of emotional self-control and lack of conflict resolution skills (Gökbüzoğlu, 2008), cognitive deficits (Gündoğan, 2016), parental attitudes (Özdoğan, 2017), media, emotional and physical abuse (Aracı, 2012). Although aggression has been extensively studied, it has been observed that the relationship between emotion regulation and aggression is limited to anger (Davey, Day, & Howells, 2005). In order for the studies on aggression to provide wider benefits, it is necessary to examine the sub-dimensions of aggression and to define different types of aggression. It is possible to see many different classifications in the literature. One of these classifications is defined as Reactive Aggression and Proactive Aggression. Reactive aggression is defined as a reactive attitude and proactive aggression is defined as a goal-oriented attitude (Uz-Baş, Öz, & Topçu Kabasakal, 2012). Proactive and Reactive aggression differ from each other cognitively and affectively. While proactive aggression refers to aggression that is deliberately and intentionally applied, reactive aggression refers to aggression aimed at self-protection when there is a possibility of being threatened and harmed (Pulkkinen, 1996).

In many studies in which aggression and emotion regulation were handled together, significant relationships were found between aggression and emotion dysregulation (low level of understanding, explaining and being aware of emotion) (Cohn, Jakupcak, Seibert, Zeichner, & Hildebrandt, 2010; Robertson, Daffern, & Bucks, 2012; Röhl, Koglin, & Peterman, 2012; Calvete & Orue, 2012). Skripkauskaitė et al. (2015) reported that there is a positive relationship between difficulty in emotion regulation and reactive-proactive aggression, and that emotional dysregulation and proactive aggression mutually reinforce each other, especially in adolescents who are criticized/defected by their mothers. In a similar study with adolescents, Özdoğan and Cenkseven Önder (2018) reported positive relationships between emotion regulation and reactive-proactive aggression. Rothenberg et al. (2019) stated that difficulty in emotion regulation has direct and indirect effects on adolescent aggression and depression.

When researches are examined, it is observed that intervention programs related to emotion regulation skills have increased in recent years (Campbell, 2015; Claro, Boulanger, & Shaw, 2015; De Witte, Sütterlin, Braet, & Mueller, 2017; Deplus, Billieux, Scharff, & Philippot, 2016; Larson, Lennarz, Lichtwarck-Aschoff, Timmerman, & Granic, 2018; Sarçalı Ender, 2020; Theofanopoulou, Isbister, Edbrooke-Childs, & Slovák, 2019; Topal, 2021; Turan, 2020). Deplus et al. (2016) applied mindfulness-based training on emotion regulation skills in adolescents and a decrease was observed in the participants' dysfunctional emotion regulation strategies after the intervention. In a study, based on a cognitive behavioral approach to awareness and expression of emotions, it was found that the program reduced test anxiety in favor of the experimental group (Demirci & Erden, 2016). In addition to these, there are group studies on aggression in general (Ando, Asakura, Ando, & Simons-Morton, 2007; Kaplan, 2007; Sarica, 2008). Also, no experimental study was found in the literature on emotion regulation skills and reactive-proactive aggression with adolescents. In this sense, intervention studies for emotional regulation difficulties in adolescence are considered important in terms of reducing aggression with various dimensions.

Methods, techniques and approaches to be used in the preparation of this psycho-educational program are discussed within the framework of Cognitive Behavioral Therapy (CBT). According to this theory, emotions are not independent of cognitions and affect our behavior as a result. Ellis (1994) mentions the existence of the belief system in the individual in the cognitive sense and that irrational thoughts act in some cases and cause cognitive distortions, negative moods and undesirable behaviors. Changing the irrational belief system in a functional way will change the existing unwanted emotional state. In the CBT approach, the person has some dysfunctional emotions and automatic thoughts that cause behaviors related to these emotions as a result of their cognitive distortions (Özdel, 2015). In this theory, it is seen that the experiences, perspective and personal evaluations that make up the cognition system of the individual play an important role in his life. For this reason, CBT focuses on the automatic thought of the problem experienced by the individual and focuses on replacing it with more functional thoughts. Considering that the physical, cognitive and psycho-social structure is formed and the identity formation process is more intense, especially during adolescence, it is important to work with cognitions in line with the CBT approach and to realize its effect on emotions and behaviors.

It is thought that the adolescents participating in this psycho-education will be able to cope with the emotional and behavioral problems they experience in their social relationships more easily, adapt, reflect their emotions correctly, and exhibit the right reaction and behavior thanks to the new information they have learned and the new experiences and in parallel, their emotion regulation difficulties and reactive-proactive aggression can be overcome. Especially considering the violence phenomenon that has been on the rise in society, conducting such a study in a sample of adolescents who are in a critical period in terms of development will further strengthen the group counseling practices carried out by psychological counselors in schools.

In this study, it was aimed to examine the effect of the psycho-educational program developed for adolescents in reducing emotion regulation difficulties and reactive-proactive aggression. In addition to bringing a new psycho-educational program to the literature, this quasi-experimental study will also provide a guide for practitioners carrying out school psychological counseling services. The hypotheses regarding the effect of the emotion regulation skills psycho-education program developed in this direction in reducing emotion regulation difficulties and reactive and proactive aggression for adolescents are as follows:

1. The emotion regulation skills psycho-education program is effective in making a difference between the pretest and posttest scores of the adolescents in the experimental group for difficulty in emotion regulation and reactive and proactive aggression scale.
2. The emotion regulation skills psycho-education program is effective in making a difference between the posttest scores of the adolescents in the experimental and control groups from difficulty in emotion regulation and reactive and proactive aggression scale in favor of the experimental group.
3. The emotional regulation skills psycho-education program will continue to be effective in the follow-up study to be carried out two months later.

Method

Research Design

In this study, a quasi-experimental design with experimental and control groups, pretest, posttest and follow-up tests was used to investigate the effect of the emotion regulation skills psycho-education program, which prepared by the researchers, on emotion regulation difficulties and reactive and proactive aggression in adolescents. This design allows testing the effect of the procedure on the dependent variable and helps to interpret the findings in a cause-effect relationship and gives statistically strong data (Büyüköztürk, 2012). The design of the research is given in Table 1.

Table 1. Research Design

Groups	Measurements			
	Pretest		Posttest	Follow-up Test
Experimental Group	DERS	Application of Psycho-education Program	DERS	DERS
	RPAS		RPAS	RPAS
Control Group	DERS	X	DERS	DERS
	RPAS		RPSAS	RPAS

Difficulties in Emotion Regulatory Scale (DERS); Reactive-Proactive Aggression Scale (RPAS)

One of the most important elements to be considered in experimental studies is internal validity. Internal validity is a type of validity that deals with whether the variation in the dependent variable is really due to the independent variable (Büyüköztürk, 2012). Factors affecting internal validity; absence of a control group, number of subjects, subject selection, location, maturity and pretest effect. In this context, the control group was included in the experimental design, the number of subjects was kept high before the procedure, the individuals selected for the experimental and control groups were assigned impartially, the data collection location was kept constant for all subjects, and in order to examine the effect on the dependent variable, unlike the independent variables, Covariance analysis (ANCOVA), which provides the control of any other variable that may affect the dependent variable and increases the internal validity, was used.

Study Group

The study group consists of 175 adolescents attending the 10th and 11th grades of a vocational high school located in the central Yenışehir district of Mersin province in the 2017/2018 academic year. Considering the adaptation processes and age factor of the 9th graders and the internship intensities and university preparation processes of the 12th grades, they were not included in the scope of the

study. According to the Personal Information Form data, the education level of the mothers (46.3%) and fathers (37.7%) of the adolescents included in the sample group is mainly at primary school level, 87.4% of them perceive themselves as "middle class" socio-economically, and 58.9% of them are perceived their parent attitude as "democratic". On the other hand, almost all of the adolescents (96%) have not been in any psycho-education group before. At the stage of determining the participant profile, in cooperation with the school counselor, the presence of any pathological diagnosis of the adolescents, other personality traits and possible negative situations in terms of group adjustment were evaluated before the study. At the end of the application, the mean and standard deviations of the Difficulty in Emotion Regulation Scale (\bar{X} =96.62; s =22.30), proactive aggression (\bar{X} =13.66, s =2.82) and reactive aggression (\bar{X} =19.30, s =4.92) scales were calculated to form the pool from which the research group would be selected. Due to the insufficient number of students with scores above the average from all scales -due to the content and characteristics of the intervention program- 25 students whose Difficulty in Emotion Regulation Scale scores and proactive and reactive aggression scores were average and above the average were determined. As a result of the random assignment, the research group consisted of a total of 22 people, 11 of which were in the experimental group and 11 in the control group. The study was completed as an experimental group of four women and five men, a total of nine people, and a control group of six women and five men. The average age of the experimental and control group participants was 16.28.

Data Collection Tools

Difficulties in Emotion Regulatory Scale (DERS): It was originally developed by Gratz and Roemer (2004) for use in adults and was clinically designed to evaluate emotion regulation difficulties. In addition to its applicability in the adult sample, its applicability on young people and adolescents is theoretically compatible with the literature (Neumann, Van Lier, Gratz, & Koot, 2010). In the scale, there are items such as "I believe that feeling bad will result in intense depressive feelings", and it is scored between 1 and 5 as a 5-point Likert type. The scale consists of 36 items and 6 subscales. Subscales are awareness, clarity, non-acceptance, strategies, impulse, and goals. The high scores obtained from the scale indicate the degree of emotion regulation difficulty. Gratz and Roemer (2004) found the Cronbach Alpha internal consistency coefficient .93 in the original form of the scale; test-retest reliability was found to be .88. Rugancı and Gençöz (2010) reported that the factor structure was the same as the original, except for one item, in their confirmatory factor analysis. In the adaptation study, the Cronbach Alpha internal consistency coefficient was found to be .94. The Turkish psychometric evaluations of the scale for adolescents were made by Sarıtaş and Gençöz (2012). The general difficulty internal consistency coefficient of the scale was found to be .93, similar to the original scale, and the test-retest reliability was found to be .83. No confirmatory factor analysis was performed on the data collected in this study, the internal consistency coefficient of the scale was calculated and the total score was 0.88; It was observed that the internal consistency coefficients for the sub-scales ranged from .68 to .82. In the study, analyzes were made on the total score of the scale, and no action was taken on the subscales.

Reactive-Proactive Aggression Scale (RPAS): In the scale developed by Raine et al. (2006), 2, 4, 6, 9, 10, 12, 15, 17, 18, 20, 21, 23. items measure proactive aggression and 1, 3, 5, 7, 8, 11, 13, 14, 16, 19, 22. items measure reactive aggression. The item "I fight with others to show that I am superior" in the scale exemplifies proactive aggression, and the item "I get angry when I am blocked" exemplifies reactive aggression. The scale is a 3-point Likert-type instrument and is scored as 0-1-2. In addition to the relevance of the concept of reactive-proactive aggression, the scale includes both verbal and physical aggression, as well as the situational and causal dimension of aggression. High scores obtained from the scale mean that the tendency to aggression is also high. The scores obtained from the reactive and proactive scales give the total aggression score. The scale describes a very good fit as below .05 in all samples and above .90 in fit indices. The internal consistency score of the scale was found to be .92.

The Turkish adaptation of the Reactive-Proactive Aggression Scale was carried out by Cenkseven-Önder, Avcı, and Çolakkađıođlu (2016). In the research, reliability and validity studies of the scale were conducted for both secondary and high school students. When the reliability coefficient

was examined, it was determined as .88 for general aggression, .84 for reactive aggression and .84 for proactive aggression. In this study, the reactive aggression internal consistency coefficient of the scale was found to be .85 and the proactive aggression internal consistency coefficient was found to be .83.

Personal Information Form (PIF): The personal information form was prepared by the researchers in order to determine the age, gender, grade level, number of siblings, educational status of parents, the place where most of their lives were spent, and the parental attitudes they perceived from their families.

Procedure

In order to carry out the study, first of all, permissions were obtained, then announcements were made to the adolescents in cooperation with the school administration and guidance service, and then information was given about the education to be implemented. Volunteer adolescents were interviewed face-to-face and the participants were informed in detail about the place, time, duration and scope of the program in terms of implementation. Adolescents who participated voluntarily were told how to fill in the pretest scales, the importance of confidentiality was mentioned, and the application was made by emphasizing giving sincere answers to the questions due to the importance of achieving the purpose of the application. In the second stage, two study groups were formed as experimental and control groups by random assignment to see whether the emotion regulation skills psycho-education program had an effect on the emotion regulation difficulties and reactive-proactive aggression of adolescents. 11 people formed the experimental group and 11 people formed the control group. 11 people in the experimental group were given detailed information about the subject, scope, day, duration and place of the group training with individual interviews before the procedure. Permission to participate in the program was obtained from the parents of the adolescents and an Informed Consent Form was signed by them. In the third stage of the study, nine-session group training was applied to the experimental group once a week. In the second week of the group training, two people from the experimental declared that they did not want to continue to participate and left the group. The study was completed with the experimental group of four women and five men, a total of nine people, and the control group of six women and five men between February 16 and April 6, 2018 and no action was taken on the control group. Finally, two months after the end of the group sessions, the follow-up test was applied to the experimental and control groups and the study was terminated.

In the process of preparing the psycho-education program applied in this study, first of all, the existing literature was searched and the existing emotion regulation skills training programs were examined. After the current literature review expert opinions were taken from educators working in various. They were asked to make long and in-depth evaluations by asking open-ended questions. The printed documents of the program were delivered to the experts, and the content of the session was given for the evaluation of each session, and they were asked to evaluate what is expected from the consulted expert with an explanatory letter in terms of the explanations regarding the structure of the program, its theoretical infrastructure, suitability for the purpose of the sessions, and general characteristics. In line with the opinions received, the program was reconstituted. Unlike counseling and therapy groups, the process in psycho-education groups includes pre-planned and structured activities, the leader is a facilitator in the process of managing the group, the group's goals are explained by the leader, the group members are informed through a previous interview, and the process is framed on the basis of teaching. (Brown, 2011). One of the aims of the psycho-education group is developing a skill over a period of time. While these group sessions last between 6 and 20 sessions, counseling and therapy sessions may be longer. Brown (2011) stated that session duration is 20 minutes for those aged seven to nine, 30-40 minutes for children aged nine and over, and an average of one hour for adolescents.

The psycho-educational program applied in this study was prepared within the framework of cognitive behavioral theory and included techniques such as role playing, visualization, warm-up games, turning negative thoughts into positive, relaxation exercises, reinforcement. The applied program is based on the sources that include techniques and methods related to group training and group trainings on emotion regulation and aggression (Atalar, 2014; Aydın, İmamoğlu, Canel, & Yaycı, 2005; Çivitçi, Türküm, Duy, & Hamamcı, 2014; Erkan & Kaya, 2015; Erözkan, 2006; Gülgez & Gündüz,

2015; Izard, 2002; Kılıçarslan, 2006; Kuzucu, 2006; Langelier, 2006; Stark et al., 2008; Southam-Gerow, 2014) and the opinions of field experts. These studies have been source for the formation of group sessions and the activities that can be used in the sessions. In addition, while determining the objectives for the group sessions and the content of each session, the sub-dimensions of emotion regulation skills in the literature were taken into account, such as recognizing emotions, expressing emotions (Gratz & Roemer, 2004; Gross, 2002; Koole, 2009; Thompson, 1994) and expressing them.

Group sessions are structured as outlined below.

1st Session (Introduction to the Program and Acquaintance)

In the first session, after the group members got to know each other, the main purpose of the program and the purpose of this session were revealed. By creating group rules with the group members, it was tried to ensure that each member set individual goals.

2nd Session (Our Emotions and Being Aware of Them)

In the second session, definitions of emotion awareness were made, and group members were tried to create their own specific goals for behavioral purposes (Kılıçarslan, 2006; Langelier, 2006; Southam-Gerow, 2014). During the process, a list of emotions was shared, basic emotions and previously unrecognized emotions were studied. Thus, the emotions that arise and change in various situations in daily life have been made more clear and understandable.

3rd Session (Understanding Emotion Confusion)

In the third session, the metaphor of traffic congestion was used in order to recognize and make sense of the emotional turmoil experienced in the developmental period (Aydın et al., 2005; Langelier, 2006). The situations in which the group members are in a similar emotional turmoil were imaginatively animated, the reflections of these emotions in the mind and body were noticed, and the importance of the intensity of the emotions experienced was tried to be comprehended.

4th Session (Understanding Emotion, Thought and Behavior Cycle)

In the fourth session, it was tried to help the members to realize their cognitive structures and functions and to distinguish their feelings and thoughts with the study materials created within the framework of the ABC model. Information was given about the relationship between emotion, thought and behavior, and the trio of emotion, thought and behavior was tried to be analyzed through case studies (Gülgez & Gündüz, 2015; Langelier, 2006; Southam-Gerow, 2014).

5th Session (Recognizing Positive and Negative Emotional Cycles and Focusing on the Positive)

In the fifth session, the focus was on recognizing the triggers that reveal emotions and turning a negative thought into a positive one - through the case study - in order to understand the negative emotional cycle. In order to realize the thoughts that arise in the negative emotional cycle experienced, awareness has been tried to be created with the role-playing technique (Çeçen, 2002; Çivitçi et al., 2014; Langelier, 2006).

6th Session (Regulation of Behaviors that Emerge with Positive and Negative Emotions)

In the sixth session, the importance of recognizing impulsive behavior that occurs within the scope of coping with negative emotions and changing it with functional behaviors was emphasized, a case study was conducted to realize the consequences of acting effectively and purposefully.

7th Session (Expressing Emotions and Understanding Its Effect in Communication)

In this session, the importance of expressing feelings and thoughts was mentioned to the participants, the effect of using "I Language" in communication was emphasized, the importance of expressing thoughts while reflecting negative emotions was tried to be understood, and it was tried to be reinforced with case studies and role playing (Erkan & Kaya, 2015; Kılıçarslan, 2006; Kuzucu, 2006).

8th Session (Developing Alternative Behaviors While Regulating Emotions)

In this session, the effect of the use of exercise in the management and regulation of emotions was emphasized, relaxation exercises were performed, and the importance of taking a goal-oriented model and getting help in cases where emotion regulation methods were insufficient. It has been tried to reinforce the participation of individuals in different activities so that they can recognize their personal well-being (Erözkan 2006; Tekinsav Sütçü, Aydın, & Sorias, 2010).

9th Session (Closing and Farewell)

In the ninth session, group members were allowed to express themselves in achieving individual goals, their feelings and thoughts regarding the termination of the group sessions and opinions were received about the changes noticed before and after participation.

Before starting the group sessions, the interaction was started with a warm-up game chosen by the practitioner. At the beginning of each session, the experiences and goals of the previous session were reminded, at the end of each session, an evaluation was made and homework was given to the group members. Volunteering status of the members was taken into consideration in the participation in the activities carried out during the group process.

Data Analysis

Covariance analysis (ANCOVA) was used to determine whether the emotion regulation skills psycho-education program has an effect on the emotion regulation difficulty and reactive-proactive aggression levels of adolescents in the analysis of the data, Shapiro-Wilk test was used to determine whether the data are normally distributed, Levene test was used to test the homogeneity of the variances and Mann-Whitney U test was used to compare two independent groups and Wilcoxon Signed Rank Test for dependent groups.

In addition to the analyzes mentioned above, eta square (η^2) value was checked to examine the effect size. While evaluating the eta square value, the result was evaluated as (.01) small, (.06) medium and (.14) large effect size (Green, Salkind, & Akey, 1997, as cited in Güler, 2018). Covariance analysis provides the control of any other variable that may affect the dependent variable, unlike the independent variables, in order to examine the effect on the dependent variable, and it also has the feature of increasing internal validity. Therefore, covariance analysis (ANCOVA) is mostly preferred in experimental studies with one or more variables. In order to perform ANCOVA, some assumptions must be met. These assumptions are;

- Regression slopes are equal within the group.
- The relationship between the dependent variable and the covariate is linear.
- Dependent variable scores are normally distributed and variances are homogeneous.
- Mean scores are unrelated (Büyüköztürk, 2012).

In order to examine the assumptions of covariance analysis, the normality distribution of the data obtained from the emotional dysregulation and reactive&proactive aggression scale of the adolescents in the experimental and control groups was examined.

Findings

In this section, before the findings related to the hypotheses are presented, information on the normality distribution of the data and the assumptions of the analyzes to be made were shared.

Emotion Regulation Difficulty

The normality distribution of the data obtained from the difficulty in emotion regulation scale of the adolescents in the experimental and control groups was examined with the Shapiro-Wilk normality test. The findings related to the test are shown in Table 2.

Table 2. Shapiro-Wilk Normality Test Results Regarding Pretest and Posttest Scores for Difficulties in Emotion Regulatory of Adolescents in the Experimental and Control Groups

Groups	Test	W	N	P
Experimental Group	Pretest	.875	9	.138
	Posttest	.962	9	.821
Control Group	Pretest	.973	11	.916
	Posttest	.964	11	.840

When Table 2 is examined, it is seen that there is no statistically significant difference between the observed distributions and the estimated distribution for all groups ($W_{exp.pretest} = .875$, $p = .138$, $p > .05$; $W_{exp.posttest} = .962$, $p = .821$, $p > .05$; $W_{cont.pretest} = .973$, $p = .916$, $p > .05$; $W_{cont.posttest} = .964$, $p = .840$, $p > .05$). In other words, pretest and posttest scores of the experimental and control groups regarding emotion regulation difficulties show normal distribution. Secondly, the homogeneity of the variances was checked. For the assumption of homogeneity of variances, mean versus variance or mean versus standard deviation hypothesis tests were used (Kalaycı, 2014). According to Levene's test used to test the homogeneity of variances, $F = .899$ and $p = .356$ was found. According to this result, the p significance value being greater than .05 indicates that it meets the homogeneity of the variances. Third, it was examined whether there was a linear relationship between the pretest and posttest scores of the groups included in the study (Büyüköztürk, 2012). For this purpose, scatterplots were examined between the pretest and posttest scores of Difficulties in Emotion Regulatory Scale and it was seen that relationship was linear.

As the fourth assumption, the equality of the regression coefficients within the groups was examined (Büyüköztürk, 2012). In order to test this assumption, it was examined whether the common effect of the pretest x group on the posttest scores was significant or not. The results are shown in Table 3.

Table 3. Comparisons of Experimental and Control Group Adolescents' Emotion Regulation Posttest Scores-Between-Subject Interaction Test

Source of Variance	Sum of Squares	Fd	Mean of Squares	F	p
Corrected Model	4493.967a	3	1497.989	3.721	.033
Group	124.705	1	124.705	.310	.586
Pretest Total	2062.997	1	2062.997	5.125	.038
Group*Pretest Total	36.028	1	36.028	.089	.769
Error	6440.983	16	402.561		
Total	308859.0	20			

When Table 3 is examined, it is seen that the pretest x group joint effect ($p = .769$; $p > .05$) on posttest scores is not significant. In other words, the slopes of the regression lines are equal. The results obtained showed that the necessary assumptions were met for the covariance analysis.

Reactive Aggression

Normal distribution of the data obtained from the reactive aggression scale of the adolescents in the experimental and control groups was examined with the Shapiro-Wilk normality test. The findings related to the test are shown in Table 4.

Table 4. Shapiro-Wilk Normality Test Results Regarding Pretest and Posttest Scores for Reactive Aggression Scale of Adolescents in the Experimental and Control Groups

Groups	Test	W	N	P
Experimental Group	Pretest	.883	9	.168
	Posttest	.956	9	.751
Control Group	Pretest	.936	9	.536
	Posttest	.914	9	.346

When Table 4 is examined, it is seen that there was no statistically significant difference between the observed distributions and the estimated distribution for all groups ($W_{exp.pretest} = .883$, $p = .168$, $p > .05$; $W_{exp.posttest} = .956$, $p = .751$, $p > .05$; $W_{cont.pretest} = .936$, $p = .536$, $p > .05$; $W_{cont.posttest} = .914$, $p = .346$, $p > .05$). In other words, pretest and posttest scores of the experimental and control groups regarding reactive aggression show normal distribution. Secondly, homogeneity of the variances was checked. To check assumption of homogeneity of variances, mean versus variance or mean versus standard deviation hypothesis tests were used (Kalaycı, 2014). According to Levene's test used to test the homogeneity of variances, $F = 3.282$ and $p = .087$ was found. According to this result, the p significance value being greater than .05 indicates that it meets homogeneity of the variances.

Third, it was examined whether there was a linear relationship between pretest and posttest scores of the groups included in the study (Büyüköztürk, 2012). In this context, scatter plots were examined between reactive aggression pretest and posttest scores and it was seen that this relationship was linear. As the fourth assumption, the equality of the regression coefficients within the groups was examined (Büyüköztürk, 2012). In order to test this assumption, it was checked whether the pretest group joint effect on the posttest scores was significant and the results are shown in Table 5.

Table 5. Comparisons of Reactive Aggression Posttest Scores of Experimental and Control Group Adolescents-Between-Subject Interaction Test

Source of Variance	Sum of Squares	Fd	Mean of Squares	F	p
Corrected Model	177.723a	3	59.241	3.474	.041
Group	15.259	1	15.259	.895	.358
Pretest Total	4.063	1	4.063	.238	.632
Group*Pretest Total	2.877	1	2.877	.169	.687
Error	272.827	16	17.052		
Total	8571	20			

According to Table 5, it was seen that the pretest x group joint effect ($p = .687$; $p > .05$) on the posttest scores of the groups was not significant. In other words, the slopes of the regression lines were equal. The results obtained showed that the necessary assumptions were met for the analysis of covariance.

Proactive Aggression

According to the Levene test, which was used to test the homogeneity of the variances of the data obtained from the proactive aggression scale of the adolescents in the experimental and control groups, the results were found to be $F = 5.994$ and $p = .025$. According to this result, the p significance value being less than 0.05 indicates that the variances do not meet the homogeneity. Since the covariance analysis did not meet the homogeneity assumption, Non-Parametric Mann-Whitney U test was used to test whether there was a statistically significant difference between the posttest total scores for proactive aggression.

1. Findings Regarding the First Hypothesis

The first hypothesis of the study was “The emotion regulation skills psycho-education program is effective in making a difference between the pretest and posttest scores of the adolescents in the experimental group for difficulty in emotion regulation and reactive and proactive aggression scale”. Wilcoxon Signed-Rank Test was used to test whether emotion regulation skills training had an effect on adolescents' emotion regulation difficulties and reactive and proactive aggression levels. The findings related to the test are shown in Table 6.

Table 6. Wilcoxon Test Results Applied to the Pretest-Posttest Scores of Adolescents in the Experimental Group from the Difficulties in Emotion Regulatory, Reactive and Proactive Aggression Scale

Experimental Group/Pretest-Posttest	N	\bar{X}	Rank Average	Rank Sum	Z	p
Emotion Regulation pretest	9	130.72	4.00	4.00	2.192	.028
Emotion Regulation posttest	11	104.22	5.13	41.00		
Proactive pretest	9	14.63	2.50	5.00	2.094	.036
Proactive posttest	11	12.55	5.71	40.00		
Reactive pretest	11	24.18	1.00	1.00	2.549	.011
Reactive posttest	9	17.55	5.50	44.00		

When Table 6 is examined, it is seen that the pretest scores of difficulty in emotion regulation ($Z=2.192$, $p=.028$; $p<.05$), proactive aggression ($Z=2.094$, $p=.036$; $p<.05$) and reactive aggression ($Z=2.549$, $p=.11$; $p<.05$) of the adolescents in the experimental group are higher than the scores of the posttest. These differences were found to be statistically significant. In other words, after the implementation of the program, the emotion regulation difficulties and reactive-proactive aggression of the adolescents in the experimental group decreased and first hypothesis was accepted.

2. Findings Regarding the Second Hypothesis

The second hypothesis of the research is “the emotion regulation skills psycho-education program is effective in making a difference between the posttest scores of the adolescents in the experimental and control groups from difficulty in emotion regulation and reactive and proactive aggression scale in favor of the experimental group”, covariance analysis was performed on the data to determine whether there is a statistically significant difference between the posttest scores of the experimental and control groups.

Emotion Regulation Difficulty

In order to determine whether there is a statistically significant difference between the posttest scores of the adolescents in the experimental and control groups from difficulties in emotion regulatory scale, covariance analysis was performed on the data and the results are given in Table 7.

Table 7. Covariance Analysis Results of Experimental and Control Group Adolescents' Emotion Regulation Posttest Scores

Source of Variance	Sum of Squares	Fd	Mean of Squares	F	P	η^2
Corrected Model	4457.939a	2	2228.970	5.850	.012	.408
Pretest	2033.454	1	2033.454	5.337	.034	.239
Group	2596.574	1	2596.574	6.815	.018	.286
Error	6477.011	17	381.001			
Total	308859.0	20				

When Table 7 was examined, it is seen that there was a significant difference between corrected posttest mean scores and pretest scores of the adolescents' emotion regulation difficulties ($F(1-17)=6.815$, $p=0.018$ $p<.05$). When we look at the eta-square value ($\eta^2=.286$), it was seen that being in two different groups explained 28.6% of the change in the Emotion Regulation Difficulty posttest scores, apart from pretest scores, with a large effect size. Considering this result, it can be said that the change seen in the

adolescents participating in the emotion regulation training program compared to the pre-experimental study is statistically different compared to the emotion regulation skills of the adolescents in the control group. In other words, it can be said that the emotion regulation skills psycho-education program reduces the emotion regulation difficulties of adolescents.

Reactive Aggression

In order to test whether there is a statistically significant difference between the reactive aggression posttest total scores of the experimental and control groups, covariance analysis was applied to the data and the results are given in Table 8.

Table 8. Covariance Analysis Results of Reactive Aggression Posttest Scores of Experimental and Control Group Adolescents

Source of Variance	Sum of Squares	Fd	Mean of Squares	F	P	η^2
Corrected Model	174.845a	2	87.423	5.391	.015	.388
Pretest	9.023	1	9.023	.556	.466	.032
Group	155.834	1	155.834	9.609	.007	.361
Error	275.705	17	16.218			
Total	8571	20				

When Table 8 is examined, it is seen that there was a significant difference between the posttest mean scores corrected according to the reactive aggression pretest scores of the adolescents ($F(1-17)=9.609$, $p=.007$ $p<.05$). When we look at the eta-square value ($\eta^2=.361$), it was seen that being in two different groups explained 36.1% of the change in the reactive aggression posttest scores, apart from the pretest scores, in the large effect size. Considering this result, it can be said that the change seen in the adolescents participating in the emotion regulation training program compared to the pre-experimental study is statistically different compared to the reactive aggression scores of the adolescents in the control group. In other words, it can be said that the emotion regulation skills training program reduces the reactive aggression of adolescents.

Proactive Aggression

In order to test whether there is a statistically significant difference between the posttest total scores for proactive aggression, Non-Parametric Mann-Whitney U test was used for independent groups. The results are shown in Table 9.

Table 9. Comparison of Proactive Aggression Posttest Scores of Experimental and Control Group Adolescents- Mann-Whitney U

Group	N	Rank Average	Rank Sum	U	p
Experimental	9	8.61	77.50	32.500	.156
Control	11	12.05	132.50		

When the effect of emotion regulation training applied to the experimental group on the proactive aggression of adolescents is examined, it is seen that there is no significant difference between the experimental group and the control group ($U=32.500$; $p=.156$; $p>.05$). Although there is a difference between the proactive aggression scores of the adolescents in the experimental and control groups, this difference is not statistically significant. When the results of the analysis are examined, it is seen that the second hypothesis of the research, "the emotion regulation skills psycho-education program is effective in making a difference between the posttest scores of the adolescents in the experimental and control groups from difficulty in emotion regulation and reactive and proactive aggression scale in favor of the experimental group", is supported in terms of emotion regulation and reactive aggression, but not in terms of proactive aggression scores.

3. Findings Regarding the Third Hypothesis

The third hypothesis of the research is that the effect of the emotional regulation skills psycho-education program on emotion regulation difficulty and reactive-proactive aggression scores will continue after the end of the experiment. Wilcoxon test was used to determine whether there was a statistically significant difference between emotional dysregulation, reactive aggression and proactive aggression posttest mean scores of the adolescents in the experimental group and the follow-up test scores administered 2 months after the end of the education. The findings related to the test are shown in Table 10.

Table 10. Wilcoxon Test Results Applied to the Posttest and Follow-Up Scores of Adolescents in the Experimental Group from the Difficulties in Emotion Regulatory, Reactive and Proactive Aggression Scale

Experimental Group/Pretest-Follow-up test	N	Rank Average	Rank Sum	Z	p
Emotion Regulation pretest	9	4.00	12.00	1.245	.213
Emotion Regulation posttest	9	5.50	33.00		
Proactive pretest	9	4.30	21.30	1.279	.201
Proactive posttest	9	3.25	6.50		
Reactive pretest	9	4.75	28.50	.718	.473
Reactive posttest	9	5.50	16.50		

When Table 10 is examined, it is seen that the difference between the difficulty in emotion regulation ($Z=1.245$, $p=.213$; $p> 0.05$), proactive aggression ($Z=1.279$, $p=.201$; $p> .05$) and reactive aggression ($Z=.718$, $p=.473$; $p> .05$) posttest scores of the adolescents in the experimental group and the follow-up test scores is not statistically significant. In other words, according to the follow-up test applied 2 months after the end of the experiment, it was seen that the effect of the education applied to the adolescents in terms of emotion regulation difficulties, reactive and proactive aggression continues. Based on the findings obtained, it can be said that the third hypothesis of the research was also confirmed.

Discussion, Result and Suggestion

When the literature is examined, many studies have drawn attention to the personal and social effects of emotion regulation from childhood to adulthood, and positive effects of functional emotion regulation skills in terms of behavior and mental health have been stated (Goodwin, Haycraft, & Meyer, 2014; Houck et al., 2016). In this study, an intervention program was prepared to examine whether the change in emotion regulation skills of adolescents has an effect on reactive-proactive aggression. After the emotion regulation skills psycho-education program, the pretest and posttest scores of the experimental group were examined and it was observed that there was a decrease in emotion regulation difficulties and reactive-proactive aggression. Results obtained, support the first hypothesis of the research that "the emotion regulation skills psycho-education program is effective in making a difference between the pretest and posttest scores of the adolescents in the experimental group for difficulty in emotion regulation and reactive and proactive aggression scale".

When the studies on emotion regulation skills in recent years were examined, although there are no experimental studies that directly address the emotion regulation skills and reactive and proactive aggression of adolescents, results of some studies support the necessity of considering emotion regulation and aggression together in the curriculum (Calvete & Orue, 2012; Robertson et al., 2012; Skripkauskaitė et al., 2015). In the prepared program, it is understood that the creation of content for adolescents –who has more ups and downs emotionally- to comprehend the place and importance of emotions in their lives, to recognize and recognize their basic emotions, to see the relationship between emotion-thought-behavior and to develop behavioral alternatives has an important contribution. Özdoğan (2017), in his study with adolescents, stated that as the difficulty in emotion

regulation increases, as reactive-proactive aggression increase. Larson et al. (2018) expressed the relationship between being able to define positive and negative emotions, comprehending the difference of emotions, coping skills in negative emotions and belief in the changeability of emotions. Within the scope of the program prepared in this study, it was aimed for the participants to recognize their emotions, express different emotions, re-evaluate them cognitively, develop a different and desired perspective and gain social skills. On the other hand, the programs and experimental studies prepared by Çeçen (2002) on managing emotions, Kuzucu (2006) on recognizing and expressing emotions, and Gülgez and Gündüz (2015) on emotion regulation skills show that practices on emotion regulation, management and expression are successful and this is in line with the results of this study.

Including cognitive emotion regulation processes in the emotional regulation skills psycho-education program provided the grounding, making sense of, and awareness of the resulting emotions, and embodied with examples, especially on emotions such as anger, whose behavior may be negative. In this respect, coping with negative emotions and the functioning of emotion regulation dynamics caused a decrease in reactive-proactive aggression in the experimental group. At the same time, the positive results of exhibiting goal-oriented behavior in the group were shared by other members and awareness was created. This result is in parallel with the studies (Çelik & Kocabıyık, 2014; Gündoğdu, 2009; Sarıca, 2008; Tekinsav Sütçü, 2006) in the field.

This psycho-educational program which prepared for adolescence, has been effective in increasing the skills of expressing emotions by giving place to cognitive emotion processes, enlivening emotions in the mind, creating and grounding meaning integrity, recognizing how emotions are formed on the cognitive plane and how they emerge together with behaviors. It was also effective in reducing reactive-proactive aggressions. While emotion regulation strategies were included in the cognitive plane in the experimental group, evaluations were made in the triangle of emotion, thought and behavior. Behavioral processes of all emotions, whether positive or negative, were examined, and group members were asked to think about alternative possibilities, and ideas were exchanged and an environment was prepared for more desired behaviors to be experienced. Focusing on alternative behaviors of group members increased their awareness and led to a decrease in aggression.

The second hypothesis of the study was stated as “the emotion regulation skills psycho-education program is effective in making a difference between the posttest scores of the adolescents in the experimental and control groups from difficulty in emotion regulation and reactive and proactive aggression scale in favor of the experimental group”. When the hypothesis was examined, it was seen that it was supported in terms of emotion regulation and reactive aggression variables, but not in terms of proactive aggression variable. In the light of the data obtained, emotion regulation skills of the adolescents participating in the psycho-education program are statistically different from the data before participation, and the psycho-education program reduces the emotion regulation difficulties of the adolescents.

In a program developed by Metz et al. (2013), it was aimed for individuals participating in the program to learn emotion regulation skills. In this study, it has been reported with statistical results that the emotional deficits of individuals who are emotionally aware and use their emotion regulation skills effectively increase and their stress levels decrease. In the psycho-education program we have prepared for adolescents -which is expected to contribute to emotion regulation skills- activities aimed at recognizing emotions, understanding emotion confusion, grasping the emotion-thought and behavior triad, recognizing emotional cycles and expressing emotions. At the same time, opportunity was given to experience and internalize the strategies taught by using role plays related to these processes.

In the prepared psycho-education program, it was aimed to regulate emotions and especially to reduce reactive aggression by using cognitive-behavioral techniques. Considering the results in terms of reactive aggression, it was seen that the change in the reactive aggression posttest scores of the two different groups, regardless of pretest scores, was explained in the large effect size. According to this result, the change observed in the adolescents participating in the emotion regulation psycho-education

program compared to the pre-study differs statistically compared to the reactive aggression scores of the adolescents in the control group. Emotion regulation skills psycho-education program reduces reactive aggression of adolescents. In similar studies, cognitive behavioral interventions seem to be effective in reducing aggression (Gültekin, 2008; Iruthayarajah et al., 2018; Normantaite, 2013; Tekinsav Sütçü et al., 2010; Yavuzer, 2009). In addition, in this psycho-education program, warm-up games, which are included in psycho-dramas, were used at the beginning of group sessions, and it can be stated that warm-up games increase group dynamics, develop confidence, contribute to the process and social cohesion, and indirectly contribute to adolescents' self-expression.

In addition, content of the program for recognizing and regulating emotions used in this study such as role-playing, relaxation exercises, communication skills, use of I-language, active listening and participation, empathic approach, modeling reduced the proactive aggression of the individuals in the experimental group to control group but this difference was not statistically significant. According to this result, it was observed that the psycho-education program was significantly effective in reactive aggression behavior, an impulsive self-defense that occurs in the event of an obstacle or threat, and emotion regulation. In addition, it was observed that proactive aggression, purpose-oriented and conscious, was not significantly effective in reducing behaviors. As Uz-Baş et al. (2012) stated, reactive aggression is more pronounced than proactive aggression at every education level. Proactive aggression, which is conscious, planned and exhibited in an effort to dominate, is reward-oriented and the person seeks to gain a benefit from his aggressive attitude (Vitaro, Barker, Boivin, Brendgen, & Tremblay, 2005). As can be understood from items such as "I fight with others to show that I am superior", "I damage things for pleasure", "I fight in a group of friends to look cool" in the proactive aggression scale, this type of aggression is associated with longer-term cognitive configurations in the individual. In other words, it can be said that cognitive processes are more dominant in proactive aggression, rather than impulsivity, and a long-term cognitive restructuring is effective instead of the momentary situation or person that will cause anger. For this reason, group members may not be very willing to share this type of aggression in the group environment and allow the leader to work. On the other hand, it is thought that the reason why the expected significant difference between the experimental and control groups could not be found in the level of proactive aggression is that the number of study sessions is limited, the participant adolescents are limited to a single school level, and concrete activities for proactive aggression are not sufficiently included in the psycho-education program. In addition, it is understood that cognitive behavioral techniques applied in the group process -because they are more common and visible- predominantly reduce reactive aggression. For this reason, content that directly targets proactive aggression can be created in future studies. As a matter of fact, Iruthayarajah et al. (2018) stated in their meta-analytical study that cognitive behavioral interventions are more effective in reducing externally observable anger -which is associated with reactive aggression. Since proactive aggression has a more planned and profit-oriented nature, it causes the person to evaluate the result of the behavior positively and provides some social rules that are appreciated by the peer group, especially during adolescence thus topics such as peer bullying, personality traits, sense of humor, subjective well-being and social skills can be studied with proactive aggression. In future studies, taking into account the social learning theory of proactive aggression, cognitive schemas and permanent learning can be focused more broadly and more practice-oriented modeling, learning by doing and empathic skills can be studied. At the same time, individual and family interviews can be conducted to better understand the basics of proactive aggression in the person considering the personality traits. On the other hand, as stated in the introduction, the attitudes of first caregivers and especially mothers are important in the development of emotion regulation capacity. Skripkauskaitė et al. (2015) found mutually reinforcing relationships between emotion regulation and especially proactive aggression in adolescents who reported that they received a lot of criticism from their mothers. Similarly, Özdoğan and Cenkseven Önder (2018) reported negative significant relationships between emotional availability to parents and reactive and proactive aggression. In this context, in similar studies to be conducted in the future, exercises that include the effects of the emotional bond and behaviors between adolescent and parent can be added to the intervention process. In addition, simultaneous

intervention in the emotion regulation skills of the parents while working with their children can increase the effectiveness of the program in terms of proactive aggression.

The third and last hypothesis of the research was stated as “the emotional regulation skills psycho-education program will continue to be effective in the follow-up study to be carried out two months later”. According to the follow-up test applied two months after the end of the study, it was observed that the effect of the education applied to the adolescents in terms of emotion regulation and reactive-proactive aggression continued and that the adolescents transferred the gains they gained during the education process to their own lives. The continuation of the effectiveness of the psycho-education program applied in this study may have been affected by some dynamics in the group process. Group sessions were organized starting from the warm-up games, giving importance to the experientialness of the applied cognitive-behavioral and emotional techniques. In particular, the role-playing technique was used frequently and it was ensured that the group members internalized their achievements. In addition, the regular handling of the homework given at the beginning of each session made it easier to transfer the achievements of the sessions to the outside of the group. It can be said that the gains obtained by considering the evaluations at the end of each session have increased the cognitive awareness levels of adolescents in developmental age.

In summary, this study is the first experimental psycho-education program for adolescents in Turkey to reduce their emotion regulation difficulties and reactive proactive aggression. The findings show that adolescents are successful in reducing their difficulties in emotion regulation and reactive aggression, and this study sets an example for other studies to be done from now on. In the follow-up measurements, it was seen that the program applied was permanent. It can be said that these results are guiding for school counselors and psychological counselors working in other fields. The program can be applied to clients with emotional dysregulation and aggressive behavior in group work in high schools, secondary schools and universities within the adolescence period.

When the results of the study are evaluated within the framework of some limitations, study is limited to being conducted with only one high school level adolescents due to the inability to bring adolescents together studying at different high schools at the same level at the same time and place, the difficulty of transportation, the absence of a different building for group program outside the school building, and the different expectations and activities of adolescents on the weekends when students are educated, program is also limited in that it was created with a quasi-experimental design as an experimental-control group. It is limited in that it is carried out with only one high school level adolescents and that it is formed with a quasi-experimental design as an experimental-control group. Making a pilot application before the application in experimental studies provides a preliminary evaluation about the techniques and applications used. This study was carried out in the spring term of the school, and it is limited in that no pilot implementation is carried out beforehand, as it is planned to be completed before the holiday. Considering the limitations; In future studies, it is recommended to carry out a pilot application in order to better plan timing and other elements, to establish a placebo group, and to conduct an experimental study by including adolescents from different high school groups in the sample. This is important for the generalizability of the study result. In other studies to be conducted, the presence of adolescent groups studying in different schools may increase the validity of the study. In addition, since this study is limited to individuals without any psychological diagnosis, depression, anxiety, rumination, etc. It can also be studied with individuals with a clinical diagnosis. Considering the results related to the types of aggression, sessions for proactive aggression can be added directly to avoid being overshadowed by reactive aggression in future studies. In order to see the change in the effect obtained from the study over time, the follow-up test was applied after sixty days. The fact that the students were about to enter the summer vacation had a great impact on this. Since the applied school is in a city where immigration and population mobility are intense, the follow-up measurement is limited in terms of not re-measurement after the holiday, considering the possible school or city change of some adolescents. In addition, the application of the same intervention program to the control group after the experimental study has been evaluated as an ethically important point in experimental

studies in recent years. The fact that no intervention was made in the control group in the study can be considered as a limitation in the ethical framework. In this context, giving the same program applied to the experimental group to the control group in future studies and repeating analysis afterwards may increase the validity of the experimental studies.

Considering that the adolescence period is closely related to turbulent emotional turmoil and aggression, it is important to inform and train the school administration, teachers, other employees, as well as parents about the developmental characteristics that adolescents come into contact with, in order to carry out better analyzes. It is possible for young people in adolescence to talk about their emotions, to have an idea about emotion regulation skills, to understand their positive and negative emotions, to be aware, to accept, to express and to be goal-oriented, with their family relationships and subjective lives and experiences. One of the limitations of this study is that other stakeholders that adolescents come into contact with are not included in the study. In future studies, it is thought that organizing trainings involving both adolescents and other stakeholders with whom they are in contact will increase the effectiveness and efficiency of the study.

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