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RESEARCH

Effect of Psychoeducation on Anger Behaviors in Individuals with Antisocial Personality Disorder

Antisosyal Kişilik Bozukluğu Olan Bireylerde Psikoeğitimin Öfke Davranışlarına Etkisi

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Abstract

In this randomized controlled study, the effect of eight sessions of psychoeducation given to individuals with antisocial personality disorder on anger behaviors was examined. The sample of the study consisted of 62 patients with a diagnosis of antisocial personality disorder, who applied to the psychiatry outpatient clinic of a military hospital, by selecting by simple random sampling method (experimental group=32, control group=30). The data of the study were collected using the Introductory Information Form and the Trait Anger and Anger Expression Style Scale. After the pretest applied to the experimental and control groups, psychoeducation consisting of eight sessions was applied to the experimental group. No intervention was applied to the control group. At the end of the training of the experimental group, the posttest and follow-up test were applied to both the experimental and control groups in the first month and the third month after the posttest. A significant difference was found when the STAXI scores of the patients in the experimental and control groups were compared in the posttest and follow-up. The change in the mean scores of the individuals in the experimental group from all sub-dimensions of the STAXI in repeated measurements was statistically highly significant. Psychoeducation was found to be effective in controlling anger behavior and expressing it appropriately in patients with antisocial personality disorder. Teaching anger management affects individuals' ability to be more productive and controlled individuals. It is thought that the continuity of this education will benefit individuals.

Keywords: Antisocial personality disorder, anger, psychoeducation

Öz

Randomize kontrollü olarak yapılan bu araştırmada antisosyal kişilik bozukluğu olan bireylere verilen sekiz oturumluk psikoeğitimin öfke davranışları üzerindeki etkisi incelendi. Araştırmanın örneklemini bir askeri hastanenin psikiyatri polikliniğine başvuran antisosyal kişilik bozukluğu tanısı olan 62 hasta basit rastgele örnekleme yöntemiyle seçilerek oluşturdu (deney grubu=32, kontrol grubu=30). Çalışmanın verileri Tanıtıcı Bilgi Formu ve Sürekli Öfke ve Öfke İfade Tarz Ölçeği (SÖÖİTÖ) kullanılarak toplandı. Deney ve kontrol grubuna uygulanan öntest sonrasında deney grubuna sekiz oturumdan oluşan psikoeğitim uygulandı. Kontrol grubuna herhangi bir girişim uygulanmadı. Deney grubunun eğitimlerinin sonunda hem deney hem kontrol grubuna sontest ve sontestten sonraki birinci ayda ve üçüncü ayda izlem testi uygulandı. Deney ve kontrol grubundaki hastaların son test ve izlemlerinde SÖÖİTÖ puanı karşılaştırıldığında anlamlı fark saptandı. Deney grubundaki bireylerin, SÖÖİTÖ'nün tüm alt boyutlarından aldıkları puan ortalamalarının, tekrarlayan ölçümlerdeki değişiminin istatistiksel olarak ileri düzeyde anlamlı olduğu görüldü. Psikoeğitimin antisosyal kişilik bozukluğu hastalarında öfke davranışını kontrol etmede ve uygun şekilde ifade edebilmede etkili olduğu bulundu. Öfke kontrolünü öğretmek, bireylerin daha üretken ve kontrollü bireyler olma yeteneklerini etkilemektedir. Bu eğitimin devamlılığının sağlanmasının kişilere fayda sağlayacağı düşünülmektedir.

Anahtar sözcükler: Antisosyal kişilik bozukluğu, öfke, psikoeğitim

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ANTISOCIAL PERSONALITY DISORDER (ASPD) is a chronic and treatment-resistant mental disorder that creates discomfort to the society rather than the patient in interpersonal relationships as a result of behavioral disruptions even if it does not give rise to significant deterioration in cognitive abilities and basic emotional and thinking structure of the person (Paris et al. 2013). According to American Psychiatric Association's (APA) classification system (Diagnostic and Statistical Manual of Mental Disorders, DSM), ASPD is defined as the habit of violating the right of other individuals without feeling regret (APA 2013).

Military environment is a setting in which individuals with different education status, personality traits, and cultures have to live together for a certain period of time. People who show such differences have to live together in harmony and balance, by bringing problems in their own social lives (marriage, economic problems, etc.). People in their draft age are in their energetic and reactional stages of life. They can experience conflict both due to being impulsive considering their age and due to their pre-military socio-economic problems. Among these variables, the manageable area is the behavior area. The most important point to be addressed in individuals with a behavioral problem in a military environment is to be able to explain the reasonings of conflicts.

In environments where healthy communication exists, the individual wants to be able to express his/her feelings comfortably and to be understood by his/her environment. Anger is one of these feelings. Anger is a natural and a universal emotional response to unmet expectations and wishes (Karatas 2009). In a situation where anger cannot be managed, the person starts damaging himself/herself and the environment. It should be considered that this situation can be caused by a psychological disorder (Rona et al. 2015). ASPD is one of the most emphasized mental disorders in relation to anger and its expression, aggression (Tatlıoglu and Karaca, 2013). The anger emotion in ASPD that is based in this study is a prominent feature with difficulty in control. The anger in ASPD is a basic emotion with no boundaries (Lobbestael et al. 2009).

Individuals with an ASPD diagnosis who cannot control their anger and often experience temper tantrums start having problems in interpersonal relationships. They can do harm to themselves and to other, as a result of not being able to fulfil their responsibilities, aggressive behavior, and going into a fight. Anger can cause problematic interpersonal relations, divorce, disruption of productivity and functionality in workplace, substantial problems in physical and mental health (Arslan 2010, Lee and DiGiuseppe 2018). Therefore, it is highly important that people with ASPD who have trouble with adjusting to society to be able control their anger.

Psychoeducation which is known to be effective in the development of positive behaviors in individuals is stated to be beneficial in reducing anger levels (Senyurt et al. 2016). Psychoeducation, which is a planned education, benefits the individual in transforming the given information into behavior and in the emergence of behaviors as healthy behaviors (Avsar and Kasıkcı 2009). Psychoeducation, which can either be carried through face-to-face interaction or with audio-visual tools, is used in many areas. For instance, the studies conducted state that psychoeducation is effective in patients with major depressive disorder, coping with stress, caregivers of individuals with psychotic disorders, anxiety disorders, and individuals with bipolar disorder (Rummel-Kluge et al. 2009, McWilliams et al. 2010, Eker and Harkın 2012, Morokuma et al. 2013, Lahera et al. 2014, Shah et al. 2014).

No psychoeducation program has been found in the literature for individuals with ASPD. It is thought that this study, which aims to control the anger behavior that may be encountered in the military environment in individuals with an ASPD diagnosis and reduce their anger levels, will contribute to the literature. In this direction, the hypothesis of the research is; "In patients who underwent psychoeducation, post-application subscale mean score (trait anger, anger in, anger out) of The Trait Anger and Anger Expression Style Scale (STAI) would be lower in the first and the third month in comparison to the control group, and the mean score of the anger control subscale would be higher than the control group".

Method

Sample

In the experimental study, randomized controlled, single-blind research method was used. The study was conducted in the psychiatry policlinic of a military hospital between May-October 2014. Three specialist physicians, three psychologists, five nurses and a janitor work in the psychiatry outpatient clinic. The selection process of patients for intervention group and control group took two weeks (from May 16, 2014, to May 28, 2014), since military service has its time limits. Two outpatient clinics provide service in the psychiatry clinic. Polyclinic services are provided between working hours and a total of 70 patients apply to the two polyclinics per day. At the end of two weeks, a total of 350 patients applied to the first outpatient clinic. Of these, 150 patients diagnosed with ASPD according to DSM-5 diagnostic criteria constituted the population of the study. All individuals matching the criteria of the study (between the ages of 20-25, diagnosed with antisocial personality disorder, clinically normal intelligence level, not using any medication for antisocial personality disorder, non-novice, volunteer to join the research and be literate) who were diagnosed with ASPD were included in the study. Randomization was executed by the envelope method in the selection of the patients into the groups. 75 experimental and 75 control groups were written down in 150 nontransparent envelopes. A polyclinic employee who was not involved in the study shuffled the envelopes and envelopes were enumerated from number 1 to 150. Individuals were included into either control or experimental groups according to the number of each incoming patient. 32 individuals matching the criteria of the research were selected for the experimental group, and 30 individuals were selected for the control group. At the end of the first week of the psychoeducation, one person (expressing that he was bored and did not want to continue) and one person at the end of the third week (because he went to prison for a crime he had committed before) left the group, and the education was completed with 30 people. In the third month follow-up, the research was completed with 18 people in the experimental group, and 21 people in the control group, as some of the private soldiers' military service came to an end. The sample size was found to be reliable for this study, as the strength calculated from the study was over 80%.

Procedure

Permission (dated 16.09.2013 and decision no 26) was obtained from the institution where the research was conducted and the ethics committee (General Staff, Gulhane

Military Medical Academy Scientific Assistant). The individuals participating in the study were informed verbally and in writing, and informed consent was obtained. The research was conducted in accordance with the Declaration of Helsinki.

Table 1. Psychoeducation plan

Subject	Content of the Session	Objectives
PRETEST **Introduction and informing about psychoeducation program**	-Introduction and informing about psychoeducation -Informing about the Introductory Information Form and STAXI, ensuring these forms be answered -Determining the objectives of the education	Informing individuals about psychoeducation
INTERVIEW 1 **Informing about ASPD**	-Informing about personality, personality disorder, and ASPD -Informing about the rules of the military environment -Summarization, Receiving feedback	Informing individuals about personality, personality disorders, and ASPD and its characteristics
INTERVIEW 2 **Coping with anger: Anger and its reasons**	-Informing about anger and its reasons -Stating how individuals feel when anger is experienced -Summarization, Receiving feedback	Enabling individuals to recognize the emotion of anger
INTERVIEW 3 **Coping with anger: Anger control methods**	-Informing about anger symptoms - Informing about coping methods used in anger management -Identifying an anger-inducing situation and role-playing it -Giving homework assignments that allow group members to identify in which situations they experience anger the most - Summarization, Receiving feedback	Enabling individuals to cope with anger
INTERVIEW 4 **Coping with anger: Stress control methods**	-Informing about stress and stressful situations -Informing about the methods used in coping with stress - Summarization, Receiving feedback	Enabling individuals to cope with stress
INTERVIEW 5 **Coping with anger: Preventing substance abuse**	-Informing about substance abuse -Informing about addictive substances -Informing on ways to avoid the substance - Summarization, Receiving feedback	Informing individuals about ways of coping with substance abuse and quitting the substance
INTERVIEW 6 **Coping with anger: Problem solving strategies**	-Informing about problem solving process and strategies -Ensuring that problem solving strategies are discussed and the method suitable for the individual is expressed – Summarization, Receiving feedback	Ensuring individuals to cope with problems
POSTTEST **Managing interpersonal relationships and reviewing the objectives of the education**	-Informing about interpersonal communication ways, explaining effective and ineffective communication with the participation of group members -Evaluation of the anger status of the group members before and after the psychoeducation program, receiving feedback about the education program -Answering the STAXI used in the study and reviewing the educational objectives	Ensuring individuals to manage interpersonal relationships

The data in this study were collected in two stages by administering pretest and posttest to patients. STAI was carried out in the first and the third month after the posttest. Pretest was applied at the end of the introductory interview, and posttest was applied at the end of an eight-week educational process. At the end of the introductory interview for the pretest, the patients were asked to fill in the Introductory Information Form and the STAXI. The patients filled out the STAXI once again at the end of the interviews for the posttest purposes. Psychoeducation program was applied to the experimental group. STAXI was carried out once again after the psychoeducation, and the before and after scores of the individuals were compared.

Content of the psychoeducation

The course the education was prepared by taking 10 specialists' opinions in line with the similar studies featured in literature (Chien and Leung 2013, Gunaydın and Barlas 2017). Education covered a period of two months, once a week. Each session of the education was conducted by the researcher, in a meeting room. Psychoeducation was carried out in groups of 10 people. Before the psychoeducation and after the sessions ended, STAI was carried out in both the experimental group and the control group in the first and the third month, and the effectiveness of the psychoeducation was evaluated. The structured psychoeducation content consists of eight sessions. In these sessions the following topics were approached; briefing about the psychoeducation program and about the disorder, anger and its reasons, anger management methods, stress control methods, prevention of substance abuse, problem solving strategies, being able to manage interpersonal relationships (Table 1).

Measures

The data in this study were collected by using the Introductory Information Form and the STAXI.

Introductory information form

In the form consisting of 16 questions prepared by the researcher by scanning the literature (Maclean and French 2014, Black 2015, Brännström et al. 2016, Gumus et al 2017), the following features exist; sociodemographic characteristics, familial characteristics, and illness characteristics.

State - Trait Anger Expression Inventory (STAXI)

The State - Trait Anger Expression Inventory (STAXI) which was developed by Spielberger, Jacobs, Russel and Crane (1983) and adapted to a Turkish form by Özer (1994) was used. It is a likert type, 34 item and self-evaluative scale which measures the emotion and expression of anger. The scale has four subscales: Trait Anger, Anger Control, Anger-Out and Anger-In. Each subscale is scored from 8 to 32 points. Higher scores on the subscale of Trait Anger indicate higher anger levels. Higher scores on subscales of Anger Control reveal that anger is successfully controlled. High scores on the subscale of Anger-Out suggest that anger is manifested out whereas high scores onthe subscale of Anger-In indicate anger is expressed inside. In the original study, the Cronbach's alpha values for the State-Trait Anger Expression Inventory, and subscales of Anger-Out, Anger-In and Anger Control were successively found as 0.67-0.92, 0.69-

0.91, 0.58-76 and0.80-0.90. In this study, the Cronbach's alpha values were found to be between 0.82 and 0.91 in State-Trait Anger Expression. Cronbach's alfa values for subscales of Anger-In (0.48-0.76), Anger-Out (0.64, 0.86), Anger Control (0.61-0.91) indicate variations in pretest, posttest and follow-up retests.

Statsitical analysis

SPSS (Statistical Package for the Social Sciences) 21.0 package program was used in the analysis of the data. Statistical analysis of the data was performed by biostatistics expert. In the analysis of the data, nonparametric tests were applied in parallel with the decrease in the number of the samples in the groups below 30, due to the individuals who were not evaluated at the third month. In addition to the descriptive statistical analysis (percentage distribution, mean, standard deviation), Friedman test was used to compare repeated measurements, and the Independent Sample t-test, which is parametric, was used to evaluate the homogeneity of the age-related means because the age variable conformed to the normal distribution. Spearman's Correlation Analysis was used to examine the relationship between the scores obtained from the sub-dimensions of the scale. Mann Whitney U test was used in the analysis of the difference in scores of the individuals in the Experimental and Control groups in each repeated measurement.

Results

Table 2 exhibits that the association of socio demographic, family and disorder variables of the control group and intervention group was not statistically significant ($p>0.05$). It was ascertained that patients in the intervention group were aged 21.33±1.44 years on average and patients in the control group were aged 20.80±1.27 years on average, 66.6% of patients in the intervention group (n=20) and 53.3% of patients in the control group (n=16) were secondary school graduates, and 90% of patients in the intervention group (n=27) and 83.3% of patients in the control group (n=25) were single. Upon the review of education level of parents of patients, it was found that mothers of 60% of patients in the intervention group (n=18) and 46.7% of patients in the control group (n=14), fathers of 53.4% of patients in the intervention group (n=16) and 63.3% of patients in the control group (n=16) were primary school graduates. Furthermore, it was discerned that 70% of patients in the intervention group (n=21) and 56.7% of patients in the control group (n=17) had 3 or more siblings. Upon the analysis of marital status of parents of patients, it was detected that parents of 73.3% of patients in the intervention group (n=22) and 63.3% of patients in the control group (n=19) were married. Moreover, it was ascertained that 80% of patients in the intervention group (n=24) and 73.3% of patients in the control group (n=22) had no chronic physical illness, 73.3% of patients in the intervention group (n=22) and 76.6% of patients in the control group (n=23) had a history of substance use. Upon the examination as to whether patients had any traumatic experience during their childhood, 63.3% of patients in the intervention group (n=19) reported that they did whereas60% of patients in the control group (n=18) stated that they did not. In this conjunction, it was observed that, of those confirming that they had childhood trauma, 81.8% of patients in the intervention group (n=9) and 66.6% of patients in the control group (n=12) categorized their traumatic experience as the 'other'.

Table 2. Personal and family characteristics of individuals

Sociodemographic Features	Experimental Group (n=30)		Control Group (n=30)		Total (n=60)		Homogeneity of Variances
	N	%	n	%	N	%	
Age Average	21.33 ± 1.44		20.80 ± 1.27		21.07 ± 1.37		t=1.517 p=0.135
Educational Status							
Primary School	5	16.7	8	26.7	13	21.7	X2=1.228
Secondary School	20	66.6	16	53.3	36	60.0	p=0.541
High School	5	16.7	6	20.0	11	18.3	
Marital Status							
Married	3	10.0	5	16.7	8	13.3	X2=0.577
Bachelor	27	90.0	25	83.3	52	86.7	p=0.353
Educational Status of the Mother							
Illiterate	8	26.7	9	30.0	17	28.3	X2=1.377
Primary School	18	60.0	14	46.7	32	53.3	p=0.502
Secondary School	4	13.3	7	23.3	11	18.3	
Educational Status of the Father							
Illiterate	4	13.3	2	6.7	6	10.0	X2=1.667
Primary School	16	53.4	19	63.3	35	58.3	p=0.644
Secondary School	6	20.0	7	23.3	13	21.7	
High School	4	13.3	2	6.7	6	10.0	
Mental Illness Status of the Mother							
Yes	6	20.0	6	20.0	12	20.0	X2=0.000
No	24	80.0	24	80.0	48	80.0	p=1.000
Mental Illness Status of the Father							
Yes	7	23.3	6	20.0	13	21.7	X2=0.098
No	23	76.7	24	80.0	47	78.3	p=0.754
Number of Siblings of the Individual							
Single Child	3	10.0	1	3.3	4	6.7	X2=5.021
1 Sibling	2	6.7	8	26.7	10	16.7	p=0.170
2 Sibling	4	13.3	4	13.3	8	13.3	
3 or more Siblings	21	70.0	17	56.7	38	63.3	
Parents' Relationship Status							
Together	22	73.3	19	63.3	41	68.3	X2=0.693
Separated / Divorced	8	26.7	11	36.7	19	31.7	p=0.405

X2= Chi Square Test

Table 3. Individuals' physical and mental health related characteristics

Characteristics Associated with Physical and Mental Health	Experimental Group (n=30)		Control Group (n=30)		Total (n=60)		Homogeneity of Variances
	n	%	n	%	N	%	
History of Ongoing Physical Illness							
Yes	6	20.0	8	26.7	14	23.3	X2=0.373
No	24	80.0	22	73.3	46	76.7	p=0.542
Substance Use History							
Yes	22	73.3	23	76.7	45	75.0	X2=0.089
No	8	26.7	7	23.3	15	25.0	p=0.766
The Situation of Experiencing a Shocking Event that Affects the Individual in Childhood							
Yes	11	36.7	18	60.0	29	48.3	X2=3.270
No	19	63.3	12	40.0	31	51.7	p=0.071
If any. Traumatic Event Affecting the Individual in Childhood Period							
Suicide	1	9.1	1	5.6	2	6.9	X2=1.493
Domestic Violence	1	9.1	5	27.8	6	20.7	p=0.474
Other	9	81.8	12	66.6	21	72.4	

X2= Chi Square Test

Table 4. Comparison of the changes in repetitive measurements of the mean scores of the individuals in the experimental and control groups of the Trait Anger and Anger Expression Style Scale (STAXI) from its sub-dimensions

STAXI Subdimensions	Measure	Experimental Group				Control Group				Z	P
		n	Min	Max	Mean ± Std	n	Min	Max	Mean ± Std		
Anger In	Ön Test	30	14	30	22.90 ± 3.86	30	15	27	21.20 ± 3.16	-1.991	0,047 *
	Son Test	30	9	23	15.37 ± 3.00	30	18	30	22.57 ± 3.28	-6.109	0,000 ***
	1. Ay	30	9	23	15.43 ± 3.04	30	18	30	22.57 ± 3.28	-6.051	0,000 ***
	3. Ay	18	8	22	15.50 ± 4.32	21	18	29	22.10 ± 3.11	-4.213	0,000 ***
		X^2=24.783 p=0.000 ***				X^2=16.200 p=0.001 **					
Anger Out	Ön Test	30	16	30	24.20 ± 3.80	30	16	31	23.77 ± 4.29	-0.609	0,543
	Son Test	30	8	20	14.97 ± 3.03	30	18	32	24.03 ± 3.63	-6.520	0,000 ***
	1. Ay	30	8	20	15.00 ± 3.10	30	18	32	24.03 ± 3.63	-6.538	0,000 ***
	3. Ay	18	8	31	15.67 ± 6.17	21	18	30	23.90 ± 3.64	-3.870	0,000 ***
		X^2=27.642 p=0.000 ***				X^2=2.077 p=0.557					
Anger Control	Ön Test	30	8	24	12.70 ± 3.73	30	8	19	13.47 ± 2.86	-1.145	0,252
	Son Test	30	20	32	28.07 ± 3.17	30	9	24	14.63 ± 3.51	-6.623	0,000 ***
	1. Ay	30	20	32	27.93 ± 3.11	30	9	24	14.63 ± 3.51	-6.623	0,000 ***
	3. Ay	18	12	32	20.89 ± 5.50	21	9	19	14.38 ± 2.95	-3.576	0,000 ***
		X^2=45.522 p=0.000 ***				X^2=5.769 p=0.123					
Trait Anger	Ön Test	30	24	40	33.43 ± 4.10	30	21	40	31.77 ± 5.75	-1.112	0.266
	Son Test	30	14	30	22.27 ± 4.16	30	23	40	32.47 ± 4.91	-6.020	0.000 ***
	1. Ay	30	14	30	22.00 ± 4.02	30	23	40	32.07 ± 4.80	-6.049	0.000 ***
	3. Ay	18	10	32	21.39 ± 7.35	21	23	40	32.29 ± 5.26	-3.925	0.000 ***
		X^2=28.317 p=0.000 ***				X^2=13.500 p=0.004 **					

* p<0.05 ** p<0.01 *** p<0.001 X2=Friedman Test; Z=Mann-Whitney U Test

Table 3 demonstrates mean scores of pretests, posttest and two retests undertaken successively before and after the psycho-education and at the end of the first month and third month following the psycho-education by patients in intervention group and control group from all subscales of STAXI. With respect to all subscales of STAXI, it was found that there was no statistically significant difference between mean pretest scores of patients of the intervention group and control group ($p>0.05$) whereas there was a statistically significant difference between mean scores of posttests and two retests of patients of the intervention group and control group ($p<0.001$). Upon further analysis, it was discerned that there was a highly statistically significant difference between mean scores of two retests obtained from all subscales of STAXI by patients of the intervention group ($p<0.001$, Table 3).

Table 3 shows the mean scores of the individuals in the experimental and control groups from all sub-dimensions of the STAXI before, after, and at the 1st and 3rd months of the psychoeducation. There was no statistically significant difference between the mean scores of the individuals in the experimental group and the control group in the pre-test measurement of all sub-dimensions of STAXI ($p>0.05$). A statistically significant difference was found between the mean scores of the individuals in the experimental and control groups, obtained from all sub-dimensions of STAXI in the posttest, 1st month and 3rd month measurements ($p<0.001$). The change in the mean scores of the individuals in the experimental group from all sub-dimensions of the STAXI in repeated measurements was statistically significant ($p<0.001$) (Table 4).

After the psychoeducation applied to the experimental group, 10% of the individuals stated that they learned anger control, learned to control their nerves, and realized their mistakes and mistakes with this training. 6.7% of the individuals stated that they learned to be patient, they could stay calmer, they learned to know themselves, and the training was beneficial. 13.3% of them once again understood that it is necessary to stay away from drugs and that education relieves them; 16.6% stated that they learned about personality disorder and that such training should always be provided.

Discussion

In this study, which was conducted to examine the effect of psychoeducation on anger behaviors of individuals with antisocial personality disorder, it is seen that psychoeducation is effective in reducing trait anger, anger-in and anger-out, and increasing anger control. This finding confirms the hypothesis of the research.

There was no significant difference found between the experimental and control group when compared in terms of the individuals' personal, familial, physical and mental health characteristics and trait anger and anger expression in the pretest (Table 1. 2. 3). The fact that there is no difference between the groups shows that sample group is suitable for experimental research design.

Due to the fact that the population and the sample of this study is comprised of private soldiers, the experimental and the control groups are of men. The incidence of ASPD is 3-7% in men and 1% in women (Koroglu and Bayraktar 2010, Torry and Billick 2011). It has been reported in all studies that ASPD is five times more common in men than in women (Paris et al. 2013). The fact that this study was conducted with male individuals who were doing their military service and have ASPD is important in terms of teaching anger control. It is thought that the individuals who learn to express their anger in a healthy manner will be more beneficial to their families and their functionality will increase in the society.

It was determined that there was a high rate of substance use history among individuals who participated in the psychoeducation. It is known that substance abuse (alcohol and other substances) in people with ASPD is considerable (Sardogan and Kaygısız 2006, Paris et al. 2008, Brook et al. 2014). Searches show that there is a link between behavioral disorders and early age alcohol use in individuals with ASPD (Zhong 2014, Cho et al. 2014).

There was no significant difference found before the psychoeducation, when the experimental and control groups were evaluated in terms of anger in, anger out, trait anger and anger control subscales. It is seen that both of the groups are homogeneous,

when they are evaluated for all sub-dimensions of STAXI. When the experimental group is evaluated within itself; it was found that the scores they got from the anger in, anger out and trait anger subscales decreased significantly after the education, while the scores they got from the anger control subscale increased significantly. A significant difference was found in favor of the experimental group between the mean scores of the individuals in the experimental and control groups in the posttest first month and third month evaluations of anger in, anger out, anger trait and anger control. After the psychoeducation it was observed that; the anger-in and anger-out scores decreased, the anger in score increased in the first and third month follow up, the anger control score averages increased and remained that way in the one-month follow-up, but tended to decrease in the third month. It can be deduced that the person who better perceives himself/herself and his/her anger with psychoeducation is able to express his/her anger in healthier ways and control his/her anger instead of repressing. Military service has a certain duration. As time passes, the tolerance for the environment decreases. Adaptation problems, routine tasks, longing for family and social life can cause stress and therefore an increase in anger in individuals. People with ASPD experience more problems due to conflict with authority and low frustration tolerance (Gori et al. 2014, Yıldırım and Tureli 2015), and the effectiveness of the education decreases. Therefore, it is recommended that the psychoeducation be repeated at regular intervals during military service.

Since there is no psychoeducation program for anger control in individuals with antisocial personality disorder in the literature, no comparison can be made in this direction. However, we see that this kind of studies directed at anger control with different populations supports the findings of this study. In the study by Ozdemir and Civitci (2016), in which the effectiveness of anger control education in university students was examined; The trait anger levels of the students in the experimental group decreased significantly in the posttest compared to the pretest; Anger control levels were also found to increase significantly. In the study in which Uzunoglu and Baysan Arabacı (2017) evaluated anger management skills of adolescents by applying anger management training program to teenagers with conduct disorder, at the end of the training program, when the experimental and control groups' pretest and posttests are compared, it was observed that the scores of the students in the experimental group from the anger-in and anger-out subscales decreased significantly, while the scores they got from the anger control subscale increased significantly. In a study, by Akar (2021), examining the effectiveness of psychoeducation on students' anger, violence and aggression levels, it was found that education reduces anger levels. In a study by Senyurt et al. (2016) examining the effects of psychoeducation on anger management and problem-solving skills with post-traumatic stress disorder, it was determined that psychoeducation increased anger control and problem-solving skills in the experimental group.

At the end of the psychoeducation, participants were asked some questions to evaluate the effectiveness of the education. In this direction, individuals stated; that they learned anger control and to be patient, that they can keep calmer now, that they learned to get to know themselves, that they once again understood to stay away from drugs, that education relaxed them, and that these kinds of education should happen all the time and that it was efficient. These statements can be evaluated as the participants learned anger control and felt good by expressing their anger in healthy ways.

The limitation of the study is that data collection covers a period of two weeks. However, since military service is a service with a definite duration, the time limitation of the researcher arises when the time required for selecting patients for the experimental and control groups and for the education to be carried out afterwards. Despite these limitations, it is thought that the study will contribute to the literature.

Conclusion

It is very important for the individuals with ASPD, who have problems in adapting to the rules in the society, to control their anger. The fact that patients participating in the psychoeducation got lower mean scores than those in the control group demonstrates that psychoeducation was an effective technique for patients diagnosed with ASPD. It was ascertained that psychoeducation was effective particularly in reducing the anger level, controlling anger and ensuring the expression of anger is through healthy means. It is also observed that the effect of psychoeducation starts to drop as of the third month, after the delivery of education. It is proposed that psychoeducation should be repeated at specific time intervals during military service. Furthermore, follow-up studies should be undertaken for six months or more to evaluate the effect of psychoeducation on patients diagnosed with ASPD.

In conclusion, psychoeducation offers several benefits in terms of providing information on mental disorder, developing skills for coping with the disorder, fighting against stress, promoting problem-solving skills, inducing cognitive change, controlling anger, increasing tolerance for frustration, teaching and enhancing the effective communication ways, etc. This study presents positive findings of psychoeducation supported with medical treatment is important for patients diagnosed with ASPD. It is recommended that psychoeducational studies be carried out in larger samples and in different populations.

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