

The Effect of Psychoeducation Program on Burnout Levels of University Students

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Abstract

The aim of this study is to examine to what extent the psychoeducation program affects the burnout levels of university students. This research is an quasi-experimental study using pretest-posttest design with a control group. The study group consists of 24 students who were studying at Selcuk University Faculty of Health Sciences in the 2018-2019 academic year and volunteering to participate in the group study. Maslach Burnout Inventory-Student Scale (MBI-SS) and Personal Information Form were used as data collection tools in the study. The psychoeducation program for university students has been prepared based on cognitive behavioral therapy approach. A psychoeducation program consisting of 8 sessions, prepared to reduce the burnout levels of university students, was applied to the experimental group for 8 weeks. Two-way analysis of variance and t-test were used for mixed measurements to analyze the data. The analysis results showed that the psychoeducation program was effective in reducing the emotional exhaustion and depersonalization scores of the students in the experimental group.

Keywords: Student burnout, psychoeducation program, university students

Psikoeğitim Programının Üniversite Öğrencilerinin Tükenmişlik Düzeylerine Etkisi

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Öz

Bu araştırmanın amacı, psikoeğitim programının üniversite öğrencilerinin tükenmişlik düzeylerini hangi ölçüde etkilediğini incelemektir. Bu araştırma, öntest sontest kontrol gruplu desenin kullanıldığı yarı deneysel bir araştırmadır. Çalışma grubu, 2018-2019 eğitim öğretim yılında Selçuk Üniversitesi Sağlık Bilimleri Fakültesi'nde öğrenim gören ve grup çalışmasına katılmaya gönüllü olan 24 öğrenciden oluşmaktadır. Araştırmada veri toplama aracı olarak, Maslach Tükenmişlik Envanteri-Öğrenci Formu (MTE-ÖF) ve Kişisel Bilgi Formu kullanılmıştır. Üniversite öğrencilerine yönelik psikoeğitim programı, bilişsel davranışçı terapi yaklaşımına dayalı olarak hazırlanmıştır. Deney grubuna 8 hafta boyunca, üniversite öğrencilerinin tükenmişlik düzeylerinin azaltılmasına yönelik hazırlanan ve 8 oturumdan oluşan psikoeğitim programı uygulanmıştır. Verilerin analizinde, Karışık Ölçümler için İki Faktörlü Varyans Analizi ve t testi kullanılmıştır. Verilerin analizi sonucunda, psikoeğitim programının deney grubunda yer alan öğrencilerin duygusal tükenme ve duyarsızlaşma puanlarını azaltmada etkili olduğu görülmüştür.

Anahtar Kelimeler: Öğrenci tükenmişliği, psikoeğitim programı, üniversite öğrencileri.

Introduction

Burnout, which is widely observed today, is a three-dimensional disorder consisting of emotional exhaustion, depersonalization, and reduced personal accomplishment. The emotional exhaustion dimension of burnout refers to the depletion of the emotional resources of the person. The depersonalization dimension refers to a negative, sarcastic and unemotional approach to the people under their care. The dimension of reduced personal accomplishment is defined as low self-efficacy, negative feelings towards oneself (Awa, Plaumann and Walter, 2010)), and decreased sense of efficiency (Maslach and Goldberg, 1998). The presence of emotional exhaustion, depersonalization and reduced personal accomplishment components distinguishes burnout from other psychological conditions such as stress, depression, fatigue, and anxiety. The state of exhaustion resulting from failure, wearing out, loss of strength and energy (Freudenberger, 1974), is caused by the stress arising through social relationships (Awa, Plaumann and Walter, 2010). It is very common in professional groups working with people face to face such as doctors, nurses, social workers, teachers, etc. (Maslach, Schaufeli and Leiter, 2001).

The coercive effects of work life and the stress cause energy loss and burnout over time (Gündüz, Çapri and Gökçakan, 2012). As the stress level of employees increases, also their burnout level increases (Danhof-Pont, van Veen and Zitman, 2011; Tavalacci and Veber, 2015). The number of people experiencing burnout is increasing with each passing day (Golembiewski, Boudreau, Sun and Luo, 1998). People with signs of burnout are generally unaware of their burnout initially (Freudenberger and Richelson, 1994). In addition to features such as chronic fatigue and energy loss, people with burnout also experience helplessness, hopelessness, stress, and negative self-perception. In addition, employees have negative attitudes towards business life, life and other people. Individuals become distant to their co-workers and people they serve as a result of depersonalization in interpersonal relationships in their work place (Maslach, Schaufeli and Leiter, 2001).

Although students are not employed and do not have any job, their basic activities can be considered as work when evaluated psychologically. They attend classes to pass exams and achieve a degree (specific goals). They per-

form structured and challenging tasks. Students may easily experience burnout due to compelling effects and exhaustion because of the tasks demanded (Schaufeli and Taris, 2005). Evidences of burnout symptoms are increasing among students universally (Dyrbye et al., 2014; Heinen, Bullinger and Kocalevent, 2017). Burnout can have negative effects on students. Research results show that burnout can affect students' academic performance negatively. Students who experience burnout show little or no interest in school activities and get lower academic achievement (Lin and Huang, 2014). Students' burnout often causes more health problems (Hamaideh, 2011) more academic burnout, and them to drop out of school (Abarghouei, Sorbi, Abarghouei, Bidaki and Yazdanpoor, 2016; Chou, Li and Hu, 2014). In addition, previous studies on students have shown that burnout symptoms significantly predict depression (Al-Alawi et al., 2019). However, students who experience burnout often find it difficult to seek professional help (Ogbuanya et al., 2019).

The literature includes results indicating that intervention studies aimed at reducing burnout are effective (Igbokwe, Obande-Ogbuinya, Nwala, Ezugwu and Ugwu, 2020; Ogbuanya et al., 2019). The meta-analysis study conducted by Awa, Plaumann, and Walter (2010) determined that 80% of 25 intervention programs were effective in reducing burnout for individuals and organizations from different occupational groups between 1995-2007. There are also efforts to reduce the consequences caused by exhaustion and burnout in Turkey. For example Tunç and Gündüz (2010) evaluated the intervention studies, that were conducted between 1996-2010 to prevent and reduce burnout, with pretest-posttest according to the Maslach Burnout Inventory. They determined that 88% of 23 studies meeting the criteria of the research were effective in reducing burnout. However, it is striking that there are few intervention studies aimed at reducing the burnout of university students (Igbokwe, Obande-Ogbuinya, Nwala, Ezugwu and Ugwu, 2020; Naçar, Baykan and Çetinkaya, 2012; Ogbuanya et al., 2019; Yedigöz Sönmez and Çapri, 2013). These results show the necessity and importance of intervention programs especially for reducing student burnout.

The psychoeducation group is one of the intervention groups for reducing burnout. Psycho-education groups are mainly educational and emphasize skills training. These groups, which are generally formed in educational institutions for the subjects within the scope of the cognitive-behavioral field,

mostly focus on cognitive styles, skill development and goal-reaching strategies (DeLucia-Waack, 2006). Psychoeducational groups are important and complementary elements for therapy groups using the perspective of cognitive behavioral therapy. This type of group is widely used in cognitive behavioral therapy and dialectical behavioral therapy. Cognitive behavioral therapy is based on the hypothesis that feelings and thoughts are interrelated. The treatment includes techniques such as relaxation exercises, coping with stress, behavioral rehearsal, and assertiveness training (Corey, 2008). Although psychoeducational groups are not considered as therapy, they provide therapeutic benefit (Brown, 2013) .

Only 4th grade students were included in the psychoeducation program prepared to reduce burnout in this study. The grade level affects the burnout of university students. The results of previous studies have shown that as the grade level of the students increased, their level of burnout also increased (Gündüz, Çapri and Gökçakan, 2012; Kaya and Arıöz, 2014; Tansel, 2015). It was stated that the burnout level of fourth grade students was higher than the third-grade students in a study conducted on students in the midwifery department of the University of Chile (López-Alegría, Oyanedel and Rivera-López, 2020). Similarly, fourth grade students in guidance and psychological counseling department were found to have higher emotional exhaustion and depersonalization scores compared to first grade students (Güler, 2016). It is thought that reducing the burnout experienced by fourth grade students is important in terms of preventing possible burnout in the first years of the profession.

When we scan the literature, lack of research draws attention in experimental models for burnout of university students in Turkey. Programs are needed to reduce the burnout levels of university students. In this context, it is necessary to determine the effect of the psychoeducation program, which is one of the intervention programs, on the burnout levels of university students. It is thought that students will be able to cope more easily with the difficulties of studentship thanks to the new knowledge and skills they have acquired from the psychoeducation program implemented in this study, and consequently, student burnout will decrease.

In the light of all these explanations, the general purpose of this study is to examine the extent to which the psychoeducation program affects the burnout levels of university students.

In line with this general purpose, the answer to the question was sought: "Is the psychoeducation program effective in reducing the burnout levels of university students?".

Method

This research is an quasi-experimental study using pretest-posttest design with a control group. The subjects are matched with each other in terms of all their characteristics and are randomly assigned to the experimental and control groups in this research (Erkuş, 2013). The design of this study is strong thanks to random method in terms of internal validity (Christensen, Johnson and Turner, 2015). The independent variable of the study is the psychoeducation program, and the dependent variable is the burnout levels of the students.

Data collection tools

Maslach Burnout Inventory-Student Scale: This study used the Maslach Burnout Inventory-Student Scale (MBI-SS) developed by Schaufeli, Martinez, Pinto, Salanova, and Bakker (2002) and adapted to Turkish by Çapri, Gündüz, and Gökçakan (2011) in order to determine the burnout levels of university students. The confirmatory factor analysis performed for the construct validity of the scale resulted in a 3-factor structure as emotional exhaustion, depersonalization, and personal accomplishment consisting of 13 items. The correlations between the scores of the sub-factors ranged from 0.32 to 0.83. The Cronbach Alpha internal consistency coefficient was found as .76, .82 and .61, respectively. Test-retest reliability results were found as .76, .74 and .73, respectively. While high scores indicate burnout in "emotional exhaustion" and "depersonalization" sub-factors, low scores indicate burnout in the "personal accomplishment" sub-factor.

Personal Information Form: The researcher created the form which contains data on the demographic variables of the students participating in the study.

Study group

The study group consists of 24 students who volunteered to participate in the group study and who were standing in the 4th grade at Selcuk University Faculty of Health Sciences in the 2018-2019 academic year. 12 students were in

the experimental group and 12 students were in the control group. All of the students were female in the study group.

Operation

The researcher got the written permission from the Dean's Office of the Faculty of Health Sciences of Selcuk University to carry out the study. Students were included in the study after they signed the informed consent form. The screening study was carried out on the basis of volunteering with 134 students studying in the 4th grade. The researcher informed the students about the program, and then measurement tools were applied. As a result of the survey, 24 students were assigned to the experimental and control groups by random assignment method. Sessions held between March 15 and May 3, 2019 and lasted approximately 90 minutes. The students in the experimental group were given a psychoeducation program for 8 weeks, one session per week. No application was applied to the students in the control group.

The psychoeducation program for university students has been prepared based on cognitive behavioral therapy approach. Opinions of three experts from the field of guidance and psychological counseling were taken on the applicability of the psychoeducation program. Students got to know each other in the first session of the psychoeducation program. In addition, group goals and group rules were discussed. In the second session, the topic of "Knowing yourself, beliefs and feelings" was discussed. It was aimed that students realize the effects of their thoughts about school on their lives. In the third session, it was aimed for them to realize the relationships among emotions, thoughts and behavior and to learn about the ABC model. In the fourth session, breathing and relaxation exercises were taught to the students, with the topic of breathing and relaxation exercises. In the fifth session, the issue of changing irrational thinking styles was discussed. In the sixth session, the issue of loading was covered. In the seventh session, stress and stress coping skills in school life were discussed. In the eighth and last session, the sessions and the whole process was evaluated generally. Activities were carried out in line with the purposes of the sessions and students were given homework during the implementation of the psychoeducation program.

Data Analysis

The two-factor ANOVA technique was used for mixed measurements, which are frequently used in mixed designs to analyze the data. Two-factor analysis of variance for mixed measures is used in two-factor mixed designs with unrelated measurements depending on the groups of operations and repeated measurements in a time-dependent manner in order to test the group \times measurement joint effect on the effectiveness of the experimental procedure applied and the main effects of the group and measurement factors (Büyüköz-türk, 2002). In order to determine whether there is a difference between the scores of the students in the experimental and control groups (for sub-dimensions where the assumptions of the split plot anova are not met), independent groups t-test was used. The pretest-posttest total scores of the students in the experimental group were compared with the t-test for dependent groups. The data of the research were analyzed using the SPSS 22nd package program.

Results

Table 1 shows the average and standard deviation values of the students in the experimental and control groups regarding the scores they got from the Maslach Burnout Inventory-Student Scale (MBI-SS).

Table 1. Average and Standard Deviation Values of the Experimental and Control Groups for the MBI-SS Pretest-Posttest Scores

Tests	Groups	Pretest			Posttest		
		N	\bar{X}	SD	N	\bar{X}	SD
Depersonaliza- tion	Experimental	12	11.00	1.76	12	8.83	2.94
	Control	12	10.41	2.02	12	11.00	1.75
Emotional	Experimental	12	12.33	2.42	12	10.58	2.81
Exhaustion	Control	12	13.83	1.69	12	13.75	1.71
Personal	Experimental	12	12.75	3.30	12	10.58	1.37
Achievement	Control	12	11.83	2.20	12	12.33	3.57

Table 1 shows that the depersonalization, emotional exhaustion, and personal accomplishment posttest mean scores of the students in the experimental group were lower than their pretest mean scores. Also, the depersonalization, emotional exhaustion and personal accomplishment posttest mean scores of the students in the experimental group were lower than the posttest mean scores of the students in the control group.

Two-factor analysis of variance was applied to the data in order to determine whether the difference between the pretest-posttest scores of the students in the experimental and control groups from the Depersonalization Sub-Scale of the Maslach Burnout Inventory-Student Scale (MBI-SS) is significant. Table 2 shows the analysis results.

Table 2. Anova Results for Depersonalization Sub-Scale Pretest-Posttest Scores of MBI-SS

Variance Resource	Sum of Squares	Sd	Mean of Squares	F	P	Partial Eta Square
Intergroup	172.81	23				
Group (Experimental/Control)	7.52	1	7.52	1.001	.328	.044
Error	165.29	22	66.51			
Within groups	73.50	24				
Measurement (Pretest- Posttest)	7.52	1	7.52	3.82	.063	.148
Group* Measurement	22.68	1	22.68	11.52	.003	.344
Error	43.29	22	1.96			
Total	246.31	47				

Table 2 shows that the joint effect (group * measurement effect) is significant ($F = 11.52$; $p < .05$). According to this finding, the joint effect of being in different groups and measurements at different times was found to be significant. It was observed that the depersonalization score averages of the students participating in the psychoeducation program decreased significantly compared to the burnout score average of the students in the control group. The eta-squared value ($\eta^2 = .344$) indicates that being in different operation groups explained 34.4% of the variability in depersonalization posttest scores on a large scale, independently from the pretest scores.

Two-Factor Analysis of Variance was applied to the data in order to test whether the difference between the pretest-posttest mean scores of the students in the experimental and control groups taken from the Maslach Burnout Inventory-Student Scale (MBI-SS) Emotional Exhaustion Sub-Scale is significant. Table 3 shows the analysis results.

Table 3. ANOVA Results for the Emotional Exhaustion Sub-Scale Pretest-Posttest Scores of (MBI-SS)

Variance Resource	Sum of Squares	Sd	Mean of Squares	F	P	Partial Eta Square
Intergroup	113.25	23				
Group (Experimental/Control)	21.33	1	21.33	5.10	.034	.188
Error	91.91	22	4.17			
Within groups	207.99	24				
Measurement (Pretest-Posttest)	44.08	1	44.08	7.84	.000	.263
Group* Measurement	40.33	1	40.33	7.18	.034	.246
Error	123.58	22	5.16			
Total	321.24	47				

Table 3 shows that the joint effect (group * measurement effect) is significant ($F = 7.18$; $p < .05$) according to the results of the variance analysis performed on the average scores of the students' emotional exhaustion pretest-posttest measurements. According to this finding, the joint effect of being in different groups and measurements at different times was found to be significant. It was observed that the emotional exhaustion mean scores of the students participating in the psychoeducation program significantly decreased compared to the emotional exhaustion mean scores of the students in the control group. The eta-squared value ($\eta^2 = .246$) indicates that being in different operation groups explained 24.6% of the variability in emotional exhaustion posttest scores on a large scale, independently from the pretest scores.

T-test was applied to independent groups in order to test whether there is a statistically significant difference between the personal achievement pretest-posttest scores of the students in the experimental group and the personal achievement pretest-posttest scores of the students in the control group. Table 4 shows the results.

Table 4. T-test Results of (MBI-SS) Personal Achievement Sub-Scale Pretest-Posttest Scores of Experimental Group and Control Group Students

	Groups	Test	N	\bar{X}	SD	t	p
Personal Achievement	Experimental	Pretest	12	12.75	3.30		
	Control	Pretest	12	11.83	2.20	.79	.43
	Experimental	Posttest	12	10.58	1.37		
	Control	Posttest	12	12.33	3.57	-1.58	.12

Table shows that the personal achievement pretest score average of the students in the experimental group is $\bar{X}=12.75$, the personal achievement pre-

test score average of the students in the control group is $\bar{X}=11.83$. The difference between the posttest mean scores of the students in the experimental group and the posttest scores of the students in the control group is not statistically significant ($t=.79$; $p>.05$). The personal achievement posttest score average of the students in the experimental group is $\bar{X}=10.58$, the personal achievement posttest score average of the students in the control group is $\bar{X}=12.33$. The difference between the posttest mean scores of the students in the experimental group and the posttest scores of the students in the control group is not statistically significant ($t=-1.58$; $p>.05$).

T-test was used to compare the personal achievement pretest and posttest scores of the students in the experimental group for dependent groups. Table 5 shows the analysis results.

Table 5. T-test Results of (MBI-SS) Personal Achievement Sub-Scale Pretest-Posttest Total Scores of Experimental Group Students

Tests	N	\bar{X}	SD	t	p
Pretest	12	12.29	2.78		
Posttest	12	11.45	2.79	1.22	2,35

Table 5 shows that the personal achievement pretest score average of the students in the experimental group is $\bar{X}=12.29$, and their posttest score average is $\bar{X}=11.45$. The difference between the posttest and pretest mean scores of the students in the experimental group is not statistically significant ($t=1.22$; $p>.05$).

Conclusion And Discussion

This study in which university students participated aimed to evaluate the effect of the 8-week psychoeducation program on student burnout. For this purpose, the pretest-posttest scores of the student burnout inventory were compared. The emotional exhaustion and depersonalization posttest scores of the students in the experimental group were significantly lower than their pretest scores, whereas there was no significant difference between the self-efficacy pretest scores and posttest scores. This finding indicates that the applied psychoeducation program led to a decrease in student burnout levels.

The eta-squared values show that being in different operation groups explained 24.6% of the variability in emotional exhaustion posttest scores on a large scale, independently from the pretest scores.

The literature shows that intervention studies conducted to reduce student burnout in university students are effective. Ogbuanya et al. (2019) determined that the Rational-Emotional Behavior Therapy Program had a significant effect on reducing the burnout of students in the experimental group. Similar findings were obtained in another study by Igbokwe, Obande-Ogbuinya, Nwala, Ezugwu, and Ugwu (2020) which evaluated the effect of the Rational-Emotional Behavior Therapy Program on the reducing burnout symptoms, conducted with graduate students studying at state universities in Nigeria. In addition, a study evaluating the effect of burnout status and their attendance on the first- and second-year students at Erciyes University Faculty of Medicine determined that stress management education was effective in reducing burnout, especially the emotional exhaustion sub-dimension of medical students (Naçar, Baykan and Çetinkaya, 2012). The psychoeducation program applied in this study was effective in reducing students' emotional exhaustion and depersonalization levels. This result is similar to the results of the studies in the literature reporting that interventions are effective for university students.

Awa, Plaumann, and Walter (2010) reported that intervention programs against burnout symptoms are effective. Intervention programs includes explanations about the reason for the cognitively-emotionally distorted concepts underlying burnout and how they can be changed (Dryden, 2007). Participants are trained on how to change their dysfunctional thoughts and beliefs. The program includes techniques such as recording of dysfunctional thoughts, directed exploration, Socratic questioning, relaxation exercises, homework and role playing (Hawton, Salkovskis, Kirk and Clark, 1989). The process of psychoeducation program aimed to make students realize the effects of their thoughts and beliefs about school on their own life and relationships, and recognize and change irrational thinking styles. In addition, breathing and relaxation exercises were taught. The students were given homework in accordance with the session topics and purposes. The topics and techniques applied in the sessions may have influenced the change of students' feelings and thoughts. It is thought that the change in feelings and

thoughts of students may have been effective in the decrease in student burn-out scores.

There are therapeutic factors, co-factors, change factors, positive group factors that support the functioning of the group and the development of the members in psychoeducation groups. Most of these factors exist in the groups. When group members have enough time to see that other members have similar problems with them, they open themselves up and express their feelings more. When the number of participants is low in the group sessions, members will have enough time to share their experiences in depth (Brown, 2013). It can be said that the low number of group members and the fact that the students have similar characteristics may have increased the healing effect of the group in addition to the factors that support development in the students in the experimental group.

Considering the results of the research, the psychoeducation program was effective in reducing the burnout levels of university students. It would be beneficial if psychological counselors or experts apply this program to university students.

Students' stress coping and problem solving skills can be improved in order to reduce students' burnout and group psychological counseling can be done.

This research is limited to Selcuk University Faculty of Health Sciences students. Psychoeducation programs can be extended with students from different departments and from different universities in order to reduce burnout levels of students.

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