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# The Relationship between Tolerance, Forgiveness, and Depression Levels in Patients Diagnosed with Depression

# Depresyon Tanısı Alan Hastalarda Hoşgörü, Affetme ve Depresyon Düzeyleri Arasındaki İlişki

<sup>1</sup>Sevinç MERSİN, <sup>2</sup>Sezai UYAR

<sup>1</sup>Bilecik Şeyh Edebali University, Faculty of Health Sciences, Psychiatric Nursing Department, Bilecik, Türkiye. <sup>2</sup>Okan University, Psychiatry Department, İstanbul, Türkiye

> Sevinç Mersin: https://orcid.org/0000-0001-8130-6017 Sezai Uyar: https://orcid.org/0000-0002-3894-2058

#### ABSTRACT

**Objective:** This study aimed to determine the relationship between the level of tolerance, forgiveness, and depression in patients diagnosed with depression.

**Materials and Methods:** It was conducted with 80 patients in the outpatient psychiatry clinic of a hospital in Turkey. Data was collected with Beck Depression Inventory, Tolerance Scale and Heartland Forgiveness Scale. Data were evaluated using SPSS (21.0) statistical program.

**Results:** In this study, while it was determined that there was a statistically significant negative and moderately relationship between the mean Beck Depression Inventory and Tolerance Scale scores, a weak negative relationship was found between the mean Beck Depression Inventory and Heartland Forgiveness Scale scores. Also, it was determined that tolerance and forgiveness predicted depression negatively.

**Conclusion:** The results of this study can be used for interventions that include tolerance and forgiveness in reducing depression.

Keywords: Depression, tolerance, forgiveness

#### ÖΖ

Amaç: Bu çalışmada, depresyon tanısı alan hastalarda hoşgörü, affetme ve depresyon düzeyleri arasındaki ilişkinin belirlenmesi amaçlanmıştır.

**Materyal ve Metot:** Bu çalışma, Türkiye'de bir hastanenin psikiyatri polikliniğinde 80 hasta ile yapılmıştır. Verilerin toplanmasında, Beck Depresyon Envanteri, Hoşgörü Ölçeği ve Heartland Affetme Ölçeği kullanılmıştır. Veriler, SPSS (21.0) istatistik programı kullanılarak değerlendirilmiştir.

**Bulgular:** Bu çalışmada Beck Depresyon Envanteri ve Hoşgörü Ölçeği puan ortalamaları arasında istatistiksel olarak orta düzeyde anlamlı negatif bir ilişki olduğu belirlenirken, Beck Depresyon Envanteri ve Heartland Affetme Ölçeği puan ortalamaları arasında negatif yönde zayıf bir ilişki bulunmuştur. Ayrıca hoşgörü ve affetmenin depresyonu negatif yönde yordadığı belirlenmiştir.

**Sonuç:** Depresyonun düzeyinin azaltılmasında, hoşgörü ve affetmeyi içeren müdahaleler için bu çalışmanın sonuçlarından yararlanılabilir.

Anahtar Kelimeler: Depresyon, hoşgörü, affetme

Sorumlu Yazar / Corresponding Author: Sevinç Mersin, Faculty of Health Sciences, Psychiatric Nursing Department, Bilecik Şeyh Edebali University, 11210, Bilecik, Türkiye Tel: +90 (228) 214 1384	Yayın Bilgisi / Article Info: Gönderi Tarihi/ Received: 08/06/2022 Kabul Tarihi/ Accepted: 24/07/2023 Online Yayın Tarihi/ Published: 06/09/2023
E-mail: sevinc.mersin@bilecik.edu.tr	
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# INTRODUCTION

Depression is a mood disorder in which the individual feels unhappy and intense pessimism prevails.<sup>1,2</sup> If life difficulties and problems in interpersonal relationships are long-lasting and the problem is not truly resolved, this may increase the individual's stress level and cause changes in neurotransmitters such as serotonin and dopamine, eventually leading to depression.<sup>2-4</sup> Therefore, interventions and methods to reduce the stress levels of individuals are recommended. Thus, the development of depression is tried to be prevented, and its level is tried to be reduced. Tolerance and forgiveness may be an important factor that reduces the stress levels of individuals and, therefore, depression. Increasing tolerance and forgiveness of individuals can prevent the deterioration of neuro-biochemical mechanisms by triggering the thought and behavior axis necessary to reduce their stress levels.<sup>2-7</sup> Because tolerance and forgiveness can reduce burden and stress by making a positive contribution to the interpersonal relationships of individuals. Tolerance is a concept that is important in interpersonal relations and is also called cognitive flexibility, which is called being flexible towards the feelings, thoughts, behaviors, beliefs and practices of other individuals, groups and other societies, and being able to give them various rights and privileges.<sup>6-9</sup> Thus, as the level of tolerance increases, the ability of individuals to make adaptive problem-solving decisions in new situations also increases.<sup>10</sup> Palm and Follette<sup>11</sup> stated that a positive relationship exists between cognitive flexibility and coping with psychological stress. Therefore, increased tolerance or cognitive flexibility may reduce the occurrence of psychiatric disorders.

Forgiveness is compassion and generosity towards the person who caused it when one's right is defeated, when anger and negative feelings are experienced.<sup>12</sup> It has been reported that there is a close relationship between forgiveness and empathy, altruistic behaviors, compassion, positive thinking, hopefulness, and psychological, spiritual and physical health.<sup>13,14</sup> Although the positive effects of tolerance and forgiveness on interpersonal relationships are known, no study has been found in the literature showing its relationship with depression.<sup>15-17</sup> Therefore, this study aimed to determine the relationship between depression, tolerance, and forgiveness.

# MATERIALS AND METHODS

**Study Setting and Procedure:** In this study, ethics committee approval was obtained from the University Ethics Committee (Date: 12.10.2018; decision no: 43/7), and it was carried out in accordance with the Declaration of Helsinki. This study is descriptive research. The data were obtained from 80 patients in

the outpatient psychiatry clinic of a hospital in Turkey between November 2018-October 2019. For the sample, at least 79 patients were needed with a 95% confidence interval, 5% error, 0.5 effect size, and 80% power analysis to represent the population. The study included patients diagnosed with depression for the first time by a psychiatrist who did not receive any psychiatric treatment for the past year. For the patients to participate in the study, the criteria were determined to be volunteers, be over 18 age, and have no communication problems. Patients completed the questionnaires in approximately 20-30 minutes.

*Data Collection and Instruments:* Data were collected using the Beck Depression Inventory, the Tolerance Scale, and the Heartland Forgiveness Scale. In addition, patients wrote their age, gender, marital status and income status on the forms.

**Beck Depression Inventory:** It is used to determine the level of depression in patients.<sup>18</sup> The Turkish validity and reliability of the inventory were performed by Hisli.<sup>19</sup> It is a 21-item and 4-Likert-type. The total score is between 0-63. The Cronbach alpha value of this study was determined as 0.86.

**Tolerance Scale:** This scale was developed by Demirci<sup>20</sup> and had 6 questions and 5- Likert-type. The total score is between 6-30. High scores indicate that individuals' tolerance is high. The Cronbach alpha of this study was determined as 0.83.

*The Heartland Forgiveness Scale:* This scale was developed by Thompson et al.,<sup>21</sup> and Turkish adaptation was conducted by Bugay and Demir.<sup>22</sup> It is an 18-item, 7-point Likert-type scale with three subscales. This scale has forgiveness of self (1, 2, 3, 4, 5, 6), forgiveness of others (7, 8, 9, 10, 11, 12) and forgiveness of situations (13, 14, 15, 16, 17, 18) subscales. The scores that can be obtained from the scale are between 18-126. While scoring the scale, some items (2, 4, 6, 7, 9, 11, 13, 15, 17) are inversely scored. The Cronbach alpha value was determined as 0.85 in this study.

*Statistical Analysis:* SPSS 21.00 was used, and the frequency, percentage, mean, and standard deviation values were calculated. The Kolmogorov-Smirnov test was used to analyse the normal distribution of the data in the study. It was determined that the scale scores showed a normal distribution. Therefore, Pearson's correlation analysis was used. The correlation values were evaluated as 0-0.2=very weak, 0.2-0.4=weak, 0.4-0.6=moderate and 0.6-0.8=strong. Also, regression analyses were carried out for further analysis. p<0.05 was accepted as the statistical significance.

### RESULTS

Of the depression patients, 90% were women (N=72), 51.3% were single, and the mean age was  $31.31 \pm 10.80$  (19-62). A total of 72.5% of the patients expressed their income status as a medium (Table 1).

Table 1. Participant characteristics.

Characteristic		n(%)
Gender	Female	72(90.0)
Jender	Male	8(10.0
A	19-29	42(52.5)
Age	30≥	38(47.5)
M 100	Married	39(48.8)
Marital Status	Single	41(51.3)
	Bad	13(16.3)
Income Status	Medium	58(72.5)
	Good	9(11.3)

Table 2. Participant scales scores.

Scales	X±SD	Min-Max	K-SZ
Beck Depression Inventory	22.61±11.03	0-63	0.073*
<b>Tolerance Scale</b>	$20.77 \pm 5.98$	6-30	0.097*
Heartland Forgiveness	71.56±20.26	18-126	0.069*
Scale			
Forgiveness of self	$24.88 \pm 7.84$	1-42	0.079*
Forgiveness of others	$23.38 \pm 9.45$	1-42	0.070*
Forgiveness of situations	24.40±9.84	1-42	0.085*

K-S Z: Kolmogorov-Smirnov Z; \*:p>0.05.

sion Inventory and Tolerance Scale (r=-.412; p<.05). In addition, a significant negative relationship was found between the mean the Beck Depression Inventory and the Heartland Forgiveness Scale total and forgiveness of self and forgiveness of situations sub-

dimensions scores (r=-.369, r=-0.386, r=-0.521; p<.05) (Table 3). According to the regression model, while the tolerance explains 18.6% (p<0.05) of depression, the forgiveness explains 13.6% (p<0.05) of depression (Table 4).

	Beck Depression Scale	Tolerance Scale	Heartland Forgiveness Scale	Forgiveness of self	Forgiveness of others	Forgiveness of situations
Beck Depression Scale						
-	1					
Tolerance	-0.412*	1				
Scale						
Heartland Forgiveness	-0.369*	0.488*	1			
Scale						
Forgiveness of self	-0.386*	0.295*	0.777**	1		
Forgiveness of others	-0.085	0.474**	0.798**	0.332**	1	
Forgiveness of situations	-0.521**	0.523**	0.771**	0.595**	0.508**	1

\*\*: p<0.01; \*: p<0.05; Pearson's correlation test.

**Table 4.** Regression among scales.

Dependent Variable	Independent Variable	$\mathbf{R}^2$	F	β	р
Beck Depression Inventory	Heartland Forgiveness Scale	0.136	12.275	-0.369	0.001*
Beck Depression Inventory	Tolerance Scale	0.186	17.813	-0.431	0.000*
Tolerance Scale	Heartland Forgiveness Scale	0.238	24.350	0.488	0.000*

\*p<0.05.

Beck Depression Inventory, Tolerance Scale, and Heartland Forgiveness Scale scores of patients were  $22.61\pm11.03$ ,  $20.77\pm5.98$ , and  $71.56\pm20.26$ , respectively. The forgiveness of self, forgiveness of others, and forgiveness of situations sub-scales of the Heartland Forgiveness Scale scores were  $24.88\pm7.84$ ,  $23.38\pm9.45$ , and  $24.40\pm9.84$ , respectively (Table 2).

A positive and significant relationship was determined between the mean the Tolerance Scale and the Heartland Forgiveness Scale total and forgiveness of self, forgiveness of others, and forgiveness of situations sub-scales of the Heartland Forgiveness Scale scores (r=.488, r=0.295, r=0.474, r=0.523; p<.05). A significant negative relationship was determined between the mean the Beck Depres-

#### DISCUSSION AND CONCLUSION

Much research has been done on the causes and treatment of depression since Hippocrates claimed that bodily fluids affect mood.<sup>2,4</sup> In addition, psychological factors such as the individuals' personality, perspective, negative life events, and individuals' ability to cope with stress have been revealed in the development and prognosis of depression.<sup>3,23-25</sup> However, despite all these studies, neither the occurrence of depression has been prevented, nor the frequency of depression has decreased.<sup>1,3,26</sup>

According to the results obtained from this study, it can be said that the mean the Beck Depression Scale, the Tolerance Scale and the Heartland Forgiveness Scale total and forgiveness of self, forgiveness of others and forgiveness of situations subscales scores were moderate. In addition, this study determined that as the tolerance level of patients with depression increased, the level of forgiveness increased. As the level of tolerance and forgiveness of the patients improved, the level of depression decreased. According to the regression model, a 1unit increase in the tolerance level decreases the depression level by 0.431 units (  $\beta = -0.431$ ; p<0.05). Also, it is determined that a 1-unit increase in the level of forgiveness decrease the depression level by 0.369 units (  $\beta = -0.369$ ; p<0.05). This result can be interpreted as tolerance and forgiveness having a positive effect on the mental health of individuals and reducing the level of depression. Tolerance and forgiveness mean ending an ongoing internal dialogue, whether litigation, justification, blame, clarification, or judgment of the other. When these dialogues cease, tolerance towards others and forgiveness take place.<sup>20-22</sup> Personality traits, teachings, cultures, and religious beliefs are important factors in individuals tolerating and forgiving others.<sup>20,21,27</sup> These characteristics are the prerequisites that affect their tolerance and forgiveness. In particular, religious teachings attributed tolerance and forgiveness to God and stated that human behavior that is tolerant and able to forgive others reflects God's characteristics.<sup>27,28</sup> Ultimately, the results of tolerance and forgiveness can lead to a feeling of pleasantness to all who forgive and are forgiven. It can create a sense of happiness and satisfaction in individuals. This can be a factor that protects mental health.

Researchers reported that tolerance and forgiveness contribute positively to reducing anger and maintaining physical and psychological well-being.<sup>28,29</sup> Forgiveness is emotional, cognitive and behavioral, and it has a role in forgiveness because tolerance increases resilience.<sup>28,30</sup> It has been reported that individuals with low tolerance levels have less resilience and have high-stress levels.<sup>20,29,30</sup> Because many individuals can forgive after reconciliation is achieved, it is necessary for the individual to depend

on others to protect his health. There is no compromise between tolerance and forgiveness. There can be tolerance and forgiveness without reconciliation. What provides this results from the individual's feelings, thoughts and behaviors. Therefore, to protect and improve mental health, it can be recommended that individuals change their thoughts, feelings and behaviors instead of constantly waiting for the forgiveness and tolerance of others.

According to the data obtained from this study, mental health professionals need to know the relationship between the level of depression and the level of tolerance and forgiveness for the prevention and treatment of depression. Thus, physical, psychological, and social destructions can be prevented and reduced by reducing the individual and social negativities caused by depression.

In conclusion, it has been determined as an important issue to improve patients' tolerance and forgiveness skills to reduce the depression levels of patients diagnosed with depression. For this reason, it may be recommended to focus on tolerance and forgiveness skills in patients with depression.

This study has some limitations. The first limitation is that it was performed in a single hospital. The second limitation is that it was conducted with patients who agreed to participate in the study. Another limitation is the inability to control the individual, cultural and social variables of the patients with whom the study was conducted. Therefore, the results cannot be generalised.

*Ethics Committee Approval:* The ethical permission was obtained from the Bilecik Şeyh Edebali University Ethics Committee (Date: 12/10/2018, decision no: 43/7).

*Conflict of Interest:* No conflict of interest was declared by the authors.

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