Journal of Dependence bağımlılık Dergisi

ARAŞTIRMA | RESEARCH
Bağımlılık Dergisi, 2024; 25(4):398-409
Doi: 10.51982/bagimli.1424031

Relationship between Guilt, Shame and Treatment Motivation in Individuals with Opioid Addiction

Opioid Bağımlılığı Tanısı Alan Bireylerde Suçluluk, Utanç ve Tedavi Motivasyonu Arasındaki İlişki

Nuray Caymaz [1], Melike Ceylan [2]

1. Balıklı Rum Hospital, Istanbul
2. Istanbul Topkapı University, Istanbul

Abstract

Objective: This study aims to identify best practices in combating addiction by thoroughly examining the relationship between opioid addiction and feelings of guilt, shame, and treatment motivation.
Method: The sample of the study consists of 288 patients diagnosed with opioid addiction according to DSM-5 criteria by psychiatrists at Balıklı Rum Hospital. The scales used in the study were the Sociodemographic Form, the Guilt-Shame Scale, and the Treatment Motivation Questionnaire.
Results: There is a significant relationship between the level of guilt and internal motivation, confidence in treatment and treatment motivation and between shame and internal motivation and general treatment motivation. When the regression coefficients are analyzed, it is seen that only guilt scores are a significant predictor of treatment motivation scores. The shame variable does not have a significant effect. The participants' mean scores of guilt were found to be significantly higher than their mean scores of shame.
Conclusion: The study revealed a significant link between guilt and various aspects of treatment motivation, while shame showed a less pronounced association. Participants reported higher mean scores for guilt compared to shame, emphasizing the potentially greater relevance of guilt in influencing treatment motivation. Focusing on psychodrama and psychoeducational group studies for the treatment of opioid addiction can make it easier for the individual to express difficult negative emotions and develop awareness within the group.

Keywords: Opioid addiction, guilt, shame, treatment motivation

Öz

Amaç: Bu çalışma, opioid bağımlılığı ile suçluluk, utanç duyguları ve tedavi motivasyonu arasındaki ilişkiyi derinlemesine inceleyerek, bağımlılıkla mücadeledeki en iyi uygulamaları belirlemeyi amaçlamaktadır.
Yöntem: Araştırmanın çalışma grubu Özel Balıklı Rum Hastanesi Vakfı'na başvuran, opioid bağimlılığı tanısı almış 288 hastadan oluşmaktadır. Araştırmanın veri toplama araçları Sosyodemografik Bilgi Formu, Suçluluk-Utanç Ölçeği, Tedavi Motivasyonu Anketidir.
Bulgular: Suçluluk ile içsel motivasyon, tedaviye güven ve tedavi motivasyonu arasında anlamlı ilişki olduğu; utanç ile içsel motivasyon düzeyleri ve genel tedavi motivasyonu arasında anlamlı ilişki olduğu belirlenmiştir. Regresyon katsayıları incelendiğinde ise, sadece suçluluk puanlarının tedavi motivasyonu puanları üzerinde anlamlı bir yordayıcı olduğu görülmektedir. Katılımcıların suçluluk puan ortalamaları, utanç puan ortalamalarından anlamlı şekilde yüksek bulunmuştur.
Sonuç: Suçluluk ile tedavi motivasyonunun çeşitli yönleri arasında önemli bir bağlantı ortaya konulmuştur. Katılımcıların, suçluluk düzeyleri konusunda utanç düzeylerine kıyasla daha yüksek bulunmuştur, bu da suçluluğun tedavi motivasyonunu etkileme potansiyelinde daha büyük bir rol oynayabileceğini göstermektedir. Eroin bağımlılığı tedavisi için psikodrama ve psikoeğitim grup çalışmalarına odaklanmak, bireyin zorlanan olumsuz duygularını ifade etmesini ve grup içinde farkındalık geliştirmesini kolaylaştırabilir.

Anahtar kelimeler: Eroin bağımlılığı, suçluluk, utanç, tedavi motivasyonu

Correspondence / Yazışma Adresi: Melike Ceylan, Istanbul Topkapı University, Departemnt of Psychology, Istanbul, Türkiye
E-mail: melikeceylanpsy@gmail.com
Received /Gönderilme tarihi: 27.01.2024 | Accepted /Kabul tarihi: 01.06.2024

Introduction

In 2018, the World Health Organization (WHO) delineated the characteristics of substance addiction, comprising an intense desire and compulsion to obtain and use the substance, a progressive escalation in dosage, heightened sensitivity to both the physical and psychological effects of the substance, an incessant pursuit of these effects, and the substance attaining paramount significance in an individual's life. Substance addiction poses a substantial threat to individuals, causing profound disruptions in their physical, spiritual, and social well-being (1).

Given its strategic location, Turkey plays a pivotal role as a transit point, facilitating the trafficking of drugs and stimulants. Despite extensive efforts globally and within the country to mitigate substance abuse, its prevalence persists across a broad spectrum. Various substances, such as opioid, cocaine, marijuana, bonzai, amphetamine, and methamphetamine, contribute to the pervasive issue (2). This research endeavors to quantitatively assess the emotions of guilt and shame experienced by individuals ensnared in opioid addiction—a condition posing significant threats to both social and mental health. Furthermore, the study seeks to scrutinize the nexus between these emotions and the motivation for seeking treatment.

The term "narcotic" or "psychoactive substance" is applied to substances with narcotic effects that engender rapid habituation in individuals (3). Substances like opioid and morphine are categorized as narcotics, while drugs such as cocaine and amphetamine are recognized as stimulants (4). Opioids swiftly induce addiction, with withdrawal symptoms exacerbating dependency. Various administration methods, notably intravenous injection, heighten the risk of infectious diseases. Treatment involves medication-assisted therapy, counseling, and harm reduction strategies like needle exchange programs. Addressing the crisis necessitates a multifaceted approach encompassing prevention, treatment, and harm reduction (5).

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5, 2013), categorizes "Opioid addiction" within the framework of opioid-related disorders. Opioid users exhibit a mortality rate that constitutes 76 percent of deaths attributed to substance use (6). There has been an increasing trend of opioid addiction and abuse in all countries around the world, with an estimated 26.8 million people worldwide with opioid abuse disorder in 2016 (2).

According to a study conducted by the Turkish Drug and Drug Addiction Monitoring Center (7) in 2011 among high school students, the lifetime prevalence of substance use was determined to be 1.5%. Within the subset of individuals acknowledging drug use, 4.6% reported opiates as their primary substance of choice, while 13.6% indicated concurrent use of opiates with other substances. Among those seeking outpatient and inpatient treatment in 2013, 76.3% disclosed opioid use, with 70.5% of them having completed primary school and 66.1% reporting unemployment. Analysis of these data revealed that 30.3% of individuals seeking treatment were still engaged in injecting drugs at the commencement of treatment, while 37.26% had a history of lifelong injecting drug use (8). Within our country's addiction treatment centers, a comprehensive array of interventions, including both detoxification and maintenance treatments, is offered. Pharmacological agents such as methadone and buprenorphine, classified as opiate agonists, are utilized in these therapeutic approaches. Conversely, naloxone and naltrexone, characterized as antagonists, find application in mitigating cravings and preventing relapses (9). Agonist medications are employed in the detoxification treatment of individuals addicted to opioid, while antagonist medications serve to diminish cravings and forestall relapses. Individuals grappling with opioid addiction often exhibit diminished self-esteem, a lack of self-confidence, and reduced motivation to actively engage in life events and interpersonal interactions, primarily attributed to financial difficulties and family-related challenges (10). Frequent relapses in addiction can evoke feelings of guilt towards both one's family and society. Societal perspectives and pressures may compel individuals to revert to drug use or foster a desire to discontinue substance use altogether.

An examination of the literature suggests that feelings of shame among individuals with substance addiction play a role in facilitating the initiation of treatment. Within the context of addiction, emotions of guilt and shame manifest as adverse psychological states for individuals. These negative emotional experiences

contribute to a lack of self-care, interpersonal relationship constraints, diminished self-esteem, and challenges in familial and occupational spheres. Consequently, these factors propel individuals towards impulsive relapse into addictive behaviors (11).

In the context of addiction, feelings of guilt and shame are recognized as detrimental emotional states for individuals. Those grappling with these emotions often encounter challenges in seeking treatment, exhibit deficiencies in self-care practices, and engage in recurrent patterns of substance use, particularly alcohol consumption (12). Effectively addressing and managing feelings of guilt and shame is imperative in the treatment of individuals with addiction. Both individual and group therapies serve as modalities for achieving this goal. Through these therapeutic approaches, individuals can develop adaptive coping mechanisms to prevent relapse by avoiding circumstances reminiscent of their past experiences. Notably, individuals experiencing guilt towards their family and immediate environment exhibit heightened sensitivity to this matter; however, their ability to consistently implement such coping mechanisms may be compromised, leading to a propensity for relapse also findings suggest that the importance of targeting acceptance when trying to reduce the effects of shame and guilt on self-forgiveness (13,14).

The study investigates the intricate relationship between emotional factors and treatment motivation among individuals grappling with opioid addiction. The first hypothesis posits a significant correlation between the level of guilt and treatment motivation in those diagnosed with opioid addiction. Building on this, the second hypothesis extends the investigation to encompass the role of shame, suggesting a noteworthy connection between shame levels and treatment motivation in the same population. Furthermore, the third hypothesis delves into the predictive aspect, contending that the feelings of guilt and shame in individuals diagnosed with opioid addiction can significantly forecast their motivation towards seeking treatment. This implies that the emotional experiences of guilt and shame may serve as indicators or determinants for treatment motivation in this specific demographic. Moving forward, the fourth hypothesis introduces the temporal dimension by positing that there are differences in guilt, shame, and motivation levels depending on the duration of opioid use. This implies that the duration of opioid use may have a discernible impact on the emotional experiences and motivation levels of individuals grappling with addiction. Finally, it will be explored the distinctions in guilt, shame, and motivation levels among individuals with opioid addiction based on their treatment-seeking behavior. This implies that those who actively seek treatment may exhibit varying emotional experiences compared to those who do not pursue professional assistance. By examining these hypotheses collectively, the study aims to provide a comprehensive understanding of the intricate interplay between emotional factors, duration of opioid use, treatment-seeking behavior, and treatment motivation in individuals diagnosed with opioid addiction.

A multitude of substances, characterized by distinct components with addictive properties, are prevalent globally and within our country. Remarkably, addiction may manifest even after a solitary instance of use. The treatment landscape for opioid addiction is delineated within both public and private healthcare institutions. The therapeutic regimen commences with the initiation of the detoxification process, succeeded by the administration of agonists such as buprenorphine and methadone (20). Crucially, the role of treatment motivation emerges as a pivotal factor in the trajectory of addiction treatment. The voluntary choice of patients to engage in treatment positively influences the therapeutic process (21).

The emotional constructs of guilt and shame permeate various facets of daily existence. Acknowledging the profound impact of heightened feelings of guilt and shame subsequent to opioid use on treatment motivation, this study endeavors to assess the influence of these emotions within the context of opioid addiction on individuals' motivation during the treatment trajectory. A comprehensive review of the existing literature revealed a dearth of research exploring the specific impact of guilt and shame on treatment motivation in the realm of opioid addiction (22). Consequently, this study aims to make a substantive contribution to the academic discourse by elucidating the mediating role of guilt and shame in shaping treatment motivation for individuals grappling with opioid addiction.

Method

Sample

The sample of the study consists of 288 patients diagnosed with opioid addiction according to DSM-5 criteria by psychiatrists at Balıklı Rum Hospital. Individuals with opioid addiction seeking services at AMATEM, affiliated with the Private Balıklı Rum Hospital Foundation in Istanbul. Inclusion criteria stipulated that participants had undergone both outpatient and inpatient treatment, were literate, aged 18 or above, and had willingly agreed to partake in the study. All participants consist of hospitalized patients. Treatment application was evaluated as patients applying for treatment.

Table 1 gives demographic information about the participants diagnosed as opioid addicts who constitute the study group. 10.8% of the participants are women and 89.2% are men. 32.6% of the participants are married and 67.4% are single. 42.4% of the participants are primary school graduates, 42.7% are high school graduates, and 14.9% are university graduates or higher. 54.2% of the participants are working, 45.8% are not working. 6.9% of the participants live alone and 93.1% live with their family. According to a study, reported drug usage duration among patients are generally occurs between less than 1 year, 1-3 years, 3-5 years, and more than 5 years (23). In our study, duration of opioid use of 5.2% of the participants is less than one year, 14.2% is between 1-3 years, 15.6% is between 3-5 years, and 64.9% is over five years. 80.9% of the participants applied for treatment, 19.1% did not. The average age of the participants is 31.68 and the standard deviation is 6.423.

Table 1. Demographic information

Group		**N**	**%**
Gender	Woman	31	10.8
	Male	257	89.2
Marital status	Married	94	32.6
	Single	194	67.4
Educational Status	Primary education	122	42.4
	High school	123	42.7
	University and above	43	14.9
Working Status	working	156	54.2
	Not working	132	45.8
Whom He Lives With	Alone	20	6.9
	With family	268	93.1
Duration of Opioid Use	less than 1 year	15	5.2
	1-3	41	14.2
	3-5	45	15.6
	over 5 years	187	64.9
Treatment Application	Yes	233	80.9
	No	55	19.1
Age		Cover.	ss
		31.68	6.423

Data Collection Tools

In this study, Sociodemographic Information Form, Guilt-Shame Scale (GUDS), Treatment Motivation Survey (TMQ) were applied to obtain data from the participants.

Sociodemographic Information Form

To ascertain sociodemographic details of the study sample, a structured questionnaire was developed. This instrument aimed to collect information pertaining to participants' age, gender, marital status, educational background, employment status, living arrangements, duration of opioid use, and any history of prior treatment seeking.

Guilt-Shame Scale (GUSS)

The scale was adapted by (15) Şahin and Şahin and validity and reliability studies were conducted. This scale measures feelings of guilt and shame. It can be applied to individuals in adolescence and adults, and there is no time restriction on its application (16). The lowest value of the Guilt scale in this study is 13, the highest value is 60, the mean is 47.27, the standard deviation is 9.836, the skewness value is -.852, the kurtosis value is .366, and the Cronbach's alpha value is .869. The lowest value of the shame scale is 13, the highest value is 60, the mean is 38.24, the standard deviation is 9.090, the skewness value is -.033, the kurtosis value is -.268, and the Cronbach's alpha value is .773.

Treatment Motivation Questionairre

The Treatment Motivation Questionnaire is a self-report form consisting of 26 items prepared to evaluate individuals' reasons for engaging in and continuing the treatment process regarding addiction. This survey is a 5-point Likert-type scale in which questions are answered in a range ranging from 'Strongly Disagree' to 'Strongly Agree' (17). The scale was adapted (18) and the validity and reliability study of the scale was conducted (17). The lowest value of the Intrinsic motivation scale in this study is 25, the highest value is 55, the mean is 48.65, the standard deviation is 6.151, the skewness value is -1.267, the kurtosis value is -1.685, and the Cronbach's alpha value is .837. The lowest value of the extrinsic motivation scale is 4, the highest value is 20, the mean is 11.37, the standard deviation is 3.102, the skewness value is .262, the kurtosis value is .548, and the Cronbach's alpha value is .359. The lowest value of the interpersonal help seeking scale is 8, the highest value is 30, the mean is 21.67, the standard deviation is 4.045, the skewness value is -.236, the kurtosis value is .251, and the Cronbach's alpha value is .660. The lowest value of the confidence in treatment scale is 9, the highest value is 25, the mean is 18.61, the standard deviation is 4.199, the skewness value is -.148, the kurtosis value is -.643, and the Cronbach's alpha value is .716. The lowest value of the treatment and motivation survey is 61, the highest value is 123, the mean is 100.30, the standard deviation is 10.940, the skewness value is -.570, the kurtosis value is .493, and the Cronbach's alpha value is .771.

Procedure

Within the scope of the research, data collection tools were applied by survey method on a voluntary basis to 288 patients diagnosed with opioid addiction who applied to the Private Balıklı Greek Hospital Foundation AMATEM Service for inpatient treatment. The scales were explained by the researcher for a better understanding of the patients. Approval for this study was received within the scope of the document numbered E-31675095-100-2200009506, dated 24/08/2022, approved by the Ethics Committee of Istanbul Topkapı University

Statistical Analysis

SPSS (version 25) package program was used to analyze the data. Number, percentage, minimum and maximum value, mean, standard deviation values, and Cronbach's alpha values were used in the analysis of descriptive data. While examining the research data in terms of normality, findings regarding extreme values, skewness and kurtosis coefficients were evaluated. 15 data that were found to be outliers were not included in subsequent analyses. Normal distribution is accepted when kurtosis and skewness coefficients are between + 1.5 and – 1.5 (19). By evaluating the findings obtained as a result of the analysis, it was decided that parametric tests should be used in the analysis of the data. Non-parametric analyzes were used for variables with fewer than 30 subgroups. Accordingly, Pearson correlation, multiple regression analysis,

one-sample t-test, ANOVA, independent groups t-test, Mann Whitney U test and Kruskal Wallis analysis were used to analyze the data. The pairwise comparison test was used for pairwise comparisons of the scores that were significant in the Kruskal Wallis analysis.

Results

Table 2: Descriptive statistics for the scales used in the research

Variable	N	Min.	Max.	$\bar{x}$	sd	Distortion	kurtosis	α
Guilt	288	13	60	47.27	9,836	-.852	,366	.869
Shame	288	13	60	38.24	9,090	-.033	-.268	.773
Intrinsic Motivation	288	25	55	48.65	6,151	-1.267	1,685	.837
Extrinsic Motivation	288	4	20	11.37	3,102	,262	.548	.359
Seeking Interpersonal Help	288	8	30	21.67	4,045	-.236	.251	.660
Trust in Treatment	288	9	25	18.61	4,199	-.148	-.643	.716
TMQ Total	288	61	123	100.30	10,940	-.570	.493	.771

TMQ: Treatment and Motivation Questionnaire

Descriptive statistics for the scales used in the research are given in Table 2. The lowest value of the guilt scale is 13, the highest value is 60, the mean is 47.27, the standard deviation is 9.836, the skewness value is -.852, the kurtosis value is .366, and the Cronbach's alpha value is .869. The lowest value of the shame scale is 13, the highest value is 60, the mean is 38.24, the standard deviation is 9.090, the skewness value is -.033, the kurtosis value is -.268, and the Cronbach's alpha value is .773. The lowest value of the intrinsic motivation scale is 25, the highest value is 55, the mean is 48.65, the standard deviation is 6.151, the skewness value is -1.267, the kurtosis value is -1.685, and the Cronbach's alpha value is .837. The lowest value of the extrinsic motivation scale is 4, the highest value is 20, the mean is 11.37, the standard deviation is 3.102, the skewness value is .262, the kurtosis value is .548, and the Cronbach's alpha value is .359. The lowest value of the interpersonal help seeking scale is 8, the highest value is 30, the mean is 21.67, the standard deviation is 4.045, the skewness value is -.236, the kurtosis value is .251, and the Cronbach's alpha value is .660. The lowest value of the confidence in treatment scale is 9, the highest value is 25, the mean is 18.61, the standard deviation is 4.199, the skewness value is -.148, the kurtosis value is -.643, and the Cronbach's alpha value is .716. The lowest value of the treatment and motivation questionairre is 61, the highest value is 123, the mean is 100.30, the standard deviation is 10.940, the skewness value is -.570, the kurtosis value is .493, and the Cronbach's alpha value is .771.

Table 3: Results of multiple linear regression analysis established to examine the predictive effect of guilt and shame scores on treatment motivation scores

Estranged	Predictor	B.	Standard Error $_B$	β	t	p	binary r	partial r
Treatment Motivation	Consant	85.259	3.264		26.121	.000		
	Guilt	.280	.076	.252	3.671	.000	.274	.212
	Shame	.047	.083	.039	.566	.572	,180	.033
R=.276 R^2=.076 $F_{(2.285)}$=11.718 p=.000								

According to Pearson correlation analysis results regarding the scale scores used in the research. Accordingly, it was determined that there was a positive significant correlation between the guilt scores of the participants diagnosed as opioid addicts and their intrinsic motivation scores (r=.320), treatment confidence scores (r=.185) and total treatment and motivation questionairre scores (r=.274). (p<.001). There is no significant relationship between guilt scores and extrinsic motivation and interpersonal help

seeking scores (p>.05). It was determined that there was a significant positive correlation between shame scores and intrinsic motivation scores (r=.202) and total treatment and motivation questionairre scores (r=.180) (p<.001). There is no significant relationship between shame scores and extrinsic motivation, interpersonal help seeking and treatment confidence scores (p>.05).

Table 4. Comparison of scale scores according to the duration of opioid use variable

Variable		N	$\bar{x}_{row}$	sd.	H	p	Difference
Guilt	less than 1 year [1]	15	154.27	3	.367	.947	-
	1-3 years [2]	41	147.98				
	3-5 years [3]	45	141.12				
	[4] over 5 years	187	143.77				
Shame	less than 1 year [1]	15	149.13	3	.606	.895	-
	1-3 years [2]	41	136.06				
	3-5 years [3]	45	142.34				
	[4] over 5 years	187	146.50				
Intrinsic Motivation	less than 1 year [1]	15	115.70	3	4,391	,222	-
	1-3 years [2]	41	127.85				
	3-5 years [3]	45	145.02				
	[4] over 5 years	187	150.33				
Extrinsic Motivation	less than 1 year [1]	15	142.90	3	16,371	**.001***	3 and 4>2
	1-3 years [2]	41	98.94				
	3-5 years [3]	45	166.94				
	[4] over 5 years	187	149.22				
Seeking Interpersonal Help	less than 1 year [1]	15	135.10	3	1,342	.719	-
	1-3 years [2]	41	137.63				
	3-5 years [3]	45	136.66				
	[4] over 5 years	187	148.65				
Trust in Treatment	less than 1 year [1]	15	141.60	3	.355	.949	-
	1-3 years [2]	41	143.15				
	3-5 years [3]	45	138.64				
	[4] over 5 years	187	146.44				
TMQ Total	less than 1 year [1]	15	126.67	3	4,875	,181	-
	1-3 years [2]	41	121.35				
	3-5 years [3]	45	146.30				
	[4] over 5 years	187	150.57				

*p < .05, TMQ: Treatment and Motivation Questionnaire

Table 3 shows the results of the multiple linear regression analysis established to examine the predictive effect of guilt and shame scores on treatment motivation scores in opioid addicts. Firstly, in testing multicollinearity, tolerance value, variance inflation factor (VIF), eigenvalue and condition index (CI) values were examined. Accordingly, it was observed that tolerance values were between 0.20-1.00 and VIF values were between 1.00-10.00. However, it was determined that the eigenvalues were lower than 15 and the CI values were lower than 30, and that there was no multicollinearity. It was observed that the Durbin Watson coefficient was close to 2 and it was determined that the independence of error terms condition was met. It was determined that the regression assumptions were met and it was concluded that the data was suitable for regression analysis and regression analyzes were carried out. The 'Enter' method was used when constructing the regression model. Guilt and shame scores were included in the regression model as predictors of treatment motivation scores. The established model was found to be statistically significant (F

(2,285 =11,718, p=,000). Guilt and shame variables had a low significant relationship with treatment motivation scores (R=,276, R 2 =,076, p=,000). The mentioned variables explain 7.6% of the total variance of treatment motivation scores.

According to standardized regression coefficients (β), the relative importance of the predictor variables on treatment motivation scores; guilt (β=.252, t=3,671, p=.000) and shame (β=.039, t=.566, p=.572). When the t-test results regarding the significance of the regression coefficients are examined, it is seen that only guilt scores are a significant predictor of treatment motivation scores. The shame variable does not have a significant effect. Also, one sample t-test analysis shows the comparison of the guilt and shame score averages of participants diagnosed as opioid addicts. One-sample t-test analysis results are given. Accordingly, the guilt score average ($\bar{x}$=47.27) of the participants diagnosed as opioid addicts is significantly higher than the shame score average ($\bar{x}$=38.24) (t=81.563; p<.05).

Table 4 shows the comparison of the rank averages of the scales used in the research according to the variable of duration of opioid use. Kruskal Wallis test results are given. Accordingly, it was determined that there was a significant difference in the extrinsic motivation scale rank averages of participants diagnosed as opioid addicts (H=16.371; p<.001). Pairwise comparison analysis was performed to determine which differences existed between groups. Accordingly, the extrinsic motivation scale rank averages of those who have used opioid for 3 years or more ($\bar{x}$ rank = 166.94; $\bar{x}$ rank = 149.22) are significantly higher than the scale rank averages of participants who have used opioid for 1-3 years ($\bar{x}$ rank = 98.94). No significant difference was detected in the rank averages of the other scales according to the variable of duration of opioid use (p>.05).

Table 5. Comparison of scale scores according to treatment application status

Variable	Group	N	$\bar{x}$	t	sd.	p
Guilt	Yes	233	47.74	1.668	286	.096
	No	55	45.29			
Shame	Yes	233	38.78	2.090	286	**.038***
	No	55	35.95			
Intrinsic Motivation	Yes	233	49.00	1.724	70	.089
	No	55	47.16			
Extrinsic Motivation	Yes	233	11.40	.350	286	.727
	No	55	11.24			
Seeking Interpersonal Help	Yes	233	21.66	-.086	286	.931
	No	55	21.71			
Trust in Treatment	Yes	233	18.76	1.172	286	.242
	No	55	18.02			
TMQ Total	Yes	233	100.81	1.641	286	.102
	No	55	98.13			

*p < .05, TMQ: Treatment and Motivation Questionnaire

Table 5 shows the comparison of the scale score averages used in the research according to the variable of applying for treatment. Independent samples t-test analysis results are given. Accordingly, it was determined that there was a significant difference in the shame score averages of the participants diagnosed as opioid addicts (t=2.090; p<.05). The shame score average of the participants who applied for treatment ($\bar{x}$=38.78) is significantly higher than the average score of the participants who did not apply ($\bar{x}$=35.95). No significant difference was detected in the mean scores of the other scales according to the variable of seeking treatment (p>.05).

Discussion

Throughout the annals of human history, diverse substances have been employed for purposes beyond their

original intentions. Substance addiction has emerged as a significant public health concern, precipitating profound challenges for both individuals and society. This pervasive issue not only poses a substantial financial burden on nations but also exhibits an escalating prevalence, with a declining age of onset. The effects of the feelings of guilt and shame felt by individuals diagnosed with opioid addiction who applied to Balıklı Rum Hospital as inpatients, on their motivation levels during the treatment process, duration of opioid use and previous application for treatment. The research hypotheses are discussed in order of their status variables. The results of the research were evaluated in the context of the findings obtained.

The investigation revealed a significant association between the degree of guilt and intrinsic motivation, trust in treatment, and treatment motivation within the studied participants. Notably, there was a positive correlation observed, indicating that heightened levels of guilt in individuals diagnosed with opioid addiction corresponded to an increased treatment motivation. Conversely, no substantial relationship was discerned between guilt and extrinsic motivation levels, as well as interpersonal help-seeking behavior among the study participants. In alignment with existing literature, a study conducted with alcohol-dependent individuals underscored elevated levels of guilt and shame in those dependent on alcohol compared to their non-alcohol-dependent counterparts (24). Differential impact of guilt and shame on the treatment and recovery processes in individuals with substance and alcohol abuse issues (25). Their findings indicated a positive contribution of feelings of guilt to individuals' inclination towards compensatory behaviors and motivational levels.

The study revealed a significant correlation between the level of shame and intrinsic motivation levels, as well as general treatment motivation levels, among the participants. Findings indicated that individuals with opioid addiction experiencing heightened levels of shame demonstrated a greater inclination to seek treatment, displaying an overall heightened motivation for treatment. The emotion of shame emerged as a notable and positively contributing factor in the treatment process for opioid addiction. It was observed that individuals in remission for at least six months, diagnosed with addiction, exhibited elevated levels of guilt and shame compared to a control group without any diagnosis (26). Nevertheless, no significant relationship emerged between the level of shame and extrinsic motivation, interpersonal help-seeking behavior, and trust in treatment among the study participants. Consequently, the study findings suggested that the intensity of shame and motivation stemming from external factors did not significantly impact the proclivity of individuals addicted to opioid to seek support from others or engage in the treatment process.

Contrary to past research indicating that individuals diagnosed with alcohol addiction tend to have higher shame levels (27), the present study's outcomes deviate, possibly attributed to the study's restriction to patients at Balıklı Rum Hospital and its exclusive focus on opioid addiction. In alignment with research by Rodríguez et al. (25), the current study identified that the intensity of guilt and shame positively predicted readiness for change, displaying a negative correlation with the desire to use. Additionally, findings from study (25) suggested that, unlike guilt, shame heightened distress levels in individuals, leading to the perpetuation of problematic behaviors rather than seeking solutions.

The study discerned that the levels of guilt and shame among participants significantly predicted treatment motivation at a low magnitude. The research findings indicated a modest association between feelings of guilt and shame and treatment motivation. Specifically, it was identified that only the level of guilt exerted a contributory influence on the treatment motivation associated with opioid addiction. Conversely, the sole level of shame did not exhibit any discernible impact on treatment motivation.These studies contended that, within the ambit of addiction treatment, feelings of guilt and shame serve as indirect determinants, contributing to the treatment process to a certain extent (29).

The research revealed a noteworthy distinction, indicating that the levels of guilt experienced by participants were significantly higher than their levels of shame. In examining the conceptualization of guilt and shame, it is discerned that shame is an emotion arising from individuals' evaluation of how they are perceived by others, while guilt is identified as an individual's sense of responsibility and remorse resulting from their own actions. The research suggests that feeling guilty about opioid use is common because it's seen as a harmful action that directly affects the individual. This guilt might motivate people to seek treatment. Another study supports this idea, showing that guilt is higher when the harm is personal, like with opioid use (25).

A noteworthy association was established between shame levels and gender among the study participants. Specifically, the research findings indicated that women with opioid addiction exhibited higher levels of shame compared to their male counterparts. In the existing literature, it is posited that women generally experience elevated feelings of guilt and shame irrespective of age group (30-33).

Significant disparities were identified in interpersonal help-seeking behavior based on marital status among the participants. Notably, married individuals with opioid addiction demonstrated a greater propensity to seek support from their social network compared to their single counterparts. Existing studies emphasize that emotional states, particularly feelings of guilt and shame, play a pivotal role in hindering the establishment of ideal relationships and adversely impacting the addiction treatment process (13,27,34,35).

A substantial difference was discerned in extrinsic motivation levels based on the duration of opioid use. Participants with a opioid usage duration of 3 years or more exhibited higher levels of treatment-seeking due to external pressures compared to those with a usage duration of 1-3 years. Given opioid's higher relapse rates due to its addictive nature, individuals face increasing challenges in quitting the substance with prolonged usage. Consequently, this study suggests that external pressure plays a predominant role in treatment initiation as individuals' intrinsic motivation diminishes over time.

Significant variations in shame levels were identified based on the variable of previous treatment-seeking behavior. Individuals with a history of seeking treatment exhibited higher levels of shame compared to those who had not sought treatment before. This dynamic is perceived to stem from societal pressures, negative attitudes, value judgments, diminished self-esteem, and feelings of failure and inadequacy after unsuccessful treatment attempts (36).

The research findings underscored relationships between feelings of guilt in individuals with opioid addiction and their intrinsic motivation, trust in the treatment process, and overall treatment motivation. However, no discernible relationships were found between guilt and extrinsic motivation, interpersonal help-seeking behavior, or shame and extrinsic motivation, interpersonal help-seeking behavior, and trust in treatment. Notably, guilt prominently emerged as a factor influencing opioid addiction treatment motivation, whereas shame alone did not significantly impact motivation for treatment. The study observed that guilt levels surpassed shame levels among opioid addicts, suggesting a positive contribution to both treatment motivation and the recovery process. The limited existing literature on the relationship between addiction, guilt, shame, and treatment motivation generally posits that feelings of guilt and shame play a negative role in addiction and actively contribute to its development (13,27,37).

In conclusion, increasing the number of rehabilitation centers that can be visited after the heroin addiction treatment process will contribute positively to individuals' ability to adapt to a healthy life more easily after the detoxification process. It is thought that focusing on group work within the scope of psychodrama during the heroin addiction treatment process will make it easier for the individual to stage the negative emotions that he or she has difficulty coping with and to gain awareness within the group. It is thought that providing psychoeducation about addiction by non-governmental organizations to heroin addicts from whom they receive social support will contribute positively to the treatment process. Additionally, factors such as shame and guilt may be associated with additional psychiatric conditions such as depression. Longitudinal studies can be conducted on the relationship between guilt and shame about opoid addiction and treatment motivation. Factors such as shame and guilt, which can be considered a limitation of this study, may be associated with additional psychiatric conditions such as depression. This limitation can be taken into consideration and investigated in future studies.

References

1. Lander L, Howsare J, Byrne M. The impact of substance use disorders on families and children: from theory to practice. Soc Work Public Health. 2013; 28(3-4): 194-205.
2. Schlag AK. Percentages of problem drug use and their implications for policy making: A review of the literature. Drug Sci Policy Law 2020; 6: 1-9.

3. Dönmezer S, Çetin Ö. Criminal law. Journal of Istanbul University Law Faculty 1975; 28(1): 237-256.
4. Günal HY. Uyuşturucu Madde Suçları. Ankara: İş Basım ve Yayın, 1976.
5. Ögel K, Karal A, Tamar D, Çakmak D. Alcohol and Substance Handbook. Istanbul: Bakırköy Psychiatric and Neurological Diseases Hospital, 1998.
6. American Psychiatric Association (APA). Diagnostic and Statistical Manual of Mental Disorders, 5th edition: DSM-5. Washington DC: American Psychiatric Publishing, 2013.
7. TUBİM Türkiye Drug Report. Ankara: Turkish Drug and Drug Addiction Monitoring Center, 2011.
8. European Monitoring Center for Drugs and Drug Addiction. European Drug Report 2014. Luxembourg: Publications Office of the European Union, 20142014.
9. Kulaksızoğlu B, Kara H, Özçelik Ö, Kuloğlu M. Use of naltrexone implant in the treatment of opioid addiction: A retrospective study. Anadolu Psikiyatri Derg 2019; 20(2): 133-138.
10. Neale J, Nettleton S, Pickering L. Gender sameness and difference in recovery from heroin dependence: A qualitative exploration. Int J Drug Policy 2014; 25(1): 3-12.
11. Kahler CW, Strong DR, Read JP. Toward efficient and comprehensive measurement of the alcohol problems continuum in college students: The Brief Young Adult Alcohol Consequences Questionnaire. Alcohol Clin Exp Res 2005; 29(7): 1180-1189.
12. Room R. Stigma, social inequality and alcohol and drug use. Drug Alcohol Rev 2005; 24(2): 143-155.
13. Treeby M, Bruno R. Shame and guilt-proneness: Divergent implications for problematic alcohol use and drinking to cope with anxiety and depression symptomatology. Pers Individ Diff 2012; 53(5): 613-617.
14. Mcgaffin, Breanna J, Lyons, Geoffrey CB, Deane, Frank P. Self-forgiveness, shame, and guilt in recovery from drug and alcohol problems. Subst Abuse 2013; 4: 396-404.
15. Şahin NH, Şahin N. Adolescent guilt, shame, and depression in relation to sociotropy and autonomy. The World Congress of Cognitive Therapy, Toronto, 1992.
16. Savaşır I, Şahin N. Evaluation in Cognitive Behavioral Therapies: Frequently Used Scales. Ankara: Turkish Psychologists Association Publications, 1997.
17. Evren C, Saatçioğlu Ö, Dalbudak E, et al. Factor structure, validity and reliability of the Turkish version of the Treatment Motivation Questionnaire in alcohol-dependent patients. Journal of Dependence 2006; 7(4): 117-122.
18. Ryan RM, Plant RW, O'Malley S. Initial motivations for alcohol treatment: Relationships with patient characteristics, treatment involvement, and dropout. Addict Behav 1995; 20(3): 279-297.
19. Tabachnick BG, Fidell LS. Using Multivariate Statistics (6th Ed). California: California State University, 2013.
20. Kleber HD. Pharmacologic treatments for opioid dependence: detoxification and maintenance options. Dialogues Clin Neurosci 2007; 9(4): 455-470.
21. Hachtel H, Vogel T, Huber CG. Mandated treatment and its impact on therapeutic process and outcome factors. Front Psychiatry 2019; 10: 445975.
22. Batchelder AW, Glynn TR, Moskowitz JT, et al. The shame spiral of addiction: Negative self-conscious emotion and substance use. PLoS One 2022; 17(3): e0265480.
23. Sapkota S, Khadka, A, Akela G. Contributing factors to relapse of drug addiction among clients attending rehabilitation centres of Dharan, Nepal. Journal of Chitwan Medical College 2016; 6(3): 20-25.
24. Bilim Şenel G. Comparison of Individuals With And Without Alcohol Problems In Terms Of Feelings Of Guilt And Shame, Styles Of Coping With Stress And Internal-External Locus of Control. (Master's thesis). Maltepe University, Institute of Social Sciences, Istanbul, 2013.
25. McGaffin BJ, Lyons GC, Deane FP. Self-forgiveness, shame, and guilt in recovery from drug and alcohol problems. Subst Abuse 2013; 34(4): 396-404.
26. Kalyoncu ÖA, Mırsal H, Pektaş DÖ, et al. Feelings of guilt and shame in alcohol addicts. Journal of Dependence 2002; 3(3): 160-164.
27. Dearing RL, Stuewig J, Tangney JP. On the importance of distinguishing shame from guilt: Relations to problematic alcohol and drug use. Addict Behav 2005; 30(7): 1392-1404.
28. Rodríguez JM, Murphy K, Stanton C, et al. The composition of the gut microbiota throughout life, with an emphasis on early life. Microb Ecol Health Dis 2015; 26: 26050.
29. Piers G, Singer MB. Shame and Guilt. Springfield, Illinois: Charles C, 1953.
30. Cengiz B. The Relationship between Alcohol Use and Depression, Shame and Guilt in University Students: Examining the Moderating Effect of Religious Attitude. (Master's thesis). Nicosia: Near East University, Department of Clinical Psychology, 2020.
31. Tangney JP, Dearing RL. Shame and Guilt. New York: Guilford Press, 2003.

32. Harder DW. Shame and guilt assessment, and relationships of shame- and guilt-proneness to psychopathology. In JP Tangney & KW Fischer (Eds.), Self-Conscious Emotions: The Psychology of Shame, Guilt, Embarrassment, and Pride (pp. 368-392). New York: Guilford Press, 1995.
33. Lutwak N, Ferrari JR. Moral affect and cognitive processes: Differentiating shame from guilt among men and women. Pers Individ Diff 1996; 21(6): 891-896.
34. Stewart SH, Karp J, Pihl RO, Peterson, RA. Anxiety sensitivity and self-reported reasons for drug use. J Subst Abuse 1997; 9, 223-240.
35. Dodes LM. Addiction, helplessness, and narcissistic rage. Psychoanal Q 1990; 59(3): 398-419.
36. Richter SS, Brown, SA, Mott MA. The impact of social support and self-esteem on adolescent substance abuse treatment outcome. J Subst Abuse 1991; 3(4): 371-385.
37. O'Connor LE, Berry JW, Inaba D, et al. Shame, guilt, and depression in men and women in recovery from addiction. Journal of substance abuse treatment 1994; 11(6): 503-510.

Yazar Katkıları: Tüm yazarlar ICMJE'in bir yazarda bulunmasını önerdiği tüm ölçütleri karşılamışlardır
Etik Onay: Bu çalışma için ilgili Etik Kuruldan etik onay alınmıştır.
Hakem Değerlendirmesi: Dış bağımsız.
Çıkar Çatışması: Yazarlar çıkar çatışması olmadığını beyan etmişlerdir.
Finansal Destek: Yazarlar finansal destek beyan etmemişlerdir.
Not: Bu makale ilk yazarın yüksek lisans tez çalışmasından üretilmiştir.
Author Contributions: All authors met criteria recommended by ICMJE for being an author
Ethical Approval: Ethical approval was obtained for this study from relevant Ethics Committee.
Peer-review: Externally peer-reviewed.
Conflict of Interest: The authors have declared that there is no conflict of interest.
Financial Disclosure: Authors declared no financial support
Acknowledgment: This article is derived from the first author's master's thesis.