# Kastamonu Education Journal, 2021, Vol. 29, No:4, 134-148

doi: 10.24106/kefdergi.789814

Araştırma Makalesi / Research Article

# Investigation of Childhood Traumas and Cognitive Emotion Regulation as the Predictors of Unforgiveness<sup>1</sup>

Affetmemenin Yordayıcıları Olarak Çocukluk Çağı Travmaları ve Bilişsel Duygu Düzenlemenin İncelenmesi

Uğur Yiğit Karataş<sup>2</sup>, Ahu Arıcıoğlu<sup>3</sup>

# **Keywords**

- 1. unforgiveness
- 2. childhood traumas
- 3. emotion regulation

#### **Anahtar Kelimeler**

- 1. affetmeme
- 2. çocukluk çağı travmaları
- 3. duygu düzenleme

Başvuru Tarihi/Received 03.09.2020

Kabul Tarihi /Accepted 16.01.2021

#### **Abstract**

The purpose of this study was to determine the predictive powers of childhood trauma and cognitive emotion regulation on unforgiveness. The participants of the study consisted of 351 students studying at Pamukkale University at seven different faculties and colleges during the academic year of 2019-2020. Childhood Trauma Scale Short Version, Transgression-Related Interpersonal Motivations Inventory (TRIM-18), Cognitive Emotion Regulation Questionnaire and Personal Information Form developed by the researcher were utilized for data collection. For analysis of the data; SPSS 25.0 package program were used and correlation analysis, t-test analysis and multiple linear regression were used. Results show that, unforgiveness does not differ according to gender, perceived trauma experience and source of perceived trauma, childhood traumas and adaptive emotion regulation strategies differ according to the source of perceived trauma. Positive correlations were found between unforgiveness and childhood traumas, maladaptive emotion regulation strategies. Similarly, a positive correlation was found between childhood traumas and maladaptive emotion regulation strategies. Negative correlation was found between childhood traumas and adaptive emotion regulation strategies and maladaptive emotion regulation strategies and maladaptive emotion regulation strategies explained about 13% of the variance in unforgiveness.

#### Öz

Bu araştırmanın amacı çocukluk çağı travmaları ve bilişsel duygu düzenlemenin, affetmeme üzerindeki yordama güçlerini belirlemektir. Araştırmanın çalışma grubunu 2019-2020 eğitim öğretim yılında Pamukkale Üniversitesi'nde yedi farklı fakülte ve yüksekokulda öğrenim görmekte olan 351 öğrenci oluşturmaktadır. Verilerin toplanmasında Çocukluk Çağı Travma Ölçeği Kısa Versiyonu, Affetmeme Ölçeği, Bilişsel Duygu Düzenleme Ölçeği ve araştırmacı tarafından hazırlanan Kişisel Bilgi Formu kullanılmıştır. Elde edilen verilerin analizinde; SPSS 25.0 paket programından yararlanılmış ve verilerin analizinde korelasyon analizi, t-tesi analizi ve çoklu doğrusal regresyon analizi kullanılmıştır. Araştırmada elde edilen sonuçlara göre affetmeme cinsiyete, algılanan travma yaşantısına ve algılanan travmanın kaynağına göre farklılaşmamakta, çocukluk çağı travmaları ve uyumlu duygu düzenleme stratejileri algılanan travmanın kaynağına göre farklılaşmamaktadır. Affetmeme ile çocukluk çağı travmaları ile uyumlu duygu düzenleme stratejileri arasında olumlu yönde anlamlı bir ilişki varken, çocukluk çağı travmaları ile uyumlu duygu düzenleme stratejileri arasında olumsuz yönde anlamlı bir ilişki vuyumsuz duygu düzenleme stratejileri arasında ile uyumlu duygu düzenleme stratejileri arasında vuyumlu duygu düzenleme stratejileri arasında vuyunlu duygu düzenleme stratejileri alt boyutları ile beraber affetmemeye ilişkin varyansın yaklaşık %13'ünü acıklamaktadır.



<sup>&</sup>lt;sup>1</sup> This is the summary of the master's thesis prepared by Uğur Yiğit Karataş under the supervision of Assoc. Prof. Dr. Ahu Arıcıoğlu at Pamukkale University Guidance and Psychological Counseling Master's Program.

<sup>&</sup>lt;sup>2</sup> Turkey; https://orcid.org/0000-0003-4182-0331

<sup>&</sup>lt;sup>3</sup> Corresponding Author: Pamukkale University, Faculty of Education, Department of Educational Science, Denizli, Turkey; https://orcid.org/0000-0002-1068-11

## **INTRODUCTION**

Life is a phenomenon that has been tried to be explained by several sciences. It has been explained in many ways until today. Schrödinger, who is known for his works on physics, describes the life on his work called "What is Life" as the act of the matter in an orderly and lawful manner, based on partially preserved existing order (Schrödinger, 1967). Philipp Frank (1962) describes the life as the change of location on four-dimensional universe by occurrences which we encounter. According to Pross (2012), life is self-sustaining, kinetically stable dynamic network of reactions. In this point of view, it can be said that the life phenomenon is seen equivalent to be in motion by positive sciences.

On the other hand, philosophy examines life in a different perspective. For instance, Nietzsche (1901) describes life as a state which contains battle constantly and emphasizes the motion and to be in interaction. When the science of psychology is observed, Freud (1915) discussed the life on dialectical basis and said that an individual who wants to live the life must also prepare themselves for death, which is the opposite of life. However, Adler discusses the life is a precession and points out that the motion is the premier characteristic of life. According to Adler, individuals generate a lifestyle in this motion (Adler, 1964).

While natural sciences, philosophy and social sciences having different approaches on the concept of life, they basically emphasize on the mobility and continuity which life includes. Although life basically includes a mobility and continuity, some occurrences in life can affect this mobility and continuity negatively. One of these occurrences in life is trauma.

The word "trauma", which is used to define personal injuries in medical literature, however, in spiritual and emotional field, the word "traumas" is used to define mental injuries which cause individuals' cognitive, sensual and emotional functions getting markedly restricted and making them unable to live on their normal lives. In other words, traumas are states that individuals' obsessive thoughts during specific occurrences, ideas and images (Ruppert, 2014). Traumatic experiences cause individuals to experience extreme fear and terror. Individuals who are victims of trauma become unable to appropriately answer back and they suffer from traumatization. Traumatic life situation comes on very suddenly, it is extremely uncertain and it undermines the spiritual integrity of the individual (James and Gilliland, 2012; Terr, 2003;). Not only adults but also children may be exposed to traumatic experiences. Children are much more vulnerable population than other age groups in terms of exposure to traumatic experiences, because the protection of children is strictly connected to the protection provided by their parents, also their bonding with their parents (Levers, 2012). As a consequence, it reveals another concept of childhood traumas. Concept of childhood traumas is underage individuals', children's, negative behaviors and life events that are shaped by physical, sexual, emotional abuse, neglect and other forms of exploitation that negatively affect children's physical health, life safety, physical development, mental health or their emotions in establishing a secure connection in interpersonal relationships (WHO, 2006). Childhood traumas are examined under the topics of physical abuse, emotional abuse, emotional neglect and physical. As well as, family crises, war, migration and natural disaster can be defined as childhood traumas (Taner and Gökler, 2004).

Experience of trauma has the potential of changing the active usage of emotion regulation strategies and as a result of that it can cause the failure of adherence to certain rules in social situations (Hagan, 2015). Although the conceptualizations about understanding the effects of trauma differ significantly, it is known that there is a consensus on some basic symptoms such as emotion regulation (Ehring and Quack, 2010). Emotion regulation can be defined as the complete processes of changing, directing and taking control of the usual flow of emotions. In other words, emotion regulation is the ability to evaluate, control, monitor, and change an individual's emotional responses to achieve the goal that they set (Wenar and Kerig, 2005). Emotion regulation is an important process that allows people to continue their daily lives without much practice on their emotions. Occasionally, emotion regulation may fail, but emotion regulation strategies may be very useful if they are used appropriately and in the right context. Sometimes people can choose unforgiveness which is not a functional way to eliminate their negative emotions (Jones Ross, 2013). However, victims look for ways to get rid of the negative effects of a damage. One of these ways is unforgiveness.

It draws the attention that a lot of studies has been done in recent years on the concept of forgiveness, which is one of the emerging concepts of the development of positive psychology (Ho and Fung, 2011). Forgiveness, which is considered as a positive personality characteristic in social relationships (Worthington, 2005) also caused to be focused on the concept of unforgiveness, hence, it is obvious that the concept of unforgiveness is examined along with forgiveness (Lozano, 2018; Stackhouse, Ross and Boon, 2018; Szablowinski, 2010; Wade and Worthington, 2003; Worthington and Wade, 1999). Distinctively from the concept of forgiveness, the concept of unforgiveness is defined as a cold emotion which makes exposed to anger, suffering or perhaps hate (Worthington and Wade, 1999). However, it is assumed that the development of unforgiveness will result in repeated thoughts about the nature of a crime, the consequences of the victim or victim in the relationship, and the person who harmed victims (Barry et al., 2001; Fincham, 2000). A victim who has been harmed, to the extent that they can forgive the person who hurt them, changes their reaction to the criminal, that is, the negative behavior towards the person who hurt them, with their own positive reaction (McNulty, 2011). If an intense feeling of anger that occurs after a person has been hurt by the other party gets ahead of the situation about the harm, the person who hurt or the victim's forgiveness of themselves, the victim enters into a vicious cycle of consuming themselves. Unforgiveness, in other ways, builds on this intense feeling of anger that victim is in (Worthington and Scherer, 2004). Similarly, Harris and Thoresen (2005) stated that the feeling of anger is a component of unforgiveness and anger is a risk for physical and psychological health, therefore unforgiveness is also a risk for physical and psychological health. It can be said that unforgiveness is a complex phenomenon created by a triple structure including emotional rumination, cognitions and perceptions of the harmed person. After a harm, this triple structure shows up in various ways when victims enter into process of unforgiveness. Unforgivable crimes generally create sort of inner conflict or a state of struggle for victims (Jones Ross, 2013). Worthington (2006) stated that individuals try different methods to reduce negative feelings which are related to unforgiveness. In order to reduce these negative feelings about unforgiveness, some individuals use different means, such as seeking another social support, seeking psychological help, orientation to religious beliefs, cognitive reframing. However, in addition to these positive or functional solution strategies, they can also resort to non-functional ways such as revenge, loss of faith in justice or denial. Murphy (2003), on the other hand, argues that in some cases, forgiveness may compromise one's moral values and that alternatives to forgiveness should be created. In other words, while intense feelings of anger and revenge can create refusal to forgiveness, what keeps people from forgiveness may have been their value judgments or moral attitudes. According to the study of Stackhouse, Ross and Boon (2018), unforgiveness is a concept that is not well understood yet.

Until today, people have been exposed to both individual and social traumas in every age. However, with the development of globalization and technology in the modern age we live in, experiences that can destroy human consciousness and discovering have spread with social networks and this is engraved in the fabric of trauma and the way people think about themselves. In conjunction with this, Chul Han (2010) named the period we live in as a performance society and stated that this performance society created defeated, unhappy and traumatized people. It is thought that the freezing of time (Audergon, 2004) and the past being alive in the form of a painful internal disorder (Van der Kolk, 2019) in people exposed to traumatic experiences may be related to cold feelings that underlie unforgiveness. At this point, it can be said that those who are exposed to traumatic experiences can resort to incompatible emotion regulation strategies. Based on all of these, it can be said that there is a need to investigate the relationship between trauma, emotion regulation and unforgiveness.

Based on the need in the literature, in this study: "Are they significant predictors of childhood traumas and cognitive emotion regulation in unforgiveness scores of university students and does unforgiveness differ based on various demographic and categorical variables?" The answer to the question was sought. Sub-problems to be tested according to the main problem of the study are as follows:

- 1-Do the levels of unforgiveness differ significantly according to the gender variable?
- 2-Do childhood trauma scores differ significantly according to the gender variable?
- 3-Do cognitive emotion regulation strategies differ significantly according to the gender variable?
- 4- Do the levels of unforgiveness differ significantly according to the perceived traumatic life situation?
- 5-Do childhood trauma scores differ significantly according to the source of the perceived traumatic experience?
- 6-Do the levels of unforgiveness differ significantly depending on the source of the perceived traumatic experience?
- 7-Do cognitive emotion regulation strategies differ significantly according to the source of the perceived traumatic experience?

## **METHOD**

## **Research Model**

Correlational survey model was used in this study. Correlational survey models are research models that aim to determine the presence or degree of co-change between two or more variables (Karasar, 2016). The independent variables of the study were childhood traumas and cognitive emotion regulation, and the dependent variable was unforgiveness. In addition, gender, perceived traumatic experience, and the source of perceived traumatic experience were also included in the analysis.

# **Research Grup**

The survey group consists of 351 students who are studying in various departments of seven different faculties. There are 245 female students (69.8%) and 106 male students (30.2%) in the survey group. Participants' ages range from 18 to 44 (x = 20.23, sd = 2.49). The survey group consists of 139 first grade (39.6%), 107 second grade (30.5%), 84 third grade (23.9%), 21 fourth grade (6.0%). The distribution of the students in the survey group by faculties is given in Table 1.

Table 1. Distribution of students in the survey group by faculties

Faculty	Number of Students	X
Faculty of Education	172	49,0
School of Physical Therapy and Rehabilitation	47	13,4
Faculty of Health Sciences	43	10,3
Faculty of Economics and Administrative Sciences	37	10,5
Faculty of Arts and Sciences	29	8,3
Faculty of Engineering	13	3,7
Faculty of Technology	10	2,8
Total	351	100,0

As is seen from Table 1, the students in the survey group are predominantly in the Faculty of Education in terms of accessibility. Faculty of Education is followed by the School of Physical Therapy and Rehabilitation, Faculty of Health Sciences, Faculty of Economics and Administrative Sciences, Faculty of Arts and Sciences, Faculty of Engineering and finally, Faculty of Technology. The distribution of the students in the survey group according to the departments is given in Table 2.

Table 2. Distribution of the students in the survey group by departments

Department	Number of Students	Χ
Psychological Counseling and Guidance	52	14,8
Physical Therapy and Rehabilitation	47	13,4
School Teaching	45	12,8
Nursing	43	12,3
Management Information Systems	37	10,8
Social Sciences Teaching	31	8,8
Philosophy	29	8,3
Preschool Education	28	8,0
English Language Teaching	16	4,6
Food Engineering	13	3,7
Manufacturing Engineering	10	2,8
Total	351	100,0

As is seen from Table 2, there are 351 students in the survey group. In the survey group, there are students who are studying in the Psychological Counseling and Guidance Department at the most, while there are students who are studying at least in the Department of Manufacturing Engineering.

#### **Data Collection Tools**

## **Personal Information Form**

In the survey, a personal information form was used to discover the demographic characteristics of the participants and their perceived traumatic experience history. In the personal information form, there are questions asking the participants' gender, age, department, class level, perceived socio-economic level, whether they were exposed to a traumatic experience before, and if they were exposed to a traumatic experience before, the source of experience. It was aimed to find out in which income group (lower, middle, upper) students see themselves with the perceived socio-economic status.

# **Short Version of Childhood Trauma Scale**

The scale, which deals with childhood physical, sexual and emotional abuse and emotional and physical neglect as five sub-dimensions, was developed as 53 items by Bernstein et al (Bernstein, Fink and Handelsman, 1994). In the Cultural Adaptation study of the Childhood Trauma Scale, which was adapted to Turkish on the 28-item short form, the test-retest reliability of the scale was found to be 0.90, while the internal consistency coefficient was found to be 0.93. The correlation coefficients are 0.90 for physical and emotional abuse, 0.85 for emotional neglect, 0.75 for sexual abuse, and 0.77 for physical neglect. The scale has five sub-dimensions: childhood physical, sexual, emotional abuse, and physical and emotional neglect. The bottom of the 28-item scale is as follows: 9, 11, 12, 15, 17 where physical abuse; Articles 20, 21, 23, 24, 27 include sexual abuse; Items 3, 8, 14, 18, 25. Emotional abuse; Physical negligence in Articles 1, 2, 4, 6, 26; Items numbered 5, 7, 13,19, and 28 were emotionally neglected. Items numbered 10, 16, and 22 related to trauma denial were not included in the total score. (Şar, Öztürk, & İkikardeş, 2012). The Cronbach alpha coefficient was .81 for the whole scale, .80 for physical abuse, .93 for sexual abuse, .70 for emotional abuse, .36 for physical neglect, and .79 for emotional neglect.

# **Scale of Unforgiveness**

The Unforgiveness Scale (TRIM-18), developed by McCullough, Root and Cohen (2006), consists of 18-item Likert-type responses and three subscales (forgiveness, revenge, avoidance). According to the results of the factor analysis, it was seen that AFÖ consists of forgiveness, avoidance and revenge sub-dimensions. The adaptation studies of the Unforgiveness Scale to Turkish culture were carried out by Küçüker and Duru (2016). 17 items of the scale and 3 sub-dimensions: Revenge (1,4,9,13,16), Avoidance (2,5,7,10,11,15,17) and Forgiveness (3,6,8,12,14). available in size. Test-retest reliability coefficients of the Unforgiveness Scale were calculated as .69 for forgiveness sub-dimension, .76 for avoidance sub-dimension, .78 for revenge sub-

dimension, and .80 for the whole scale. In this study, the Cronbach alpha coefficient was found as .80 for revenge sub-dimensions, .78 for forgiveness sub-dimension, .79 for avoidance sub-dimension, and .86 for the whole scale.

# **Cognitive Emotion Regulation Scale**

The Cognitive Emotion Regulation Questionnaire, developed by Garnefski, Kraaij, and Spinhoven (2001), is a five-point Likert-type measuring instrument consisting of 36 items. Cronbach alpha value of the sub-dimensions in the original form of CERS. 67 to. It ranges from 81. Self-Blame (1,10,19,28), Acceptance (2,11,20,29), Rumination (3,12,21,30), Positive Refocus (4,13,22,31), Re-Plan Focus (5,14,23,32), Positive Reassessment (6,15,24,33), Changing Perspective (7,16,25,34), Disaster (8,17,26,35) and Blaming the Other. There are 9 dimensions as (9,18,27,36). Onat and Otrar (2010) adapted the CERS to Turkish and determined the Cronbach Alpha value as  $\alpha$  = .784 and the test-retest reliability coefficient as "r = 1.00". In this study, the Cronbach alpha internal consistency coefficient was found to be .81.

## **Data Collection Method and Process**

After obtaining the necessary permissions from the Pamukkale University Ethics Committee, the data collection process was initiated and the scales of the survey were applied to the volunteer students in the classroom environment after obtaining the necessary permissions from the faculty members of the seven faculties and 11 departments at Pamukkale University. The data collection process included the Fall Semester of the 2019-2020 Academic year. The application of the scales was carried out on average between 20-25 minutes. Informed consent was provided in the personal information form given to the participants in the study.

## **RESULTS**

# Difference Analysis Between Demographic Variables and Observed Variables

After obtaining the necessary permissions from the Pamukkale University Ethics Committee, the data collection process was initiated and the scales of the survey were applied to the volunteer students in the classroom environment after obtaining the necessary permissions from the faculty members of the seven faculties and 11 departments at Pamukkale University. The data collection process included the Fall Semester of the 2019-2020 Academic year. The application of the scales was carried out on average between 20-25 minutes. Informed consent was provided in the personal information form given to the participants in the study.

Table 3. The T-test results for variables observed with gender

	F	emale	[	Male		Total		
	Х	SS	Χ	SS	Χ	SS	t	р
Childhood Trauma	31,34	5,50	32,15	5,82	31,58	5,60	-1,246	.214
Pyhsical Abuse	5,13	.59	5,47	1,21	5,23	.84	-3,516	.000*
Sexual Abuse	5,49	1,86	5,30	1,20	5,43	1,69	.950	.343
Emotional Abuse	6,47	1,94	6,36	2,08	6,43	1,98	.467	.641
Emotional Neglect	8,12	3,03	8,57	2,96	8,26	3,01	-1,281	.021*
Unforgiveness	57,47	11,20	55,41	10,58	56,85	11,04	1,609	.109
Revenge	12,83	4,43	12,77	4,96	12,81	4,59	.106	.916
Avoidance	26,77	5,67	24,65	5,02	26,13	5,56	3,326	.001*
Forgiveness	17,86	4,22	17,98	3,84	17,90	4,10	242	.809
Adaptive Emotion Regulation	69,33	10,23	69,37	10,31	69,34	10,24	033	.947
Positive Refocus	12,57	3,39	12,41	3,48	12,52	3,41	.408	.683
Refocusing on the Plan	14,96	2,85	15,90	2,73	15,24	2,84	-2,884	.004*
Acceptance	12,67	2,97	12,29	3,05	12,55	2,99	1,078	.282
Positive Reappraisal	14,82	3,08	14,84	2,87	14,82	3,01	053	.958
Changing Perspective	14,30	2,88	13,91	3,04	14,18	2,93	1,129	.260
Maladaptive Emotion Regulation	47,56	7,03	47,03	6,77	47,40	6,95	.657	.512

Table 3. The T-test results for variables observed with gender

Blaming Themselves	12,05	2,84	11,98	2,53	12,03	2,74	.219	.827
Rumination	15,65	2,59	14,67	2,97	15,35	2,75	3,079	.002*
Disaster	10,22	3,11	10,42	2,98	10,28	3,07	562	.575
Blaming The Other	9,64	2,59	9,95	2,39	9,73	2,53	-1,055	.292

(p\* < .05)

When Table 3 is examined, childhood traumas (X = 31.58, p > .05), unforgiveness (X = 56.85, p > .05), adaptive emotion regulation (X = 69.34, p > .05) and maladaptive emotion regulation (X = 47.40, p > .05). Considering the sub-dimensions of the variables, it is seen that physical abuse, which is one of the sub-dimensions of childhood trauma, significantly differentiates according to gender. Accordingly, the average physical abuse exposure of males is significantly higher than females (X = 5.23, p < .05). It is also seen that emotional neglect, which is one of the sub-dimensions of childhood trauma, significantly differentiates according to gender. Accordingly, the exposure of males to emotional neglect is significantly higher than females (X = 8.26, p < .05). It was found out that in the sub-dimensions of unforgiveness, avoidance significantly differentiated according to gender. Accordingly, avoidance levels of females are significantly higher than men (X = 26.13, p < .05). The sub-dimension of refocusing the plan, one of the adaptive emotion regulation strategies, also significantly differentiates according to gender. Accordingly, males use the plan refocusing strategy significantly more than females (X = 15.24, X = 15.24,

Table 4.T-test results for perceived traumatic experience and unforgiveness

	Ye	es	N	lo	То	tal		
	Х	SS	Χ	SS	Χ	SS	t	p
Unforgiveness (Total Point)	58,39	11,88	56,20	10,63	55,85	11,04	2,087	.089
Revenge	13,59	4,45	12,48	4,62	12,81	4,59	1,707	.038*
Avoidance	26,60	6,01	25,94	5,36	26,13	5,56	1,027	.305
Forgiveness	18,19	4,25	17,77	4,04	17,90	4,10	.864	.388

(\*p < .05)

When Table 4 is examined, the levels of unforgiveness of the participants who stated that they had been exposed to traumatic experiences before in their lives did not differ significantly from those who stated that they had not been exposed to traumatic experiences before (X = 55.85, p > .05). Considering the sub-dimensions of unforgiveness, the averages of those who perceived traumatic experiences before in terms of the revenge sub-dimension were significantly higher than those who did not (X = 12.81, P < .05). The results of the T-test regarding the perceived source of trauma and the observed variables are given in Table 5.

Table 5.T-test results regarding the perceived source of trauma and observed variables

	Fai	mily	Ot	her	Т	otal		
	X	SS	Χ	SS	X	SS	t	р
Childhood Trauma	34,57	6,04	32,03	5,75	33,25	6,03	2,207	.030*
Pyhsical Abuse	5,28	.85	5,32	1,08	5,29	.98	228	.820
Sexual Abuse	6,16	3,01	6,03	2,48	6,10	2,74	.230	.818
Emotional Abuse	6,92	2,05	6,66	2,11	6,78	2,09	.629	.531
Emotional Neglect	9,74	3,47	7,96	2,86	8,80	3,29	2,870	.005
Unforgiveness	58,66	11,00	58,19	12,62	58,38	11,88	.202	.840
Revenge	13,46	4,62	13,82	4,35	13,63	4,48	413	.680
Avoidance	27,18	5,62	26,11	6,30	26,66	5,99	.335	.365

Table 5.T-test results regarding the perceived source of trauma and observed variables

ruble 3.1-lest results regulating th	ie perceiveu s	ource of t	i uuiiiu uiiu	UDSET VEU	variables			
Forgiveness	18,02	3,87	18,25	4,62	18,08	4,24	280	.780
Adaptive Emotion Regulation	64,61	9,60	69,40	10,12	67,20	10,14	-2,482	.015*
Positive Refocus	11,33	3,12	12,21	3,33	11,82	3,25	-1,393	.167
Refocusing on the Plan	13,95	3,09	15,69	2,87	14,87	3,10	-2,979	.004*
Acceptance	12,64	2,61	12,83	2,80	12,75	2,71	360	.720
Positive Reappraisal	13,60	3,15	15,12	3,26	14,43	3,28	-2,424	.017*
Changing Perspective	13,07	2,83	13,53	2,82	13,31	2,83	840	.403
Maladaptive Emotion Regulation	48,44	6,91	47,39	6,91	47,93	6,92	.771	.442
Blaming Themselves	12,40	3,00	12,08	2,75	12,23	2,88	.55	.578
Rumination	15,22	2,72	15,67	2,89	15,50	2,79	823	.413
Disaster	10,24	3,30	10,31	3,41	10,29	3,35	107	.915
Blaming The Other	10,57	2,53	9,32	2,62	9,90	2,67	2,453	.016*

<sup>(</sup>p\* < .05)

When Table 5 is examined, the participants' perceived source of trauma differ significantly in terms of childhood traumas. Accordingly, the average childhood trauma of the participants who marked the family (family, relative) option for the perceived source of trauma was significantly higher than those who marked the other (friend, familiar people, stranger, situation) option (X = 33.25, p <.05). Among the perceived sources of trauma, adaptive emotion regulation strategies of those who marked the other option were significantly higher than those who marked the family option (X = 67.20, p < .05). The perceived source of trauma does not differ in terms of unforgiveness (X = 58.38, p>.05) and maladaptive emotion regulation strategies (X = 47.93, p>.05). Considering the sub-dimensions of the variables, refocusing on the plan, which is one of the sub-dimensions of adaptive emotion regulation strategies, also differs significantly. Accordingly, the averages of refocusing on the plan of those who marked the other option among the perceived trauma sources were significantly higher than those who marked the family option (X = 14.87, p <.05). Positive reappraisal from the sub-dimensions of adaptive emotion regulation strategies also differs significantly. Accordingly, the positive re-evaluation averages of those who marked the other option among the perceived trauma sources were significantly higher than those who marked the family option (X = 14.43, p <.05). Among the sub-dimensions of maladaptive emotion regulation strategies, blaming the other differs according to the perceived source of trauma. Among the perceived sources of trauma, blaming the other option of those who marked the family option was significantly higher than those who marked the other option (X = 9.90, p <.05). In the survey, the correlation analysis between the regression analysis and the assumptions of the regression analysis was performed to measure the predictive power of the independent variables on the dependent variable.

# **Regression Analysis**

# **Relationships Between Dependent and Predictive Variables**

Before proceeding to regression analysis, the bilateral relationships between the dependent variable, unforgiveness, and the predictor variables, childhood traumas, compatible and incompatible emotion regulation strategies, were examined by the Pearson correlation coefficient in order to look at the relationships between variables from the assumptions of the regression analysis. Results are included in Table 6.

Table 6. Pearson correlation coefficients between variables

	N	1.	2.	3.	4.
1.Unforgiveness	351	1	.184**	.009	.277**
2.Childhood Trauma	351		1	165**	.125*
3.Adaptive Emotion Regulation	351			1	.080
4. Maldaptive Emotion Regulation	351				1

<sup>(\* =</sup> p < .05, \*\* = p < .01)

As is seen in Table 6, there are significant positive correlations between unforgiveness and childhood traumas (r = .184 \*\*, p <.01), and maladaptive emotion regulation strategies (r = .277 \*\*, p <.01). In other words, it can be said that individuals who tend not to forgive have high average childhood traumas and use maladaptive emotion regulation strategies more. There is no

significant relationship between unforgiveness and compatible emotion regulation strategies (r = .080, p > .05). There are significant relationships between childhood traumas and compatible emotion regulation strategies in the negative (r = .165 \*\*, p < .01) and between incompatible emotion regulation strategies (r = .125 \*, p < .05). No significant relationship in any direction was found between adaptive emotion regulation and maladaptive emotion regulation strategies. The correlation analyzes between the sub-dimensions of non-forgiveness and predictor variables are included in Table 7.

Table 7. Correlation analyzes between unforgiveness and sub-dimensions of predictor variables	ana	yzes b	etween	unforgiv	eness an	ip-qns p	mensions	of predicto	or variab	les				
	-	2	က	4	2	9	7	60	6	10	11	12	13	14
1.Unforgiveness	Н	.064	.119•	.165**	.057	.137*	062	.147**	.022	012	.063	.229**	.266**	049
2.Physical Abuse		П	.030	.236**	.232**	.025	043	029	900	013	024	.091	.025	086
3.Sexual Abuse				.134*	010	003	-104	130*	.061	050	.043	920.	.033	060
4.Emotional Abuse				1	.400+	.025	.007	035	.028	031	.092	.112*	203**	047
5.Emotional Neglect					1	910.	168**	140**	.058	168••	064	.129	820.	165**
6.Blaming Themselves						П	135**	.036	.181"	018	.254**	.349**	980	029
7. Positive Refocus							1	.256**	.105*	.536	.032	047	.028	**065
8. Refocusing on the Plan								1	021	.415••	.231**	048	.003	.208**
9.Acceptance									1	.199••	.251**	.112**	860.	.260
10. Positive Reappraisal										1	.256**	198**	108•	.561**
11.Rumination											Н	.046	024	.151**
12.Disaste													384**	.036
13.Blaming the Other													1	007
14. Changing Perspective														-

As is seen in Table 7, there are positive significant relationships between unforgiveness and childhood trauma sub-dimensions, sexual abuse (r = .119 \*, p < .05) and emotional abuse (r = .165 \*\*, p < .01). There is a positive significant relationship between unforgiveness and refocusing on the plan, which is one of the sub-dimensions of compatible emotion regulation strategies (r = .147 \*\*, p < .01). There are also significant positive relationships between unforgiveness and disaster (r = .229 \*\*, p < .01) and blaming the other (r = .266 \*\*, p < .01), which are sub-dimensions of incompatible emotion regulation strategies.

# **Regression Analysis**

While analyzing the predictive power of predictor variables on unforgiveness, which is the independent variable of the survey, adaptive emotion regulation strategies that are not related to unforgiveness were not included in the analysis. In the analyses

where sub-dimensions were included, sub-dimensions related to unforgiveness were included in the analysis. The results of the regression analysis made with the total scores for the variables are included in Table 8.

Table 8. Multiple linear regression analysis with total scores for predictors of unforgiveness

Değişkenler	В	Standart Fault	β	t	р	Binary r	Partial r
1. Unforgiveness (Stable)	27,954	4,727		5,914	.000*		
2. Maladaptive Emotion Regulation Strategies	.410	.081	.258	5,034	.000*	.277	.261
3. Childhood Trauma	.299	.101	.152	2,961	.003*	.184	.157
R =.315	$R^2 = .099$						
F = 19,220	Edited R <sup>2</sup> = .094	p = .000*					

<sup>(\* =</sup> p < .05)

When the multiple type regression analysis results given in Table 8 are examined, the regression equation is significant according to the variance analysis result (F = 19,220; p < .05). Accordingly, color the variance approximately 9% (R = .315, R2 = .099) of the participants' unforgiveness scores as explained by childhood traumas and maladaptive emotion regulation strategies (p < .05 measured). Standardized regression coefficients () and significance information of independent variables were examined. Childhood traumas (p = .152; p < .05) and maladaptive emotion regulation strategies (= .258; p < .05) have positive and significant predictive power to not forgive. When the standardized regression coefficients beta () is examined, as seen in the incompatible regulation strategies (= .257) of the effective variable in terms of predictive power. The results of the regression on the sub-dimensions of the predictor variables are given in Table 9.

Table 9. Multiple linear regression analysis with sub-dimensions on predictors of unforgiveness

Variables	В	Standart Fault	β	t	р	Binary r	Partial r
1.Unforgiveness (Stable)	25,871	4,556		5,679	.000*		
Maladaptive Emotion Regulation Strategies (Total Point)	.410	.081	.258	5,034	.000*	.270	.261
3.Childhood Trauma (Total Point)	.299	.101	.152	2,961	.003*	.814	.157
3.1. Blaming the Other	.806	.240	.185	3,358	.001*	.266	.178
3.2. Sexual Abuse	.719	.332	.110	2,162	.031*	.119	.116
3.3. Refocusing on the Plan	.666	.196	.172	3,398	.001*	.147	.180
3.4. Emotional Abuse	.566	.287	.102	1,975	.049*	.165	.106
3.5. Disaster	.528	.196	.147	2,700	.007*	.229	.144
R =.371	R <sup>2</sup> =.138						
F = 11,028	Edited R <sup>2</sup> =.125	p=.000*					

<sup>(\* =</sup> p < .05)

When the result of multiple regression analysis is examined in Table 9, sub-dimensions of variables that are considered to be predictors change the results on unforgiveness. In the analysis made with sub-dimensions, it was seen that the variance in the unforgiveness scores of the variables increased the explanation value to approximately 13% (R = .371, R 2 = .138).

## **DISCUSSION**

The study was conducted to determine the predictive powers of childhood traumas and emotion regulation on unforgiveness and whether unforgiveness differed according to various categorical and demographic variables. Before the model analysis used in the study, the relationships between demographic variables and the independent variable, forgiveness, and the correlations

between dependent and independent variables were examined. In addition, it was examined whether the variables of gender and perceived source of trauma differ according to both dependent and independent variables. Childhood traumas and maladaptive emotion regulation strategies were found to be significant predictors of unforgiveness.

Firstly, gender variables were taken into account in the study, however, no significant difference was discovered based on gender variables. It is clearly seen that, in sub-dimensions, male significantly were exposed to physical abuse and emotional neglect when compared to females. When the relevant literature is examined, studies present different findings in terms of childhood trauma experiences of men and women. According to the study of Young and Korszun (2009), epidemiological data do not support the idea of women are certainly exposed to more traumatic experiences. In a meta-analysis study, they concluded that the studies in the literature do not support the hypothesis that women are more exposed to trauma and those studies on childhood trauma generally do not support gender differences (Tolin and Foa, 2008). Demirkapı (2013) also found that childhood traumas do not differ significantly based on the gender variable. Maikovich-Fong and Jaffee (2010) argue that childhood traumas, especially sexual abuse, may not be a highly predictive factor in terms of gender variable. In addition, they also stated that there may not be a strong empirical basis on the assumption that one gender group is more vulnerable to the negative consequences of sexual abuse or their exposure is more or girls and boys are affected differently by childhood traumatic experiences. It can also be said that the results of the physical abuse sub-dimension obtained in the study are the result of cultural factors. In this regard, in terms of raising children and in the family structures in Turkey, corporal punishment and physical violence is used as a tool to discipline and widely common in our society. As a result, it is seen as physical violence in so called traditional family structures (Güleç, Topaloğlu, Ünsal and Altıntaş, 2012). In our culture, it can be said that while boys are subjected to physical violence more, girls are subjected to language-structured forms of violence both within the family and socially (Zeren, Yengil, Çelikel, Arık and Arslan, 2012; Güloğlu et al., 2016). In relation to that, the distinction between boys and girls begins long before birth, and in many societies boys are seen as more valuable, as a result, men become the dominant group and women remain in the position of the abused group (Reskin, 2000). All in all, it can be said that the processes that explain why some childhood trauma victims are more psychologically destroyed than the others are more complex. Based on this study and the current literature, it can be said that explaining childhood traumas through the gender variable will create a narrow perspective and a deficiency in understanding the basic dynamics of the phenomenon.

In the use of adaptive emotion regulation strategies and maladaptive emotion regulation strategies, no distinctness was discovered between males and females. It can be said that this result is coherent with the literature (Küçüker, 2016; Mitrofan and Ciuluvica, 2012). When the sub-dimensions of adaptive emotion regulation strategies were examined, it was seen that the refocusing on plan sub-dimension differed significantly according to gender, and men used the strategy of refocusing the plan significantly more than women. Rumination, one of the sub-dimensions of maladaptive emotion regulation strategies, differs significantly according to gender, and women use this maladaptive emotion regulation strategy significantly more than men. Gardener, Carr, MacGregor, and Felmingham (2013), emphasized in their study that previous neuroimaging studies on gender differences in emotion regulation showed mixed results due to the difficulties in discriminating processes in emotional activation and emotion regulation, but they also stated that women had more difficulty in regulating emotional responses to negative stimuli. Although there are past studies showing that women are more likely to think about it more than men when they experience negative effects, it is a controversial situation whether this occurs as a result of a male-dominated understanding of science (Butler and Nolen-Hoeksema, 1994; Thomsen and the other, 2005). Scientific studies in which women are shown to be weak may cause researchers to doubt about gender differences in emotion regulation. It has been repeatedly assumed that individuals may have gender differences in their emotional responses or emotion regulation skills, but this is less consistent in experimental studies (Domes and the other, 2010). According to that, it can be said that while investigating the emotion regulation phenomenon, it is important to investigate the different dynamics of the phenomenon rather than a gender-based perspective in order to understand this phenomenon and make it functional. It is thought that a vicious circle will be the result when the studies on emotion regulation proceed solely on the basis of gender.

No significant difference in unforgiveness levels in terms of gender variable was discovered during the study. When it was taken into consideration the sub-dimensions of unforgiveness, it was observed that the avoidance levels of women were significantly higher than men. In a research performed by Küçüker (2016), it was determined that women's tendency to unforgiveness was lower than men. Considering that the concept of unforgiveness, which has come to the fore with research in positive psychology (Ho & Fung, 2011), is not a concept that has been frequently researched in the literature and unforgiveness is not yet well understood (Stackhouse, Ross, & Boon, 2018), some difficulties are encountered when researching this concept. Whether gender is being effective in the tendency to unforgiveness or not, is also one of these difficulties, because it can be said that gender-based research studies of this concept, which has already limited research, cause difficulties in supporting the findings. The previously perceived traumatic experience in the personal form of the study did not show a significant difference in terms of the unforgiveness variable. However, in terms of sub-dimensions, the average revenge sub-dimension of the participants who stated that they had a previous traumatic experience were found to be significantly higher than those who stated that they did not have a previous traumatic experience. In his study, Steiner (2018) stated that individuals who are exposed to severe traumatic experiences have problems in coping with the feeling of guilt and therefore the development of the healing cycle that includes forgiveness and repair can be prevented. Toussaint and Cheadle (2009) stated that individuals who are unforgiven can resort to the denial mechanism or, alternatively, attempts to take revenge. When the related literature was examined, no other study dealing with trauma and unforgiveness variables was found.

Also, analyzes were performed between the options included in the personal information form regarding the source of the trauma and the dependent-independent variables. The childhood trauma averages of those who marked the family / relative option in the group that previously indicated traumatic experience were significantly higher than those who marked the other (friend \ acquaintance \ stranger \ situation) option. This shows that the level of being affected by trauma is higher in the narrow circle (family, relatives). In addition to that, the averages of the adaptive emotion regulation strategies of the participants who stated the source of the traumatic experience with the "other" option were significantly higher than those who stated with the family / relative option. In terms of sub-dimensions, the average of blaming the other sub-dimensions of maladaptive emotion regulation strategies of those who marked the family / relative option was significantly higher than those who marked the "other" option. The averages of refocusing to the plan and positive refocusing, which are sub-dimensions of adaptive emotion regulation, were also higher in those who marked the "other" option.

Exposure to distress during childhood is often depends on family environment. In this aspect, it can be said that families with particularly abusive parents are a constant and direct source of threat to the personal safety of children and a common context for children who witness violence (Finkelhor, Turner, Ormrod and Hamby, 2009). Cicchetti (2004) stated that in spite of exposure to abuse has different contexts, it can often create a wider context of risk within the family. An unpredictable and chaotic family environment can also reduce children's perception that the world is safe and fair (Conger et al, 2002). These studies also show that family sourced traumas can be more hurtful. As a matter of fact, Fassler, Amodeo, Griffin, Clay, and Ellis (2005) stated in their study that the abuser being a member of the family, especially in terms of sexual abuse, will increase the effect of trauma on the child. Another study reveals that children exposed to parental abuse experience more PTSD symptoms (McCloskey & Walker, 2000). Brown (2019) examined family related traumatic experiences with the perspective of the psychoanalytic theory and stated that deep traumas that disintegrate the protective connection with the mother could cause such a great devastation for the traumatized person that they could completely collapse psychologically. Another problem related to traumas originating from family or relatives-acquaintances is that these traumas are more difficult to detect. This situation is especially seen in sexual abuse due to the difficulty of being noticed. For instance, Çöpür et al (2012) revealed that sexual abuse was reported to authorized institutions and organizations only at a rate of one in twenty on average. Based on these, it can be said that traumas caused by narrow circles (family, relatives, etc.) are more hurtful and harder to detect, and can prevent both victims' psychological support and legal action against criminals. The source of the traumatic experience did not differ significantly in terms of levels of unforgiveness. In other words, the source of the trauma individuals experienced did not make a difference in unforgiveness. In relation to that, the occurrence of a mentally hurtful event that is the basis of unforgiveness and the eventually the victim's feelings such as anger, bitterness, hostility, anger, hatred, fear, shame and anger could be the cause to reveal all sources of trauma (Greenberg, Warwar, & Malcolm, 2010).

In this study, the relationships between childhood traumas, unforgiveness and emotion regulation strategies used were also analyzed. According to the results, there are significant relationships between childhood traumas and unforgiveness, maladaptive emotion regulation strategies and adaptive emotion regulation strategies. There is a positive and significant relationship between unforgiveness and maladaptive emotion regulation strategies. Based on the results, it can be said that individuals with childhood trauma tend not to forgive, they use maladaptive emotion regulation skills more often, they have less adaptive emotion regulation skills, and those who tend not to forgive use maladaptive emotion regulation strategies more. Cross, Fani, Powers, and Bradley (2017) cited in their study that childhood maltreatment often involves abuse or neglect from the primary caregiver or the presence of domestic violence, and these children are less exposed to modeling appropriate emotional labeling, expression, and regulation behaviors, often modeled by primary caregivers. They mentioned that there is a possibility of staying and therefore they may not be able to develop strategies for appropriate emotion regulation. In another study, childhood traumas were found to be related to emotion regulation difficulties, and in this study, emotion regulation mediated the relationship between childhood traumas and sleep patterns and executive functions (Tinajero, 2020). Bridgett et al. (2011) stated that successful emotion regulation skills are learned primarily in the context of parent-child interaction. According to the study of Akyıl (2019), a significant relationship between childhood traumas and cognitive emotion regulation was discovered. Similarly, in the study of Burns et al. (2010), it was seen that emotion regulation partially predicted the relationship between physical and emotional abuse, which are subtypes of childhood trauma. The study of Bonn-Miller et al. (2011) similarly shows that increased emotion regulation difficulties can fully explain the relationship between post-traumatic stress symptom severity and coping strategies in the population exposed to trauma. When the subject is considered in terms of the physical findings of neurobiology, it can be said that the relationship between trauma and emotion regulation can be seen more clearly. For instance, Lengua et al.'s (2019) study revealed that childhood traumas cause changes in brain chemistry and slow down coping strategies for stress regulation. Studies conducted in the laboratory environment also present an experimental pattern for the relationship between trauma and emotion regulation. For instance, an experimental study with rats shows that exposure to traumatic experience at an early age may increase the risk of psychopathology associated with amygdala-prefrontal cortex (PFC) circuits (Honeycutt et al., 2020). Considering that the amygdala and prefrontal cortex regions are related to emotions, the results seem even more important. In family related childhood traumas, this learning becomes difficult and the possibility of using maladaptive emotion regulation strategies increases.

As a result of the regression analysis, it was revealed that childhood traumas and maladaptive emotion regulation strategies have the power to predict unforgiveness positively and significantly. Although there are studies dealing with childhood traumas and emotion regulation in the literature (Burns, Jackson, & Harding, 2010; Fernando et al., 2014; Lincoln, Marin, & Jaya, 2017), there is no study dealing with childhood traumas and unforgiveness. In his study on unforgiveness, Lozano (2018) stated that

unforgiveness could be an opposing stance against the moral calls of the survivors for forgiveness or reconciliation from others. In terms of trauma, it can be said that people who survive trauma, especially when the source of the trauma is closer, i.e. from a narrower circle, can maintain the opposing stance against the moral calls of forgiveness or reconciliation. At this point, it was seen that one of the predictors of not forgiving as a cold emotion (Worthington & Wade, 1999) was maladaptive emotion regulation strategies. In addition, disaster and blaming the other, which are among the maladaptive emotion regulation strategies, appear to be predictors of not forgiving. These predictors are also related to negative cognitions that underlie not forgiveness (Jones Ross, 2013). Worthington et al. (2007) stated that not forgiving about disaster always includes fear of future harm. It can be said that the freezing of time (Audergon, 2004) and the past being alive in the form of a painful internal disorder (Van der Kolk, 2019) in people exposed to traumatic experiences may be related to cold feelings that underlie unforgiveness, and at this point, maladaptive emotion regulation strategies can be used.

## Limitations

The first limitation of the study is about the study group. Seven faculties and schools taken from Pamukkale University prevent generalizations to be made for the whole university population. The number of students participating in the study from the departments and departments of the faculties also varies. In addition, the results of the study are only the results of people in a certain age range and education level, and again prevent the generalization of the same results in all age and education groups. The short version of the Childhood Trauma Scale, the Unforgiveness Scale (UFS) and the Cognitive Emotion Regulation Scale, which are the data collection tools of the study, are adapted and limited by the qualities it measures. These measurement tools are self-report and not using a measurement tool other than the self-report type is another limitation.

## **CONCLUSION AND SUGGESTION**

Trauma causes the child inside of ours to retreat. Deep traumas kill the child inside. This situation affects both self and relationality schemas, especially for people exposed to trauma. In this aspect, we can think of the consequences of childhood traumas in two ways. Both systems are affected in people who are exposed to such experiences. Some regions and countries seem to be more disadvantaged in terms of exposure to trauma. Since the self and relationality schemes of people in societies that are exposed to trauma are damaged, socially, they can exhibit negative thoughts and behaviors towards those who have personality traits that can reveal their natural child ego state in addition to their adult personality traits. In such situations, they tend to find it difficult to forgive both themselves and others because they have more negative emotions. If the trauma is far above the coping capacity of the individual, a psychotic situation may occur in which emotion regulation skills are completely disabled and the perception of reality is lost. In such cases, psychosis may build a fictional wall between the individual and the traumatic and injurious reality, imprison the individual in a universe in which they live only to themselves. This corresponds to piercing the protective armor of the ego. Individuals with pierced protective armor may be more exposed to emotions shaped by cold and revenge feelings of having difficulty in forgiveness and unforgiveness in their relationship patterns. Individuals with childhood traumas may find it difficult to regulate their emotions in adulthood. Individuals who use maladaptive emotion regulation strategies, on the other hand, tend to not forgive due to traumatic memories.

## Suggestions

# **Recommendations for the Researcher**

- 1. This is the first study investigating the relationship between childhood trauma and unforgiveness in Turkey. The research was conducted with Pamukkale University students. Considering this limitation in future studies, comparative studies on childhood traumas and cognitive emotion regulation as predictors of unforgiveness of students at different universities may be useful in diversifying the measures to be taken.
- 2. Studying the concept of unforgiveness with different variables may be helpful in elucidating this concept, which is not well understood yet. Adding childhood traumas and cognitive emotion regulation to different variables may be important in terms of developing the model and increasing its functionality.
- 3. The low childhood trauma scores in the study suggests that the concept of trauma may be more appropriate for qualitative studies rather than quantitative studies. Considering this limitation in future studies, it may be beneficial to study trauma in depth with qualitative and mixed methods in terms of diversifying the measures to be taken.

## **Suggestions for Implementation**

- 1. Considering the relationship of unforgiveness with cognitive emotion regulation, it can be said that especially Cognitive Behavioral Therapy applications will be beneficial in terms of unforgiveness.
- 2. In order to reduce unforgiveness and increase the quality of life of individuals, psychological counseling services gain importance, and it is important to provide services to individuals in need by experts in relevant institutions and organizations.
- 3. Considering that traumatic experiences from the family increase the motivation for revenge in unforgiveness, the use of family systems approach is also important in terms of its functionality.

- 4. It is very important for the teachers and administrators to inform the necessary institutions and organizations on time in revealing the childhood traumas. This is vital for quick preventive action.
- 5. In the event of a traumatic experience at school, the school counselor's action plan and crisis intervention plan are important for the child who is exposed to traumatic experience.
- 6. It can be said that learning emotion regulation strategies, especially in relation to caregivers, establishing psychoeducational groups related to emotion regulation skills, and educating families before birth and during child raising will be a protective factor. In this way, the emergence of unforgiveness can be prevented by reducing incompatible emotion regulation strategies.

# **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## **Funding**

The author(s) received no financial support for the research, authorship, and/or publication of this article.

# Statements of publication ethics

We hereby declare that the study has not unethical issues and that research and publication ethics have been observed carefully.

## Researchers' contribution rate

The study was conducted and reported with equal collaboration of the researchers.

## **Ethics Committee Approval Information**

This study was approved by the Ethics Committee of Pamukkale University Social and Humanities Scientific Research and Publication (09.10.2019. 68282350/2018/G12)

## **REFERENCES**

- Adler, A. (2011). Psikolojik aktivite (çev. B. Çorakçı). İstanbul: Say Yayınları. (Orijinal çalışmanın basım tarihi 1964)
- Akyıl, A. (2019). Çocukluk çağı travmaları, bilişsel duygu düzenleme ve psikolojik iyi oluş arasındaki ilişkinin incelenmesi: Diyarbakır ve Mardin örneği. Yayınlanmamış Yüksek Lisans Tezi. Fatih Sultan Mehmet Üniversitesi, Lisansüstü Eğitim Enstitüsü, İstanbul.
- Audergon, A. (2004). Collective trauma: The nightmare of history. Psychotherapy and Politics International, 2(1), 16-31.
- Bernstein, D. P., Fink L., Handelsman L. (1994). Initial reliability and validity of a new retrospective measure of child abuse and neglect. *Am J Psychiatry*, 151(8), 1132-1136.
- Berry, J. W., Worthington, E. L., Parrott, L., III., O'Connor, L. E., & Wade, N. G. (2001). Dispositional forgivingness: Development and construct validity of the transgression narrative test of forgivingness (TNTF). *Personality and Social Psychology Bulletin*, 27, 1277–1290.
- Bonn-Miller, M. O., Vujanovic, A. A., Boden, M. T., & Gross, J. J. (2011). Posttraumatic stress, difficulties in emotion regulation, and coping-oriented marijuana use. *Cognitive Behaviour Therapy*, 40(1), 34-44.
- Bridgett, D. J., Gartstein, M. A., Putnam, S. P., Lance, K. O., Iddins, E., Waits, R., et al. (2011). Emerging effortful control in toddlerhood: The role of infant orienting/regulation, maternal effortful control, and maternal time spent in caregiving activities. *Infant Behavior & Development*, 34, 189–199.
- Burns, E.E., Jackson, J.L. & Harding, H.G. (2010). Child maltreatment, emotion regulation and posttraumatic stress: The impact of emotional abuse. *Journal of Aggression, Maltreatment & Trauma*, 19, 801-819.
- Butler, L. D., & Nolen-Hoeksema, S. (1994). Gender differences in responses to depressed mood in a college sample. Sex Roles, 30, 331–346.
- Can, Y. (2013). Kadına yönelik şiddetin toplumsal cinsiyet temelleri: Niğde örneği. Zeitschrift für die Welt der Türken/Journal of World of Turks, 5(1), 203-216.
- Chul Han, B. (2017). Yorgunluk toplumu (çev. S. Yalçın). İstanbul: Açılım Kitap. (Orijinal çalışmanın basım tarihi 2010)
- Cicchetti, D. (2004). An odyssey of discovery: Lessons learned through three decades of research on child maltreatment. *American Psychologist*, 59, 731–741.
- Conger, R. D., Wallace, L. E., Sun, Y., Simons, R. L., McLoyd, V. C., & Bordy, G. H. (2002). Economic pressure in African American families: A replication and extension of the family stress model. *Developmental Psychology*, 38, 179–193.
- Cross, D., Fani, N., Powers, A., & Bradley, B. (2017). Neurobiological development in the context of childhood trauma. *Clinical Psychology: Science and Practice*, 24(2), 111-124.
- Çöpür, M., Üneri, Ö. Ş., Aydın, E., Bahalı, M. K., Tanıdır, C., Güneş, H., & Erdoğan, A. (2012). Characteristic features of sexually abused children and adolescents in İstanbul sample. *Anatolian Journal of Psychiatry*, 13(1), 46-50.

- Demirkapı, E. Ş. (2013). Çocukluk çağı travmalarının duygu düzenleme ve kimlik gelişimine etkisi ve bunların psikopatolojiler ile ilişkisi. Yayınlanmamış Yüksek Lisans Tezi. Adnan Menderes Üniversitesi, Sağlık Bilimleri Enstitüsü, Aydın.
- Domes, G., Schulze, L., Böttger, M., Grossmann, A., Hauenstein, K., Wirtz, P. H., Heinrichs, M. & Herpertz, S. C. (2010). The neural correlates of sex differences in emotional reactivity and emotion regulation. *Human Brain Mapping*, *31*(5), 758-769.
- Ehring, T., & Quack, D. (2010). Emotion regulation difficulties in trauma survivors: The role of trauma type and PTSD symptom severity. *Behavior therapy*, 41(4), 587-598.
- Fassler, I. R., Amodeo, M., Griffin, M. L., Clay, C. M., & Ellis, M. A. (2005). Predicting long-term outcomes for women sexually abused in childhood: Contribution of abuse severity versus family environment. *Child Abuse & Neglect*, 29(3), 269-284.
- Fernando, S., Beblo, T., Schlosser, N., Terfehr, K., Otte, C., Löwe, B., Wolf, O. T., Spitzer, C., Driessen, M. & Wingenfeld, K. (2014). The impact of self-reported childhood trauma on emotion regulation in Borderline Personality Disorder and Major Depression. *Journal of Trauma & Dissociation*, 15(4), 384-401.
- Fincham, F. D. (2000). The kiss of the porcupines: From attributing responsibility to forgiving. Personal Relationships, 7, 1–23.
- Finkelhor, D., Turner, H. A., Ormrod, R., & Hamby, S. L. (2009). Violence, abuse, and crime exposure in a national sample of children and youth. *Pediatrics*, 124(5), 1–13.
- Frank, P. (2017). Bilim felsefesi (çev. D. Kadıoğlu). İstanbul: Say Yayınları. (Orijinal çalışmanın basım tarihi 1962)
- Freud, S. (2018). Savaş ve ölüm üzerine. (çev. E. Yıldırım). İstanbul: Oda Yayınları. (Orijinal çalışmanın basım tarihi 1915)
- Garnefski, N., Kraaij, V. & Spinhoven, P. (2001). Negative life events. cognitive emotion regulation and emotional problems. *Personality and Individual Differences*, 30, 1311–1327.
- Gardener, E. K., Carr, A. R., MacGregor, A., & Felmingham, K. L. (2013). Sex differences and emotion regulation: an event-related potential study. *PloS One*, 8(10), 1-9.
- Greenberg, L., Warwar, S., & Malcolm, W. (2010) Emotion-focused couples therapy and thefacilitation of forgiveness. *Journal of Marital and Family Therapy*, 36(1), 28-42.
- Gross, J. J. & Thompson, R. A. (2007). Handbook of emotion regulation, Ed. J.J. Thompson, New York, Guilford Press.
- Güleç, H., Topaloğlu, M., Ünsal, D., & Altıntaş, M. (2012). Bir kısır döngü olarak şiddet. Psikiyatride Güncel Yaklaşımlar, 4(1), 112-137.
- Güloğlu, B., Karaırmak, Ö., & Emiral, E. (2016). Çocukluk çağı travmalarının tinsellik ve affetme üzerindeki rolü. *Anadolu Psikiyatri Dergisi*, 17(4), 309-316.
- Hagan, C. (2015). Emotion regulation and adherence to display rules after experiencing childhood trauma (Master's thesis, Duquesne University). https://dsc.duq.edu/etd/612 sayfasından erişilmiştir.
- Harris, A. H. S., & Thoresen, C. E. (2005). Forgiveness, unforgiveness, health, and disease. In E. L. Worthington, Jr. (Ed.). Handbook of forgiveness (pp. 321-333). New York, NY: Brunner-Routledge.
- Ho, M. Y., & Fung, H. H. (2011). A dynamic process model of forgiveness: A cross-cultural perspective. Review of General Psychology, 15(1), 77-
- Honeycutt, J. A., Demaestri, C., Peterzell, S., Silveri, M. M., Cai, X., Kulkarni, P., Cunningham, M. G., Ferris, C. F. & Brenhouse, H. C. (2020). Altered corticolimbic connectivity reveals sex-specific adolescent outcomes in a rat model of early life adversity. *eLife*, 9:e52651. doi: 10.7554/eLife.52651
- James, R., & Gilliland, B. (2012). Crisis intervention strategies. Belmont, CA: Cengage Learning. Nelson Education.
- Jones Ross, R. (2013). Putting the pieces Together: A proposed model of unforgiveness. Doctoral dissertation, University of Calgary, Alberta.
- Karasar, N. (2016). Bilimsel araştırma yöntemi (30. baskı, ilk basım yılı: 1982). Ankara: Nobel Yayıncılık.
- Küçüker, D. & Duru, E. (2016). Affetmeme ölçeğinin geçerlik ve güvenirlik çalışmaları, Sözlü bildiri, *EJER 3rd International Eurasian Educational Research Congress*, Muğla, Türkiye.
- Küçüker, D. (2016). Affetme, affetmeme, bilişsel esneklik, duygu düzenleme ve yaşam doyumu arasındaki ilişkilerin incelenmesi. Yayımlanmamış Yüksek Lisan Tezi, Pamukkale Üniversitesi, Eğitim Bilimleri Enstitüsü, Denizli.
- Lengua, L. J., Thompson, S. F., Moran, L. R., Zalewski, M., Ruberry, E. J., Klein, M. R., & Kiff, C. J. (2019). Pathways from early adversity to later adjustment: Tests of the additive and bidirectional effects of executive control and diurnal cortisol in early childhood. *Development and Psychopathology*, 1-14. DOI: https://doi.org/10.1017/S0954579419000373
- Levers, L. L. (Ed.). (2012). Trauma counseling: Theories and interventions. New York, NY: Springer.
- Lincoln, T. M., Marin, N., & Jaya, E. S. (2017). Childhood trauma and psychotic experiences in a general population sample: a prospective study on the mediating role of emotion regulation. *European Psychiatry*, 42, 111-119.
- Lozano, H. (2018). *Unforgiveness: An alternative space for people who cannot forgive*. Unpublished Master's Thesis, University of British Columbia, Canada.
- Maikovich-Fong, A. K., & Jaffee, S. R. (2010). Sex differences in childhood sexual abuse characteristics and victims' emotional and behavioral problems: Findings from a national sample of youth. *Child Abuse & Neglect*, *34*(6), 429-437.
- McCloskey, L. A., & Walker, M. (2000). Posttraumatic stress in children exposed to family violence and single-event trauma. *Journal of the American Academy of Child & Adolescent Psychiatry*, 39(1), 108-115.
- McCullough, M. E., Root, L. M., & Cohen, A. D. (2006). Writing about the personal benefits of a transgression facilitates forgiveness. *Journal of Consulting and Clinical Psychology*, 74, 887-897.
- McNulty, J. K. (2011). The dark side of forgiveness: The tendency to forgive predicts continued psychological and physical aggression in marriage. *Personality and Social Psychology Bulletin*, 37(6), 770-783.

- Mitrofan, N., & Ciuluvică, C. (2012). Anger and hostility as indicators of emotion regulation and of the life satisfaction at the beginning and the ending period of the adolescence. *Procedia-Social and Behavioral Sciences*, 33, 65-69.
- Murphy, J. G. (2003). Getting even: Forgiveness and its limits. New York, NY: Oxford University Press.
- Nietzsche, F. (2017). Güç istenci. (çev. N. Epçeli). İstanbul: Say Yayınları. (Orijinal çalışmanın basım tarihi 1901)
- Onat, O., Otrar, M. (2010). Bilişsel duygu düzenleme ölçeğinin Türkçe'ye uyarlanması: Geçerlik ve güvenirlik çalışmaları. *M. Ü. Atatürk Eğitim Fakültesi Eğitim Bilimleri Dergisi*, 31, 123-143.
- Pross, A. (2016). Yaşam nedir? (çev. R. Gürdilek). İstanbul: Metis Yayınları. (Orijinal çalışmanın basım tarihi 2012).
- Reskin, B. F. (2000). The Proximate Causes of Employment Discrimination. *Contemporary Sociology*, 29 (2), 319-328.
- Roberts, J. L. (2013). Trauma, technology and the ontology of the modern subject. Subjectivity, 6(3), 298-319.
- Jones Ross, R. (2013). Putting the pieces Together: A proposed model of unforgiveness. Doctoral dissertation, University of Calgary, Alberta.
- Ruppert, F. (2014) Travma, bağlanma ve aile konstelasyonları (çev. F. Zengin). İstanbul: Kaknüs. (Orijinal çalışmanın basım tarihi 2008).
- Schrödinger, E. (2014) Yaşam nedir? (çev. M. Doğan). İstanbul: Pan Yayıncılık. (Orijinal çalışmanın basım tarihi 1967)
- Stackhouse, M. R. D., Ross, R. W. J., & Boon, S. D. (2018). Unforgiveness: Refining theory and measurement of an understudied construct. *British Journal of Social Psychology*, 57(1), 130-153.
- Steiner, J. (2018). The trauma and disillusionment of Oedipus. The International Journal of Psychoanalysis, 99(3), 555-568.
- Szablowinski, Z. (2010). Between forgiveness and unforgiveness. The Heythrop Journal, 51(3), 471-482.
- Şar, V., Öztürk, E. & İkikardeş, E. (2012). Çocukluk çağı ruhsal travma ölçeğinin türkçe uyarlamasının geçerlilik ve güvenilirliği. *Türkiye Klinikleri J Med Sci*, 32(4), 1054-1063.
- Taner, Y. ve Gökler, B. (2004). Çocuk İstismarı ve İhlali: Psikiyatrik Yönleri. Hacettepe Tıp Dergisi, 35, 82-86.
- Terr, L. C. (2003). Childhood traumas: An outline and overview. Focus, 1(3), 322-334.
- The World Health Organization (2006). *Preventing Child Maltreatment: a Guide to Taking Action and Generating Evidence*, Geneva, 14-89. https://www.who.int/violence injury prevention/publications/violence/child maltreatment/en/ sayfasından erişilmiştir.
- Thomsen, D. K., Mehlson, M. Y., Viidik, A., Sommerland, B., & Zachariae, R. (2005). Age and gender differences in negative affect—Is there a role for emotion regulation? *Personality and Individual Differences*, 38, 1935–1946.
- Tinajero, R., Williams, P. G., Cribbet, M. R., Rau, H. K., Silver, M. A., Bride, D. L., & Suchy, Y. (2020). Reported history of childhood trauma and stress-related vulnerability: Associations with emotion regulation, executive functioning, daily hassles, and pre-sleep arousal. Stress and Health. Doi: https://doi.org/10.1002/smi.2938
- Tolin, D. F. & Foa E. B. (2008). Sex differences in trauma and posttraumatic stress disorder: a quantitative review of 25 years of research. *Psychological Trauma: Theory, Research, Practice, and Policy,* (1), 37–85. https://doi.org/10.1037/1942-9681.S.1.37
- Toussaint, L., & Cheadle, A. C. (2009). Unforgiveness and the broken heart: Unforgiving tendencies, problems due to unforgiveness, and 12-month prevalence of cardiovascular health conditions. Walker (Eds.), Religion and psychology. New York, NY: Nova Publishers.
- Van der Kolk, B. A. (2019). Beden kayıt tutar. (çev. N. C. Maral). Ankara: Nobel Yaşam. (Orijinal çalışmanın basım tarihi 2014)
- Wade, N. G., & Worthington Jr, E. L. (2003). Overcoming interpersonal offenses: Is forgiveness the only way to deal with unforgiveness? *Journal of Counseling & Development*, 81(3), 343-353.
- Wenar, C., & Kerig, P. (2000). Developmental psychopathology: From infancy through adolescence. McGraw Hill Higher Education; 5th Revised edition.
- Worthington, E. L., & Wade, N. G. (1999). The psychology of unforgiveness and forgiveness and implications for clinical practice. *Journal of Social and Clinical Psychology*, 18(4), 385-418.
- Worthington, E. L., & Scherer, M. (2004). Forgiveness is an emotion-focused coping strategy that can reduce health risks and promote health resilience: theory, review, and hypotheses. *Psychology and Health*, 19, 385-405.
- Worthington, E. L., Jr. (2005). Initial questions about the art and science of forgiving. In E. L. Worthington, Jr. (Ed.) *Handbook of forgiveness* (s. 1-14). Brunner-Routledge: New York.
- Worthington, E. L. (2006). Forgiveness and reconciliation. New York: Routledge.
- Worthington, E. L., Witvliet, C. V. O., Pietrini, P., & Miller, A. J. (2007). Forgiveness, health, and well-being: A review of evidence for emotional versus decisional forgiveness, dispositional forgivingness, and reduced unforgiveness. Journal of Behavioral Medicine, 30(4), 291-302.
- Young, E., & Korszun, A. (2010). Sex, trauma, stress hormones and depression. Molecular psychiatry, 15(1), 23-28.
- Zeren, C., Yengil, E., Çelikel, A., Arık, A., & Arslan, M. (2012). Üniversite öğrencilerinde çocukluk çağı istismarı sıklığı. *Dicle Tıp Dergisi*, 39(4), 536-541.