



# The Effect Of Psycho-Education Program On Increase The Tendency To Forgive and Five Factor Personality Properties Of Forgiveness Tendency

Fatıma Firdevs Adam Karduz<sup>1</sup> & Ali Haydar Şar<sup>2</sup>

<sup>1</sup>MEB Serdivan Nilüfer İş Uygulama Okulu, Sakarya, Turkey

<sup>2</sup>Sakarya University Faculty of Education, Hendek, Sakarya, Turkey

## ARTICLE INFO

### Article History:

Received 06.07.2019

Received in revised form  
15.08.2019

Accepted 29.08.2019

Available online  
30.09.2019

## ABSTRACT

The basic aim of this study is to examine the effect of psycho-education program for gaining the tendency to forgive on Big five personality traits. The study was carried out via experimental design to determine the cause and effect relationship between the independent variable (big five personality traits) and the dependent variable (tendency to forgive). The study was conducted with Pretest-Posttest Control Group Design. 24 university students who attended to the study were randomly assigned to the experimental and the control group each of which consisted of 12 university students. The data was collected through Big Five Personality Traits Scale and Heartland Forgiveness Scale. Within the scope of the study, experimental group was given 10-week psycho-education program to gain positive personality traits and to gaining forgiveness tendency while control group was not given any intervention. The effectiveness of the group counseling process was tested by the same scale in pre-experimental, post-experimental and follow up processes. According to the findings of the study, it was found that all of the personality traits were effective in order to help to increase the tendency of forgiveness of individuals with high scores for neuroticism, one of the big five personality traits, and low scores for forgiveness, that is people with less forgiveness competency. The findings were discussed in the light of the literature and recommendations were made accordingly.

© 2019 IJPES. All rights reserved

### Keywords:

Five factor personality characteristics, tendency to forgiveness, psycho-education program.

## 1. Introduction

Forgiveness has existed since the beginning of human history (McCullough, 2008) and for many years, human relations and past experiences were deemed important for the underlined mechanisms of forgiveness in interpersonal relations (McCullough, Root, Tabak, & Witvliet, 2009). There is considerable research in psychology, particularly in positive psychology, about the concept of forgiveness (Lopez and Snyder, 2009). However, scientific studies on forgiveness began in the mid-1980s and have continued since then (Worthington, 2005).

In order to understand forgiveness correctly and accurately, it is necessary to perceive unforgiving first. Worthington and others define unforgiving as a combination of negative feelings (i.e. anger, anguish, revenge, hatred, and fear) on the person who makes a mistake (Worthington, Sandage, Berry, 2000; Worthington, Wade, 1999). Forgiveness is the result of many different circumstances that arise from different problems. Therefore, most of the definitions are case-specific, so it is difficult to make a definition that is common and acceptable to all the situations (Toussaint and Webb, 2005). Forgiveness could be in the form of self-forgiveness (Hall and Fincham, 2005), interpersonal forgiveness (Enright, Freedman and Rique, 1998), forgiving God, forgiveness from God (Exline, Yali and Lobel, 1999), forgiving families (DiBlasio and Proctor,

<sup>1</sup> Corresponding author's address: MEB Serdivan Nilüfer İş Uygulama Okulu, Sakarya, Turkey

Telephone: 0 554 699 60 80

e-mail: [karduzfirdevs@gmail.com](mailto:karduzfirdevs@gmail.com)

<http://dx.doi.org/10.17220/ijpes.2019.03.010>

1993) or forgiving the entire society and culture (Sandage, Hill, and Wang, 2003). Theorists such as Enright and The Human Development Study Group (1991), Enright (1996), Enright and Fitzgibbons (2000), Ferch (1998), Worthington (1998) have developed a number of theories to define forgiveness. Forgiveness is the cognitive renunciation decision about the desire to take revenge against the blame/offender and the abandonment of negative thoughts (Fitzgibbons, Enright and O'Brien, 2004). Forgiveness is the ability to show compassion in the moral framework against the unfair and uncomfortable attitude of the misdemeanor (Freedman, Enright, & Knutson, 2005). Forgiveness is not only about reducing negative attitudes, feelings, motives and behaviors towards the person who makes mistakes, but also increasing positive feelings and perspectives (wider perceptions) such as empathy, hope or compassion (Harris, Thoresen, 2005).

Forgiveness plays an important role in sustaining social relations, preventing unnecessary conflicts and the ability to correctly sustain life (Noreen et al., 2014). In this context, it is thought that an increase in both individual and social tendencies of forgiveness will lead a healthy interpersonal relationship and interaction and an increase in social peace and prosperity, and an elevated contribution to psychological well-being and positive personality traits.

Forgiveness is regarded as an interpersonal process to maintain human relationships and improve the quality of interaction (Tsang et al., 2006; Worthington et al., 2007). Causes of forgiveness (Mullet and Girard, 2000), and the socio-psychological structure of forgiveness have been investigated (McCullough et al., 1998). Nonetheless, individual differences affecting forgiveness have not been evaluated in-depth. Thus, researchers have initiated studies targeting the relationship between forgiveness and personality traits and have linked the criteria for forgiveness to the personality traits (McCullough and Hoyt, 2002). Most of the studies on the characteristics of forgiveness focus on the differences in the five-factor model of personality (Emmons, 2000). In order to explain the relationship between personality traits and forgiveness, it is thought that a person's views on behaviors s/he is inclined to, injustices the person exposed to, and the way s/he has a relationship are important factors (McCullough and Hoyt, 2002). There is a growing body of psychology literature examining the nature of forgiveness in order to understand the general tendency to forgive or unforgiving circumstances (Berry, Worthington, Parrott, O'Connor, and Wade, 2001; Brown, 2003; Walker and Gorsuch, 2002). In particular, researchers are interested in defining the dimensions of the basic personality traits associated with forgiveness and better understanding the underlying personality-based mechanisms in order to better predict forgiveness behavior (McCullough, 2001). As a result of research spanning many years, a consensus on the general classification of the "Big Five Personality Traits" has reached (John and Srivastava, 1999).

Somer, Korkmaz and Tatar (2002) formed 15 sub-dimensions that could be grouped under five main factors for measuring the homogeneous personality traits.

**Extraversion (Extraversion, Energy, Enthusiasm): Extraversion-Introversion:** The characteristics of this factor are very similar to Eysenck's extraversion dimension and include traits such as being vibrant, excited, cheerful, talkative, sociable, and clubby. Extraversion is more related to the amount of social stimuli in interpersonal relationships. In addition, sociality and outgoingness, fun, love, leadership, power, willingness and friendly behavior also represented in this factor.

**Neuroticism (Emotional Imbalance, Neuroticism, Negative Impact, Irritability): Emotional Stability-Instability:** McCrae and Costa (1987) pointed out that negative feelings such as nervousness, anxiety, depression, anger, distrust, and distress are on the bases of neuroticism. Matthews, Derryberry and Siegler (2000) describe neuroticism as non-rational, unrealistic automatic thoughts, and failure in coping mechanisms.

**Agreeableness (Compatibility, Altruism, Love): Agreeableness – Hostility:** On the positive side of this factor, there are features such as gentle, subtle, respectful, safe, flexible, open-hearted and compassionate. The agreeableness dimension is also a key factor in interpersonal relationships. Researchers define this factor with trust, honesty, amity, obedience, humility, and compassion. People who are high in agreeableness are those who love others, sharing, and are socially caring.

**Conscientiousness (Self-discipline, Control, Self Restriction): Responsibility–Undirectedness:** Costa, McCrae and Dye (1991) used the concept of direction to define this factor. Because they indicate that this dimension

has both progressive and inhibiting aspects. The progressive aspects of this factor appear in traits such as the need for success and action, the persistence in working whereas the inhibiting aspects are present in the traits such as the orderliness, meticulousness, and precaution. To represent this factor, competence, order, meticulousness, hard worker, goal oriented, self-discipline, and precaution sub-dimensions were proposed (Somer et al. 2002).

Openness (Openness to Experience, Novelty, Open mindedness) Openness to Experience/Intellect: The fifth factor is the least agreed on the model. This factor has been named as intellect by some researchers, culture by others, and openness to experience by others. Descriptive traits of the factor include analytical, sophisticated, curious, independent, creative, liberal, non-traditional, original, imaginative, wide-ranging, brave, loving change, artistic, open-minded adjectives (Somer, Korkmaz and Tatar, 2002).

Person who succeeded in forgiveness and accomplish empathy for the guilty/offender and his/her actions/wrongdoings can be positively affected both mentally and physically. Because at the end of forgiveness, socialization is ensured, interpersonal relations are improved, healthy behavior emerges and this improves the mental health (Berry et al., 2005). In experimental studies, it was observed that neurotic personality trait prevented forgiveness (Ashton et al., 1998). In fact, this is not surprising, because the most important symptom of neuroticism is the hostile attitude or the feeling of revenge that is a significant factor prevents forgiveness (McCullough and Worthington, 1999). Being intertwined with society (being in social environments) involves the risk of being hurt by others. Such offensive situations/misdemeanors occur in the relationship between at least two persons: it is necessary to avoid hurt-hurt and revenge (McCullough, 2001). According to McCullough, Worthington, and Rachal (1997), when individuals forgive the offending situation/guilt they experience in their interpersonal relationships, they turn their feelings of revenge and harm into positive emotions, thus increasing the likelihood that their relationship with the accused person becomes more coherent and positive. In this context, the psycho-education program which is prepared and applied in this study is important because aims decrease the neuroticism score, which is one of the big five personality traits, and thereby increase the forgiveness tendency.

### **1.1.Aim of the study**

The study tested the following research hypotheses.

Main Hypothesis: The prepared psycho-education program is effective in increasing the tendency to forgive.

Sub-hypotheses:

Hypothesis 1: The structured psycho-education program focusing on forgiveness tendency is effective in increasing the levels of "openness to experience, responsibility, extraversion, agreeableness" from the big five personality traits of individuals.

Hypothesis 2: The structured psycho-education program focusing on forgiveness tendency is effective in reducing the neuroticism levels of the big five personality traits of individuals.

Hypothesis 3: The psycho-education program focusing on forgiveness tendency is effective in increasing the level of "self-forgiveness, forgiveness of others and forgiveness of the situation."

Hypothesis 4: Structured psycho-education program focusing on forgiveness tendency is effective in increasing the general level of forgiveness of individuals.

### **2.Methods**

As a part of the study, a structured psycho-education program consisting of 10 weeks was conducted by the researcher to increase the tendency of forgiveness among the participants of the study group. The big five personality traits of individuals as content in these sessions which can be described as the 'openness to experience', 'conscientiousness', 'extraversion', 'agreeableness' and 'neuroticism' levels with the 'Self Forgiveness', 'Forgiving Others', 'Forgiving Situation' and Heartland Forgiveness Scale scores are aimed to be improved. In order to determine the level and degree of effectiveness of the psycho-education program sessions, the 'pre-test, post-test and follow-up-test' were applied to the experimental and control groups with a randomized design. The application carried out by the researcher is defined as a randomized design of 2x3.

In such studies, measurement tools are applied to the sample group randomly determined by the researcher and the results are evaluated. After the experimental and control groups were determined, pre-test was applied to the experimental and control group by the researcher. While the psycho-education program is applied to the experimental group, nothing was applied to the the control group. At the end of the study, the test instrument was applied to both experimental and control groups and the effectiveness of psycho-education was investigated. After a certain period of time following the post-test, both the experimental and the control groups are subjected to a follow-up test and the process was concluded.

## **2.1. Working group**

The participants of the study consisted of the students enrolled to Sakarya University Faculty of Education in 2016-2017 academic year. While the students were selected by the researcher, no specific criteria were superimposed, the measurement tools were randomly applied to a sample group of 513 participants. Then, 24 students who were determined by unbiased appointment from 55 participants with low scores in forgiveness tendency and Positive Personality structure. In total, a group of 24 students pursuing the 3<sup>rd</sup> and 4<sup>th</sup> year were selected. There were 6 females and 6 males in the experimental group, 11 females and 1 male in the control group. In other words, the study consists of 17 female and 7 male students.

## **2.2. Data Collection Tools**

### **2.2.1. Personal Information Form**

The researcher prepared a personal information form and applied it to the participants so as to gather data from the gender, year in college, perceived academic success, socio-economic levels, and presence of psychological support in their lifetime.

### **2.2.2. The Five Factor Personality Inventory**

Benet-Martinez and John (1998) developed "The Big Five Inventory" that consists of 44 items and "neuroticism", "agreeableness", "openness to experience", "extraversion", and "conscientiousness" dimensions. The scale includes 8 items from each of "neuroticism" and "extraversion", 9 items from "agreeableness" and "responsibility", and 10 items from "openness to experience".

Twelve out of the the 44 items of the five-factor personality scale are scored were inversed.

Adaptation of the scale to Turkish was done by Somer and Somer (2005). The Cronbach's alpha reliability coefficients of the main study of the scale for the "neuroticism", "extraversion", "openness to experience", "agreeableness", and "conscientiousness" factors were 0.79, 0.77, 0.76, 0.70, and 0.78, respectively. The Cronbach's alpha values of the five factor personality inventory in this study for the sub-dimension of conscientiousness was 0.897, for the agreeableness sub-dimension was 0.818, for the neuroticism sub-dimension was 0.823, for the sub-dimension of experience was 0.801, for the extraversion sub-dimension was 0.861, and for the total five-factor personality scale was 0.847.

### **2.2.3. Heartland Forgiveness Scale**

The scale was developed by Thompson et al. (2005) and the translation and adaptation to Turkish was conducted by Bugay and Demir (2010). The Heartland Forgiveness Scale consists of 18 items. The scale is structured as 7-point style and each item is answered by the participants. The scale consists of three sub-dimensions: "Self-forgiveness", "Forgiving others" and "Forgiving the situation".

Cronbach alpha reliability coefficient of the Turkish version of the scale for self-forgiveness sub-dimension was 0.64, the coefficient for the forgiving others sub-dimension was 0.79, for forgiving the situation sub-dimension was 0.76. The Cronbach alpha value for the entire scale was calculated as 0.81. In addition to this, Exploratory and Confirmatory Factor Analysis was performed in order to test the sub-dimensions of the scale at the local level and the obtained values were found at the appropriate level (GFI = 0.92, AGFI = 0.90, RMSEA = 0.06). The Cronbach alpha value was 0.841 for the self-forgiveness subscale, 0.738 for the forgiving others subscale, 0.911 for the forgiving the situation, and 0.853 for the entire Heartland Forgiveness Scale in this study.

Bugay and Demir (2012) investigated the simultaneous validity and reliability of the Rumination Scale Short Form and Life Satisfaction Scale in different. They reported the correlation between the self-forgiveness sub-dimension and the rumination scale as -0.32, between the forgiving others sub-dimension and the rumination scale -0.09, between the forgiving situation and rumination scale -0.34, the total score between forgiveness and the rumination scale as -0.31. The also found that the correlation coefficient between self-forgiveness and life satisfaction was 0.26, between forgiving others and life satisfaction was 0.10, between forgiving situation and life satisfaction was 0.34, and correlation between forgiveness total score and life satisfaction was 0.31. The findings revealed that the Turkish form of the Heartland Forgiveness Scale had a simultaneous validity (Bugay and Demir, 2012).

#### 2.2.4. Process

A structured psycho-education program consisting of 10 sessions of 120-150 minutes per week was conducted by the researcher for the participants in the experimental group. The organized sessions were completed regularly and systematically without any problems. No application was executed to the participants in the control group.

### 3. Results

In order to determine which data analysis technique will be used while evaluating the data obtained from by the researcher, a normality test was applied to the scale scores obtained from the 45-item Five Factor Personality Scale and the Heartland Forgiveness Scale, which is formed in 18 items. In other words, it is aimed to determine whether a parametric test should be applied.

In order to be able to apply the parametric tests in which the data is normally distributed, the pre-test results of the scales applied to the experimental and control groups, the kurtosis, and skewness values should be calculated. The pre-test data obtained from the scales are shown in the table below.

**Table 1.** Five Factor Personality Scale of Experimental and Control Groups; Openness to Experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism Sub-Dimensions and Self-forgiveness, Forgiving Others and Forgiving the Situation Sub-dimensions of Heartland Forgiveness Scale.

Scale	Group	n	$\bar{X}$	Ss	Median	Mode	Skewness	Kurtosis
Openness to experience	Experimental	12	31.25	6.83	31.00	31.00	-0.088	-0.099
	Control	12	30.83	3.73	29.50	31.00	0.533	0.917
Conscientiousness	Experimental	12	20.08	5.97	27.50	26.00	-0.134	-0.626
	Control	12	19.25	4.33	23.50	24.00	-1.063	0.700
Extraversion	Experimental	12	15.00	6.60	20.00	14.00	0.102	-1.46
	Control	12	14.25	5.08	16.00	16.00	-0.244	-1.322
Agreeableness	Experimental	12	28.50	2.96	31.00	33.00	-0.862	0.384
	Control	12	25.58	3.94	26.50	25.00	0.651	0.856
Neuroticism	Experimental	12	30.25	2.63	31.00	30.00*	-0.182	0.081
	Control	12	25.50	5.76	26.00	20.00*	0.543	-0.843
Self-forgiveness	Experimental	12	17.25	6.13	17.50	6.00*	-0.383	-0.061
	Control	12	24.75	9.30	25.50	32.00	-0.260	-0.964
Forgiving Others	Experimental	12	20.50	6.94	29.00	21.00*	-0.020	-1.495
	Control	12	20.83	7.43	21.50	24.00	-0.189	-1.068
Forgiving the Situation	Experimental	12	24.66	5.59	23.00	23.00	-0.142	-0.410
	Control	12	23.41	7.51	22.00	13.00*	0.210	-1.135
Heartland Forgiveness Scale	Experimental	12	62.41	14.28	74.00	60.00*	0.258	-0.724
	Control	12	69.00	22.07	63.00	56.00	-0.104	-0.895

\*The smallest value due to multimodality

**Table 2.** Experiment and Control Group Openness, Conscientiousness, Extraversion, Compliance, Sub-Dimensions and Self-forgiveness, Forgiving Others and Forgiving the Situation Sub-dimension and Total Score of Heartland Forgiveness Scale of Pre-Test Measure-Test Analysis Results

Scale	Experimental			Control			t	p	
	n	$\bar{X}$	Ss	n	$\bar{X}$	Ss			
Openness to experience	12	31.25	6.83	12	30.83	3.73	22	1.519	.143
Conscientiousness	12	20.08	5.97	12	19.25	4.33	22	2.778	.061
Extraversion	12	15.00	6.60	12	14.25	5.08	22	1.535	.139
Agreeableness	12	28.50	2.96	12	25.58	3.94	22	2.047	.053
Neuroticism	12	30.25	2.63	12	25.50	5.76	22	2.598	.059
Self-forgiveness	12	17.25	6.13	12	24.75	9.30	22	-2.331	.089
Forgiving Others	12	20.50	6.94	12	20.83	7.43	22	3.632	.093
Forgiving the Situation	12	24.66	5.59	13	23.41	7.51	22	.462	.648
Heartland Forgiveness Scale	12	62.41	14.28	12	69.00	22.07	22	.582	.567

The five factor personality scale and Heartland Forgiveness Scale used in the study and the skewness and kurtosis values of these subscales were found to be between -1.96 and +1.96 according to the 5% significance level. In this respect, it can be assumed that all preliminary measurements obtained are normally distributed.

When the results of the t-test for difference of total pre-test scores between control and experimental group indicated in Table 2 are considered, no statistical difference was evident in 'Openness to Experience', 'Conscientiousness', 'Extraversion', 'Agreeableness', 'Neuroticism,' Self-forgiveness', 'Forgiving Others', 'Forgiving the Situation' and 'Heartland Forgiveness Scale' ( $t_{(22)}=1.519$ ,  $p>0.05$  for the 'Experience to Openness' sub-dimension score,  $t_{(22)}=2.778$ ;  $p>0.05$  for the 'Conscientiousness' sub-dimension score;  $t_{(22)}=1.535$ ;  $p>0.05$  for the 'Extraversion' sub-dimension score;  $t_{(22)}= 2.047$ ;  $p>0.05$  for 'Agreeableness' sub-dimension score,  $t_{(22)}= 2.598$ ;  $p>0.05$  for the 'Neuroticism' sub-dimension score;  $t_{(22)}=-2,331$ ;  $p>0.05$  for 'Self-Forgiveness' sub-dimension score;  $t_{(22)}=3.632$ ;  $p>0.05$  for 'Forgiving Others' sub-dimension score;  $t_{(22)}=0.462$ ;  $p>0.05$  for 'Forgiving the Situation'; and  $t_{(22)}=0.567$ ;  $p>0.05$  for 'Heartland Forgiveness Scale' total score). When the findings are examined, both the experimental and control groups were similar in terms of total scale scores and all sub-dimensions prior to the psycho-education program.

Based on all the obtained values, all conditions required for two-way analysis of variance were met in the process of analyzing the hypothesis. Based on this, variance analysis technique was used for repetitive measurements to analyze the data obtained from the participants as a result of the psycho-education program. SPSS 21.00 Windows Package program was used in data analysis and significance level of  $p<0.05$  was considered throughout the experiment.

#### 4. Discussion and Conclusion

In this study, the effect of the psycho-education program on the tendency to forgive and the effect on the five-factor personality traits were investigated. Some hypotheses were developed and tested for this purpose.

The structured psycho-education program focused on increasing forgiveness were demonstrated to be effective in increasing the levels of 'openness to experience, conscientiousness, extraversion, and agreeableness' which are among the big five personality traits of individuals. It was observed that structured psycho-education program focusing on elevating the forgiveness tendency is effective in increasing the level of 'openness to experience' of individuals. According to this result, the level of 'openness to experience' increases as the tendency to forgive increases. This may be due to the fact that individuals with this character have tendency to participate in social activities, be open to different emotions and intellectual thoughts

(Chamorro-Premuzic, 2007), so they are not conservative or inflexible. Therefore, openness to experience is a feature that encourages forgiveness (Worthington, 1998). Because the degree of openness includes openness to new ideas, imagination, and aesthetics (Costa and McCrae, 1992). Therefore, people with high degree of openness are open to new ideas and change, but people with low degree of openness are narrow-minded, resistant to change (Benet-Martinez and John, 1998; Costa and McCrae, 1995; Somer et al., 2002). The openness dimension can be considered to facilitate forgiveness. However, in many studies, there is no relationship between openness to experience and forgiving others (Ashton et al., 1998; McCullough and Worthington, 1999; Ross et al., 2004; Walker and Gorsuch, 2002). On the other hand, in a different study, a negative correlation between the degree of openness and forgiveness was reported (Ajmal, Amin and Bajwa, 2016). It was also reported that openness to experience was only related to positive effect (Watson and Clark, 1992) but not to any of the dimensions of forgiveness (Walker & Gorsuch, 2002). The reason for this is that people with openness do take the risk to try new things (Ajmal, Amin and Bajwa, 2016) and do not to hesitate to express their emotions, which is a factor that reduces the forgiveness attitude because they are not hesitant to openly utter the reasons for their intimidation when they are exposed to a wrongdoing.

The degree of openness is negatively correlated with the tendency to take revenge, which reduces the tendency to forgive (Rey and Extremera, 2014). In addition, it is reported that individuals with openness have low scores of forgiveness and gratitude (Ajmal, Amin and Bajwa, 2016). In addition, according to the findings obtained from the study of Doğan (2012) examining the relationships between personality traits and subjective well-being, a significant positive correlation between personality openness and subjective well-being were found. A positive correlation between the tendency to forgive and openness, agreeableness, extraversion (Berry, Worthington, Parrott, O'Connor and Wade, 2001), conscientiousness (Walker and Gorsuch, 2002), and a negative correlation with rumination, hostility (Berry et al., 2001) and depression (Toussaint, Williams, Musick and Everson-Rose, 2008) was reported. However, in Walker and Gorsuch's (2002) study, it was found that there was no correlation between openness to experience and forgiveness.

It has been observed that the structured psycho-education program which focuses on increasing the forgiveness tendency is effective in increasing in 'conscientiousness' levels of individuals. According to the results, the level of conscientiousness increases as the tendency to forgive increases. This may be due to the fact that individuals with responsibility have better control over their emotions (John, Naumann and Soto, 2008), and in particular their ability to effectively control the expression of their negative feelings where necessary. There are studies supporting this result. In Shepherd and Belicki's (2008) study, a positive correlation was found between forgiveness and responsibility, which is the dimension of responsibility and diligence (diligently working). In other words, restrictive self-control and self-discipline/responsibility (reflecting reasonability and diligent traits, respectively) supports forgiveness. This is due to the nature of the responsibility which includes working diligently, persistently, with a self-discipline, and in a hard-working way mainly through the the internal and automatic behavior nature of the responsibility of individuals (Ajmal, Amin and Bajwa, 2016) that also leads them to program their lives according to goals and the work plan. Forgiveness actually requires emotional control. It can be stated that people with the self-discipline could be more forgiving as they can control their feelings more easily. Perhaps it may be thought that these qualities are transformed into efforts to maintain interpersonal interaction and relationships. McCullough et al. (1997) found that those who could control their impulsive behaviors were less likely to be reckless and to halt the process of forgiveness. In another study, a positive correlation between the dimension of responsibility and forgiveness was found (Ajmal, Amin and Bajwa, 2016).

Rey and Extremera (2014) showed that individuals with high scores in responsibility dimension had a significantly reduced tendency to take revenge. In addition, the responsibility has a positive correlation with forgiveness and gratitude (Ajmal, Amin and Bajwa, 2016). A significant positive correlation was reported between responsibility and subjective well-being (Doğan 2012).

However, no significant correlation was reported between the extent of responsibility and forgiveness in some studies (Ashton et al., 1998; Ross et al., 2004). According to the findings of Watson and Clark (1992), the dimension of responsibility is related only to the positive effects; however, it was not associated with any of the dimensions of forgiveness (Walker and Gorsuch, 2002). As it can be deduced from the results of previous research, there are also results contradicting to the findings of the present study.

It is observed that structured psycho-education program which focuses on gaining forgiveness tendency is effective in increasing the "extroversion" of individuals. According to the findings, the level of extraversion increases as the tendency to forgive increases. This may be due to the fact that people with this characteristic are more inclined to positive feelings that in turn makes act of forgiving easier (Chamorro-Premuzic, 2007). Individuals with extroversion traits have a more forgiving attitude and therefore live happier lives and are generally positive, active and courageous people who enjoy taking risks and making friends. The people with the oppositetrails of the extroversion have a weak social ability, are silent and unwilling to do anything (Costa and McCrae, 1992). The previous research supports the finding of this current study. The forgiveness level of those with high extraversion scores was also high (Berry et al. 2001; Ajmal, Amin and Bajwa, 2016). There was a positive correlation between extroversion dimension and general forgiveness. In other words, being more optimistic and having positive feeling encourage forgiving behaviors (Shepherd and Belicki, 2008). Furthermore, the extraversion dimension has a strong relationship with both positive effect and seeking support (Watson and Clark, 1992; Watson and Hubbard, 1996). Individuals with extraverted personality traits tend to have high levels of forgiveness and gratitude as they are concerned about their social image (Ajmal, Amin and Bajwa, 2016). This is because extraversion individuals may be very competent and friendly and receive their energies from people around them. They like to meet and gather with different individuals. Therefore, they tend to be more forgiving in order to be forgiven during their relationship with others (Costa and McCrae, 1992). In addition, a positive significant correlation was found between extraversion personality characteristic score and subjective well-being (Doğan 2012) which is consistent with the findings of this study.

The structured psycho-education program which focuses on gaining forgiveness tendency was effective in increasing the "agreeableness" levels of individuals in the present study. This is because people with this characteristic may be more incline to forgive in their interpersonal relationships because they are friendly, social and trustworthy (Glass, Prichard, Lafortune and Schwab, 2013). The agreeableness factor of the Five-Factor Model is one of the dimensions that has a strong correlation with forgiveness (Mullet, Neto and Rivière, 2005). Agreeableness dimension is one of the big five personality traits and includes features such as helpful, cooperative, soft-minded, understanding, adaptable to the conditions, reliable, and empathic (Goldberg, 1990). The agreeableness dimension is related to good modesty, self-sacrificing, flexible, sympathetic, and forgiveness (McCrae and Costa, 1987). Agreeableness is related to forgiveness, because forgiveness is seen as a social and altruistic act (Ashton, Paunonen, Helmes, & Jackson, 1998; McCullough, 2001) and is associated with empathy and goodwill in different terms (McCullough, Worthington, & Rachal, 1997). Many experimental studies have supported these intuitive and conceptual relationships (Mullet et al., 2005). According to Shepherd and Belicki's study (2008), agreeableness was the most important predictor of forgiveness. In experimental studies, there is generally a positive correlation between agreeableness and forgiveness (Ashton et al. 1998; McCullough and Worthington, 1999; Ross et al., 2004; Mullet et al., 1999). Wang's (2008) findings of the study showed that individuals with a high level of agreeableness have a higher tendency to forgive. So agreeableness is a feature that promotes forgiveness (Worthington, 1998). Furthermore, the agreeableness dimension in the studies shows a consistent positive correlation in many forgiveness measurement tools (McCullough and Hoyt, 2002; Berry, Worthington, Parrott, O'Conner, and Wade, 2001; Brose et al. 2005; McCullough et al. 2001).

In addition, individuals with a high tendency to forgive have been found to be mostly emotionally balanced and have agreeableness personality traits (Ajmal, Amin and Bajwa, 2016). This may be due to the fact that individuals with agreeableness traits have various positive social behavior traits and have a more optimistic view of maintaining relationships. In other words, the wrong behavior of others may be the reason they have compassion. It is also observed that individuals with agreeableness traits are cooperative, soft-hearted, empathic, warm, and helpful and they have positive thoughts about others (Glass, Prichard, Lafortune and Schwab, 2013). Therefore, they believe that most people are reliable, reasonable, and honest, which may be a reason for their high tendency to forgive. There are people who are grateful for the people with agreeableness traits around them for the contribution of joy in their life. This situation improves the belief that forgiveness and gratitude are related (McCullough et al. 2002). Similarly, in another study, it was found that the agreeableness traits were positively correlated with forgiveness and gratitude (Ajmal, Amin and Bajwa, 2016). İlbay and Sarıçam (2015) reported positive predictions of forgiveness and gratitude and psychological fragility. In the case of the forgiveness of the individual in the choice of forgiveness and relationship, the



forgiven person can react with a sense of gratitude. Gratitude reduces the individual's negative feelings, increases positive feelings and strengthens the tendency to forgive (Witvliet, Ludwig, and Vander Laan, 2001; McCullough, Emmons, and Tsang, 2002). It is thought that the gratitude of the individuals who have a tendency to forgive is from the agreeableness dimension. Individuals with feelings of gratitude are among those who tend to forgive (McCullough et al. 2002). Therefore, if people can increase their level of forgiveness, it seems possible to improve their feelings of gratitude. Agreeableness is also a feature that helps an individual effectively manage interpersonal frustrations and anger (McCullough et al. 2001). Revenge, which reduces the tendency to forgive, has been found to be negatively correlated with the agreeableness dimension. That is, people with the tendency to approve revenge attitudes or those who use revenge as a problem-solving strategy have a lower level of agreeableness (McCullough et al. 2001). In an experimental study, a positive correlation was found between the big five personality traits and the "forgiveness - no revenge" factor (Ashton, Paunonen, Helmes, & Jackson, 1998). The agreeableness trait is also among the important determinants of long-lasting of hatred (Roberts, 1995; Neto, 2007). Ajmal, Amin and Bajwa (2016) found that the individuals who had low feelings of revenge were found to have high agreeableness traits. Revenge is negatively associated with the agreeableness and life satisfaction, so individuals with a high tendency to get revenge have a high level of negative impacts and a lower level of life satisfaction and perhaps have difficulty in maintaining interpersonal relationships (McCullough et al. 2001). In addition, a positive correlation was found between the agreeableness trait and subjective well-being (Doğan 2012). Therefore, the findings of the study are incongruent with the present study.

The structured psycho-education program focused on gaining tendency to forgive individuals was shown to be effective in reducing 'neuroticism' levels from big five personality traits. This implies that the level of neuroticism decreases as the tendency to forgive increases. This is because emotional instability and being more susceptible to negative feelings (Lounsbury and Gibson, 2009) might halt the ability to cope with any negative or stressful conditions. Therefore, it can be thought that the forgiving tendency of neurotic individuals has decreased considerably. In experimental studies, neurotic personality trait was shown to prevent forgiveness (Ashton et al. 1998). In fact, this is not surprising because the hostile attitude, which is the most important symptom of neuroticism, is a major factor that hinders forgiveness (McCullough and Worthington, 1999). Neuropathic features include anxiety and emotional imbalance. Those with high neuroticism are considered anxious, aggressive individuals with emotional fluctuations. People with low neuroticism are tranquil-calm, emotionally balanced, have anger control, high self-esteem and positive feelings (Benet-Martinez and John, 1998; Costa and McCrae, 1995). According to Ajmal, Amin and Bajwa (2016), individuals with high neuroticism dimension score experience more depressive affect, anxiety, anger, and guilt. It is known that these negative emotions reduce the tendency to forgive. Thus, findings of an excessive amount of research support the finding of the current study. It was found that there was a negative correlation between neuroticism and forgiveness and a lower neuroticism score implies a higher tendency to forgive (McCullough et al. 2001a, c; McCullough, Bellah, Kilpatrick, and Johnson, 2001; McCullough and Hoyt, 2002; Brose, Rye, Lutz-Zois, and Ross, 2005; Berry, Worthington, Parrott, O'Conner, and Wade, 2001; Brown, 2003; Brown and Phillips, 2005; Neto and Mullet, 2004; Walker and Gorsuch, 2002). Similarly, Ajmal, Amin and Bajwa (2016) found a negative correlation between neuroticism and forgiveness. In another study, Hafnidar (2013) found a significant positive correlation between emotional balance and forgiveness despite neuroticism. However, Brown (2003) reported a positive correlation between forgiving others and neuroticism.

The hostility and anger elements of the dimension of neuroticism constitute a major obstacle to forgiveness (McCullough et al. 2001c). It can also be thought that irritation and rapid anger can prevent forgiveness. Because these features can cause the re-emergence of negative emotions when a misbehavior occurs which may prevent the development of positive emotions. Neuroticism is one of the important factors that affect the long duration of a negative emotion (Roberts, 1995; Neto, 2007). Because individuals with high neuroticism scores against emotional stability have a tendency to ruminate after an error (McCullough et al., 1998). Similarly, individuals with low feelings of revenge were found to have high neuroticism against emotional balance (Ajmal, Amin and Bajwa, 2016). Ashton, Paunonen, Helmes and Jackson, (1998) reported a positive correlation between the neuroticism dimension of the big five personality traits and "forgiveness - not taking revenge" factor in their experimental study. According to the findings of Doğan's (2012) study on the relationship between personality traits and subjective well-being, a significant negative correlation was

found between neurotic personality trait and subjective well-being. Therefore, the findings of the previous research reported in the literature are incongruent with the findings of the present study.

The psycho-education program focusing on the tendency to forgive has been found to be effective in increasing the level of "self-forgiveness, forgiving others and forgiving the situation". In order to support the psychological structure of forgiveness with experimental studies, a number of interventions were conducted (Freedman and Enright, 1996; Rye and Pargament, 2002). While most of the studies were related to forgiving others (Freedman and Enright, 1996; McCullough, Worthington and Rachal, 1997), the studies about self-forgiveness are rare (Al-Mabuk & Downs, 1996; Gerber, 1990). Self-forgiveness is the ability to accept personal mistakes (Ajmal, Amin and Bajwa, 2016).

There are studies that support the findings of the present study regarding the impact of psycho-education program applied to elevate forgiveness tendency on the big five personality traits evaluated. Walker and Gorsuch (2002) showed that extraversion dimension is an important predictor of self-forgiveness. In another study, the extraversion dimension was significantly associated with self-forgiveness (Ross et al., 2004; Mullet, Neto and Riviere, 1999). It has been reported that as the primary factor of extraversion dimension, the sense of friendship, is significantly related to self-forgiveness. In addition, self-confidence is significantly associated with self-forgiveness (Walker and Gorsuch, 2002). This is because individuals who score high on the extraversion dimension may have to make decisions for themselves and therefore do not need to forgive themselves. In addition, people with this personality can be reluctant to forgive and to be forgiven by others, as they are away from emotions and emotional comments. Ross et al. (2004) also found a positive correlation between the extraversion dimension and the characteristics of warm and positive emotions in self-forgiveness.

The strongest relationship with self-forgiveness is between anxiety and emotional balance, which are among the primary factors of neuroticism (Walker and Gorsuch, 2002). In the study of Ross et al. (2004), the neuroticism dimension was the only significant predictor of self-forgiveness. This result shows that those who have low emotional stability dimension also have difficulty in self-forgiveness. In addition, attributes such as depression, anxiety and fragility are the biggest indicators of self-forgiveness. Persons with these qualifications are described as having a personality trait that is emotionally fragile and prone to be guilty. In these individuals, the low level of depression is the best predictor of self-forgiveness, and the impulsivity is also low (Ross et al., 2004). Also, a significant relationship was found between emotional balance and self-forgiveness, and individuals with high emotional stability scores were reported to have low self-forgiveness after intense disagreements (Walker and Gorsuch, 2002). This may be because these individuals are extremely self-confident and therefore never need to forgive themselves. Alternatively, because they have a problem of forgiveness, they avoid great reactions, so they become more resilient to disappointment. Therefore, it is likely that individuals who score high on this factor do not need to constantly forgive themselves.

Self-forgiveness has also been found to be negatively correlated with the responsibility and the hostility factors of the neuroticism dimension (Ross et al. 2004). In another study, a significant correlation was found between the extent of responsibility and self-forgiveness (Mullet, Neto and Riviere, 1999). However, in still another study, no associations with self-forgiveness and responsibility knowledge was reported (Walker and Gorsuch, 2002). This may be because self-forgiveness is not regarded as an essential practice by many.

Shepherd and Belicki (2008) indicated that the self-forgiveness is prevented during worry-stress situations and is promoted in enthusiasm-morale cases. Agreeableness was found to be positively correlated with self-forgiveness (Ashton, Paunonen, Helmes and Jackson 1998; Mullet, Neto and Riviere, 1999).

Maltby et al. (2001) and Mauger et al. (1992) demonstrated a positive correlation between self-unforgiving/punishment (the punishment or accusation of self) and depression. Individuals who have difficulty in forgiving themselves tend to regard themselves as negative, and to experience feelings of guilt and worthlessness about depression. This attitude can lead to a sense of helplessness when confronting one's own wrongful actions and hinder the process of self-forgiveness indefinitely. The findings of NEO-PI-R and self-forgiveness suggest that those who have difficulty in self-forgiveness experience more negative affectivity. It seems that those who do not forgive themselves have a tendency to internalize themselves, instead of externalizing and develop sense of self-harm (Ross et al., 2004). There is a positive correlation between agreeableness and the self-forgiveness (Leach and Lark, 2004), friendliness, assertiveness (Walker

and Gorsuch, 2002), the need for compassion, spirituality (Edwards, Lapp-Rincker, Magyar-Moe, Rehfeldt and Ryder, 2002); and a negative correlation between neuroticism (Leach and Lark, 2004) and distrust, anxiety (Walker and Gorsuch, 2002), anger, hostility, depression (Seybold et al. 2001), and psychotism (Johnson and Butzen, 2008).

Forgiving others is to stop taking revenge on the person who made the mistake (Ajmal, Amin and Bajwa, 2016). The findings of the earlier studies support the results of the present research. Walker and Gorsuch (2002) also found that individuals with high neurotoxicity scores against emotional equilibrium had a substantial difficulty in forgiving others, forgiving themselves and accepting the forgiving requests from others. Individuals who have had more resentment against others have higher scores in the neuroticism dimension and lower scores in the agreeableness dimension (Hafnidar, 2013). Ross et al. (2004) reported that although there were no significant determinants for forgiveness, only one significant correlation was found in the dimension of hostility in neuroticism, as predicted. Maltby et al. (2001) and Mauger et al. (1992) suggest that those who have difficulty in forgiving others are in a more punitive manner because the desire to take revenge, grudge, and anger experience are indications of this personality trait.

People with high agreeableness scores are trustworthy and sympathetic, and there is a positive correlation between agreeableness and forgiveness/ forgiven by others (Walker and Gorsuch, 2002). Agreeableness is an important predictor of asking for forgiveness from others. Walker and Gorsuch (2002), on the other hand, conclude that agreeableness does not have an effect on the forgiving others. There is a strong relationship between interpersonal relations (altruism, compassion), the relationship within oneself (trust, patience) and the nature of forgiving others and the extent of forgiveness and agreeableness (Brose et al. 2005). Agreeableness dimension was positively correlated with forgiving others (Ashton et al. 1998; Mullet, Neto and Rivie`re, 1999). The positive correlation between the agreeableness dimension and the forgiving others emphasizes interpersonal (altruism, voluntarism) as well as self-directed (trust, patience) nature (Ross et al. 2004). The reason for this is that the individuals with these characteristics are more likely to forgive others and think that those who make mistakes against them are not malicious and do not deceptively make this mistake.

Extraversion dimension was found not to be effective on forgiving others or self-forgiveness (Walker and Gorsuch, 2002). The dimensions of extraversion and conscientiousness were found to be significantly related to forgiving others (Ross et al. 2004; Mullet, Neto and Rivie`re, 1999). It has been found that there is a positive correlation between forgiving others and extraversion dimension, warm and positive emotions characteristics (Ross et al. 2004). There was a positive correlation between forgiving others and extraversion, sincerity, positive emotions (Shoemaker and Bolt, 1977). It has been reported that there is often a positive correlation between forgiveness and conscientiousness (Mullet et al., 1999).

Ajmal, Amin and Bajwa (2016) demonstrated a positive correlation between forgiving others and conscientiousness. However, many studies reported no relationship between forgiving others and conscientiousness (Ashton et al. 1998; Ross et al. 2004; Walker and Gorsuch, 2002). People who have difficulty in forgiving others, who do not feel sad because of a violation/mistake, and who are inclined to self-forgiveness are "more self-centered, narcissist, insensitive, morally weak, less embarrassed, unable to show remorse and empathy" (Tangney et al. 2015). Walker and Gorsuch (2002) indicated a negative correlation between forgiving others and the openness dimension.

Sarıçam and Biçer (2015) emphasized that compassion is significantly related to forgiving others. Neff and Pommier (2013) stated that forgiving others requires an understanding of the broader causes and conditions. Forgiveness is a way of getting out of pain. When we forgive others, we eliminate the anger and pain. In other words, it can be thought that compassion to self is a necessary factor for forgiving others.

It has been observed that structured psycho-education program which focuses on improving forgiveness tendency is effective in increasing the level of "forgiving the situation". Individuals who are susceptible to physical pain can be particularly vulnerable to physical problems and therefore may be less likely to forgive. Individuals who need more emotional support may often not be able to forgive and cope with the problems themselves, as individuals who are self-confident do. In addition, in the study of Shepherd and Belicki (2008), it was noted that forgiveness was consistent, but most participants expressed that their forgiveness depends on the situation. Although personality traits of people have tendency to forgive in general, there are many

situational factors (the magnitude of the perceived mistake, whether the effects are persistent, the time elapsed after the failure, and the proximity of the relationship) that ultimately determine whether people should forgive a mistake. Wang's (2008) study also found that the agreeableness dimension was significantly associated with situational forgiveness and permanent forgiveness. In addition, neuroticism was found to be negatively correlated with situational forgiveness and continuous forgiveness. There was no significant correlation between the other three personality factors (openness, conscientiousness, extraversion) and two forgiveness points (situational forgiveness and persistent forgiveness). In a study by Azar et al. (1999), 48 participants were asked different and hypothetical mistake/violation cases in the framework of educational status, age, gender and religious group. It was observed that the lack of deliberate malpractice and the lack of lasting negative results positively affect the attitude towards forgiveness. Intentionality of the violation/mistake was and the persistence of the outcome were more effective especially in the participants with lower level of education. In a study conducted by Zechmeister and Romero (2002), the participants were asked for an exposed violations/mistake experience and their violation/mistake experiences. After all, it was observed that the participants did not forgive the serious mistakes/violations they perceived. The possible reason for this is that it is difficult to forgive the mistakes/violations that result in severe consequences, or that the individual perceives the consequences of the wrongdoing as weak after a while.

It has been observed that the structured psycho-education program that focuses on elevating the tendency to forgive is effective in increasing the general level of forgiveness of participants. To explain this hypothesis, it can be argued that forgiveness is one of the priceless features of mankind and an absolute necessity for the continuity of human existence. It is a feature that converts a person from a collapse state to an integration state (Worthington, 2005) and is an opportunity to regain confidence and reconfiguration. Therefore, it is a factor to reconnect to a trust-based relationship again (McCullough et al. 2001). Forgiveness can be formulated as a positive social behavior change against a mistake (McCullough et al. 1997; 1998). These motivational changes have an important place in basic personality processes (McCullough and Hoyt, 2002).

Forgiveness is an internal process which is an indicator of positive self-esteem. One practices different experiences while forgiving others, asking forgiveness from others and from God, and self-forgiveness. Through each of these dimensions, it provides a love, cognition and behavior change that leads to educating people after making fictitious or real mistakes (Brown and Philips, 2005).

Forgiveness, which is one of the important processes of psychology, leads the communication, emotion, spiritual and physical development of human beings and can also support mental health positively by affecting interpersonal function and healthy behaviors. According to Tusanit and Webb (2005), forgiveness reduces the level of anxiety, anger and depression of the forgiving person, which implies that forgiveness can result in the relief of the pain and suffering experienced in life. Forgiveness is a real determination and change in the emotional experience of people, which is related to physical and mental health (Worthington, 1998).

Most of the experimental studies regarding forgiveness are practical and feasible (Coyle and Enright, 1997; Freedman and Enright, 1996; Hebl and Enright, 1993; McCullough and Worthington, 1995). Ghobari Bonab, Keyvanzadeh and Vahdat Torbati (2008) found a correlation between the level of forgiving and mental health of the students, and it was revealed that the students with more forgiving tendencies experienced less depression, anxiety and interpersonal problems than the other group. Similar results were found in the studies conducted by McCullough et al. (2001a). Koç et al. (2016) found that the level of psychological well-being increased as the tendency to forgive increase. In addition, as the tendency to forgive increased, the level of intolerance to ambiguity decreased with no mediating effect on psychological well-being. The increase in the tendency to forgive also increases the level of anger management and it was reported that the tendency to forgive is mediated by the effect on psychological well-being.

On the other hand, Watkins and Regmi (2004) reported no correlation between forgiveness and personality traits in the study conducted in Nepal. Fu et al. (2004) concluded that, in collectivist societies, measurement tools for personality traits developed in western cultures about social adaptive factors such as relationship harmony are more effective in forgiveness. Bugay and Demir (2012) used "Forgiveness Development Group" based on Enright's (1996) Forgiveness Process Model for the purpose of testing the effectiveness of the psycho-education program established to improve university students' self-forgiveness and forgiving others.

No procedure was performed to the control group between measurements. According to the findings of the study, there was a significant difference between the results of self-forgiveness of the experimental and control groups where the experimental group performed higher forgiveness scores.

Thus, it was observed that the prepared psycho-education program was effective in increasing the forgiveness (self-forgiveness, forgiving others, and forgiving the situation). It is concluded that students' general forgiveness level increased positively. In addition, it is evident that the levels of participants of five-factor personality traits of extraversion, agreeableness, openness to experience, and conscientiousness increased, and that of neuroticism decreased.

This study was limited to 10 sessions of psycho-education program practice with the individuals having low tendency to forgive and high neuroticism scores. In the present study the effect of a psycho-education program aiming to elevate the tendency to forgiveness and the five-factor personality traits were examined. Comparing the results of this study with the outcome of an expanded psycho-education program enriched with different variables would be invaluable. In addition, educational institutions, counseling centers, and social development centers can benefit from this psycho-education program in group guidance studies.

## References

- Ajmal, A., Amin, R., & Bajwa, R. S. (2016). Personality traits as predictors of forgiveness and gratitude. *Pakistan Journal of Life & Social Sciences*, 14(2).
- Al-Mabuk, R. H., & Downs, W. R. (1996). Forgiveness therapy with parents of adolescent suicide victims. *Journal of Family Psychotherapy*, 7(2), 21-39.
- Ashton, M. C., Paunonen, S. V., Helmes, E. and Jackson, D. N. (1998). Kin altruism, reciprocal altruism, and the big five personality factors. *Evolution and Human Behavior*, 19, 243-255. doi:10.1016/S1090-5138(98)00009-9
- Azar, F., Mullet, E., & Vinsonneau, G. (1999). The propensity to forgive: Findings from Lebanon. *Journal of Peace Research*, 36(2), 169-181. doi:10.1177/0022343399036002003
- Belicki, K., Rourke, J., & McCarthy, M. (2008). Potential dangers of empathy and related conundrums. *Women's reflections on the complexities of forgiveness*, 165-185.
- Benet-Martinez, V., & John, O. P. (1998). Los cinco grandes across cultures and ethnic groups: Multitrait, multimethod analyses of the Big Five in Spanish and English. *Journal of Personality and Social Psychology*, 75, 729-750.
- Berry J. W., Worthington, E. L., Jr., O'Connor, L. E., Parrott, L., III, & Wade, N. G. (2005). Forgiveness, vengeful rumination, and affective traits. *Journal of Personality*, 73, 1-43. doi: 10.1111/j.1467-6494.2004.00308.x
- Berry, J. W., Worthington, E. L., Jr., Parrott, L. III, O'Connor, L. E., & Wade, N. G. (2001). Dispositional forgivingness: Development and construct validity of the Transgression Narrative Test of Forgivingness (TNFT). *Personality and Social Psychology Bulletin*, 27, 1277-1290. doi:10.1177/01461672012710004
- Brose, L. A., Rye, M. S., Lutz-Zois, C., & Ross, S. R. (2005). Forgiveness and personality traits. *Personality and Individual Differences*, 39(1), 35-46.
- Brown, R. P. (2003). Measuring individual differences in the tendency to forgive: Validity and links with depression. *Personality and Social Psychology Bulletin*, 29, 759-771. doi: 10.1177/0146167203252882
- Brown, R. P., & Phillips, A. (2005). Letting bygones be bygones: Further evidence for the validity of the Tendency to Forgive scale. *Personality and individual differences*, 38(3), 627-638.
- Bugay, A. ve Demir A. (2012). Affetme arttırılabilir mi?: Affetmeyi geliştirme grubu. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 4 (37), 96-106.
- Bugay, A., & Demir, A. (2016). Hataya ilişkin özelliklerin başkalarını affetmeyi yordaması. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 4(35).
- Chamorro-Premuzic, T., & Furnham, A. (2007). Personality and music: Can traits explain how people use music in everyday life? *British Journal of Psychology*, 98(2), 175-185.
- Costa Jr, P. T., & McCrae, R. R. (1992). Neo personality inventory-revised (neo-pi-r) and neo five-factor inventory (neo-ffi) professional manual. Odessa, FL: Psychological Assessment Resources.
- Costa, P. T., & McCrae, R. R. (1995). Domains and facets: Hierarchical personality assessment using the Revised NEO Personality Inventory. *Journal of Personality Assessment*, 64, 21-50. doi:10.1207/s15327752jpa6401\_2
- Costa Jr, P. T., McCrae, R. R., & Dye, D. A. (1991). Facet scales for agreeableness and conscientiousness: A revision of the NEO Personality Inventory. *Personality and individual Differences*, 12(9), 887-898.

- Coyle, C. T., & Enright, R. D. (1997). Forgiveness intervention with post-abortion men. *Journal of Consulting and Clinical Psychology, 65*, 1042–1045.
- DiBlasio, F. A., & Proctor, J. H. (1993). Therapists and the clinical use of forgiveness. *American Journal of Family Therapy, 21*, 175–184. doi:10.1080/01926189308250915
- Doğan, T. (2013). Beş faktör kişilik özellikleri ve öznel iyi oluş. *Doğuş Üniversitesi Dergisi, 14* (1) 2013, 56-64.
- Edwards, L., Lapp-Rincker, R. H., Magyar-Moe, J. L., Rehfeldt, J. D., & Ryder, J. A. (2002). A positive relationship between religious faith and forgiveness: Faith in the absence of data. *Pastoral Psychology, 50*, 147–152.
- Emmons, R. A. (2000). Personality and forgiveness. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *The frontiers of forgiving: Conceptual, empirical, and clinical perspectives* (pp. 156–175). New York: The Guildford Press.
- Enright, R. D. (1996). Counseling within the forgiveness triad: On forgiving, receiving forgiveness, and self-forgiveness. *Counseling and values, 40*(2), 107-126. doi:10.1002/j.2161-007X.1996.tb00844.x
- Enright, R. D., & Fitzgibbons, R. P. (2000). *Helping clients forgive: An empirical guide for resolving anger and restoring hope*. Washington, DC: American Psychological Association.
- Enright, R. D., Freedman, S., & Rique, J. (1998). The psychology of interpersonal forgiveness. In R. D. Enright & J. North (Eds.), *Exploring forgiveness* (pp. 46–62). Madison, WI: University of Wisconsin Press.
- Enright, R. D. ve The Human Development Study Group. (1991). The moral development of forgiveness. In W. Kurtines ve J. Gerwitz (Eds.), *Handbook of moral behavior development* (Vol. 1, pp. 123-152). Hillsdale, NJ: Lawrence Erlbaum.
- Exline, J. J., Yali, A. M., & Lobel, M. (1999). When God disappoints: Difficulty forgiving God and its role in negative emotion. *Journal of Health Psychology, 4*, 365–379. doi:10.1177/135910539900400306
- Ferch, S. R. (1998). Intentional forgiving as a counseling intervention. *Journal of Counseling and Development, 76*, 261-270. doi:10.1002/j.1556-6676.1998.tb02541.x
- Fitzgibbons, R. P., Enright, R. D., & O'Brien, T. (2004). Learning to forgive. *American School Board Journal, 191* (7), 24-26.
- Freedman, S. R. & Enright, R. D. (1996). Forgiveness as an intervention goal with incest survivors. *Journal of Consulting and Clinical Psychology, 64*, 983–992.
- Freedman, S. R. & Enright, R. D., & Knutson, J. (2005). A progress report on the process model of forgiveness. E. L. Worthington (Ed.), *Handbook of forgiveness* (pp. 393-406). New York: Routledge.
- Gerber, P. (1990). P. Gerber, H. Leutwyler and JL Goity, Phys. Lett. B 246, 513 (1990). *Phys. Lett. B, 246*, 513.
- Ghobarı, B. B., Keyvanzadeh, M., & VAHDAT, T. S. (2008). The relationship between "forgiveness" and "mental health" in medical college students, *Journal Of Psychology And Education, 38*, 167-180.
- Glass, R., Prichard, J., Lafortune, A., & Schwab, N. (2013). The influence of personality and facebook use on student academic performance. *Issues in Information Systems, 14*(2).
- Goldberg, L. R. (1990). An alternative" description of personality": the big-five factor structure. *Journal of personality and social psychology, 59*(6), 1216.
- Hafnidar. (2013). The relationship among five factor model of personality, spirituality, & forgiveness. *International Journal of Social Science & Humanity, 3* (2), 167-170.
- Hall, J. H., & Fincham, F. D. (2005). Self-forgiveness: The stepchild of forgiveness research. *Journal Of Social And Clinical Psychology, 24*(5), 621-637.
- Harris, A. H., & Thoresen, C. E. (2005). Forgiveness, unforgiveness, health, and disease. E. L. Worthington (Ed.), *Handbook of forgiveness* (pp. 321-334). New York: Routledge.
- Hebl, J.H. , & Enright, R.D.(1993). Forgiveness as a psychotherapeutic goal with elderly females. *Psychotherapy, 30*, 658-667.
- İlbay, A. B., & Sarıçam, H.(2015). The predictor role of gratitude and psychological vulnerability on forgiveness. *International Journal of Research Studies in Psychology, 4*(4), 61-74. doi: 10.5861/ijrsp.2015.1305
- John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative big five trait taxonomy. *Handbook of personality: Theory and research, 3*(2), 114-158.
- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. *Handbook of personality: Theory and research, 2*(1999), 102-138.
- Koç, M., İskender, M., Çolak, T.S. ve Düşünceli, B. (2016). Investigation of the effect of intolerance of uncertainty and the effect of anger control on the relationship between forgiveness and psychological

- well-being through structural equation modelling. *Sakarya University Journal of Education*, 6(3), 201-209. doi: 10.19126/suje.282951
- Lopez, S. J., & Snyder, C. R. (2009). *Oxford handbook of positive psychology*. New York: Oxford University Press.
- Lounsbury, J.W. ve Gibson, L.W. (2009). *Personal style inventory: A personality measurement System for work and school settings*. Knoxville, TN: Resource Associates Inc.
- Leach, M. M., & Lark, R. (2004). Does spirituality add to personality in the study of trait forgiveness? *Personality and individual differences*, 37(1), 147-156.
- Lee, K., & Ashton, M. C. (2004). Psychometric properties of the HEXACO personality inventory. *Multivariate behavioral research*, 39(2), 329-358.
- Maltby, J., Macaskill, A., & Day, L. (2001). Failure to forgive self and others: A replication and extension of the relationship between forgiveness, personality, social desirability, and general health. *Personality and Individual Differences*, 30, 881–885. doi:10.1016/S0191-8869(00)00080-5
- Matthews, G., Derryberry, D., & Siegler, G. J. (2000). Personality and emotion: Cognitive science perspectives. *Advances in personality psychology*, 1, 199-237.
- Mauger, P. A., Perry, J. E., Freeman, T., Grove, D. C., McBride, A. G., & McKinney, K.E. (1992). The measurement of forgiveness: Preliminary research. *Journal of Psychology and Christianity*, 11, 170-180.
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, 52, 81-90.
- McCullough, M. E. (2001). Forgiveness: Who does it and how do they do it? *Current Directions in Psychological Science*, 10, 194–197. doi:10.1111/1467-8721.00147
- McCullough, M. E. (2008). *Beyond revenge: The evolution of the forgiveness instinct*. New York, NY: Jossey-Bass.
- McCullough, M. E., Bellah, C. G., Kilpatrick, S. D., & Johnson, J. L. (2001). Vengefulness: Relationships with forgiveness, rumination, well-being, and the Big Five. *Personality and Social Psychology Bulletin*, 27(5), 601-610. doi:10.1177/0146167201275008
- McCullough, M. E., Emmons, R. A., & Tsang, J. A. (2002). The grateful disposition: A conceptual and empirical topography. *Journal of Personality and Social Psychology*, 82, 112–127. doi:10.1037//0022-3514.82.1.112
- McCullough, M. E., & Hoyt, W. T. (2002). Transgression-related motivational dispositions: Personality substrates of forgiveness and their links to the Big Five. *Personality and Social Psychology Bulletin*, 28, 1556–1573. doi: 10.1177/014616702237583
- McCullough, M. E., Rachal, K. C., Sandage, S. J., Worthington, E. L. Jr., Brown, S. W., & Hight, T. L. (1998). Interpersonal forgiving in close relationships II: Theoretical elaboration and measurement. *Journal of Personality and Social Psychology*, 73, 321–336. doi:10.1037/0022-3514.73.2.321
- McCullough, M. E., Root, L. M., Tabak, B., & Witvliet, C. V. O. (2009). Forgiveness. In S.J. Lopez (Ed.), *Handbook of positive psychology* (2<sup>nd</sup> ed., pp. 427–435). New York: Oxford University Press.
- McCullough, M. E. & Worthington, E. L. J. (1999). Religion and the forgiving personality. *Journal of Personality*, 67, 1141-1164. doi:10.1111/1467-6494.00085
- McCullough, M. E., Worthington, E. L., Jr., & Rachal, K. C. (1997). Interpersonal for giving in close relationships. *Journal of Personality and Social Psychology*, 73, 321–336.
- Mullet, E., & Girard, M. (2000). Developmental and cognitive points of view on forgiveness. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, research and practice* (pp. 111–132). New York: Guilford Press.
- Mullet, E., Neto, F., & Riviere, S. (2005). Personality and its effects on resentment, revenge, forgiveness, and self-forgiveness. E. L. Worthington (Ed.), *Handbook of forgiveness* (pp.159-81). New York: Routledge.
- Neff, K. D., & Pommier, E. (2013). The relationship between self-compassion and other-focused concern among college undergraduates, community adults, and practicing meditators. *Self and Identity*, 12(2), 1-17. doi:10.1080/15298868.2011.649546
- Neto, F., & Mullet, E. (2004). Personality, self-esteem, and self-construal as correlates of forgivingness. *European Journal of Personality*, 18(1), 15-30.
- Noreen, S., Bierman, R. N., & MacLeod, M. D. (2014). Forgiving you is hard, but forgetting seems easy: can forgiveness facilitate forgetting? *Psychological science*, 25(7), 1295-1302.
- Rey, L., & Extremera, N. (2014). Positive psychological characteristics and interpersonal forgiveness: Identifying the unique contribution of emotional intelligence abilities, Big Five traits, gratitude and optimism. *Personality and Individual differences*, 68, 199-204. doi:10.1016/j.paid.2014.04.030

- Roberts, R. C. (1995). Forgivingness. *American Philosophical Quarterly*, 32, 289–306.
- Ross, S. R., Kendall, A. C., Matters, K. G., Mark S. Rye, M. S. R., & Wrobel, T. A. (2004). A personological examination of self-and other-forgiveness in the five factor model. *Journal of Personality Assessment*, 82(2), 207-214.
- Rye, M. S., & Pargament, K. I. (2002). Forgiveness and romantic relationships in college: Can it heal the wounded heart? *Journal of Clinical Psychology*, 58(4), 419-441.
- Sandage, S. J., Hill, P. C., & Vang, H. C. (2003). Toward a multicultural positive psychology: Indigenous forgiveness and Hmong culture. *Counseling Psychologist*, 31, 564–592. doi: 10.1177/0011000003256350
- Sarıçam, H., & Biçer, B. (2015). The predictive role of moral value and self-compassion on forgiveness. *GEFAD / GÜJGEF* 35(1), 109-122.
- Shepherd, S., & Belicki, K. (2008). Trait forgiveness and traitedness within the HEXACO model of personality. *Personality and Individual Differences*, 45(5), 389-394. doi:10.1016/j.paid.2008.05.011
- Shoemaker, A., & Bolt, M. (1977). The Rokeach value survey and perceived Christian values. *Journal of Psychology and Theology*, 5(2), 139-142.
- Somer, O., Korkmaz, M., & Tatar, A. (2002). Beş faktör kişilik envanterinin geliştirilmesi: ölçek ve alt ölçeklerin oluşturulması. *Türk Psikoloji Dergisi*, 17 (49), 21 – 33.
- Tangney, J. P., Boone, A. L., & Dearing, R. (2015). Forgiving the self: Conceptual issues and empirical findings. In J. Everett L. Worthington (Ed.), *Handbook of forgiveness* (pp. 143-158). New York, NY: Routledge.
- Thompson, L. Y. Snyder, C. R., Hoffman, L., Michael, S. T., Rasmussen, H. N., Billings, L. S. Roberts, D. E. (2005). Dispositional forgiveness of self, others, and situations. *Journal of Personality*, 73, 313–359. doi:10.1111/j.1467-6494.2005.00311.x
- Toussaint L. and Webb J. R. (2005). Theoretical and Empirical Connections between Forgiveness, Mental Health, and Well-Being. E. L. Jr. Worthington (Ed.), *Handbook of Forgiveness* (pp. 349-362). New York: Brunner-Routledge.
- Toussaint, L. L., Williams, D. R., Musick, M. A., & Everson-Rose, S. A. (2008). Why forgiveness may protect against depression: Hopelessness as an explanatory mechanism. *Personality and Mental Health*, 2(2), 89-103. doi:10.1002/pmh.35
- Tsang, J. A., McCullough, M., & Fincham, F. D. (2006). The longitudinal association between forgiveness and relationship closeness and commitment. *Journal of Social and Clinical Psychology*, 25, 448–472.
- Walker D.F. & Gorsuch R.L. (2002). Forgiveness within the Big Five personality model. *Personality and Individual Difference* 32, 1127-1137. doi:10.1016/S0191-8869(00)00185-9
- Wang, T. W. (2008). Forgiveness and Big Five personality traits among Taiwanese undergraduates. *Social Behavior and Personality: an international journal*, 36(6), 849-850.
- Watkins, D., & Regmi, M. (2004). Personality and forgiveness: A Nepalese perspective. *The Journal of social psychology*, 144(5), 539-540.
- Watson, D., & Clark, L. A. (1992). On traits and temperament: General and specific factors of emotional experience and their relation to the five-factor model. *Journal of personality*, 60(2), 441-476.
- Watson, D., & Hubbard, B. (1996). Adaptational style and dispositional structure: Coping in the context of the Five-Factor model. *Journal of personality*, 64(4), 737-774.
- Witvliet, C. v. O., Ludwig, T. E., & Vander Laan, K. L. (2001). Granting forgiveness or harboring grudges: Implications for emotion, physiology, and health. *Psychological Science*, 121,117–123. doi:10.1111/1467-9280.00320
- Worthington, E. L. Jr. (1998). *Dimensions of forgiveness: Psychological research and the logical perspectives*. Philadelphia: Templeton Foundation Press.
- Worthington, E. L, Jr. (2005). Initial questions about the art and science of forgiving. In E. L. Worthington Jr. (Ed.), *Handbook of forgiveness* (pp. 1–14). New York, NY: Routledge.
- Worthington, E. L., Jr., Sandage, S. J., & Berry, J. W. (2000). Group interventions to promote forgiveness: What researchers and clinicians ought to know. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp. 228–253). New York: Guilford Press.
- Worthington, E. L, Jr, Van Oyen Witvliet, C., 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, 291–302. doi:10.1007/s10865-007-9105-8



- Worthington, E. L., Jr., & Wade, N.G. (1999). The social psychology of unforgiveness and forgiveness and implications for clinical practice. *Journal of Social and Clinical Psychology, 18*, 358–415.
- Worthington, E. L. Jr. (1998). *Dimensions of forgiveness: Psychological research and the logical perspectives*. Philadelphia: Templeton Foundation Press.
- Zechmeister, J., & Romero, C. (2002). Victim and offender accounts of interpersonal conflict: Autobiographical narratives of forgiveness and unforgiveness. *Journal of Personality and Social Psychology, 82*, 675–686. doi: 10.1037//0022-3514.82.4.675