

Received: November 24, 2021

Accepted: December 29, 2021

<http://dergipark.org.tr/rep>

Research Article

e-ISSN: 2602-3733

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December 2021 ♦ 5(2) ♦ 397-413

Doi: 10.54535/rep.1025099

# The Mediator Role of Forgiveness between The Interpersonal Relationships and The Level of Cognitive Distortions in Young Adults

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## Abstract

The aim of this research is to examine the mediating role of forgiveness in the relationship between interpersonal relationships and cognitive distortions in young adults' addiction using the structural equation modeling (SEM) technique. This research is designed in relational scanning type. The sample of the study between the years 2019-2020 living in Istanbul, which is a multi-stage sampling method with the universe in different socio-economic levels of qualifications will be represented, 331 women (73.8%), 117 were male (26.2%) of 448 young adult constitutes. Research data; was collected using The Personal Information Form, Interpersonal Relationship Dimensions Scale, the Cognitive Distortions Scale, and the Heartland Forgiveness Scale. The data of the research were analyzed using SPSS and AMOS package programs. To examine the study's, an independent samples t-Test, ANOVA (One-Way Analysis of Variance), Pearson product-moment correlation and the structural equation modeling (SEM) have been used for analyzing the data. According to the current research results, forgiveness has a partial mediating role in the relationship between interpersonal relationships and cognitive distortions. When the model goodness of fit indexes are compared with the acceptable and good fit indexes, it is seen that the model is compatible with the established Structural Equation Model data and the tested model is verified.

## Keywords

Interpersonal relationships • Cognitive distortions • Forgiveness • Path analysis

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**Citation:** Yıldız, H. V., & Ekşi, H. (2021). The mediator role of forgiveness between the interpersonal relationships and the level of cognitive distortions in young adults. *Research on Education and Psychology (REP)*, 5(2), 397-413.

Individuals as social beings, interact with others as needed in social life. When the individual interacts with others, he both influences and is affected by the dimensions of emotion, thought and behavior as well as the dimension of communication (Colakoğlu, 2012; Leary, 2004). Interpersonal relations, which include social relations between two or more people, are experienced in different degrees of closeness and sharing between individuals. In this context, it can be said that interpersonal relations include all kinds of connections, relationships and intimacy that will enable individuals to interact with each other. In addition, the individual transforms himself and gains in value with the people he interacts with (Köknel, 2005). The factors that are effective in interpersonal relations, which have a decisive role in human life, are shaped by the individual himself, other individuals with whom he has a relationship, and environmental factors. The determining factors of the individual in the initiation, continuation and termination of interpersonal relations; direct factors are personality traits, self-concept, autonomy, perfectionism, sensitivity to interpersonal rejection, emotional stability, safe behavior, social skills and social competence, cognitive skills (Alberti & Emmons, 2002; Nichols & Schwartz, 1998; Safran, 1990; Tangney et al., 2004). Elements of interpersonal attractiveness such as similarity, personality traits of the other person, trust, early experiences, parental attitudes, non-verbal signs, closeness and respectability, and some characteristics related to the environment and other people are among the indirect factors that affect interpersonal relationships (Imamoğlu, 2008; Siyez, 2010).

Cognitive distortions of individuals are one of the factors that determine the maintenance of interpersonal relations. The level of cognitive distortions, expressed by Beck (2006) as thinking errors and biases that people make while processing information, has a decisive role in initiating and maintaining interpersonal relationships. Cognitive distortions explain the thoughts, feelings, and behavioral problems that an individual presents about perceiving and interpreting himself, other people, and the outside world unrealistically (Ersoy-Kart et al., 2018). Cognitive distortions occur with childhood in all individuals and are accepted as an absolute reality without being tried by the individual, but they appear more intensely in individuals with mental problems (Türkçapar, 2011). These distortions, also called cognitive errors, appear as the source of the main emotional difficulties in experiencing psychological problems (Beck, 2008; Ersoy-Kart et al., 2018; Savaşır & Batur, 2003). With the effect of distortions, the functionality of the individual, who is almost in a vicious circle, decreases and the individual begins to feel more negative emotions such as unhappiness, sadness, anger, and defeat (Beck, 2008).

Interpersonal schemas, which are formed by the combination of the individual's perceptions of himself and his environment, affect the feelings, thoughts and behaviors of the individual towards himself and other people, and his relations with other people (Hamamcı & Büyüköztürk, 2003; Safran & Segal, 2004; Savaşır et al., 2009). Cognitive distortions which are related to interpersonal relationships are rigid, irrational, absolute beliefs, thoughts, perceptions and evaluations that occur together with dysfunctional interpersonal schemas that the person has -owns (Hamamcı & Büyüköztürk, 2004). Cognitive distortions cause forming unhealthy interpersonal relationship patterns and they also cause a decrease in satisfaction from social relationships (Murat, 2019). This situation also increases the possibility of individuals having problems related to their interpersonal relationships (Sullivan & Schwebel, 1995; Quilty, 2020).

The individual develops dysfunctional emotions and behaviors towards himself, other people and the world with cognitive distortions about his relationships. Individuals may experience some conflicts due to distortions in their interactions (Akin, 2010). Because of conflicts, negative emotions such as anger and sadness occur in the individual, and he may feel resentment against the person with whom the conflict is experienced. Forgiveness, which is one of the means of coping with these negative emotions experienced in interpersonal relationships, is very effective in forgiving the resentment that has arisen about the experienced situation or event, and in maintaining the interpersonal relationships and increasing its quality (Bugay & Demir, 2010). Forgiveness is replacing the negative emotions of the victimized person naturally with positive emotions about the person who made the mistake, without ignoring the negative situation. However, it also means that the victim offers a second chance to the offender (Coleman, 1998; cited in Colak & Koç, 2016; Hebl & Enright, 1993; cited in Asıcı, 2019). Miceli and Castelfranchi (2011) emphasize that to forgive, an individual should reframe their cognitive schemas related to the situation that upsets them. In the process of forgiveness, the individual who reconstructs his cognitive schemas regarding himself or the other person reframes his basic assumptions and reality of the breaking situation with a different perception situation. Thus, the individual gains a different understanding of himself, other people and the world by getting out of the effect of cognitive distortions that cause him to interpret events and situations in a non-functional way. With forgiveness, which has an important function in maintaining the relationship in interpersonal relations, cognitive distortions of individuals, which are far from functional, turn into a functional ones.

Humans are social beings and encounter and interact with countless people throughout their lives. Since it is assumed that interpersonal relations will exist in every period of an individual's life, it is seen that it is important to find the factors that are effective in interpersonal relations to develop healthy interpersonal relations. For this reason, focusing on the subjects of interpersonal relations in studies based on the individual will contribute to the relevant studies. In related studies, it is seen that cognitive factors that are effective in interpersonal relations are emphasized, and the schemas and thoughts that people have regarding relationships are effective on interpersonal relations (Safran, 1990; Hamamcı & Büyüköztürk, 2003). Cognitive distortions are also seen as an important factor among cognitive factors. In addition, when the studies are examined, it has been revealed that some tools are effective in coping with negative emotions that are shaped together with cognitive distortions related to close relationships. According to the research findings; it has been observed that forgiveness is effective as a way of coping and increases the quality and satisfaction of interpersonal relationships (Berry & Worthington, 2001; Coyle & Enright, 1997; Fincham & Beach, 2002; McCullough, Fincham & Tsang, 2003).

Although there are various studies in the literature on the relationships between interpersonal relationships, cognitive distortions, and forgiveness variables in the studies that have been put forward until now (Akin, 2010; Hamamcı, 2002; Hamamcı & Büyüköztürk, 2003), there has been no study examining the relationships between the three variables together. The concepts of interpersonal relationships and forgiveness have been studied in the related literature together with different variables. The studies have focused on the predictive role of forgiveness in interpersonal relationships (Kaygas, 2017). In the studies on the relationships between cognitive distortions and interpersonal relations variables, it has been observed that there is a significant relationship between the variables (Civan, 2013). Besides, the studies have shown that the concept of forgiveness, which is also effective in cognitive

distortions, significantly predicts the level of cognitive distortions that are important in interpersonal relationships. It is observed that there is no research in which interpersonal relationships, cognitive distortions and forgiveness variables are examined together. For this reason, the study aims to examine the mediating role of forgiveness in the relationship between interpersonal relationships and cognitive distortions in young adults.

## Method

### Research Model

The relationship between interpersonal relationships, cognitive distortions and forgiveness levels of young adults was analyzed by "Structural Equation Modeling". In the study, the direct or indirect effects of cognitive distortions on interpersonal relations are examined. In addition, some evaluations were made to see whether forgiveness is a statistically significant mediator variable in which direction and at what level the mediation effects were also a part of the study.

### Study Group

The study group of the research consists of 448 young adult individuals living in Istanbul from 2019-2020. There were 331 (73.9%) girls and 117 (26.1%) boys. Research data were collected using the most appropriate sampling method. When the income levels of the participants are examined, there are 36 (8.0%) people in the low-income group, 357 (79.7%) people in the middle-income group, and 55 (12.3%) people in the high-income group. Considering the marital status of the people, it is seen that 364 (81.3%) people are married and 84 (18.8%) people are single.

### Data Collection Methods

**The Scale of Interpersonal Relationship Dimensions (SIRD)** Scale of Interpersonal Relationships Dimensions [Imamoğlu & Aydın \(2009\)](#), consists of 54 items. It was aimed to measure four relationship dimension prototypes regarding interpersonal relationships by collecting different items in the scale. The items in this scale were created based on the answers given by the individuals participating in the research when asked about the main factors in initiating and maintaining relationships with other people, statements in the literature, and expert opinions. On the scale, there are 15 items related to approval dependence, 9 items related to empathy, and 14 items related to trust in others, among interpersonal relationship dimensions. There are two reverse points in the dependency sub-dimension, which is one of the sub-dimensions of the scale. The higher the score, the higher the approval dependency. In the empathy sub-dimension, which is the second sub-dimension of the scale, all items are evaluated positively. In the sub-dimension of trusting others, which has 11 reverse items, as the score increases, there is a decrease in trust in others. In the sub-dimension of emotional awareness, which is the last sub-dimension of the scale, 10 items have reverse items and as the score increases, emotional awareness decreases. In the Scale of Interpersonal Relationships Dimensions, which is a Likert-type scale, the participants are asked to evaluate and choose the most appropriate answer for the items (1 = completely describes me; 4 = does not describe me at all). As a result of the answers given, certain points are obtained for the interpersonal relationship dimensions. The Cronbach Alpha internal consistency coefficients of the sub-dimensions ranged from 78 to 85; test-retest values also vary between 62 and 96. In the study,

the Cronbach's alpha internal consistency coefficients of reliability in others, empathy and emotional awareness, which are the sub-dimensions of the SDIR, were determined as .78, .75, and .74.

**The Interpersonal Cognitive Distortions Scale (ICDS)** The Interpersonal Cognitive Distortions Scale created by Hamamcı (2002), evaluates the cognitive distortions that people display in their relationships. There are 19 items on the scale that contain statements about cognitive distortions related to interpersonal relationships. The items in the scale were created based on the answers given by the individuals participating in the research to the form containing open-ended statements, statements in the literature, and expert opinions. On the scale, there are 8 items measuring avoidance of intimacy, 8 items measuring unrealistic relationship expectation, and 3 items measuring unrealistic relationship estimation (mind-reading). Participants are asked to evaluate and choose the most appropriate answer for the items in the ICDS, which is a five-point Likert-type scale (1 = I completely agree; 5 = I do not agree at all). On the scale the highest score is 95 and the lowest score is 19. Also, people's scores reveal their cognitive distortions regarding interpersonal relationships. Internal consistency and test-retest methods were used to measure the reliability of the scale. Internal consistency coefficient for the whole scale. is .67. The internal consistency coefficients of the sub-dimensions of the scale are; for the proximity avoidance sub-dimension. .73; for the unrealistic relationship expectation sub-dimension. .66; for mind-reading sub-dimension. It was found to be .74. Test-retest correlation coefficient; .74 for the whole scale, .70 for the first sub-dimension; It was calculated as .76 for the second sub-dimension and .74 for the third sub-dimension. In the research, the Cronbach alpha internal consistency coefficient of the Interpersonal Cognitive Distortions Scale was found to be .85.

**The Heartland Forgiveness Scale.** The Heartland Forgiveness Scale developed by Thompson et al. (2005), was developed to measure individuals' tendency to forgive. The scale consists of 18 items. It is a 7-point Likert-type scale. It has three sub-dimensions: forgiving oneself, forgiving the situation, and forgiving others, and the highest total score on the scale is 126, while the lowest total score is 18. The lowest score in the sub-dimension scores is 6 and the highest score is 42. It was observed that there was a significant relationship between the scales used to ensure criterion validity, and forgiveness was also found to be negatively associated with rumination, hostility and revenge. In the study conducted to ensure the reliability of the scale, the test-retest coefficient was calculated as .83 for self-forgiveness, .72 for the forgiving the others, .73 for situational forgiveness sub-dimension, and .77 for the total score. Cronbach  $\alpha$  coefficients were also reported as .75, .78, .79, and .86 for the total score, respectively (cited by Bugay & Demir, 2010). Bugay and Demir (2010) carried out the translation and adaptation studies of the scale into Turkish culture. Internal consistency coefficient for the whole scale in the Turkish form. .81 for the self-forgiveness subscale, one of the sub-dimensions of the scale. .64 for the forgiveness of others subscale. .79 and for the forgive the situation subscale. It was found to be .76. As a result of confirmatory factor analysis, the goodness of fit index (GFI) was .92; the comparative fit index (CFI).90; The root means a square error of approximation (RMSEA)=.06 and constructs validity of the scale was sufficient. Criterion-dependent validity was calculated to determine the criterion validity and all dimensions of the forgiveness scale were combined with the life satisfaction scale ( $r=.205$ ,  $p=.00$  for self-forgiveness dimension,  $r=.145$ ,  $p=.00$  for the forgiveness of others dimension;  $r = .381$ ,  $p=.00$ , and  $r = .324$   $p=.00$  for general forgiveness) were positively correlated. Rumination scale of the scale ( $r = -.353$ ,  $p =.00$  for self-forgiveness;  $r = -.351$ ,  $p=.00$  for forgiveness of situations, and  $r = -.333$   $p =.00$  for total forgiveness). was found to be related. It

was observed that there was no significant relationship between the forgiveness of others' dimensions and the Rumination scale ( $r = -.085$ ,  $p = .102$ ). In the study, the Cronbach alpha internal consistency coefficient of the Heartland Forgiveness Scale was found to be .86.

### **Analysis of Data**

SPSS Statistics and AMOS programs were used to analyze the research data. Incorrect or incomplete fillings in the data collection tools were excluded from the analysis. Within the scope of the research, descriptive statistics, independent Groups t-Test, One-Way Analysis of Variance (ANOVA), Scheffe Post-Hoc test and Pearson Correlation Analysis were used to analyze data on interpersonal relationships, cognitive distortions and forgiveness scores of young adults. Whether the forgiveness variable has a mediating role in the relationship between interpersonal relations and cognitive distortion variables and the structural relationships between the variables were revealed by the Structural Equation Model (SEM) technique, path analysis. While the AMOS program was used for path analysis, the SPSS program was used to prepare research data for path analysis and to test whether the necessary assumptions were met.

Structural equation model used in the analysis of data in the research; It is a model that includes multiple analyzes such as confirmatory factor analysis, path analysis, multi-group applications (Cokluk et al., 2016; Kline, 2019). The model created with the observed variables is also tested with the path analysis, which is a regression-based analysis in SEM (Cokluk et al., 2016). Testing the direct and indirect effects between causality, which has an important context in the path analysis, and the test of the direct and indirect effects between the variables related to the model created has the confirmatory feature (Cokluk et al., 2016). It is analyzed with the regression equation and the resulting path coefficients determine which variables to include in the equation. Thus, while explaining the change on the predicted variable, path coefficients are used in the selection of the variables that will enter the model. In addition to determining the effect of the independent variables on the dependent variable, it is possible to reveal the mediating variable that is effective between the variables thanks to the path analysis (Cokluk et al., 2016).

In this study, the method suggested by Baron and Kenny (1986) was followed to determine whether the mediation of forgiveness is significant in the relationship between interpersonal relationships and cognitive distortions in young adults: According to Baron and Kenny, for a variable to be a mediator; (a) there should be a significant relationship between the dependent and independent variable, (b) there should be a meaningful relationship between the mediating variable and the independent variable, (c) there should be a meaningful relationship between the mediating variable and the dependent variable, and (d) there should be a significant relationship between the mediating variable and the independent variable When it enters the model simultaneously, the significant relationship between the dependent and independent variable should cease to be significant (fully mediative) or the previous level of significance should decrease (partial mediation).

### Finding

In this section, in line with the aims of the present research; The results of the Pearson Product-Moment Correlation, a measure of the strength of a linear association between two variables and attempts to draw a line of best fit through the data of two variables, was used and the structural equation modeling, carried out to examine the mediating role of forgiveness between interpersonal relationships and cognitive distortions, are presented in the accompanying tables.

Table 1.

*Correlation Table among Variables, Arithmetic Means and Table of Internal Consistency Coefficients of Variable*

Variables	N	X	1	2	3	4	5
<b>1.Cognitive distortion</b>	448	52.22	1	.334*	.334*	.310*	.197*
<b>2.Trust others</b>	448	43.04	.334*	1	.326*	.147*	.070
<b>3. Empaty</b>	448	19.27	.334*	.326*	1	.073	-.090
<b>4.Emotion awareness</b>	448	42.64	.310*	.147*	.073	1	.052
<b>5. Forgiveness</b>	448	76.62	.197*	.070	-.090	.052	1

\*P<,001

In Table 1, there is the number of participants, arithmetic averages, and correlation coefficients showing the relations of the variables with each other regarding the variables used in the research. Since the relations between the variables related to the model to be tested within the scope of the research are significant, it is concluded that the results are at a sufficient level for the model to be tested. Therefore, finding the relationship between the variables, which is one of the antecedents of the model, shows that the model is testable (Baron & Kenny, 1986).

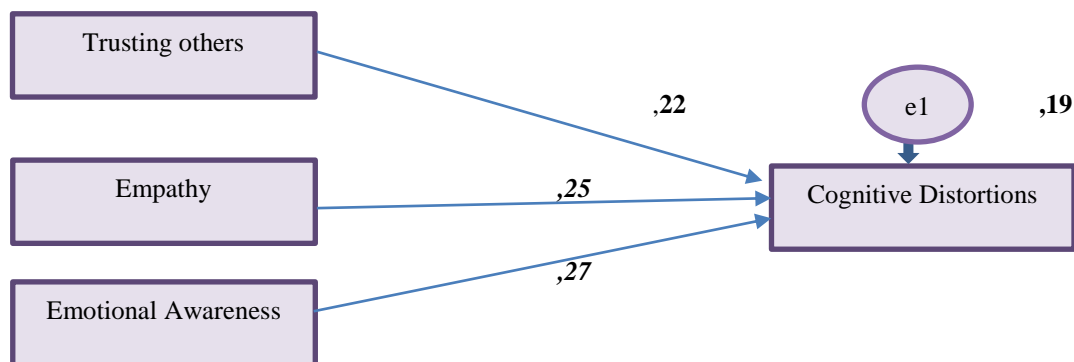
The following models were tested to conduct a detailed and comprehensive analysis for the research:

Model 1: Is there a significant relationship between interpersonal relationships and cognitive distortions?

Model 2: Does forgiveness have a mediating role between interpersonal relationships and cognitive distortions?

Figure 1

*Structural Model of the Relationship Between Interpersonal Relationships and Cognitive Distortions 1*



In Figure 1, it is seen that there is a significant relationship between each of the sub-dimensions of trust in others, empathy and awareness of emotion variables and the cognitive distortions variable ( $r_1=.22$ ;  $r_2=.25$ ;  $r_3=.27$ ;  $p<.001$ ). The cognitive distortion variable of trusting others, empathy and awareness of emotion is explained by 19%. Following these results, the process of testing the mediating role of the forgiveness variable in the relationship between interpersonal relations and cognitive distortions was started.

Figure 2

*Structural Model 2 Examining the Mediator Role Effect of Forgiveness on the Relationship Between Interpersonal Relationships and Cognitive Distortions*

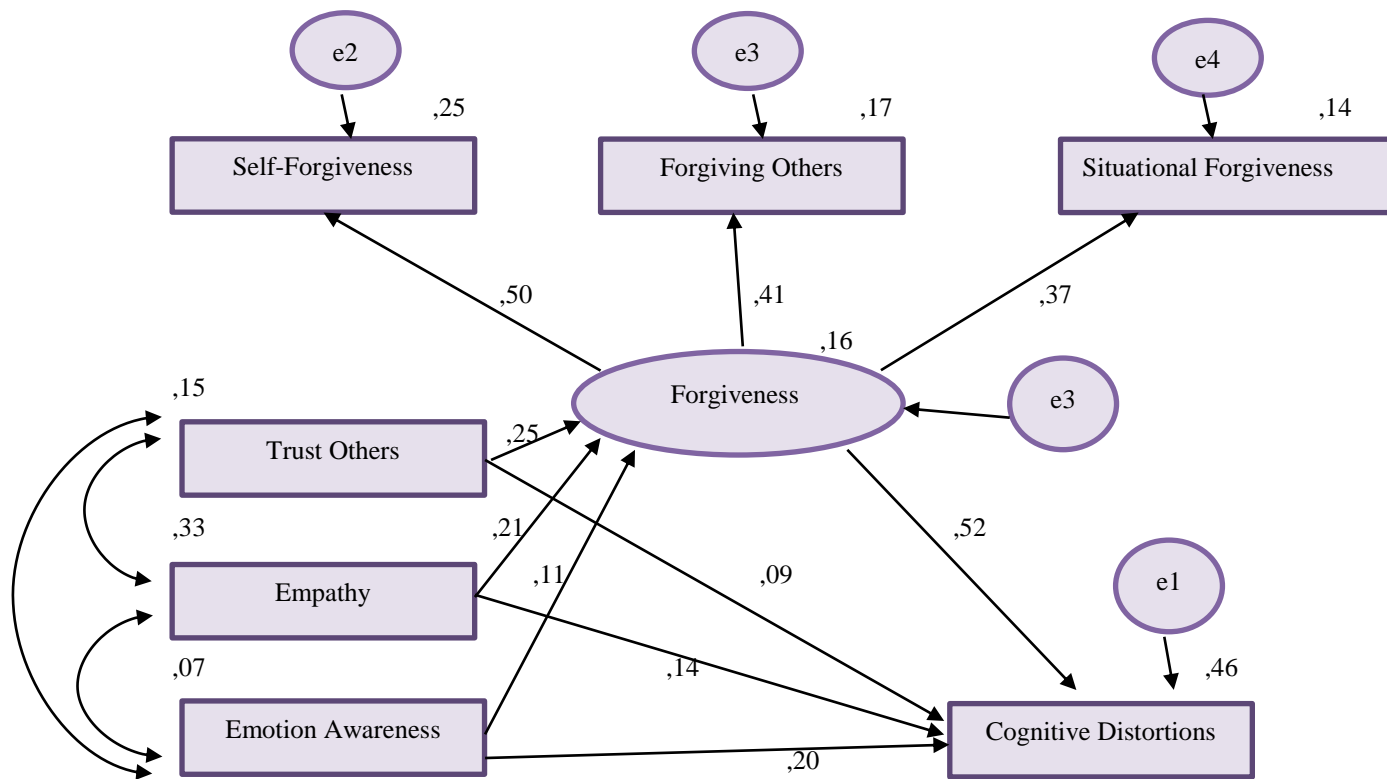


Figure 2 shows the mediating role of the forgiveness variable in the relationship between interpersonal relationships and cognitive distortions. The relationship between the predictor and the predicted variable should either completely or partially decrease with the inclusion of the mediator variable in the model to understand whether a variable has a mediating effect. Model 2, which is the aim of the study, shows that the relationship between interpersonal relationships and cognitive distortions in model 1 has decreased significantly. While it was ( $r_1=.22$ ;  $r_2=.25$ ;  $r_3=.27$ ) in the previous model, this relationship was found at ( $r_1=.09$ ;  $r_2=.14$ ;  $r_3=.20$ ) in the new model.



Table 2

*The goodness of Fit Indices for Model 2*

<b>Indices</b>	<b>Model values</b>	<b>Acceptable Limits</b>
$\chi^2/sd$	3,232	$\leq 5$ acceptable fit, $\leq 3$ perfect fit < 0
<b>RMSEA</b>	.071	$\leq .10$ poor fit, $\leq .08$ good fit, $\leq .05$ perfect fit
<b>GFI</b>	.986	.85-.89 acceptable good fit, $\geq .90$ good fit
<b>AGFI</b>	.944	.85-.89 acceptable fit, $\geq .90$ good fit
<b>CFI</b>	.949	$\geq .90$ acceptable fit, $\geq .95$ good fit, $\geq .97$ perfect fit
<b>IFI</b>	.952	$\geq .90$ acceptable fit, $\geq .95$ good fit, $\geq .97$ perfect fit

Whether the fit values are among the values accepted in the literature or not has been analyzed and the findings have been evaluated to understand if the fit values of the model tested are at the desired levels, In Table 2, it is seen that the values are either between acceptable or excellent values ( $\chi^2/sd=3,232$ ;  $RMSEA=.071$ ;  $GFI=.986$ ;  $AGFI=.944$ ;  $CFI=.949$ ;  $IFI=.952$ ). According to these results, the tested model is among the required goodness-of-fit values.

### **Discussion, Conclusion and Recommendations**

In the study, it was found that the structural equation model was compatible with reasonable values. In the structural equation model, in which cognitive distortions are described as the predicted (dependent) variable, interpersonal relations as the predictor (independent) variable, and forgiveness as the mediator variable, the relationships between the variables seem to have some direct and indirect effects. It is seen that interpersonal relations have a moderate and significant direct effect on the cognitive distortions variable, the level of this relationship decreases with the inclusion of the variable of forgiveness in the model, and forgiveness has a partial mediating role in the relationship between interpersonal relationships and cognitive distortions since the relationship maintains its significance. It can be said that the variable of forgiveness explains some of the relationships between interpersonal relationships and cognitive distortions.

It was concluded that there was a significant relationship between the variables of interpersonal relations and cognitive distortions in the model created and that as the dimensions of interpersonal relationships increased, cognitive distortions decreased. According to the related literature, people with cognitive distortions about interpersonal relationships misinterpret what other individuals say (Akin, 2010); The sensitivity of individuals with interpersonal sensitivity and their cognitive distortions about the self are closely related (Koichi et al., 2018); individuals are suitable for conflict in their relationships (Hamamcı & Büyüköztürk, 2003); high school students with cognitive distortions related to high levels of interpersonal relationships tend to exhibit more aggressive reactions (Uğur & Murat, 2014); that there is a significant and negative relationship between the cognitive distortions of individuals with depression and their interpersonal functionality (Schwartzman et al., 2012); research findings show

that cognitive distortions related to relationships are an important predictor of loneliness (Hamamcı & Duy, 2007). When these studies in the literature and the findings of the current study are examined, it can be concluded that interpersonal relationships have a predictive effect on the level of cognitive distortions.

According to the findings related to the created model, it was observed that there is a statistically significant relationship between interpersonal relationships and forgiveness. When the studies are examined; it is seen that the increase in the level of forgiveness of individuals has a positive effect on their interpersonal relationships (Gordon et al., 2009; Karremans & Van Lange, 2004; Bugay & Demir, 2010). Fincham and Beach (2002) examined the relationship between interpersonal commitment and forgiveness in a study they conducted and found a positive relationship between them. In another similar study, it was observed that with the decrease in the level of forgiveness in interpersonal relationships, satisfaction with the relationship decreased (Strelan et al., 2013). The results obtained from all these studies confirm the relationship between interpersonal relationships and forgiveness. This situation shows that there is a directly proportional relationship between forgiveness and interpersonal relationships and positively affecting each other.

It was concluded that there was a negative and significant relationship between cognitive distortions and forgiveness, which are the other variables of the study. This shows that there is an inversely proportional relationship between cognitive distortions and forgiveness, which affects each other negatively. When the relevant literature is examined; It is seen that there is a negative relationship between the cognitive distortions of individuals and their forgiveness levels (Ascioglu-Önal & Yalçın, 2017; Bugay & Demir, 2010; Navidian & Bahari, 2013). During the development of the Heartland Forgiveness Scale, the sub-dimensions of anger, anxiety and negative emotions were found to be negative; cognitive flexibility, life satisfaction, and positive emotions were found to be positively related to the sub-dimensions of forgiveness of self and others (Thompson et al., 2005). In a similar study, Gündüz (2014) revealed that individuals' self-forgiveness levels significantly predicted their cognitive distortion levels. When these studies in the literature and the findings of the current study are examined, it can be interpreted that the level of forgiveness of oneself and other individuals affects the level of cognitive distortions.

In the study, interpersonal relations, cognitive distortion, and forgiveness levels of young adults were examined as the main purpose, the relations between these variables were determined, and the mediating role of forgiveness between interpersonal relations and forgiveness was examined. According to the research findings, the relationships established between interpersonal relationships, cognitive distortions and forgiveness variables were found to be significant. In the study, it was observed that the relationship between interpersonal relations and cognitive distortions decreased significantly when the variable of forgiveness was included in the relationship between interpersonal relationships and cognitive distortions. Therefore, it was determined that forgiveness was a partial mediator in this model. It supports this finding; The concept of forgiveness and relationship quality and the role of attributions (Taysi, 2007), attachment styles (Alpay, 2009), well-being (Gismero-González et al., 2020), resilience (Capan & Arıcoğlu, 2014), and rumination (Oral, 2016), it is seen that forgiveness is examined together with some variables that affect interpersonal relations and cognitive distortions. In the studies reviewed, significant relationships

were found between interpersonal relationships, cognitive distortions, and forgiveness. Therefore, it is observed that the studies in the literature support the findings of the research.

Civan (2013), in his study examining the relationship between university students' cognitive distortions in their interpersonal relationships and their level of forgiveness of others, determined that there is a low level, negative significant relationship between cognitive distortion total scores and forgiveness of others scores. In another study, Erok (2013) revealed that the prevalence of marital conflict has a highly positive and significant relationship with avoidance of intimacy, unrealistic relationship expectation, and mind-reading, which are cognitive distortions related to relationships. Kılıç (2019), on the other hand, in his study examining the mediating effect of forgiveness between university students' self-understanding and irrational beliefs, revealed that forgiving others and forgiving the situation are a partial mediator, while self-forgiveness has a full mediator effect. When we examine the literature, it is seen that interpersonal relations and cognitive distortions are handled with different mediating variables.

According to the results of the research, it is seen that the high level of forgiveness of young adults will have a significant effect on both interpersonal relationships and less cognitive distortions. In addition, it is seen that some of the relationships between individuals' interpersonal relationships and cognitive distortions are explained by forgiveness. This situation reveals the existence of other mediating variables in the relationship between interpersonal relationships and cognitive distortions. In the related literature; No study was found in which all the relationships between interpersonal relationships, cognitive distortion and forgiveness variables were examined together. This research is the first to reveal the mediating role of forgiveness in the relationship between interpersonal relationships and cognitive distortions in young adults. Therefore, it is thought that it will be important to support these results of the research with new studies to be conducted.

According to the results obtained from the research, the following suggestions can be made for mental health professionals and future research: Based on the findings, psycho-educational programs can be developed to change these cognitive distortions of young adults and groups counseling sessions can be conducted with young adults. In addition, with the help of individual psychological counseling, therapeutic environments can be created that will enable the individual to develop an awareness of cognitive distortions; at the same time, cognitive, behavioral homework or exercises can be given to the individual. Relationship development programs can be created for individuals to cope with the problems they encounter in their interpersonal relationships by helping them to evaluate their level of forgiveness and predictors of self, others, and the situation. Studies on forgiveness in our country are not at the desired level. Similar studies can be organized for both young adults and individuals in other life stages. Investigating which other variables have a mediating effect on the relationship between interpersonal relationships and cognitive distortions will make significant contributions to the relevant literature. With the study, it was seen that there are very few studies examining how interpersonal relationships, cognitive distortions and forgiveness variables change according to demographic variables, and current studies indicate very different results from each other. Therefore, addressing various demographic variables in studies examining these variables will make significant contributions to the relevant literature. Finally, the study group of the research was limited to young adults living in Istanbul only. The study group can be expanded by making further studies to cover different provinces and regions.

**Ethic**

It has complied with ethical principles in this study. Ethics committee approval was obtained from İstanbul Sabahattin Zaim University Ethics Committee (İstanbul Sabahattin Zaim Üniversitesi Etik Kurulu) for this study on 30.09.2020 with the decision numbered 20292139-050.01.04.

**Author Contributions**

This article was written with the joint contributions of two authors.

**Conflict of Interest**

The authors declare that they have no conflict of interest.

**Funding**

No scholarships or payments have been received from any institution for this article.

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