



Dyadic Assessment of Perceived Partner Forgiveness and Relationship Investment Model in Turkish Romantic Couples

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ABSTRACT

The aim of this study is to investigate the relationship between perceived partner forgiveness and relationship investment variables [relationship satisfaction, quality of alternatives, investment size,] in dyadic context. The data were collected from 116 heterosexual romantic couples (n = 232) in the 18-30 age group having at least six months of romantic relationship. This study employed cross-sectional correlational study design. Actor-Partner Interdependence Model (APIM) was used to examine the predictive effect of independent variables of the couples on their dependent variables (actor) and their partners' dependent variables (partner). In this study, dependent variables are relationship satisfaction, quality of alternatives and investment size, independent variable is subjective partner forgiveness. Subjective Partner Forgiveness Scale, The Investment Model Scale were used for data collection. The results suggest that as the level of forgiveness experienced by men and women increase relationship satisfaction increases in the relations between relationship satisfaction and perceived partner forgiveness. Results of the quality of the options and perceived partner forgiveness indicate that the partners' assessment of the quality of alternative decrease as the perceived forgiveness level of both men and women increase. Results of relationship investment and perceived partner forgiveness indicate that the partners' assessment of relationship investment increases as perceived forgiveness in women and men increase. The results were discussed in the context of relevant literature.

Scientific interest in forgiveness studies is generally focused on the positive aspects of forgiveness that can be defined as an important virtue (Bono & McCullough, 2004; Seligman, 2002). In recent years, forgiveness studies have received attention and meta-analysis (Fehr et al., 2010; Riek & Mania, 2012) have been published on the topic of forgiveness and its positive effects. For example, empirical evidence suggests that people who can easily forgive have low hematocrit and white blood cells, one of the variables considered as a criterion of health (Seybold, et al., 2001), a lower tendency to anxiety and depression (Sheffield, 2003) and high levels of individual development, self-acceptance, positive relationships with others, and total psychological well-being (Şahin, 2013) and are highly aggregable and less neurotic than those who do not forgive (Ashton, et al., 1998).

Enright (1996) formulated forgiveness in three different dimensions: interpersonal forgiveness, perceived (subjective, feeling of being forgiven; these will be used interchangeably throughout the text) forgiveness, and self-forgiveness. We only studied the perceived forgiveness dimension in the context of this study because it can be considered that feeling forgiven by one's partner is an important issue that operates mutual processes to maintain romantic relationships.

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Self-forgiveness and interpersonal forgiveness were both extensively studied in the context of direct forgiveness (Enright, 1996). Forgiveness studies also have focused on two specific sub-dimensions: granting forgiveness and seeking forgiveness; While the perspective and feelings of transgressors have been given less attention in forgiveness studies (Asbhy, 2003; Aydın, 2017; Riek, 2010; Riek et al., 2014; Sandage et al., 2000;).

The understanding of transgressors' perspective in forgiveness process, primary activity should be seeking forgiveness (Ashby, 2003). Perceived forgiveness is regarded as the concept of subjective partner forgiveness. The conceptualization of this part of forgiveness is not sufficient to explain it. This concept is expressed in the literature with the terms "perceived partner forgiveness" and "subjective experience of forgiveness" (Friesen, et al., 2005; Pansera & La-Guardia, 2012). In general, different phases of seeking forgiveness are described in the literature as; "seeking forgiveness", "receiving forgiveness," "feeling forgiven" (Enright & Coyle, 1998; Exline & Baumeister, 2000;). All these dimensions are different in terms of assessing forgiveness from the perspective of transgressors. Seeking forgiveness is related to owning up to one's mistakes and wanting to fix the broken heart of the partner (Sandage et al., 2000). There are some variables found to be related to seeking forgiveness. For example, narcissism is negatively related to seeking forgiveness, on the other hand, feeling guilty is a facilitator to apologizing and seeking forgiveness (Sandage et al., 2000; McCullough & Oyen-Witvliet, 2002). After seeking forgiveness, transgressors take place in a passive role, receiving forgiveness. In this phase, people who got hurt can forgive or decide not to (Asbhy, 2003), so transgressors have to wait to be forgiven.

In the field of couple research, several studies report the positive effect of forgiveness in the quality of romantic adult relationships (Fenell, 1993; Haselton & Buss, 2000; Kachadourian et al., 2004; Karremans & Van Lange, 2004; McCullough, et al., 1998; McCullough, et al., 1998). Maintaining a relationship is particularly difficult after being hurt in close relationships such as romantic ones. Many previous studies investigate factors that affect relationship stability, such as social interest, relational self-esteem, and spirituality (Akarsu-Uslu, 2018), childhood traumas (Mamati, 2018), attachment styles (Büyüksahin & Hovardaoğlu, 2007; Uzun, 2017), early maladaptive schemas (Şahin, 2015), forgiveness (Tangney, et al., 2015), and empathy (Cramer, 2003). In these studies, factors affecting the relationship stability are also affected by the personal and positive characteristics that both partners share in the relationship.

Forgiveness is seen as an important means of self-protection that helps to eliminate the hurt caused by the other person, to get rid of the damaging situations that occur and to maintain the relationship (Fincham, 2000). Also, after hurtful events, forgiveness is task for partners in all long-term romantic partnerships (Waldron & Kelly, 2005)

Many factors affect the behaviors of individuals in maintaining romantic relationships. The investment model is one of the most important models explaining the relationship maintenance and termination of relations in a healthy way (Rusbult, 1980, 1983). This model examines relationship stability over three basic dimensions related to the continuation processes of relationships. First one these variables is relationship satisfaction which expresses an individual's overall satisfaction with his or her partner, is an important variable for relationship continuity. Relationship satisfaction can be defined as a concept that allows individuals to define their relationships as near ideal and to express their satisfaction with their relationships (Le & Agnew, 2003). Second variable is quality of alternatives. When people do not find sufficient satisfaction in their relationships and their relationship commitment wanes, they tend to turn to alternative relationship options. The quality of the most attractive relationship compared to the existing relationship can, on average, be accepted as a criterion for determining the quality of individuals' options (Rusbult, 1983). Third variable is investment size which are divided into two as internal and external resources, are considered as powerful motivational tools for maintaining the relationship (Rusbult et al., 1998).

Sub-dimensions of this model are closely related to forgiveness. For example, the studies investigating the relationship between relationship satisfaction and forgiveness determined that forgiveness is an indicator of relationship satisfaction (McCullough et al., 1998; Rusbult et al., 2011) and tendency to forgive a partner is a factor that increases relationship satisfaction (Kachadourian et al., 2004).

Another factor related to forgiveness in the investment model is investment size. The size of the investment can be explained as the amount of resources that an individual will lose if he / she terminates the relationship (Rusbult, 1980). Partners invest in each other in the hope of a lasting future by spending time and effort in the relationship and sharing (Rusbult et al., 1998). It is revealed that romantic relationships are thought to be important emotional source, so individuals are more willing to forgive their partners by thinking about their relationship investments (McCullough et al., 1998), and want to protect the relationship especially if it is high quality relationship, and therefore they have a high tendency to ignore the mistakes of their partners (Rusbult et al., 1991; McCullough et al., 1998).

The last factor relating to forgiveness is the quality of alternatives. The quality of alternatives also considered as the earning value that individuals receive from their partners in their current relationships, is an important variable that affects the motivation of individuals to continue their current relationships and refuse the other options (Le & Agnew, 2003). People who see their partner as more favorable than others, show more positive attitudes towards them, and regard the other options as less valuable (Rusbult, 1980). Partner cognitions are also important for maintaining a relationship (Davis & Gold, 2011). People with high level of commitment to their dating partners do not have the tendency of being with someone else. Additionally, individuals who are satisfied with their current romantic relationship do not need other relationships, and their tendency to choose other options is low (Johnson & Rusbult, 1989). These partners also idealize each other or derogate other possible alternatives to avoid the fear of abandonment (Ogolsky et al., 2017).

Studies show that forgiveness promotes closeness (Bono, et al., 2008) and effective communication (Fincham & Beach, 2002) in romantic relationships. Also, forgiveness facilitates reconciliation between partners (McCullough et al., 1997). While there are initial findings investigating the relationship between forgiveness and investment model (Tsang et al., 2006; Wieselquist, 2009) however, forgiveness studies that using dyadic data are quite few (e.g., Chung, et al., 2009; Knobloch & Theisis, 2010; Stoeber, 2012). In intimate relationships, it is important to examine how change in one partner depends on the characteristics of the other partner. These changes can be related to cultural differences (Kadiangandu et al., 2007). It has been noted that there are cultural differences in forgiveness. Bonding to partners in romantic relationships and underlying mechanisms in forgiveness are affected by some variables that are related to cultural outcomes. Findings about cross-cultural forgiveness studies in romantic relationships indicated that individuals who have high level of positive romantic relationship factors (closeness, satisfaction etc.) have high tendency to forgive their partners (Karremans et al, 2011) regardless of cultural context. However, some of study conducted in different cultural contexts concluded that participants in individualistic cultures (e.g., in USA) focused on more personal reasons to forgive others, participants in collectivistic cultures (e.g., in Japan) focused on more social norms than personal reasons (Terzino et al., 2010). Turkish culture has both individualistic and collectivistic elements and studies show that Turkey cannot be placed on one side of these dimensions. (e.g., Uleman et al., 2000; Uskul, et al., 2004). So, forgiveness in romantic relationships in Turkish young adults cannot be studied under one side of individualistic-collectivistic context because of ambiguous cultural status of Turkey.

In the context of relationship maintenance and relationship satisfaction, some studies investigated the actor-partner effects (Stoeber, 2012; Papp, et al., 2012) For example, the results of a study investigating relationship satisfaction and long-term commitment showed that dyadic perfectionism in romantic relationships cause pressure on partners and affects the perception of the quality of the relationship (Stoeber, 2012). Another study investigating the usage of Facebook and relationship satisfaction in dyadic contexts showed that disagreements about the relationship status on Facebook was associated with lower level of relationship satisfaction on females, rather than males (Papp et al., 2012).

The investigation of romantic relationships in dyadic context is very crucial to understand mutual effects on relationships. Relational factors are generally investigated on personal or individual bases, and this creates a weakness to fully understand relationship dynamics from dyadic or couple perspective. This study goes beyond the previous research about seeking forgiveness in romantic relationships and plans to investigate the relationship between relational investment and perceived partner forgiveness in dyadic context, aiming to elicit actor and partner effects in the romantic relationship. Promoting positive behaviors such as being forgiven by

the partner is critical to the stability of the relationship. At this point, it is thought that investigating perceived forgiveness will help the problems of couples who have difficulty in forgiving their partner and reflecting that in the relationship.

In this study, a dyadic approach was adopted and the Actor-Partner Interdependence Model (APIM, Kenny, et al., 2006) was used. This model makes it possible to examine the effect of the independent variables of couples on their dependent variables (actor effect) and the effect of the dependent variable of partners (partner effect) as well (Aydoğan & Özbay, 2018; Karaköse et al., 2023). Generally, partner effects are typically smaller than actor effects (Karaköse, et al., 2023) In our study, we expect for the actor effects, previous studies (Guerrero & Bachman, 2010; Kachadourian et al., 2004) results on a positive relationship between relationship investment model and interpersonal forgiveness show similar results. Particularly, we expect that relationship satisfaction and forgiveness both women and men are significantly related. We do not expect any gender differences in satisfaction and forgiveness relations. However, previous studies suggests that in heterosexual romantic relationships, investment size of women is higher than their partners generally. So, we expect that in investment size and forgiveness relationship, there has a significant positive relation only for women on both actor and partner effects. We also expect that perceived forgiveness and quality of alternatives are negatively associated with for both men and women based on previously mixed findings (Guerrero & Bachman, 2010; Rusbult, 1983; Rusbult et al., 1994). Based on discussions above, general hypotheses of this study were that;

H1: subjective partner forgiveness of men and women is positively significantly related to relationship satisfaction of both men and women.

H2: subjective partner forgiveness is negatively significantly related both men and women's assessments of the quality of alternatives.

H3: subjective partner forgiveness of men and women is positively significantly related to investment size of both men and women.

Method

Participants

In this study, a purposeful sampling method was used. Inclusion criteria for the study were both partners being in the 18-30 age range, unmarried couples, both partners being willing to participate, being in a committed heterosexual relationship, and having a relationship for at least six months (Table 1). The sample of this study consists of 116 heterosexual romantic couples (116 women, 116 men, $N = 232$ participants) from Turkey who provided complete data. It was constituted criterion sampling method and reached 436 Turkish young people (266 females, 170 males) however, 178 of them did not meet the dyad criteria because their partners did not complete the study, 26 of them were outliers and they were excluded from the data set. Finally, 116 dyads (116 females, $M_{age} = 22.67$, $SD = 2.58$; 116 males, $M_{age} = 23.63$, $SD = 2.77$) constituted data set and all studying at different universities in Turkey. No payment was made to the participants. Kenny and Ledermann (2010) recommended at least between 80 and 100 couples to estimate APIM we followed this sample size recommendation. We also set a limit for sample age because having a romantic relationship is an important place for emerging adulthood (18-29 age) (Arnett, 2000).

The ages of the participants ranged between 18-30 ($M = 23.15$, $SD = 2.90$). Educational level of the participants was 1 with primary (0.4%), 1 with secondary (0.4%), 10 with high school (4.3%), 186 with undergraduate (80.1%), and 34 with graduate degree (14.1%). The mean duration of the romantic relationship of the participants was 34.30 ($SD = 2.38$) months and the duration of the romantic relationship varied between 6 and 122 months.

In terms of past relationships, 38 (32.8%) of the female participants stated that they had a single romantic relationship and 78 (67.2%) had more than one romantic relationship while 28 of the male participants (24.1%) had a single romantic relationship and 88 (75.9%) had more than one romantic relationship. According to the participants' living together with their partners, 10 romantic couples (8.6%) live in the same house, 65 couples (56%) live in the same city but in different houses, 40 couples (34.5%) live in different cities.

Three instruments, one of them being personal information form created by the researcher, the other two instruments are The Investment Model Scale (Turkish version) and Subjective Partner Forgiveness Scale.

Data Collection Tool

Demographic Form. The personal information form includes demographic variables such as age, sex, educational attainment, socioeconomic level, relationship duration.

The Investment Model Scale. This scale was initially developed by Rusbult, Martz and Agnew (1998), and adapted to Turkish form (Büyükşahin et al., 2005). It has been used to measure the commitment level (e.g., *I want our relationship to last a very long time.*), satisfaction level (e.g., *(Our relationship is satisfying to me)*), quality of alternatives, (e.g., *Other than the person I'm with, there are very attractive to me*) and investment size (e.g., *I have invested so much in our relationship that I would have lost a lot if it ended*) in dating and married couples. The scale consists of 37 items and four subscales, namely, relationship satisfaction (10 items), quality of alternatives (10 items), investment size (10 items) and commitment level (7 items). The first five items of the relationship satisfaction, quality of alternatives, investment size subscales were of the four-point likert type (1 = *completely false*, 4 = *fully correct*), the rest were of the nine-point likert type (1 = *completely false*, 9 = *fully correct*). Commitment subscale were of the nine-point Likert type (1 = *completely false*, 9 = *fully correct*). Cronbach's alpha coefficient in this study was .87, .87, .86 and .82 respectively, relationship satisfaction, quality of alternatives, investment size and commitment level.

The Subjective Partner Forgiveness Scale. The scale was developed by Gülgün and Özbay (2019) and aims to measure the feeling of being forgiven or perceived forgiveness by partner. The scale was developed to determine the status of feeling forgiven by of dating, engaged and married couples, aged 18 and over. The scale is a single factor consisting of 28 items. Each item (e.g., *"My partner treats me more understanding over time in the face of negative situations we experience"*) is rated on a 5-point scale (1=*strongly disagree* to 5=*strongly agree*). Higher scores on this scale represent that they are forgiven by their partner. The Cronbach's alpha coefficient calculated for is .94 in this study. In the analysis for the criterion validity of the scale, the correlation with the relationship satisfaction sub-dimension of relationship investment model scale was found to be $r = .68$ ($p < .001$).

Procedure

Firstly, ethical permission was obtained (2018/50). Participants were recruited through various ways, such as social media posts, university e-mails, personal and professional contacts. The couples were asked to use the same nicknames with their partners.

Actor-Partner Interdependence Model (APIM). One method frequently used in studies in recent years to explain the dynamics of family and couple relationships is the actor-partner interdependence model. In this study, the Actor-Partner Interdependence Model (APIM, Kenny, et al., 2006) was used to examine the relationships between dependent and independent variables.

Looking at studies in the field of close relationships in general, we find that processes involving interpersonal relationships, such as commitment and conflict, are traditionally assessed independently of their partners. However, according to the nature of these relationships, individuals should be treated jointly with their partners (Kenny, et al., 2006). The use of the APIM model in research on close relationships contributes to the explanation of the personal characteristics of the partners and the effects of the relationship-related characteristics on them, as well as the effects of the partners on each other.

Data Analysis

For the data screening purposes, single and multidimensional extreme values were examined, standard z-scores were calculated, and it was found that 13 dyads were outside the range of -3, +3, these couples were excluded from the data set. No data was extracted from the data set since no participant produced a value less than .001, according to the Mahalabonis distance (Penny, 1996). Analyzes were performed on the remaining 116 ($n = 232$) couple dyads. Then, missing value analysis was performed, and no missing value was found in the data set.

In the normal distribution analysis, it was observed that the commitment subscale was not normally distributed for both male and female participants, they are positively skewed and aren't appropriate for APIM. Logarithmic transformation, square root transformation and inverse transformation (Büyüköztürk, 2010) were

performed to ensure the normal distribution of the data, but it was observed that the data related to the sub-dimension of the commitment did not show a normal distribution. Therefore, the analyzes of the sub-dimension of the commitment were excluded from the subsequent analyzes since the normal distribution could not be achieved. Data were analyzed with the Statistical Package for Social Science for Windows, version 21. Firstly, descriptive statistics were performed and then, Spearman’s correlation analysis (Spearman’s rho) was used to present variables.

Findings and Interpretation

Preliminary Analyses

Descriptive statistics and intercorrelations between the study variables are shown in Table 1. Also, measurement invariance was determined in this study. Subjective partner forgiveness scores of men and women are relatively high (Table 1). Average of the quality of alternatives subscale points scored below the scale’s mid-point. They get high scores in terms of investment size. Also, unpaired t-tests showed that satisfaction level [(t (684) = 2.04, $p < .01$)] and investment size scores [(t (428) = -3.16, $p < .01$)] of males were significantly higher than females. There was no significant gender difference in subjective partner forgiveness and the quality of alternatives. When the correlations between the variables were analyzed, satisfaction level of each partner had a significant positive correlation with other variables in the study. On the other hand, the quality of alternatives of each partner had a significant negative correlation with their own subjective partner forgiveness as well as the partner’s subjective partner forgiveness. Additionally, significant positive correlations were found between man's and woman’s subjective partner forgiveness and ($r = .40, p < .01$), woman’s investment and woman’s relationship satisfaction ($r = .19, p < .05$) and man’s relationship satisfaction and woman’s subjective partner forgiveness ($r = .26, p < .01$) man’s quality of alternatives and man’s relationship satisfaction ($r = .29, p < .01$) woman’s relationship satisfaction and woman’s subjective partner forgiveness ($r = .32, p < .01$) (Table 1).

Table 1. Correlations Between Relationship Satisfaction, Relationship Investment, Quality of Alternatives and Subjective Partner Forgiveness and Mean and Standard Deviations

	1	2	3	4	5	6	7	8	Mean	Sd
1. W_SPF	1.00								86.26	7.92
2. W_RS	.32**	1.00							59.04	5.89
3. W_QA	-.21**	-.27**	1.00						25.31	9.57
4. W_RI	.12	.19*	-.29**	1.00					45.68	11.39
5. M_SPF	.40**	.30**	-.08	.11	1.00				84.13	10.25
6. M_RS	.26**	.50**	-.07	.25**	-.42**	1.00			60.43	4.42
7. M_QA	-.30**	.30**	.41**	-.19*	.29**	-.07	1.00		23.58	10.43
8. M_RI	.19*	-.21*	-.20*	.35**	.30**	.06	.45**	1.00	50.20	10.13

Since the analysis was conducted primarily on gender; the sub-dimensions of the relationship stability (satisfaction level, quality of alternatives, investment size) and subjective partner forgiveness were tested using Confirmatory Factor Analysis (CFA) to determine whether the same structure was maintained for men and women. Then, the measurement invariance was tested for male and female participants on all variables.

Table 2. Measurement Invariance for The Investment Model Scale and Subjective Forgiveness Scale

Steps	Investment Model Scale			Subjective Forgiveness Scale		
	χ^2 / df	RMSEA	CFI	χ^2 / df	RMSEA	CFI
Formal invariance	1.79	.08	.90	2.12	.09	.92
Metric invariance	1.82	.08	.89	2.07	.09	.92
Measurement inv.	1.84	.08	.89	2.07	.09	.92
Strict invariance	1.87	.08	.88	2.09	.09	.91

Note: Measurement inv.: Measurement invariance

It was tested whether the fit indices of the investment model and subjective partner forgiveness given above are invariant for male and female participants. Since actor-partner model was tested in this study, only the formal invariance has been examined in terms of measurement invariance. In other words, examining whether

the items of the scale were collected under the same factor was thought to be sufficient. Also, metric and scalar invariance were examined, and they are ensured in these two scales according to the CFI values changes (seen that less than .001). Multi-group CFA was performed to test the formal invariance. Providing formal invariance indicates that the male and female participants use the same conceptual points of view to respond to the scale items. According to confirmatory factor analysis results, for the subscales of satisfaction level, investment size and the quality of alternatives included in the analysis for the male and female participants, the structure maintained in the adaptation study. Also, one-dimensional factor structure obtained during the developmental stage of subjective partner forgiveness preserved as a result of exploratory factor analysis.

APIM Results

The fit indices obtained for the models in the hypotheses were examined. Fit indices (RMSEA = .06, NFI = .96, AGFI = .94) obtained in the model for the relationship between the first model of satisfaction level and subjective partner forgiveness show that the model is quite good (Baumgartner & Homburg, 1996; Çokluk, et. al., 2012; Schermelleh-Engel & Moosbrugger, 2003). All fit indices were found to be significant (RMSEA=.06; NFI=.96; AGFI=.94).

The first hypothesis of the study to explain the relationship between subjective partner forgiveness and satisfaction level indicates that both the actor and partner effects are significant. Women's subjective partner forgiveness positively predicts their own relationship satisfaction ($\beta = .14, p < .05$) and likewise, men's subjective partner forgiveness positively predicts their own relationship satisfaction ($\beta = .23, p < .05$). In other words, both the male and female subjective partner forgiveness has actor effect on their own relationship satisfaction.

The partner effects show that the subjective partner forgiveness of both women ($\beta = .19, p < .05$) and men ($\beta = .20, p < .05$) predict the satisfaction of their partners. In other words, feeling forgiven by a partner increases their relationship satisfaction. When the effect size values of the model were examined, the effect size of the female relationship satisfaction was found to be .08 and the male relationship satisfaction was .13. These values indicate small and medium effect sizes (Cohen, 1988).

When the fit indices (GFI = .97, AGFI = .86, CFI = .90) obtained in the second model for the relationship between the quality of alternatives and subjective partner forgiveness are examined, correlation indices show that the model is quite good (Baumgartner & Homburg, 1996, Schermelleh-Engel & Moosbrugger, 2003).

The second hypothesis of the study to explain subjective partner forgiveness is negatively significantly related both men and women's assessments of the quality of alternatives.

The relationship between subjective partner forgiveness and quality of alternatives indicates that only partner effects are significant. The subjective partner forgiveness of women ($\beta = -.12, p < .05$) and men subjective partner forgiveness ($\beta = -.16, p < .05$) have a negative impact on the quality of alternatives of their partners. In other words, both the male and female subjective partner forgiveness has partner effect on evaluation of alternatives. However, no significant actor effect was found. There was not a significant relationship between the feeling of forgiveness of women and men and their own evaluation of alternatives. When the effect size values of the model were examined, the effect size of the female quality of alternatives was found to be .03 and the male quality of alternatives was .04. These values suggest small effect size (Cohen, 1988).

In the last model, the fit indices for the relationship between subjective partner forgiveness and investment size (RMSEA = .00, GFI = .99, AGFI = .98) show that the model is quite good (Baumgartner & Homburg, 1996, Schermelleh-Engel & Moosbrugger, 2003). The third hypothesis of the study to explain subjective partner forgiveness of women has a positive relation to their own relationship investment but not related to partner's investment size. The relationship between subjective partner forgiveness and investment size indicates that only partner effects are significant. The subjective partner forgiveness of both women ($\beta = .13, p < .05$) and men ($\beta = .15, p < .05$) subjective partner forgiveness has an effect on their partner's investment size. However, no significant actor effect was found. There was no relationship between the feeling of forgiveness of women and men and their investment size. When the effect size values of the model were examined, the

effect size of the female investment size variable was found to be .03 and the effect size of the male investment size variable was found to be .02. These values show small effect sizes (Cohen, 1988).

Discussion

The aim of this study is to examine the relationship between perceived partner forgiveness, relationship satisfaction, quality of alternatives, and relationship investment variables in a dyadic context. The results supported first hypothesis that one's own subjective partner forgiveness associated with their own relationship satisfaction and also partner's relationship satisfaction. This finding is consistent with reports from other studies examining the tendency of forgiveness and the satisfaction received from relationships (Friesen, et al., 2004; Reis, et al., 2004).

Braithwaite et al., (2011) concluded that the tendency to forgive partner is related to relationship satisfaction because forgiveness is related not only lower-level negative responses but also increased motivation to relationship. Relationship satisfaction is also related to replacing negative emotions with the positive one. High relationship satisfaction is found to be related to feeling guilty after harmful behavior (Riek, 2010). In a study examining the relationship between accusatory behavior and forgiveness towards the partner, when both partners were asked about their citations about the same negative situation, couples who had high satisfaction with their relationship stated that their negative attributions were low towards their partners (Friesen, et al., 2005). In other words, partner's relational factors such as relationship satisfaction, investment size or quality of alternatives rather than their own relational factors exerted more influence on their perception of forgiveness.

The results also partially supported second hypothesis that one's own subjective partner forgiveness negatively associated with their own assessments of the quality of alternatives and also partner's assessments of the quality of alternatives. In this model, only partner effects are significant. When the individual evaluates his/her current relationship as more attractive and have more relational gain than the alternative relationship options, the tendency towards relational options decreases (Rusbult, 1980). The average relationship satisfaction and relationship investment scores of women and men in this study can be considered as two other important variables that explain individuals not seeking a relationship and wanting to maintain their relationships. The research indicated that relationship satisfaction is an indicator of evaluation about quality of alternatives. When couples are satisfied with their relationships, they negatively consider alternative relationships (Johnson & Rusbult, 1989), and if they are not satisfied with their relationships, the existence of deception increases (Treas & Giesen, 2000).

The results partially supported of third hypothesis that subjective partner forgiveness of men and women is positively significantly related to investment size of both men and women. The other "partner effect" contributing the subjective experience of forgiveness is investment size. When people invest in their romantic relationships, it affects their partner's subjective experience of forgiveness. A number of studies have also found a connection between investments and forgiveness in romantic couples (McCullough, et al., 1998...). It is stated that investments in romantic relationships are perceived as a psychological power and increase the tendency to continue the relationship. Individuals can also develop a defense mechanism for the mistakes of their partners mistakes to protect their satisfaction. Also, individuals tend to forgive more in their relationships that they perceive as high quality and satisfaction (Rusbult et al., 1991).

In accordance with the nature of the relational investment, especially in the relationships with a high relationship quality, the investment made by both parties show that the partners get mutual satisfaction. Individuals tend to behave in favor of their partners in a relationship they want to maintain (McCullough et al., 1998). In the current study, the increase in relationship investment towards their partners are highly related to the positive attitudes of partners, such as the feeling of forgiveness.

The existence of trust as a relational power is another concept that can explain the relationship between investment and feeling forgiven. There are studies explaining that the feeling of trust mediates between the investment and seeking forgiveness (Gordon et al., 2009; Wieselquist, 2009) In current study, there was a significant effect between the feeling forgiven and the relationship investment. In other words, the increase of confidence in the partners who feel that they are forgiven will be positively reflected in their relationship. As long as they trust their partners, people continue to invest in their relationships.

Looking at the reasons of individuals who turn to alternative relationships, it is seen that men and women offer different reasons. In the current study, the fact that the average point of satisfaction was high and individuals who had a romantic relationship unlike the marriage relationship can be considered as factors explaining the decrease in the orientation towards the options. In particular, it is stated that an individual who is satisfied with the relationship uses different cognitive manipulation methods such as underestimating the features of alternative relationship options. Individuals who are satisfied with their relationships use these cognitive mechanisms to avoid anxiety that may arise from questioning their relationships and turning to alternatives in order to preserve their existing relationships (Rusbult et al., 2001).

There was only one 'actor' effect in our study that affects subjective partner forgiveness. In the model, when partners' own relationship satisfaction increases, their subjective experience of forgiveness also increases. The relationship satisfaction model is the only model that have both significant actor and partner effects. In romantic couples, it is important to feel that it is understood by the partner in having high satisfaction relationships and their expectations are also high (Pansela & La Guardia, 2012). In this study, relationship satisfaction scores were above average for both women and men. It is possible that the couples participating in the study have high expectations for understanding and forgiveness by their partners, depending on their high satisfaction with the relationship. This situation can be interpreted as a situation explaining that the actor and partner effects are meaningful in the relationship between the feeling of being forgiven and relationship satisfaction.

Limitations and Future Suggestions

The present study has several strengths, including the collection dyadic data from heterosexual romantic couples, the testing of actor and partner effects, studying the concept of feeling of being forgiven that studied little in forgiveness literature. There are also some limitations. One is the focus on heterosexual romantic couples which may limit the generalizability of the findings to married couples. Therefore, future research may focus on married couples' relationship stability and feeling of forgiven. Also, few of sample is consisted of cohabitated people and this creates some marital outcomes, and it can cause some limitations about romantic relationship qualities and its generalizability.

In current study, correlations are generally weak. This can be caused by the characteristics of the sample such as duration of relationship, cohabitation etc. Mean length of relationship of sample was almost three years (34 months), but nearly half of couples (44.82%) has a relationship period less than two years. Previous studies suggest that relationship length is important for romantic couples in terms of some relational factors affects relationship satisfaction, investments. In long term relationships, individuals invest more their relationships than short ones (Stoeber, 2012). In future studies, it may be useful to work with a study group that has a longer relationship period so that the results of the investment model can be more apparent. This study does not generate a causation as the research design and the data collected in this research are cross-sectional and non-experimental. For instance, that high level relationship satisfaction precedes or even results in subjective partner forgiveness or not that subjective partner forgiveness is the reason of relationship satisfaction. To identify the reasons of forgiveness, at least quasi-experimental design and longitudinal design can use to determine patterns in intimate relationship.

Also, this study group consisted of romantic couples from Turkey, which is a collectivistic society. Although the current findings can be generalized to other cultures like Turkish culture in relational context, still more studies outside of western countries are needed to generalizability of research findings. The current study used data of 116 couples (or 232 individuals), for dyadic data analysis. Although the number of dyads is found to be decent for dyadic data analysis (Kenny & Ledermann, 2010), it is seen that it may be beneficial to work with a larger sample when effect sizes are examined.

It is important to consider these relational systems together with the concept of forgiveness. From the perspective of forgiveness from a broader perspective, the fact that individuals experience events that require forgiveness is a factor that can improve their relational resilience in the relational process. The phenomenon of forgiveness, which can be interpreted as the positive support of the partner, can be addressed with different

variables in the context of relational resilience. In this study, we can find evidence that feeling of forgiveness is associated with the relationship investment model variables. In future research, forgiveness related issues can be extended. In dyadic studies, some important relationships such as parent-child, sibling relationships, friendship, and friendship relations can be studied under the forgiveness studies.

Subjective partner forgiveness is not a commonly studied concept in the context of studies related to forgiveness in Turkey. In this regard, it would be useful for family and couple counselors and researchers to examine different variables related to the concept of subjective partner forgiveness apart from the general concept of forgiveness.

It is important to study dyadic relationships between forgiveness and feeling forgiven so that these research results can be better tested and forgiving cycle based on forgiveness can be explained under a conceptual framework. Additionally, studies can be conducted in this field by looking into the effect of forgiveness-oriented psycho-education activities on forgiveness and the relationship satisfaction of individuals.

The sample consisted of romantic couples, considering the importance of pre-marital counseling in terms of establishing a healthy family, it is important to increase the number of pre-marital psycho-education studies. Psycho-education programs can be organized to increase forgiveness and focus on relationship maintenance skills. These programs can be applied in the pre-marriage period.

Conclusion

Overall, the results of this study indicate that subjective experience of forgiveness is related to the relationship maintenance factors (relationship satisfaction, relationship investment and quality of alternatives). The hypotheses within this study were confirmed especially in the context of partner effects. Both actor and partner effects were found to be significant only in the relationship satisfaction variable. Subjective partner forgiveness had a predictive effect on the satisfaction of both men and women in terms of actor effect. Among partner effects, in the dimension of evaluating the quality of options, the feeling of being forgiven was found to be related to the negative view of the relationship options. In other words, women feeling forgiven by their partners was found to be related to men not turning to alternative relationship options and vice versa.

Finally, when looking at the relationship between investment size and subjective partner forgiveness, a significant relationship was found between the feeling of being forgiven and the relationship investments partners. In other words, the feeling of forgiveness is highly related to their partners' investments in the relationship.

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Data Availability: Data is available upon request from the corresponding author.

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