The Mediating and Moderating Role of Subjective Happiness in the Relationship between Vengeance and Forgiveness

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Abstract
The primary goal of the current study was to investigate the mediator and moderator effects of subjective happiness on the relationship between forgiveness and vengeance in Turkish university students. A questionnaire containing the Turkish version of Vengeance Scale, Subjective Happiness Scale, and Forgiveness Scale were completed by 298 university students, between the ages of 18 and 24. Hierarchical regression analysis indicated that subjective happiness partially mediated the relationship between vengeance and forgiveness. However, subjective happiness did not moderate the relationship between vengeance and forgiveness. Furthermore, results have shown that subjective happiness and forgiveness were negatively related to vengeance. Limitations of the study are considered and the significance of results is discussed.

Keywords  
Forgiveness, Mediator, Moderator, Subjective Happiness, Vengeance.

Human nature possesses the capacity to create goodness or evil, to help or harm, and to forgive or take revenge. When individuals are harmed, they experience certain negative emotions such as anger, resentment, and disappointment and express certain typical behaviors such as avoidance or vengeance. However, in the long term, vengeance causes increased psychological problems and stress. Therefore, individuals start looking for more positive ways to solve their problems and conflicts. Forgiveness is one of these mechanisms (McCullough, Pargament, & Thoresen, 2001; McCullough, Worthington, & Rachal, 1997). Since ancient times, the concept of forgiveness has been addressed as treatment and one of the basic factors for repairing offensive behaviors and a variety of negative situations experienced in interpersonal relations (Hargrave & Sells, 1997).

Recent related studies present different definitions of forgiveness. Although these definitions share some common properties, there is no consensus on the stages and dimensions of forgiveness. Nevertheless, forgiveness is defined as a positive response that is granted in damaging interpersonal relations, thus reducing tension and not seeking revenge (Kearns-Bodkin, 2006). Enright, Gassin, and Wu (1992) defined forgiveness as an individual's attempt to cope with negative emotions and judgments about the offending person by trying.

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to regard that person with feelings of forgiveness, kindness, compassion, sensitivity, and love without refuting the negative emotions and judgments that s/he has toward the offending person. Exline and Baumeister (2000) defined forgiveness as forgoing the holdings by a person who was harmed or put in a difficult situation. Forgiveness was defined by Worthington et al. (2000) as a combination of the deferred negative emotions (such as anger, hatred, resentment, hardness, hostility, and fear) toward the offending person.

Forgiveness is “giving people a second chance,” not being vengeful (Park, Petersen, & Seligman, 2004); being forgiving can provide various benefits to an individual. Forgiveness can help the individual release stress caused by negative emotions and thoughts. It enables the reformation and continuation of the relationship damaged by interpersonal problems. Forgiveness is important for reducing the negative cognitions and emotions of the individual that one experiences in cases of betrayal and disappointment.

Forgiveness that can be accepted as a human strength and virtue (Peterson & Seligman, 2004) is not only an important psychological construct for conflict resolution and maintenance of relationships but also an essential factor for well-being. Several studies suggest that forgiveness is connected with enhanced well-being (Friedman & Toussiant, 2006; Krause & Ellison, 2003; Subkoviak et al., 1995). Researchers have emphasized that forgiveness has some implications for emotional and mental well-being (Enright, 2001; Malone et al., 2011; Toussiant & Webb, 2005). Therefore, forgiveness is linked to a number of aspects of well-being and is a key concept in personal adjustment. Empirical works on forgiveness indicated that forgiveness was positively associated with gratitude (McCullough, Emmons, & Tsang, 2002), empathy (Tsang & Stanford, 2006), positive affect (Maltby, Day, & Barber, 2004), and quality of life (Friedman & Toussiant, 2006). Individuals who tend to forgive others when they were harmed were less likely to experience symptoms of psychological distress than individuals who were unwilling to forgive (Maltby, Macaskill, & Day 2001). In contrast, forgiveness was negatively associated with depression, anxiety (Karremans, Van Lange, Ouwerkerk, & Kluwer, 2003; Maltby et al., 2001), anger rumination, thoughts of revenge (Barber, Maltby, & Macaskill, 2005), state anger, and trait anger (Rye, Folck, Heim, Olsewski, & Traina, 2004). On the other hand, individuals facing injustice may refrain from communications or minimize contact and can consider taking revenge on that person as compensation for injustice (McCullough, Bellah, Kilpatrick, & Johnson, 2001). Akin to forgiveness, vengeance might require a response to a specific event (McCullough et al., 1998) and can restore justice in the aftermath of personal injury (Bradfield & Aquino, 1999). Revenge or vengeance (these two concepts may be used interchangeably) can be described as the infliction of harm in return of perceived harm or as simply getting back at another person (Cota-McKinley, Woody, & Bell, 2001)

The concept of revenge was derived from the word avenger in the old French period that meant giving penalty or seeking satisfaction in the place of unfairness or being wounded (Cayne, 1993). Vengeance, the opposite concept of forgiveness (McCullough et al., 1997), has been lately used in association with aggression and violence (Pfefferbaum & Wood, 1994). Stuckless and Goranson (1992) defined revenge as giving punishment or harm in response to the perceived injustice. Cota-McKinley et al. (2001) defined revenge as either giving harmful punishment or simply returning behavior to the person in response to perceived harm or insults.

Receiving vengeance can bear irrational and destructive consequences for both the individual who exhibits harmful behavior and the one who is exposed to this damage. However, vengeance can also cause the avenging individual to compromise their own integrity, social status, and personal safety for the sake of revenge (Stuckless & Goranson, 1992). Vengeance was positively related to anti-social behaviors, expressions of empathy (Stuckless & Goranson, 1992), weak psychological well-being (Cardozo, Kaiser, Gotway, & Agani, 2003; McCullough et al., 2001), aggressiveness, negative affect (McCullough et al., 2001), and negatively related to life satisfaction (McCullough et al., 2001) and psychological health (Ysseldyk, Matheson, & Anisman, 2007). Moreover, Berkowitz (1993) suggested that vengeful people experience more negative affect and are easily angered and offended by others.

**Subjective Happiness as Mediator and Moderator**

Considering that happiness and subjective well-being are very important for most people and societies, psychologists became more interested in positive feelings and emotions of well-being (Van
Hoorn, 2007). They focused on positive individual traits and strengths to improve quality of life and prevent the psychological problems that appear when life feels meaningless and unfruitful (Seligman & Csikszentmihalyi, 2000). Subjective happiness is based on the questions of why some people are happier than others or why some have more capacity for happiness after experiencing negative situations. It refers to the subjective assessment of whether a person is happy or unhappy, can be evaluated as a psychological state of well-being or contentment (Lyubomirsky, 2001), and is related to the personal evaluation of how life has been progressing (Diener & Diener, 1996). Subjective happiness as a positive experience and increasingly important construct in positive psychology may mediate or moderate the relationship between forgiveness and vengeance and may also be an important construct related to forgiveness and vengeance.

Individuals who have a high level of subjective happiness have more positive thoughts about themselves (Lee & Im, 2007), more satisfying social relationships, and spend less time alone (Diener & Seligman, 2002). Studies on subjective happiness have shown a positive relationship with life satisfaction (Garcia & Siddiqui, 2009), subjective vitality (Akin, 2012), self-perceptions of well-being (Diener, 2000), satisfying relationships (Diener & Seligman, 2002), mental health (Liem, Lustig, & Dillon, 2010), and self-acceptance (Krause & Ellison, 2003; Maltby et al., 2004). In contrast, subjective happiness was negatively associated with presence of depressive symptoms (Chaplin, 2006) and internet addiction (Akin, 2012). In light of the given relationships between subjective happiness, adaptive constructs, and maladaptive constructs shown in previous studies, subjective happiness may contribute to the association between forgiveness and vengeance. Accordingly, the main hypothesis of the present study is that as forgiveness increases, vengeance may decrease or vice versa, and that subjective happiness may play a role in this decrease. Thus, this study’s primary goal was to investigate the mediating and moderating effects of subjective happiness on the relationship between forgiveness and vengeance.

Method

Participants

The research design is based on a convenience sample of 298 undergraduate students (56% females, 44% males) from a variety of departments at Istanbul Commerce University. Of the participants, 62 (21%) were freshmen, 86 (29%) were sophomores, 77 (26%) were juniors, and 71 (24%) were seniors. Their average age was 21.43 years (SD = 1.03) ranging from 18 to 24 years.

Measures

The Vengeance Scale: The Vengeance Scale was developed by Stuckless and Goranson (1992) consists of 20 items (e.g., If someone causes me trouble, I’ll find a way to make them regret it). Responses are given on a 7-point scale from “Strongly Disagree” = 1 to “Strongly Agree.” = 7. Item responses for each participant are summed and averaged, yielding a total score of vengeance ranging from 20 to 140. Higher scores indicate higher levels of vengeance. Turkish adaptation of the scale had been done by Satici, Can, and Akin (2012). The Cronbach alpha coefficient of the Turkish version was .91 and test-retest reliability coefficient was .87. The scale's confirmatory factor analysis indicated that the model fit well (RMSEA = .061, SRMR = .050, NFI = .95, CFI = .97, IFI = .97, RFI = .94, GFI = .91). In the present study, Cronbach alpha coefficient was .87.

The Subjective Happiness Scale: The Subjective Happiness Scale was developed by Lyubomirsky and Lepper (1999) is a four items (e.g., I think I am a happy person) self-report instrument. Participants respond to each item using a 7-point scale ranging from 1 (very unhappy) to 7 (very happy). Item responses for each participant are summed and averaged (after reverse-coding negative items), yielding a total score of subjective happiness ranging from 4 to 28. Higher scores indicate higher levels of subjective happiness. The scale was adapted into by Akin and Satici (2011). The results of confirmatory factor analysis indicated that the model fit well (RMSEA = .000, SRMR = .000, NFI = .99, CFI = 1.00, IFI = 1.00, RFI = .98, GFI = 1.00, AGFI = .99, and SRMR = .015). The Cronbach alpha coefficient of the scale was .86 and the test-retest reliability coefficient was .73. In the present study, Cronbach alpha coefficient was .72.

The Trait Forgiveness Scale: The Trait Forgiveness Scale was developed by Berry, Worthington, Parrott, and Wade (2005) consists of 10 items (e.g., I can forgive a friend for almost anything). Responses are given on a 5-point scale from “Strongly Disagree” = 1 to “Strongly Agree.” = 5. Item responses for each participant are summed and averaged, yielding a total score of forgiveness ranging from 10 to 50. Higher scores indicate more forgiveness level. Turkish
adaptation of this scale had been done by Akin, Akin, and Gediksiz (2012). The results of confirmatory factor analysis indicated that fit well ($x^2=106.47$, df= 32, p=0.00, RMSEA=.077, GFI=.89, GFI=.95, AGFI=.91, and SRMR=.062). Factor loadings ranged from .29 to .67. The internal consistency coefficient of the scale was .67 and the corrected item-total correlations ranged from .26 to .43. In the present study, Cronbach alpha coefficient was .67.

**Procedure**

The study group of this research was formed by the participants who were studying in Istanbul Commerce University. Researchers administered the self-report measures to the students in the classroom environment. Students were free to fill the instruments out and participation was voluntary. All participants were informed about the purpose of the study before completing of measures. Participants completed the instruments approximately in 20 minutes.

To test whether subjective happiness mediated and moderated the link between vengeance and forgiveness, we followed the recommendations for testing mediation and moderation outlined by Baron and Kenny (1986). Firstly, vengeance must be associated with subjective happiness and secondly with forgiveness. Thirdly, subjective happiness must be related to forgiveness. Fourthly, when subjective happiness is controlled, there must be a statistically significant reduction in the effect of vengeance on forgiveness. If the relation is reduced to non-significant levels, full mediation is demonstrated. Partial mediation occurs when the correlation between vengeance and forgiveness is reduced but still significant. Hierarchical regression analysis was used to test each of these conditions. The analyses were carried out via IBM SPSS Statistics 20.

**Results**

**Descriptive Data and Inter-correlations**

Means, descriptive statistics, and Pearson product-moment correlations among vengeance, subjective happiness, and forgiveness are shown in Table 1. As can be seen, vengeance is significantly negatively correlated with subjective happiness ($r= -.45$, $p< .01$) and forgiveness ($r= -.61$, $p< .01$). As expected, subjective happiness is significantly positively correlated with forgiveness ($r= .41$, $p< .01$).

**Is the Vengeance–forgiveness Relation Mediated by Subjective Happiness?**

In the first step of mediation process, it was verified that vengeance significantly predicted negatively subjective happiness ($\beta= -.45$, $t= -8.70$, $p< .01$). Then, it was verified that subjective happiness significantly predicted positively forgiveness ($\beta= .41$, $t= 7.84$, $p< .01$). In step three, the results of hierarchical regression analysis demonstrated that vengeance was negatively associated with forgiveness ($\beta= -.61$, $t= -13.39$, $p< .01$). However, when subjective happiness and vengeance was taken together in the regression analysis, the significance of relationship between vengeance and forgiveness ($\beta= -.53$, $t= -10.61$, $p< .01$) decreased, yet the relationship between vengeance and forgiveness was significant. This result indicated that subjective happiness partially explained the relationship between vengeance and forgiveness. Results are presented in Table 2.

**Table 1**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Vengeance</th>
<th>Subjective happiness</th>
<th>Forgiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>72.21</td>
<td>19.15</td>
<td>31.12</td>
</tr>
<tr>
<td>SD</td>
<td>21.28</td>
<td>3.87</td>
<td>5.33</td>
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<tr>
<td>Skewness</td>
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<td>-.03</td>
<td>-.44</td>
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<td>Kurtosis</td>
<td>.54</td>
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**Table 2**

<table>
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<tr>
<th>Step 1</th>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>$\beta$</th>
<th>t</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
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</thead>
<tbody>
<tr>
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<td>Vengeance</td>
<td>-.154</td>
<td>.011</td>
<td>-.614</td>
<td>-13.39</td>
<td>.37</td>
<td>.37</td>
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</table>

<table>
<thead>
<tr>
<th>Step 2</th>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>$\beta$</th>
<th>t</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vengeance</td>
<td>-.134</td>
<td>.013</td>
<td>-.536</td>
<td>-10.61</td>
<td>.40</td>
<td>.40</td>
</tr>
<tr>
<td></td>
<td>Subjective happiness</td>
<td>.238</td>
<td>.070</td>
<td>.173</td>
<td>3.41</td>
<td>.40</td>
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</tr>
</tbody>
</table>

**Dependent Variable: Forgiveness**

In addition, the results of regression analyses testing mediation effects of subjective happiness on the relationship between vengeance and forgiveness are presented in figure 1. As shown figure 1, the beta weight when vengeance was regressed alone on forgiveness was -.61. The beta weight dropped from -.61 to -.53 when subjective happiness was added into the equation.
Sobel test was also performed to find the estimated significance of the mediation effect. Sobel (1982) test is characterized as being a restrictive test, and as so, assures that the verified results are not derived from colinearity issues. In the present study, the test value verified was $Z = -3.18; p = .001$.

**Is the Vengeance–forgiveness Relation Moderated by Subjective Happiness?**

Before testing the moderating role, the two predictor variables (vengeance and subjective happiness) were standardized to reduce problems associated with multicollinearity between the interaction term and the main effects (Frazier, Tix, & Baron, 2004). Thus, z-scores were calculated for vengeance and subjective happiness. According to the results of the hierarchical regression analysis, summarized in Table 3, vengeance ($\beta = -.53, p < .01$) and subjective happiness ($\beta = .17, p < .01$) predicted forgiveness significantly. However, there was no significant interaction between vengeance and subjective happiness ($\beta = .05, p > .05$). These findings indicated that subjective happiness had no moderating role on the relationship between vengeance and forgiveness.

**Table 3**

<table>
<thead>
<tr>
<th>Variable</th>
<th>$B$</th>
<th>$SE_{B}$</th>
<th>$\beta$</th>
<th>$t$</th>
<th>$R^2$</th>
<th>$R^2$ change</th>
<th>$F$ change</th>
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</thead>
<tbody>
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<tr>
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<td>-.614</td>
<td>13.39</td>
<td>.37</td>
<td>.37</td>
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<tr>
<td>Vengeance</td>
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<td>.269</td>
<td>-.536</td>
<td>-10.62</td>
<td>.40</td>
<td>.03</td>
<td>11.68</td>
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<tr>
<td>Subjective Happiness (Sh)</td>
<td>.920</td>
<td>.269</td>
<td>.173</td>
<td>3.42</td>
<td>.40</td>
<td>.00</td>
<td>1.651</td>
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<td></td>
</tr>
<tr>
<td>Vengeance</td>
<td>-2.829</td>
<td>.270</td>
<td>-.531</td>
<td>-10.49</td>
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<tr>
<td>Subjective happiness</td>
<td>.893</td>
<td>.270</td>
<td>.168</td>
<td>3.31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vengeance X Sh</td>
<td>.286</td>
<td>.222</td>
<td>.058</td>
<td>1.28</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Discussion**

Subjective happiness can be clarified as the assessment of people’s own evaluations of emotional well-being and happiness (Lyubomirsky & Lepper, 1999). Lyubomirsky and Lepper (1999) specified that “one may conceivably appraise oneself as a very happy person, despite having only a somewhat happy life; conversely one may identify oneself as a generally unhappy person, despite having felt ‘pleased,’ ‘proud,’ and ‘particularly excited’ in the previous month” (p. 140). It involves subjective evaluations of whether an individual is a happy or unhappy person and is related to psychological constructs (Akin, 2012; Diener, 2000; Diener & Seligman, 2002; Garcia & Siddiqui, 2009). Thus, the present study examined the possible role of subjective happiness as a mediator and its moderator role in the relationship between forgiveness and vengeance. As anticipated, the results showed that subjective happiness partially mediated the association between forgiveness and vengeance. Mediation implies that as forgiveness increases, vengefulness decreases and subjective happiness plays a mediator role in this increment. Previous studies on subjective happiness indicated that it was positively related to adaptive variables and may affect positive experiences or human strengths such as optimism (Chuah, 2010), subjective vitality.
forgiveness and vengeance must be identified. However, other mediators or moderators like wisdom, self-esteem, religiousness, and compassion that probably play a role in the relationship between forgiveness and vengeance. Thus, these findings increase our knowledge about the mediator role of subjective happiness and vengeance. Moreover, as expected, results of the correlation analysis showed that subjective happiness and forgiveness were negatively related with vengeance. Therefore, the positive effect of subjective happiness on forgiveness seems very reasonable.

Some limitations in the current study should be addressed. First, the study group was composed of university students, which limits the generalizability of the findings. For this reason, further research targeting other populations or different cultures is needed. Second, the study was cross-sectional, so it is difficult to make cause-effect inferences. Third, the data was collected only through self-report measures; using multiple or different methods for evaluation may decrease the subjectivity. Finally, the presence of a mediating role and lack of a moderating role of subjective happiness have been demonstrated in the present study. However, other mediators or moderators like wisdom, self-esteem, religiousness, and compassion that probably play an important role in the relationship between forgiveness and vengeance must be identified.

Despite these limitations, this study has made a contribution to the positive psychology literature and strengthened the theoretical structure of this discipline. Subjective happiness is an important construct for positive psychology and one of the most desired things throughout the entire history of humanity. Subjective happiness is also an individual strength and the present study empirically examined its role or effect as a mediator or moderator between forgiveness and vengeance. Additionally, findings of the study demonstrated that subjective happiness was positively associated with forgiveness and negatively associated with vengeance. Thus, these findings increase our knowledge about the mediator role of subjective happiness between forgiveness and vengeance. Moreover, the results are important for enhancing our understanding of positive psychology, which is an attempt to urge psychologists to adopt a more
open and appreciative perspective regarding human potentials, motives, and capacities” (Sheldon & King, 2001, p. 216). Finally, the results suggest that subjective happiness plays a key role in supporting forgiveness. Counseling or intervention programs focusing on increasing subjective happiness may help students to be less vengeful and more forgiving. Thus, it is important for mental health professionals and school counselors to develop programs for enhancing subjective happiness.

References


