

本文章已註冊DOI數位物件識別碼

► Forgiveness as a Mediator of Breakup Appraisal and Post-Traumatic Stress-like Symptoms among Young Adults

寬恕為大學生分手事件的評估和創傷相關症狀之中介因子

doi:10.30074/FJMH.201609_29(3).0003

中華心理衛生學刊, 29(3), 2016

Formosa Journal of Mental Health, 29(3), 2016

作者/Author：郭思妤(Sze-Yu Kuo);陳淑惠(Sue-Huei Chen)

頁數/Page：289-314

出版日期/Publication Date：2016/09

引用本篇文獻時，請提供DOI資訊，並透過DOI永久網址取得最正確的書目資訊。

To cite this Article, please include the DOI name in your reference data.

請使用本篇文獻DOI永久網址進行連結:

To link to this Article:

[http://dx.doi.org/10.30074/FJMH.201609_29\(3\).0003](http://dx.doi.org/10.30074/FJMH.201609_29(3).0003)



DOI Enhanced

DOI是數位物件識別碼（Digital Object Identifier, DOI）的簡稱，是這篇文章在網路上的唯一識別碼，用於永久連結及引用該篇文章。

若想得知更多DOI使用資訊，

請參考 <http://doi.airiti.com>

For more information,

Please see: <http://doi.airiti.com>

請往下捲動至下一頁，開始閱讀本篇文獻

PLEASE SCROLL DOWN FOR ARTICLE



Forgiveness as a Mediator of Breakup Appraisal and Post-Traumatic Stress-like Symptoms among Young Adults

SZE-YU KUO, SUE-HUEI CHEN

Purpose: Romantic relationships provide opportunities for adolescents to explore ways to build intimacy. Experiencing romantic breakups can be a stressful life event that increases vulnerability to post-traumatic stress-like symptoms. In this study we examined the mediating role of forgiveness between self-appraisal (perceived harm and anger) and PTSD-like symptoms after breakups. **Method:** The study began from January 2012 to August 2012, and we administered questionnaires to 175 college students (122 females and 55 males) who had had at least one breakup experience. Participants were given 5 minutes to recall and write down their last breakup experience, and then they completed the Forgiveness Scale, the Impact of Event Scale, and the Negative Emotion Appraisals Questionnaire. Data were analyzed using SPSS to perform correlation, ANOVA, and mediation analyses. **Results:** The analyses showed that perceived harm and anger were positively associated with distress. People who were rejected experienced more harm and anger than people who initiated the breakup. Forgiveness partially mediated the relationship among perceived harm and distress, avoidance, and intrusion. Forgiveness also fully mediated the relationships between anger and distress, anger and avoidance, and anger and intrusion. **Conclusion:** The results illustrate the impact of romantic relationship dissolution on young adults, and suggest that forgiveness can be used as an effective tool to regulate distress.

Key words: avoidance, breakup, forgiveness, intrusion, PTSD-like symptoms

Sze-Yu Kuo: Doctoral Student, Department of Psychology, National Taiwan University.

Sue-Huei Chen: Professor, Department of Psychology, National Taiwan University. (Corresponding Author, e-mail: shchen@ntu.edu.tw)

Received: 5 December 2016; Accepted: 7 February 2017.

airiti

Introduction

Romantic relationships provide unique opportunities for young adults to deepen their experience in intimacy, affiliation, sexuality, and autonomy (Collins, 2003). Learning to get involved in a romantic relationship and coping with a breakup experience are both crucial for college students, since during this period of time young adults are becoming independent and developing social connections and intimate relationships away from home for the first time. A large phone survey of traumatic events showed that the most mentioned “worst event” was breakup from a romantic relationship (Monroe, Rohde, Seeley, & Lewinsohn, 1999), yet breaking up with a romantic partner is common as young adults go through a series of brief but emotionally intense relationships (Frazier & Cook, 1993; Welsh, Grello, & Harper, 2003).

General consequences of romantic relationship dissolution

In general, after romantic relationship dissolution, people tend to experience more negative emotions such as hurt, loneliness, and frustration than positive ones such as love and relief (Sprecher, 1994). Grief reactions (Lindemann, 1944) are commonly observed with negative psychological (e.g., depression, and suicidal thoughts) and some physical symptoms (e.g., sleeplessness) which last longer than six months (Fink et al., 1991). Psychological responses following relationship dissolution include feelings of anger, hatred, rejection, emptiness, self-pity, guilt, reduction in self-confidence, and a sense of being lost (Lindemann, 1944). A recent study found university students who experienced high breakup distress showed higher scores on negative emotion and more negative behaviors were also observed, such as poor academic performance, drinking, and disorganized behavior (Field, Diego, Pelaez, Deeds, & Delgado, 2013).

Furthermore, there are a few different factors that might alter a person’s evaluation of the breakup event, which might result in different level of negative emotions. From

airiti

romantic relationship dissolution, there is the ‘leaver’ (the person who initiated the breakup) and the ‘left’ (the person who broke up by rejection) (Sprecher, 1994; Vaughan, 1986; Weiss, 1975). Those who broke up by rejection experience more distress than those who left or had mutual breakups (Frazier & Cook, 1993; Gray & Silver, 1990; Sprecher, 1994). Those who felt they had invested greatly in a relationship and those who felt they had no control over the breakup tend to experience more severe depression following a breakup (Peterson, Rosenbaum, & Conn, 1985). Additionally, people with stronger commitment show a higher level of stress after breakup, and people who had a longer duration of relationship and who lack alternatives are associated with greater distress after breakup (Frazier & Cook, 1993; Orbuch, 1992).

Research showed that ending these emotionally intense relationships is not only traumatic (Chung et al., 2003) but also increases vulnerability to depression and anxiety (Weinberg & Bell, 1978; Sax, Bryant, & Gilmartin, 2002; Field, Diego, Pelaez, Deeds, & Delgado, 2009; Field et al., 2013). Anxiety was frequently observed to be associated with romantic relationship breakups, in a survey of more than 5,000 internet respondents. The study also showed that anxiety was related to preoccupation with the lost romantic partner, intense intrusive thoughts about the lost romantic partner, strong attempts to rebuild the lost relationship, accompanied by extreme physical and emotional distress (Davis, Shaver, & Vernon, 2003). Moreover, post-traumatic stress disorder (PTSD)-like symptoms (e.g., intrusion, avoidance) are frequently observed in people exposed to non-traumatic life stressors (such as romantic relationship dissolution), which have been associated with higher rates of PTSD (Gold, Marx, Soler-Baillo, & Sloan, 2005; Long et al., 2008; Van Hooff, McFarlane, Baur, Abraham, & Barnes, 2009).

PTSD-like symptoms after breakup: intrusion and avoidance

Horowitz’s stress response theory (1976, 2001) posits that intrusion and avoidance are two major response sets following major life stressors. Intrusion is characterized by

airiti

unsolicited thoughts and images, troubled dreams, strong pains or waves of feelings, and repetitive behavior associated with the major life event. After experiencing breakup, intrusive thoughts can be continual, uncontrollable, and often distressing, as it is one of the most heartbreaking experiences (Field et al., 2009). Intrusive thoughts are usually uncontrollable and distressing. Some interpret intrusive thoughts as a mechanism which absorbs change or major change in one's worldview (Peirce, 2007), and contributes to anxiety with alertness and ambiguity, leading to anxiety symptoms (Nolen-Hoeksema, 2000). Previous researchers have suggested that controlled intrusive thoughts before sleep turn into intrusive images during sleep and ultimately lead to insomnia (Field et al., 2009), which is a symptom commonly reported after a romantic relationship ends. It is possible that intrusive thoughts and images not only increase stress but also strongly link to discomfort in body sensation such as insomnia. Avoidance is characterized by ideational constriction, denial of the meanings and consequences of the event, blunted sensation, behavioral inhibition or counterphobic activity, and awareness of emotional numbness (Horowitz, Wilner, & Alvarez, 1979). Trying to avoid memories, feelings, and thoughts related to the breakup event and the lost partner can require great effort (Horowitz et al., 1979).

Unforgiveness: a pivot leading to negative consequences

According to Worthington and colleagues (Worthington, Sandage, & Berry, 2000; Worthington & Wade, 1999) Unforgiveness is characterized as a group of delayed negative emotion, such as resentment, anger, bitterness and fear while response to stress. It is different from immediate emotional response to inequity, yet it can be viewed as a situation that a person is getting stuck in negative emotions with hyperaroused stress response through repetitive thinking (Worthington, 2001). Similar negative health and psychological consequences were observed in traumatized population and among people who encounter extreme or chronic stressor (Schnurr & Green, 2004). Unforgiveness

usually manifests as anger, hostility, and aggression (Worthington, 2001; Harris & Thoresen, 2005), and it might prolong the resolution of relationship breakup. Feeling less forgiving about the breakup is found to be associated with greater distress (Field et al., 2013). Unforgiving reactions can perpetuate anger (Witvliet, Ludwig, & van der Laan, 2001), and anger reduces listening and understanding, which aggravates anger (Cloke, 1993). According to Cloke (1993), when anger turns into rage, revenge becomes the main goal rather than trying to understand what had happened; in addition, the focus of self-interest is distorted and the offenders are seen as obstacles for the individual to return to the authentic self.

In short, unforgiveness is conceptualized as a stress response to a significant stressor, and it has been shown to produce intense negative emotions with physiological responses (Witvliet, Ludwig, & Bauer, 2002; Witvliet et al., 2001). Travis (1989) illustrated that there is a set of rationalizations, feelings, excuses, and assumptions behind our angry responses, and if these are broken, moving towards forgiveness can be expected. Forgiveness then provides an opportunity to cope with difficult interpersonal relationships and possibly heal the wound once inflicted by our loved ones. Therefore, understanding forgiveness is crucial, and it could be the key when dealing with distress.

Forgiveness: a key to positive adjustment to breakup

Forgiveness is possibly one of the most crucial factors in the resolution process of relationship breakup, which provides emotional closure for separating couples (Brown, 1991). Specifically, forgiveness allows “letting go” of one’s anger or resentment, and developing prosocial feelings toward the unsuccessful romantic relationship or the previous romantic partner (McCullough, 2000). Kaplan (1992) emphasized that forgiveness is a trivial antidote to hostility, and forgiveness can promote health by minimizing the effect of sustained anger on physical health. Forgiveness is beneficial for preventing and ameliorating psychological and physical problems (McCullough

& Witvliet, 2002). Studies have consistently shown that forgiveness enhances both psychological well-being (Karremans, van Lange, Ouwerkerk & Kluwer, 2003; Orcutt, 2006; Toussaint & Webb, 2005) and physiological health (Harris & Thoresen, 2005; Lawler et al., 2003; Witvliet et al., 2001), and is conversely related to depression (Brown, 2003; Berry & Worthington, 2001; McCullough, Bellah, Kilpatrick, & Johnson, 2001).

Conceptually, forgiveness is a complex construct that has been seen as a process involving different phases. According to the process model of forgiveness (Enright, 1991), it includes four phases and twenty steps before true forgiveness happens. The goal of this model stresses the complicated nature of the forgiving process. Similarly, Cloke (1993) posited that five major steps are involved towards forgiveness: a) remembering in detail about what had happened and how it made us feel; b) understanding another person's point of view by hearing what they thought had happened and how they felt as they were experiencing it; c) identifying the obstacles that prevent us from forgiving; d) choosing to accept responsibility for ourselves and choosing to release from expectations we have created that kept us from forgiving; and e) eventually creating a ritual act of release to let go and forgive. Several researchers have divided forgiveness into dispositional and event-specific forgiveness (situational forgiveness) (e.g., Rye et al., 2001; Toussaint & Webb, 2005). Dispositional forgiveness refers to a general tendency to act in a forgiving way, which has been emphasized as the foundation of reactions to specific transgressions (cf. Roberts, 1995), such as personality traits and dispositions that allow predictions of forgiveness across time and series of different events. In contrast, situational forgiveness involves a process of change from negative to positive cognitions, behaviors, and affects relating to a specific interpersonal offense (Toussaint & Webb, 2005), such as harm appraisal, closeness of the relationship, and severity of the transgression (McCullough et al. 1998). However, dispositional trait of forgiveness is not always accurate of predicting forgiveness in a specific event (Mischel, 1968), knowing a person's general level of forgiveness may not allow us to predict forgiveness in a certain event. Consequently,

aiririti
this study is designed to exam the relationship between appraisal of breakup event, state forgiveness and distress.

Aim of the study

To our knowledge, previous research about forgiveness mostly focuses on understanding its role in maintaining relationships instead of its role in resolution of relationship breakup, and the mechanisms involved therein. Therefore, we sought to enhance the knowledge of such mechanisms by investigating the role of forgiveness following relationship dissolution and possible ways to alleviate distress, particularly PTSD-like symptoms (intrusion and avoidance). Based on the above, this study aimed to examine the mediating role of forgiveness between self-appraisal (harm and anger) and PTSD-like symptoms after relationship dissolution. Our hypotheses were: (1) after relationship dissolution, perceived harm and anger are positively correlated with PTSD-like symptoms (Avoidance and Intrusion). (2) people who ended a romantic relationship by rejection experience more harm and anger than people who initiated the breakup and people who broke up with mutual agreement. (3) Forgiveness negatively mediates the link between harm and PTSD-like symptoms; forgiveness negatively mediates the link between anger and PTSD-like symptoms.

Method

Participants

The study began from January 2012 to August 2012. Participants were 175 undergraduate students, which includes 122 females (69.7%) and 53 males (30.3%), who had experienced romantic relationship breakup, recruited from the introductory psychology course at National Taiwan University and volunteering students from other universities. The mean age of our sample was 21.87 years ($SD = 3.06$; range = 19-46).

Average had 2.14 times of break-up experiences ($SD = 1.32$; range = 1-6). Overall, 47.4% initiated the break-up, 29.1% broke up by rejection, and 23.4% had mutual agreement with their intimate partner to end the relationship. Reasons to terminate the romantic relationship include five major categories, i.e., long distance (32.2%), betrayal (20.6%), disapproval by others (12%), abusive relationship (5.14%), and other reasons (30.06%). The 'betrayal' category includes both betrayal and a third person intruding into the relationship; the 'disapproval by others' category includes disapproval by family and friends; the 'abusive relationship' category includes both physical and verbal abuse in the relationship.

Procedure

Upon signing an informed consent, participants were asked to recall and write down the last breakup experience over a 5-minute period, including details of the relationship, how the breakup happened, and any feelings associated with it when it comes to mind. After writing, participants were asked to complete the questionnaires assessing the last breakup experience, impact, forgiveness, and negative emotions. All questionnaires were administered in Chinese, and a rigorous double-back-translation was performed to avoid language bias. All study procedures were approved by the Institutional Review Board of the Department of Psychology, National Taiwan University. Data were analyzed using SPSS version 20.0 (IBM SPSS Statistics, Armonk, New York, USA) to perform correlation analysis, ANOVA analysis, and mediation analysis.

Measures

Forgiveness. The Forgiveness Scale (FS) was used to assess a specific real-life interpersonal transgression (Rye et al., 2001), which was originally developed for women who had been wronged in their romantic relationship, and was revised later to apply to either sex with any type of wrongdoing. The FS consists of 15 items (e.g., "*I spend time thinking about ways to get back at the person who wronged me*") and respondents are

asked to think how they have responded to the person who wronged them using a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), with a higher score indicating a greater tendency to forgive their romantic partner. The FS showed adequate internal consistency and test-retest reliability, with Cronbach's alpha and test-retest reliability .87 and .80, respectively (Rye et al., 2001). The Cronbach's alpha coefficient in the present study was .85.

Post-traumatic Stress. The Impact of Event Scale (IES) (Horowitz, Wilner, & Alvarez, 1979) was used to assess the level of subjective stress after breaking up with a romantic partner. The IES consists of 15 symptom-items that rate the frequency of their occurrence in the past week, on the 5-point Likert scale (0 = Not at all; 5 = Often), which is divided into two subscales: a 7-item intrusion subscale (e.g., *I thought about it when I didn't mean to*) and an 8-item avoidance scale (e.g. *I tried to remove it from memory*), with the higher score indicating greater intrusion and avoidance symptoms. The cut-offs for the total IES scores were subclinical (8 or less); mild (9 to 25); moderate (26-43); and severe (44 and above). The IES showed adequate internal consistency and test-retest reliability (Horowitz et al., 1979), with Cronbach's alpha and test-retest reliability .88 and .87, respectively. The Cronbach's alpha coefficient in the present study was .86.

Appraisals of the Past Relationship. Perceived harm from the breakup was assessed by the item: "*how severely were you hurt by the breakup event?*" (1 = I wasn't hurt at all, 7 = I was hurt deeply). Perceived anger from the break-up was assessed by the item: "*how angry did you feel because of the breakup event?*" (1 = I wasn't angry at all, 7 = I was very angry).

Results

Correlation analyses, ANOVA analyses, and mediation analyses were performed to understand the relationship between various variables and the mediating role of forgiveness.

Correlation analyses

Pearson correlation analyses were performed to examine the zero-order associations among study variables, and spearman correlation analyses were performed to examine variables associated with gender. As shown in Table 1, time from last breakup was negatively correlated with number of breakup experience, anger, distress and intrusion. Anger was positively correlated with perceived harm, distress and avoidance, yet negatively correlated with forgiveness. Perceived harm was positively correlated with distress, intrusion, and avoidance, and negatively correlated with forgiveness. As expected, forgiveness was negatively correlated with anger, harm, distress, intrusion, and avoidance.

ANOVA analyses

Two one-way between-subject ANOVAs were conducted to compare the effect of ways to breakup in romantic relationships (i.e., mutual, initiation of breakup, and rejection by other conditions) on negative emotions. First, on perceived harm, one-way ANOVAs yielded a significant effect of ways to breakup, $F_{(2, 172)} = 10.99$, eta square = .113, $p < .001$. Post-hoc Scheffe's test showed that participants of the rejected by other condition experienced significantly higher perceived harm than those of the initiated breakup condition ($Mean = 4.22$, $SD = 1.78$) and those who had the mutual breakup condition ($Mean = 4.12$, $SD = 1.50$), but the latter two groups did not differ.

Second, concerning perceived anger, a one-way ANOVA yielded a significant effect of ways to breakup, $F_{(2, 172)} = 6.33$, eta square = .07, $p = .002$. Post-hoc Sheffe's test indicated that participants of the rejected by other group ($Mean = 2.76$, $SD = 1.77$) experienced significantly higher anger than those who initiated breakup ($Mean = 1.87$, $SD = 1.36$). The mutual and initiation of breakup individuals did not differ on perceived anger.

Table 1 Correlations Among the Study Variables.

	1	2	3	4	5	6	7	8	9	10
1. Gender	—									
2. Age	.22**	—								
3. T_breakup	.06	.18*	—							
4. N_breakup	.06	.17*	-.18*	—						
5. Anger	-.17*	-.03	-.15*	.05	—					
6. Harm	.02	-.01	.07	.10	.35**	—				
7. FS-Total	-.03	.02	.11	-.14	-.58**	-.22**	—			
8. IES-Total	-.05	.05	-.23**	.07	.28**	.30**	-.45**	—		
9. IES-Intru	.01	-.01	-.25**	.03	.11	.28**	-.31**	.81**	—	
10. IES-Avoid	-.08	.09	-.10	.10	.33**	.23**	-.44**	.84**	.40**	—
<i>Mean</i>	—	21.87	3.58	2.14	2.28	4.54	56.93	20.69	8.25	12.44
<i>SD</i>	—	3.06	1.33	1.32	1.54	1.66	9.93	12.98	7.40	8.29

Note 1: T_breakup = Time from last break up; N_breakup = Number of breakups; FS = Forgiveness Scale; IES = Impact of Event Scale; IES-Intru = Impact of event –Intrusion; IES-Avoid = Impact of event –Avoidance. * $p < .05$, ** $p < .01$, *** $p < .001$

Note 2: Data from column 1 were performed by spearman correlation.

Mediation analyses

Two sets of mediation analyses were performed to understand the mediating role of forgiveness. The first set of mediation analyses examined the relationship between perceived harm and breakup distress, avoidance and intrusion respectively. The second set of mediation analyses aimed to examine the relationship between anger and breakup distress, avoidance and intrusion respectively. The order of the analyses was designed to understand the mediating role of forgiveness between each antecedent variable (perceived harm and anger) and general breakup distress, then each was further examined to see the relationship between specific PTSD-like symptoms (avoidance and intrusion). In addition, each mediation had set age, gender, time from last breakup, and total breakup times as covariant to ensure the mediation effect was not affected by these factors.

Perceived harm as antecedent variable

As Figure 1a illustrates, mediation analysis showed that the relationship between perceived harm and breakup-related distress (or PTSD-like symptoms) was significantly mediated by forgiveness. Specifically, perceived harm still had a significant effect on breakup-related distress after controlling for forgiveness, suggesting partial mediation. Bootstrapping procedure (Preacher & Hayes, 2008) was used to test the significance of the indirect effect, showing that the unstandardized indirect effect of perceived harm on breakup-related distress via forgiveness was statistically significant (bootstrap index = 0.66, 95% CI [0.20, 1.38]; bootstrapping 1000 times). As Figure 1b illustrates, mediation analysis showed that the relationship between perceived harm and avoidance was significantly mediated by forgiveness. Perceived harm still had significant effect on avoidance after controlling for forgiveness, suggesting partial mediation. Bootstrapping procedure (Preacher & Hayes, 2008) was used to test the significance of the indirect effect, showing that the unstandardized indirect effect of perceived harm on avoidance via forgiveness was statistically significant (bootstrap index = 0.44, 95% CI [0.12, 0.88]; bootstrapping 1000 times). As Figure 1c illustrates, mediation analysis showed that the relationship between perceived harm and intrusion was significantly mediated by forgiveness. Specifically perceived harm still had significant effect on intrusion after controlling for forgiveness, suggesting partial mediation. Bootstrapping procedure (Preacher & Hayes, 2008) was used to test the significance of the indirect effect, showing that the unstandardized indirect effect of perceived harm on intrusion via forgiveness was statistically significant (bootstrap index = 0.23, 95% CI [0.05, 0.53]; bootstrapping 1000 times).

Anger as antecedent variable

As Figure 2a illustrates, mediation analysis showed that the relationship between anger and breakup distress was significantly mediated by forgiveness. Specifically breakup anger had no significant effect on breakup distress after controlling for forgiveness,

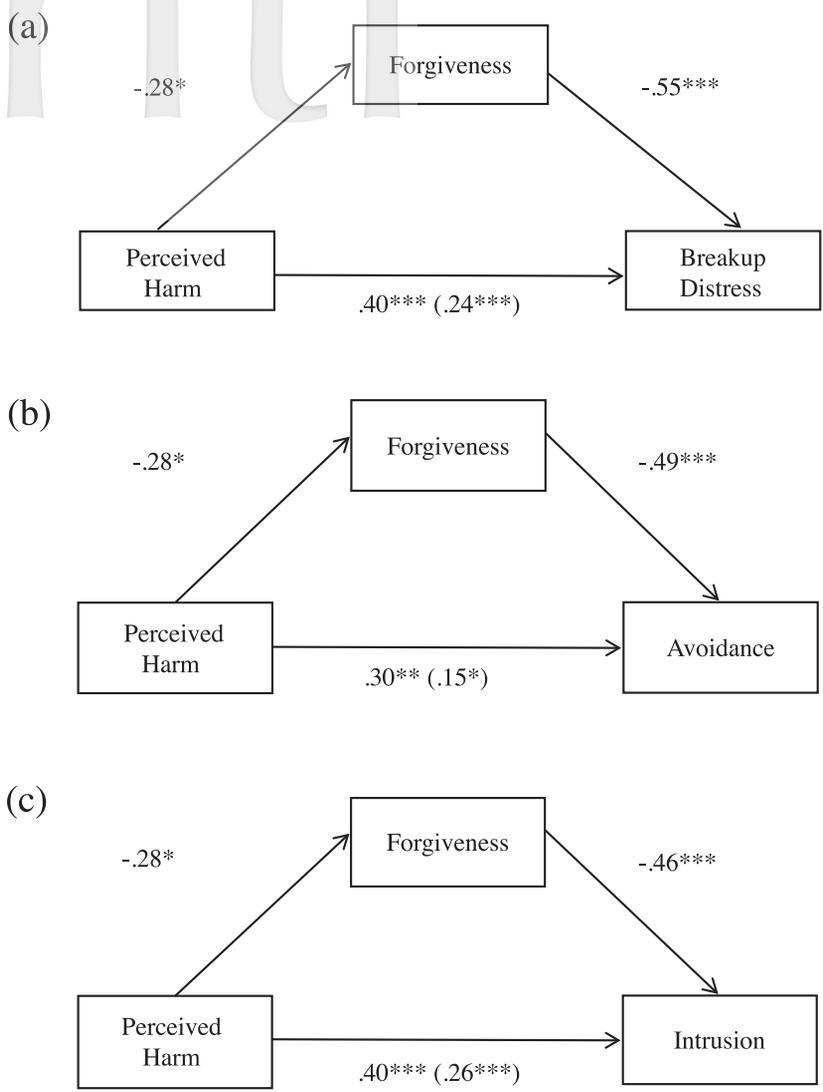


Figure 1 Forgiveness partially mediated the relationship between perceived harm and breakup distress(a), avoidance(b), and intrusion(c). The standardized regression coefficient after controlling for forgiveness is in parentheses.

* $p < .05$, ** $p < .01$, *** $p < .001$

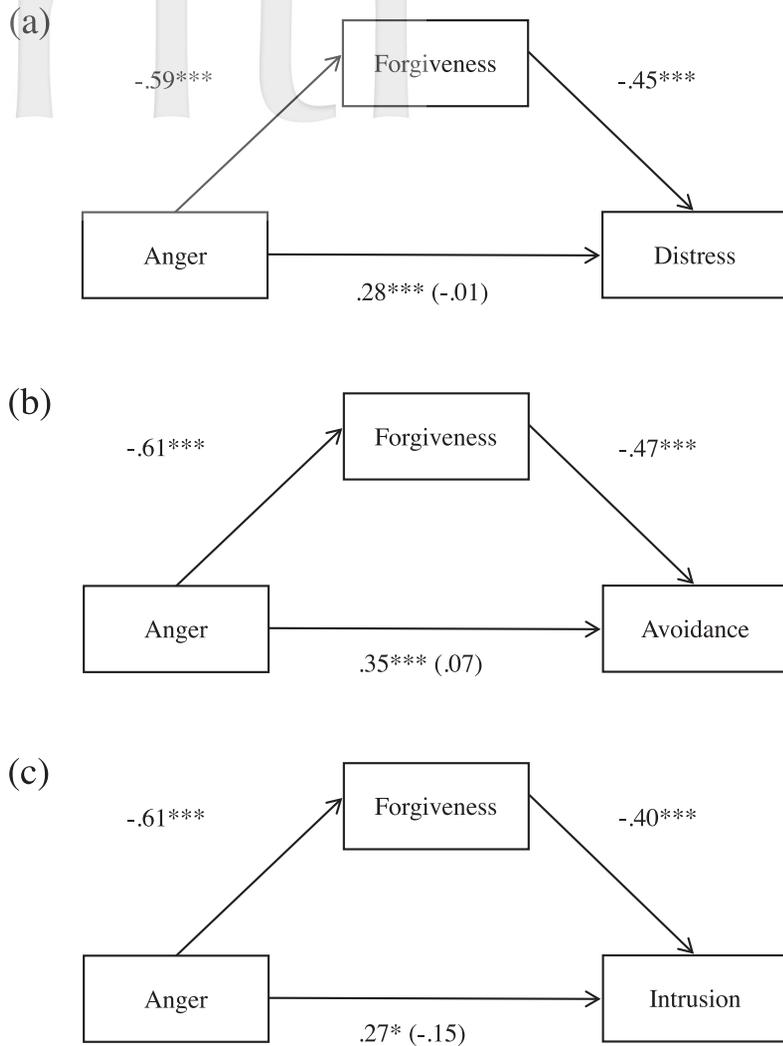


Figure 2 Forgiveness fully mediated the relationship between anger and breakup distress(a), avoidance(b), and intrusion(c). The standardized regression coefficient after controlling for forgiveness is in parentheses.

* $p < .05$, ** $p < .01$, *** $p < .001$

suggesting full mediation. Bootstrapping procedure (Preacher & Hayes, 2008) was used to test the significance of the indirect effect, showing that the unstandardized indirect effect of anger on breakup-related distress via forgiveness was statistically significant (bootstrap index = 2.25, 95% CI [1.17, 3.40]; bootstrapping 1000 times). As Figure 2b illustrates, mediation analysis showed that the relationship between breakup anger and avoidance was significantly mediated by forgiveness. Specifically breakup anger had no significant effect on avoidance after controlling for forgiveness, suggesting full mediation. Bootstrapping procedure (Preacher & Hayes, 2008) was used to test the significance of the indirect effect, showing that the unstandardized indirect effect of anger on avoidance via forgiveness was statistically significant (bootstrap index = 1.27, 95% CI [0.65, 2.12]; bootstrapping 1000 times). As Figure 2c illustrates, mediation analysis showed that the relationship between breakup anger and intrusion was significantly mediated by forgiveness. Specifically, breakup anger had no significant effect on intrusion after controlling for forgiveness, suggesting full mediation. Bootstrapping procedure (Preacher & Hayes, 2008) was used to test the significance of the indirect effect, showing that the unstandardized indirect effect of anger on intrusion via forgiveness was statistically significant (bootstrap index = 1.09, 95% CI [0.56, 1.82]; bootstrapping 1000 times).

Discussion

Forgiveness has been proposed to bring about significant benefits to the individual's health and well-being. The main purpose of the study was to explore the mediating role of forgiveness following breakup of a romantic relationship. The results of our zero-order correlational analyses showed that higher levels of anger and harm after romantic relationship breakup were related to higher levels of distress. This finding supports earlier hypotheses suggesting that going through romantic relationship breakup can be stressful.

ANOVA analyses revealed that those who breakup by rejection (the 'left') tended to

perceive more harm and anger compared to people who initiated the breakup (the 'leaver'). Specifically, the 'left' also perceived more harm than the people who had mutual breakup, yet no significant difference in perceived harm was found between the 'leaver' and those who had mutual breakup. On the other hand, the 'left' did not perceive higher anger than those who had mutual breakup. These results indicate that those who are 'left' in romantic relationship perceived more harm and anger than those who 'leave', since the relationship was ended by others and was incongruent with their will and motivation to stay in the relationship. The result is consistent with the other finding that rejection from a romantic relationship has been demonstrated as painful, and people are not only suffering but also undermined (MacDonald & Leary, 2005).

Forgiveness as a buffer for harm and anger

Concerning the mediating role, forgiveness partially mediated between harm and distress (PTSD-like symptoms). To further investigate the cluster of PTSD-like symptoms, which includes avoidance and intrusion in our study, it was found that forgiveness also partially mediated the relationship between perceived harm and avoidance, and the relationship between perceived harm and intrusion. In addition, forgiveness was found to fully mediated the relationship between anger and distress, anger and avoidance, and anger and intrusion respectively.

It is congruent with our hypothesis suggesting that when unforgiveness takes place after breakup, the higher the perceived harm the higher distress it will lead to, which in turn may increase thought intrusion and avoidance associated with the breakup. Conversely, when forgiveness plays a role after the romantic relationship dissolution, forgiveness not only serves as a buffer for breakup related intrusion, but also becomes a guardian for breakup related avoidance. Hence, when a person grants forgiveness toward the breakup event or the previous romantic partner, no grudges are held in the heart, and thus uncontrollable intrusion-like and avoidance-like symptoms associated with harm

appraisal are greatly reduced. Our result is consistent with another study, which showed that forgiveness is deemed to be a replacement of unforgiving and negative emotions with more positive emotions (Worthington, Witvliet, Pietrini, & Miller, 2007).

As expected, the study found forgiveness fully mediated the relationship between anger and distress, anger and avoidance, and anger and intrusion respectively. This result implies that anger related to breakup leads to distress through unforgiveness. Yet, when forgiveness takes place, it becomes an effective protector for distress, because of which the person will no longer experience the PTSD-like symptoms. With forgiveness, not only the person will not need to avoid or suppress the thoughts related to the previous breakup itself, the person will not experience uncontrollable intrusion-like symptoms related to the breakup.

From our results, it seems forgiveness is a stronger guardian for anger than perceived harm. It is suspected that when a person feels hurt from a relationship, there are other important factors that need to be considered in order to forgive. Forgiveness is not simply reduction of unforgiveness, it also increases positive states associated with the person, such as empathy, compassion or hope (Toussaint, Williams, Musick, & Everson, 2001). Therefore, it's natural to understand when unforgiveness is reduced, distress can be decreased, yet factors such as apology, empathy or compassion should also be considered in order to reach true forgiveness.

On the other hand, anger is a strong intense emotion, which can be defined as an emotional response to a perceived offending behavior which can range from irritation to rage and hostility (Smith, 1992). It is suspected that when forgiveness takes place, it has a calming effect on the aroused emotion; therefore, distress associated with the breakup event becomes more manageable. The calming effect of decreasing unforgiveness on the aroused angry emotion itself is sufficient enough to eliminate the chance for avoidance-like and intrusion-like symptoms to occur. Thus, even if a person feels angry or hurt from a breakup, forgiveness is the key to decreasing distress and shows another path to cope with the heartbreaking relationship.

airiti

It is noteworthy that previous research mainly focused on understanding what forgiveness is and its relationship in maintaining and promoting healthy romantic relationships. The current study not only focuses on the role of forgiveness after a romantic relationship ends, but to our knowledge our study is also the first to examine forgiveness in relation to PTSD symptoms. From our findings, forgiveness not only serves as a buffer for decreasing the effects of harm leading to breakup distress, avoidance-like, and intrusion-like symptoms; it also demonstrates a key role in preventing anger leading to distress, avoidance-like, and intrusion like symptoms. When recollection rises about the breakup event, a forgiving person will experience less distress in general, which is specified by having less unwanted thoughts or memories intruding into the mind, and the person will not need to suppress memory, thoughts and feelings, and thus there will be no avoidance related to the relationship dissolution. On the other hand, when an unforgiving person faces recollections related with the breakup, perceived harm and anger will lead to greater distress, which is characterized by having higher avoidance and intrusion.

Implications and limitations

This result is congruent with Enright's theory that forgiveness is "the idea of a change whereby one becomes less motivated to think, feel, and behave negatively in regard to the offender". Future studies should investigate clinical samples to understand the mediating role of forgiveness with PTSD symptoms. Since experiencing romantic relationship breakup could lead to PTSD-like symptoms, university based health education curricula should incorporate stress relieving groups to assist young adults to cope with relationship dissolution, integrating forgiveness into workshops, speeches, and counseling groups to help young adults overcome stress, and prevent further emotional burden after relationship dissolution.

A few limitations of the study should be noted. First, participants were asked to recall memories of the last breakup event, yet some of the breakups happened more than

aiririti

2 or 3 years ago, and the impact related to the breakup might not be as acute. Future studies should limit the time frame of the breakup event within a shorter period. Given that it is not a longitudinal study, in which changes in forgiveness were studied with changes in negative emotions, we cannot draw inferences about its causality. If this study were replicated in a longitudinal study, we expect that it could reveal the true benefits of forgiveness after ending a romantic relationship. This study is also limited by the measures; negative emotions ratings such as anger and harm were measured with a single question. Even though it rates the level of subjective feeling, it is impossible to understand the content of each negative emotion. For example, does the person feel angry towards the way the breakup was handled? Or is the person angry at the partner simply because he/she does not want to end the relationship? Literature has demonstrated different characteristics of anger, such as loss of connectedness to others, loss of volition, extreme pervasiveness, and distorted and heightened cognitive processes (McHugh, Forbes, Bates, Hopwood, & Creamer, 2012). Future studies should assess each negative emotion by using more psychometrically sound measures. Moreover, exploring from different perspectives of forgiveness would be essential. Research has identified forgiveness of self, forgiveness of others, forgiveness of god, emotional forgiveness, decisional forgiveness and so on, to better understand how each perspective of forgiveness relating to relationship dissolution could facilitate the emphasis in therapy. In addition, in this study we were unable to compare different breakup reasons with its impact on distress due to the design of the questionnaire. Future studies could further this study by compare different breakup reasons to understand its specific impact. Lastly, this study surveyed undergraduate students in Taiwan, and the generalizability of our findings to a community population or other cultures remains unclear. Investigation for different ages and groups is crucial. Especially, according to DSM-5, the symptom clusters of Post-Traumatic Syndrome Disorder (PTSD) include avoidance, intrusion, negative alterations in cognitions and mood, and alterations in arousal and reactivity. In the current study, we were unable to

generalize results to persons with PTSD, yet our findings suggest that forgiveness has a buffer effect on both avoidance and intrusion after relationship dissolution. Perhaps future studies should investigate the effect of forgiveness for PTSD symptom clusters to better understand the application of forgiveness in PTSD patients.

Conclusions

In sum, the present study found that forgiveness mediates between breakup appraisal and post-traumatic stress-like symptoms. The finding not only illustrates the importance of understanding the impact of romantic relationship dissolution among young adults, but also examined how forgiveness can be used as an effective tool to regulate distress. Longitudinal research examining the effect of forgiveness in relation to post-traumatic stress symptoms will be needed.

References

- Berry, J. W., & Worthington, E. L., Jr. (2001). Forgiveness, relationship quality, stress while imagining relationship events, and physical and mental health. *Journal of Counseling Psychology, 48*(4), 447-455.
- Brown, E. (1991). *Patterns of infidelity and their treatment*. New York: Brunner/Mazel.
- Brown, R. P. (2003). Measuring individual differences in the tendency to forgive: Construct validity and links with depression. *Personality and Social Psychology Bulletin, 29*(6), 1-13.
- Chung, M. C., Farmer, S., Grant, K., Newton, R., Payne, S., Perry, M., & Stone, N. (2003). Coping with post-traumatic stress symptoms following relationship dissolution. *Stress and Health, 19*(1), 27-36.
- Cloke, K. (1993). Revenge, forgiveness, and the magic of mediation. *Mediation Quarterly, 11*(1), 67-78.

- Collins, W. A. (2003). More than myth: The developmental significance of romantic relationships during adolescence. *Journal of research on adolescence, 13*(1), 1-24.
- Davis, D., Shaver, P. R., & Vernon, M. L. (2003). Physical, emotional, and behavioral reactions to breaking up: The roles of gender, age, emotional involvement, and attachment style. *Personality and Social Psychology Bulletin, 29*(7), 871-884.
- Enright, R. D. (1991). The moral development of forgiveness. In W. M. Kurtines & J. L. Gewirtz (Eds.), *Handbook of moral behavior and development: Theory, Research, and Application* (pp. 123-152). Hillsdale, NJ: Erlbaum Press.
- Field, T., Diego, M., Pelaez, M., Deeds, O., & Delgado, J. (2009). Breakup distress in university students. *Adolescence, 44*(176), 705-727.
- Field, T., Diego, M., Pelaez, M., Deeds, O., & Delgado, J. (2013). Negative emotions and behaviors are markers of breakup distress. *College Student Journal, 47*(3), 516-523.
- Fink, K., Russell, S., Engel, L., Harkness, D., Pederson, D., & Harvey, J. (1991). *Reactions to relationships loss*. Paper presented at Southwestern Psychological Association meeting, New Orleans.
- Frazier, P. A., & Cook, S. W. (1993). Correlates of distress following heterosexual relationship dissolution. *Journal of Social and Personal Relationships, 10*(1), 55-67.
- Gold, S. D., Marx, B. P., Soler-Baillo, J. M., & Sloan, D. M. (2005). Is life stress more traumatic than traumatic stress? *Journal of Anxiety Disorders, 19*(6), 687-698.
- Gray, J. D., & Silver, R. C. (1990). Opposite sides of the same coin: Former spouses' divergent perspectives in coping with their divorce. *Journal of Personality and Social Psychology, 59*(6), 1180-1191.
- Harris, A. H. S., & Thoresen, C. E. (2005). Forgiveness, unforgiveness, health, and disease. In E. L. Worthington Jr. (Ed.), *Handbook of forgiveness* (pp. 321-334). New York, NY: Routledge.
- Horowitz, M., Wilner, N., & Alvarez, W. (1979). Impact of event scale: a measure of subjective stress. *Psychosomatic Medicine, 41*(3), 209-218.

Horowitz, M. J. (1976). *Stress response syndromes*. New York: Jason Aronson.

Horowitz, M. J. (2001). *Stress response syndromes: Personality styles and interventions* (4th ed.). New York: Jason Aronson.

Horowitz, M. J., Wilner, N., & Alvarez, W. (1979). Impact of Event Scale: A measure of subjective stress. *Psychosomatic Medicine*, 41(3), 209-218.

Kaplan, B. H. (1992). Social health and the forgiving heart: The Type B story. *Journal of Behavioral Medicine*, 15(1), 3-14.

Karremans, J. C., Van Lange, P. A., Ouwerkerk, J. W., & Kluwer, E. S. (2003). When forgiving enhances psychological well-being: The role of interpersonal commitment. *Journal of Personality and Social Psychology*, 84(5), 1011-1026.

Lawler, K. A., Younger, J. W., Piferi, R. L., Billington, E., Jobe, R., Edmonson, K., & Jones, W. H. (2003). A change of heart: Cardiovascular correlates of forgiveness in response to interpersonal conflict. *Journal of Behavioral Medicine*, 26(5), 373-393.

Long, M. E., Elhai, J. D., Schweinle, A., Gray, M. J., Grubaugh, A. L., & Frueh, B. C. (2008). Differences in posttraumatic stress disorder diagnostic rates and symptom severity between Criterion A1 and non-Criterion A1 stressors. *Journal of Anxiety Disorders*, 22(7), 1255-1263.

Lindemann, E. (1944). Symptomatology and management of acute grief. *American Journal of Psychiatry*, 101(2), 141-148.

McCullough, M. E. (2000). Forgiveness as human strength: theory, measurement, and links to well-being. *Journal of Social and Clinical Psychology*, 19(1), 43-55.

McCullough, M. E., Bellah, C. G., Kilpatrick, S. D., & Johnson, J. L. (2001). Vengefulness: Relationships with forgiveness, rumination, well-being, and the Big Five. *Personality and Social Psychology Bulletin*, 27(5), 601-610.

McCullough, M. E., Rachal, K. C., Sandage, S. J., Worthington, E. L., Jr., Brown, S. W., & Hight, T. L. (1998). Interpersonal forgiving in close relationships: II. Theoretical elaboration and measurement. *Journal of Personality and Social Psychology*, 75(6), 1586-1603.

aiririti

McCullough, M. E., & Witvliet, C. V. (2002). The psychology of forgiveness. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 446-455). New York, NY: Oxford University Press.

MacDonald, G., & Leary, M. R. (2005). Why does social exclusion hurt? The relationship between social and physical pain. *Psychological Bulletin*, *131*(2), 202-223.

McHugh, T., Forbes, D., Bates, G., Hopwood, M., & Creamer, M. (2012). Anger in PTSD: is there a need for a concept of PTSD-related posttraumatic anger? *Clinical Psychology Review*, *32*(2), 93-104.

Monroe, S. M., Rohde, P., Seeley, J. R., & Lewinsohn, P. M. (1999). Life events and depression in adolescence: relationship loss as a prospective risk factor for first onset of major depressive disorder. *Journal of Abnormal Psychology*, *108*(4), 606-614.

Mischel, W. (1968). *Personality and assessment*. Hoboken, NJ: Wiley.

Nolen-Hoeksema, S. (2000). The role of rumination in depressive disorders and mixed anxiety/depressive symptoms. *Journal of Abnormal Psychology*, *109*(3), 504-511.

Orbuch, T. L. (1992). A symbolic interactionist approach to the study of relationship loss. In T. L. Orbuch (Ed.), *Close relationship loss: Theoretical perspectives* (pp. 192-204). New York: Springer-Verlag.

Orcutt, H. K. (2006). The prospective relationship of interpersonal forgiveness and psychological distress symptoms among college women. *Journal of Counseling Psychology*, *53*(3), 350-361.

Peirce, A. G. (2007). From intrusive to oscillating thoughts. *Archives of psychiatric nursing*, *21*(5), 278-286.

Peterson, C., Rosenbaum, A. C., & Conn, M. K. (1985). Depressive mood reactions to breaking up: Testing the learned helplessness model of depression. *Journal of Social and Clinical Psychology*, *3*(2), 161-169.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*(3), 879-891.

- airiti
- Roberts, R. C. (1995). Forgiveness. *American Philosophical Quarterly*, 32(4), 289-306.
- Rye, M. S., Loiacono, D. M., Folck, C. D., Olszewski, B. T., Heim, T. A., & Madia, B. P. (2001). Evaluation of the psychometric properties of two forgiveness scales. *Current Psychology*, 20(3), 260-277.
- Sax, L. J., Bryant, A. N., & Gilmartin, S. K. (2002). A longitudinal investigation of emotional health among first-year college students: comparisons of women and men. Retrieved January 19, 2017, from <http://files.eric.ed.gov/fulltext/ED471506.pdf>.
- Schnurr, P. P., & Green, B. L. (2004). *Trauma and health: Physical health consequences of exposure to extreme stress*. Washington, DC: American Psychological Association.
- Smith, T. W. (1992). Hostility and health: Current status of a psychosomatic hypothesis. *Health Psychology*, 11(3), 139-150.
- Sprecher, S. (1994). Two sides to the breakup of dating relationships. *Personal Relationships*, 1(3), 199-222.
- Toussaint, L., & Webb, J. R. (2005). Theoretical and empirical connections between forgiveness, mental health, and well-being. In E. L. Worthington (Ed.), *Handbook of forgiveness* (pp. 349-362). New York, NY: Routledge.
- Toussaint, L. L., Williams, D. R., Musick, M. A., & Everson, S. A. (2001). Forgiveness and health: Age differences in a U.S. probability sample. *Journal of Adult Development*, 8(4), 249-257.
- Travis, C. (1989). *Anger: The misunderstood emotion*. New York: Simon & Schuster.
- Vaughan, D. (1986). *Uncoupling: Turning points in intimate relationships*. New York: Oxford University Press.
- Van Hooff, M., McFarlane, A. C., Baur, J., Abraham, M., & Barnes, D. J. (2009). The stressor Criterion-A1 and PTSD: A matter of opinion? *Journal of Anxiety Disorders*, 23(1), 77-86.
- Weinberg, E., & Bell, A. I. (1978). Performance of United States citizens with foreign medical education on standardized medical examinations. *New England Journal of Medicine*, 299(16), 858-862.

- Welsh, D. P., Grello, C. M., & Harper, M. S. (2003). When love hurts: Depression and adolescent romantic relationships. In P. Florsheim (Ed.), *Adolescent romantic relations and sexual behavior: Theory, research, and practical implications* (pp.185-211). Mahwah, NJ: Lawrence Erlbaum Associates.
- Witvliet, C. V. O., Ludwig, T. E., & Bauer, D. J. (2002). Please forgive me: Transgressors' emotions and physiology during imagery of seeking forgiveness and victim responses. *Journal of Psychology and Christianity, 21*(3), 219-233.
- Witvliet, C. V. O., Ludwig, T. E., & Laan, K. L.V. (2001). Granting forgiveness or harboring grudges: Implications for emotion, physiology, and health. *Psychological Science, 12*(2), 117-123.
- Weiss, R. S. (1975). *Marital separation*. New York: Basic Books.
- Worthington, E. (2001). *Five steps to forgiveness: The art and science of forgiving*. New York: Crown Publishers.
- Worthington, E. L., Sandage, S. J., & Berry, J. W. (2000). Group interventions to promote forgiveness: What researchers and clinicians ought to know. In M. E. McCullough, K. I. Pargament & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp.228-253). New York, NY: Guilford Press.
- Worthington, E. L., & Wade, N. G. (1999). The psychology of unforgiveness and forgiveness and implications for clinical practice. *Journal of Social and Clinical Psychology, 18*(4), 385-418.
- Worthington, E. L. Jr., Witvliet, C. V., Pietrini P., & Miller, A. J. (2007). Forgiveness, health, and well-being: a review of evidence for emotional versus decisional forgiveness, dispositional forgiveness, and reduced unforgiveness. *Journal of Behavioral Medicine, 30*(4), 291-302.

寬恕為大學生分手事件的評估和創傷相關 症狀之中介因子

郭思好 陳淑惠

研究目的：戀愛關係提供了大學生學習和探索的機會以建立親密關係，但對於大學生來說，結束一段戀愛關係卻可能造成極大的壓力，甚至使得提升創傷後壓力症候群相關症狀的脆弱性因子。本研究主要檢驗在分手事件後，寬恕是否為自我評估(受到傷害或感到憤怒)和創傷後壓力症候群相關症狀(壓力、逃避與入侵)的中介因子。**研究方法：**研究時間從2012年1月開始至2012年8月結束。受試者共包含175位大學生，其中包括男性53名，女性122名。每位受試者至少都有一次戀愛關係的分手經驗，並在填寫量表前有五分鐘的時間回想並寫下與分手事件有關的回憶，之後開始填寫寬恕量表、事件衝擊量表、以及負向情緒之自我評估表。本研究之資料使用SPSS版本20.0分析數據，以進行相關分析、平均數變異數分析、以及中介分析。**研究結果：**本研究發現自評受到傷害以及自評感到憤怒皆與壓力(distress)有正相關，且被分手者會比主動提出分手者自評經驗到更多傷害和憤怒情緒。此外，寬恕分別部分中介自評受到傷害與壓力、逃避症狀及侵入症狀的關係。寬恕亦分別完全中介自評感到憤怒與壓力、逃避症狀及侵入症狀的關係。**研究結論：**本研究不但說明青少年面對戀愛關係結束時的困難，同時也說明了寬恕能夠成為面對分手困境時的重要元素。

關鍵詞：逃避、分手、寬恕、侵入、創傷後症後群症狀

郭思好：國立臺灣大學心理學研究所博士班學生；諮商心理師；美國波士頓大學、復健諮商系碩士；專長領域與研究興趣為寬恕、憂鬱、創傷症狀。

陳淑惠：國立臺灣大學心理學系教授；美國艾默雷大學、心理學系臨床心理學博士；專長領域與研究興趣為憂鬱、創傷、網路成癮。(通訊作者；E-mail: shchen@ntu.edu.tw)