

# Evaluation Of The Psychometric Properties Of Two Forgiveness Scales

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This study examined the psychometric properties of two forgiveness scales using participants enrolled at a Midwestern Catholic university ( $N = 328$ ). The Forgiveness Scale is a 15-item Likert-type scale designed to measure forgiveness toward an offender. The Forgiveness Likelihood Scale is a 10-item Likert-type scale designed to measure tendency to forgive across situations. Factor analyses revealed that the Forgiveness Scale contains two subscales (i.e., Absence of Negative, Presence of Positive) and the Forgiveness Likelihood Scale consists of a single factor. Both scales have adequate internal consistency and test-retest reliability. Both subscales of the Forgiveness Scale were significantly correlated in the expected direction with measures of forgiveness, religiousness, anger, hope, religious well-being, existential well-being, and social desirability. The Forgiveness Likelihood Scale was significantly correlated in the expected direction with measures of forgiveness, religiousness, trait anger, religious well-being, and social desirability.

A major challenge with developing measures of forgiveness involves settling upon a satisfactory operational definition of forgiveness. Interestingly, social scientists have found it easier to agree upon what forgiveness is *not* (McCullough, Pargament, & Thoresen, 2000). Many authors concur that forgiveness should be distinguished from reconciliation (e.g., Enright & the Human Development Study Group, 1994; Freedman, 1998), legal pardon (e.g., Enright & the Human Development Study Group, 1991), condoning (e.g., Veenstra, 1992), and forgetting (e.g., Smedes, 1996).

Settling upon a definition of what forgiveness *is*, however, has proven to be more challenging (McCullough, Pargament, & Thoresen, 2000). Some authors have defined forgiveness as the absence of negative responses toward an offender. For example, the Transgression-Related Interpersonal Motivations Inventory (McCullough et al., 1998) is based on a conceptualization of forgiveness as the absence of both revenge and avoidance responses. In contrast, others have argued that forgiveness necessarily involves positive responses toward the offender. Subkoviak et al. (1995) wrote:

In forgiving, a person overcomes resentment toward an offender, but does not deny him/herself the moral right to such resentment. The forgiver tries to have a new stance of benevolence, compassion, and even love toward the offender, even though the latter has no moral right to such a merciful response. (p. 642)

This conceptualization provides the basis for the Enright Forgiveness Inventory

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(Subkoviak et al., 1995), which includes questions on both positive and negative responses toward an offender.

Whether forgiveness necessarily involves positive responses toward offenders will likely remain a point of debate. Sometimes overlooked is the argument that social scientists need to study whether most people practice forgiveness in accordance with the conceptualizations provided by social scientists, philosophers, and religious leaders. In the meantime, there is value in developing forgiveness measures that include questions about both the absence of negative responses and the presence of positive responses toward an offender. Such scales could allow researchers to determine whether there are differential outcomes between wronged individuals who respond positively toward an offender versus those who simply overcome negative responses. For the purpose of this paper, forgiveness will be conceptualized as a response toward an offender that involves letting go of negative affect (e.g., hostility), cognitions (e.g., thoughts of revenge), and behavior (e.g., verbal aggression), and may also involve positive responses toward the offender (e.g., compassion).

### *Methods of Measuring Forgiveness*

McCullough, Hoyt, and Rachal (2000) outlined a 3 X 2 X 4 taxonomy for categorizing current forgiveness measures. The first level of the taxonomy concerns measurement specificity. Within this level, forgiveness measures can be offense-specific, dyadic, and dispositional. The second level of the taxonomy refers to the direction of forgiveness. As McCullough et al. (2000) noted, forgiveness can be assessed from the perspective of the forgiver or from the perspective of the offender. Finally, forgiveness can be assessed using a number of methods including self-report, partner-report, outside observer report, and examination of constructive and destructive behaviors toward an offender. While forgiveness measures need to be developed that correspond to all levels of this proposed taxonomy, the present article will focus only on: 1) a scale that measures forgiveness in response to a specific offender, and 2) a scale that measures propensity to forgive across situations. Both of these scales are self-report measures and are designed to assess forgiveness from the perspective of the individual who was wronged.

### *Measuring Forgiveness of an Offender*

A few self-report scales have already been developed to measure forgiveness of an offender (e.g., Enright Forgiveness Inventory—Subkoviak et al., 1995; Transgression-Related Interpersonal Motivations Inventory—McCullough et al., 1998; Wade Forgiveness Scale—Wade, 1989). The Enright Forgiveness Inventory has adequate psychometric properties and has been used cross-culturally (Subkoviak et al., 1995). However, the scale, which consists of 60 items plus a five-item “pseudo-forgiveness” scale, is relatively lengthy. Another relatively lengthy scale (i.e., 83 items) with adequate psychometric properties is the Wade Forgiveness Scale (Wade, 1989). Efforts to shorten the Wade Forgiveness Scale resulted in the creation of the Transgression-Related

Interpersonal Motivations Inventory (McCullough et al., 1998) which contains a five-item revenge subscale and a seven-item avoidance subscale. This scale also appears to have adequate psychometric properties (McCullough et al., 1998). However, a disadvantage to this scale is that it does not measure positive thoughts, feelings, and behaviors that some authors have suggested are part of the forgiveness process (e.g., Enright, Gassin, & Wu, 1992). Thus, there is a need for a forgiveness scale that is relatively brief and contains questions about both positive and negative responses toward offenders.

### *Measuring Tendency to Forgive*

The Willingness to Forgive Scale (Hebl & Enright, 1993) was developed to measure tendency to forgive when presented with a variety of hypothetical situations. As described by Hebl and Enright (1993), the Willingness to Forgive Scale consists of 15 items concerning hypothetical wrongdoing and one item concerning a wrongdoing experienced by the respondent. For each of the items, respondents are asked to indicate: 1) how they believe they would respond to the wrongdoing (ending response), and 2) how they would ideally like to respond (preferred response). Participants are asked to select from 10 possible responses to the wrongdoing such as "talk with a counselor or friend," "get even," and "forgive." Internal consistency across subscales was found to be adequate (Hebl & Enright, 1993). An adapted version of this scale contained 12 items and was used by Al-Mabuk, Enright, & Cardis (1995). Both versions of this scale are important attempts at measuring a general tendency to forgive. However, it is not clear whether individuals can make a meaningful distinction between how they would probably cope and how they would prefer to cope. Furthermore, the scale measures the degree to which participants would consider using a variety of coping responses, including forgiveness. A scale is also needed that exclusively examines tendency to forgive in response to hypothetical wrongdoings.

### *Present Study*

The present study evaluated the psychometric properties of a scale designed to measure forgiveness of a specific offender and a scale designed to measure one's tendency to forgive across situations. Specifically, the following questions will be addressed for each scale: 1) What is the factor structure of each scale? 2) Is each scale reliable, as measured by internal consistency and test-retest reliability? 3) Is each scale related to existing measures of forgiveness? 4) Is each scale related to other measures that have been shown previously to be correlated with forgiveness?

## METHOD

### *Participants*

Participants ( $N = 328$ ) consisted of introductory psychology students from a Midwestern Catholic university. Participants ranged in age from 18 to 41 ( $M = 19.2$ ,  $SD = 2.3$ ). Participants included students in their first year of college (57.3%), second year (31.7%), third year (4.6%), fourth year (5.5%), and other (.9%). The majority of participants were female (67.7%) and Caucasian (90.9%). Most participants indicated they were Catholic (70.1%) or Protestant (18.0%). Other reported religious affiliations included Jewish (.6%), Muslim (.3%), or other (10.4%). Two participants (.6%) did not indicate a religious affiliation.

Participants were asked to think of an individual who had wronged them in the past, and to describe the nature of the wrongdoing they had experienced. Several raters classified participant responses into broader categories. Types of wrongdoing reported by participants included being let down by a friend or family member (27.7%), verbal / emotional abuse (17.1%), broken commitment / unwanted relationship breakup (14.9%), infidelity (14.6%), lying (12.2%), gossip / wrongful accusation (7.9%), physical abuse (6.4%), rape/sexual assault (3.4%), and other (14.9%). Percentages add to over 100 because several participants indicated that they had been wronged in more than one way by the same offender. Participants' responses regarding the length of time that had elapsed since the wrongdoing included: 0–6 months (36.2%), 7–12 months (17.1%), 1 – 2 years (23.2%), and 3 or more years (23.5%).

### *Procedure*

Participants were recruited from introductory psychology courses at a medium-size Midwestern Catholic university. Students were eligible to participate in the study if they were at least 18 years of age and had experienced a wrongdoing in the past. Of the 383 students who initially agreed to participate, 335 completed and returned questionnaires (87%). Questionnaires completed by seven participants were not included in the analyses because they failed to meet study criteria, provided incomplete responses, or provided responses that were not valid. Consequently, a total of 328 participants were included in the analyses. Participants were mailed questionnaires on two occasions, with about 14 days between mailings. Participants were provided with a research code in order to maintain confidentiality and to allow researchers to match their responses from time 1 to time 2.

### *Instruments*

Participants completed a questionnaire on two occasions (unless otherwise indicated) that included the scales described below. Selected scales that have been published previously have been shown to have adequate psychometric properties.

*Demographic / Background Information.* At time 1, participants completed demo-

graphic questions on variables such as age, year in school, race, and religious affiliation. In addition, participants were asked to identify an individual who has wronged them, describe the nature of wrongdoing(s), and to indicate how long ago the wrongdoing(s) occurred.

*Forgiveness Scale.* The Forgiveness Scale (see appendix) was designed to measure forgiveness toward a particular offender. The scale was developed as part of an earlier study involving college women who had been wronged in a romantic relationship (Rye, 1998). Similar to the Enright Forgiveness Inventory (Subkoviak et al., 1995) items were created to measure affective, cognitive, and behavioral responses to wrongdoing. Questions were evaluated based upon whether they measured important indicators of forgiveness as suggested by the research literature. Questions were also designed to assess both positive and negative responses to wrongdoing. Although the psychometric data on the initial 16 item questionnaire were promising, the original sample was relatively small. Additionally, questions on the original survey specifically measured responses to wrongdoing in a romantic relationship. Thus, the question wording was altered so that the scale could be used by individuals who have experienced any type of wrongdoing. Additionally, one item was dropped from the original scale as a result of the factor analytic results (described below). The revised scale consists of 15 items using a Likert-type format with response possibilities ranging from 1 (Strongly disagree) to 5 (Strongly agree). Respondents are instructed to think about how they have responded to the person who wronged or mistreated them. Sample items include "I spend time thinking about ways to get back at the person who wronged me" and "If I encountered the person who wronged me I would feel at peace." Higher scores on this scale reflect greater forgiveness toward an offender.

*Forgiveness Likelihood Scale.* The Forgiveness Likelihood Scale (see appendix) was also developed as part of an earlier study involving college women who had been wronged in a romantic relationship (Rye, 1998). Ten scenarios were developed involving hypothetical wrongdoing. Scenarios were designed to assess a variety of types of wrongdoing (e.g., infidelity, slander, theft) to which college students would likely be able to relate and provide a meaningful judgment. Although the scale was originally designed for college students, the authors believe the scenarios are also relevant to other populations. Respondents are instructed to imagine that the scenarios happened to them and then consider the likelihood that they would be willing to forgive the offender. The scale uses a Likert-type format with response possibilities ranging from 1 (*Not at all likely*) to 5 (*Extremely likely*). Sample items include "One of your friends starts a nasty rumor about you that is not true. As a result, people begin treating you worse than they have in the past. What is the likelihood that you would choose to forgive your friend?" and "Your significant other has a 'one night stand' and becomes sexually involved with someone else. What is the likelihood that you would choose to forgive your significant other?" Higher scores on this scale reflect increased willingness to forgive.

*Enright Forgiveness Inventory.* Participants were asked to complete the Enright Forgiveness Inventory (Subkoviak et al., 1995), and a one-item question from the Enright Forgiveness Inventory that globally assesses forgiveness. The Enright For-

givenness Inventory consists of sixty items that assess the following: positive and negative affect, positive and negative cognition, and positive and negative behavior. The scale also includes five additional items designed to measure "pseudo-forgiveness." Subkoviak et al. (1995) reported that the scale has adequate psychometric properties. In this study, Cronbach's alpha for the Enright Forgiveness Inventory was .99. Higher scores on this scale reflect higher levels of forgiveness.

### ***Other Measures***

Participants were asked to complete several other measures that have previously been shown to be related to forgiveness. These included measures of religiousness, anger, hope, spiritual well-being, and social desirability. It was hypothesized that both of the new forgiveness measures would be positively correlated with religiousness, hope, spiritual well-being, and social desirability, and negatively correlated with anger.

*Religiousness.* Participants' religiousness was assessed using the Hoge Intrinsic Religious Motivation Scale (Hoge, 1972). The scale consists of 10 items with a Likert-type scale format with response possibilities ranging from 1 (*Strongly disagree*) to 5 (*Strongly agree*). Sample items include, "One should seek God's guidance when making every important decision," and "My religious beliefs are what really lie behind my whole approach to life." The scale has been shown to have adequate psychometric properties (Hoge, 1972). In the present study, Cronbach's alpha for this scale was .87. Participants in this sample were moderately religious ( $M = 32.9$ ,  $SD = 8.25$ ). In this study, the scale was coded so that higher scores reflect higher levels of religiousness.

*Anger.* The 10-item versions of both the State-Anger Scale and the Trait-Anger Scale were used to assess anger (Spielberger, Jacobs, Russell, & Crane, 1983). The State-Anger Scale measures feelings of anger that the respondent is experiencing. The State-Anger Scale was constructed on a Likert-type scale with response possibilities ranging from 1 (*Not at all*) to 4 (*Very Much*). Examples of items include "I am mad," "I feel angry," and "I feel like yelling at somebody." In contrast, the Trait-Anger Scale measures one's tendency to be angry across situations. The scale was constructed using Likert-type items with response possibilities ranging from 1 (*Almost Never*) to 4 (*Almost Always*). Examples of items include "I have a fiery temper," "I am a hot-headed person," and "It makes me furious when I am criticized in front of others." Both scales have adequate psychometric properties (Spielberger et al., 1983). In this study, Cronbach's alphas for the State-Anger Scale and the Trait-Anger Scale were .92 and .85 respectively. Higher scores on these scales reflect higher levels of anger.

*Hope.* Hope was measured using the Avoidance of Hope Threats subscale of the Miller Hope Scale (Miller & Powers, 1988). Scale items were constructed using a Likert-type format with response options ranging from 1 (*Strongly agree*) to 5 (*Strongly disagree*). The Avoidance of Hope Threats subscale contains 12 items pertaining to impediments to hope. Examples of items include, "I feel overwhelmed," "I am feeling hopeless about some aspects of life," and "I lack inner strength." The psychometric properties of this subscale are adequate (Miller & Powers, 1988). In this study,

Cronbach's alpha was .85. This scale was coded so that higher scores reflect higher levels of hope.

*Spiritual Well-Being.* Spiritual Well-Being was assessed using both the Religious Well-Being and the Existential Well-Being subscales of the Spiritual Well-Being Scale (Ellison, 1983). The complete scale consists of 20 items constructed on a Likert-type format, with response possibilities ranging from 1 (*Strongly disagree*) to 6 (*Strongly agree*). Sample items from the Religious Well-Being subscale (10 items) include "I believe that God loves me and cares about me" and "I believe that God is concerned about my problems." Sample items from the Existential Well-Being subscale (10 items) include "I feel that life is a positive experience" and "I feel very fulfilled and satisfied with life." The psychometric properties of both subscales are adequate (Ellison, 1983). In this study, Cronbach's alphas for both the Religious Well-Being and the Existential Well-Being subscales were .93 and .86 respectively. Higher scores reflect increased perceptions of well-being.

*Social Desirability.* At time 2, participants completed the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) to determine whether the new forgiveness scales were related to social desirability. The social desirability scale consists of 33 true-false items pertaining to common weaknesses that most individuals are willing to admit they have. Examples of items include "I like to gossip at times," "At times I have really insisted on having things my own way," and "I am sometimes irritated by people who ask favors of me." The psychometric properties of this scale were judged to be adequate (Crowne & Marlowe, 1960). In this study, Cronbach's alpha for the Marlowe-Crowne Social Desirability Scale was .76. Higher scores on this scale reflect greater social desirability.

## RESULTS

### *Factor Analyses*

Principal components factor analyses with varimax rotations were computed separately on both the Forgiveness Scale and the Forgiveness Likelihood Scale in order to determine the factor structure of the scales. Several criteria were used in determining factors. First, the eigenvalue scree plot was examined. Second, items were included with factor loadings greater than .40. Third, conceptual clarity was considered when evaluating the factor structure.

*Forgiveness Scale.* Examination of the eigenvalue scree plot revealed that either a two-factor or three-factor solution was appropriate. The three-factor solution produced one factor that contained only two items and had inadequate internal consistency. In contrast, the two-factor solution produced factors that were conceptually meaningful and had adequate internal consistency. Consequently, the two-factor solution was selected. One item was eliminated from the scale due to a loading below .40 on both factors. Thus, 15 items were included in the final scale. Factor loadings, eigenvalues, and percentages of variance accounted for by each factor are presented in Table 1. One factor contains items describing the absence of negative thoughts, feelings, and behav-



**TABLE 1**  
**Factor Loadings for the Forgiveness Scale**

Item	Factor 1 (AN)	Factor 2 (PP)
1. I can't stop thinking about how I was wronged by this person.*	<b>.80</b>	.03
2. I wish for good things to happen to the person who wronged me.	.06	<b>.85</b>
3. I spend time thinking about ways to get back at the person who wronged me.*	<b>.56</b>	.32
4. I feel resentful toward the person who wronged me.*	<b>.58</b>	.46
5. I avoid certain people and/or places because they remind me of the person who wronged me.*	<b>.57</b>	.20
6. I pray for the person who wronged me.	-.08	<b>.70</b>
7. If I encountered the person who wronged me I would feel at peace.	.30	<b>.66</b>
8. This person's wrongful actions have kept me from enjoying life.*	<b>.80</b>	.00
9. I have been able to let go of my anger toward the person who wronged me.	<b>.55</b>	.44
10. I become depressed when I think of how I was mistreated by this person.*	<b>.77</b>	-.13
11. I think that many of the emotional wounds related to this person's wrongful actions have healed.	<b>.57</b>	.21
12. I feel hatred whenever I think about the person who wronged me.*†	<b>.52</b>	.58
13. I have compassion for the person who wronged me.	.04	<b>.87</b>
14. I think my life is ruined because of this person's wrongful actions.*	<b>.62</b>	.05
15. I hope the person who wronged me is treated fairly by others in the future.	.07	<b>.83</b>
Eigenvalue	5.70	2.67
% variance	35.6	16.7

Notes. \*Item reverse scored. †Item was included on factor 1 to enhance conceptual clarity.

ior toward the wrongdoer (Absence of Negative). The other factor contains items describing the presence of positive thoughts, feelings, and behavior toward the wrongdoer (Presence of Positive). As shown in Table 1, most items on the scale loaded unambiguously on a single factor. The only exceptions were items related to anger, which loaded moderately on both factors. In the interest of conceptual clarity, one anger-related item (question 12) was placed on the Absence of Negative subscale, even though it loaded slightly higher on the other subscale. Means and standard devia-



**TABLE 2**  
**Means and Standard Deviations of Forgiveness Scales by Gender**

	Men ( <i>N</i> = 106)	Women ( <i>N</i> = 222)	Total ( <i>N</i> = 328)
1. Forgiveness Scale (AN)	37.6 (8.2)	36.1 (7.6)	36.6 (7.8)
2. Forgiveness Scale (PP)	16.2 (4.9)	16.9 (4.1)	16.7 (4.4)
3. Forgiveness Likelihood Scale	26.7 (7.1)	27.5 (7.3)	27.2 (7.2)

**TABLE 3**  
**Factor Loadings for the Forgiveness Likelihood Scale**

Item	Loading
1. You share something embarrassing about yourself to a friend who promises to keep the information confidential. However, the friend breaks his/her promise and proceeds to tell several people. What is the likelihood that you would choose to forgive your friend?	.63
2. One of your friends starts a nasty rumor about you that is not true. As a result, people begin treating you worse than they have in the past. What is the likelihood that you would choose to forgive your friend?	.77
3. Your significant other has just broken up with you, leaving you hurt and confused. You learn that the reason for the break up is that your significant other started dating a good friend of yours. What is the likelihood that you would choose to forgive your significant other?	.73
4. A family member humiliates you in front of others by sharing a story about you that you did not want anyone to know. What is the likelihood that you would choose to forgive the family member?	.50
5. Your significant other has a "one night stand" and becomes sexually involved with someone else. What is the likelihood that you would choose to forgive your significant other?	.64
6. Your friend has been talking about you behind your back. When you confront this person, he/she denies it, even though you know that he/she is lying. What is the likelihood that you would choose to forgive your friend?	.72
7. A friend borrows your most valued possession, and then loses it. The friend refuses to replace it. What is the likelihood that you would choose to forgive your friend?	.65
8. You tell an acquaintance about a job that you hope to be hired for. Without telling you, the acquaintance applies and gets the job for him/herself. What is the likelihood that you would choose to forgive your acquaintance?	.61
9. A stranger breaks into your house and steals a substantial sum of money from you. What is the likelihood that you would choose to forgive the stranger?	.61
10. You accept someone's offer to attend a formal dance. However, this person breaks their commitment to take you and goes to the event with someone who they find more attractive. What is the likelihood that you would choose to forgive this person?	.71
Eigenvalue	4.39
% variance	43.9

**TABLE 4**  
*Correlations Between Forgiveness Scales*

	1	2	3	4	5
1. Forgiveness Scale (AN)	—	.41***	.15**	.52***	.60***
2. Forgiveness Scale (PP)		—	.30***	.75***	.53***
3. Forgiveness Likelihood Scale			—	.25***	.23***
4. Enright Forgiveness Inventory				—	.71***
5. Single Item Forgiveness (from EFI)					—

Note: \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$

tions by gender for both subscales are presented in Table 2. T-tests were computed to compare mean scores on each subscale by gender. No significant gender differences were found on either subscale.

*Forgiveness Likelihood Scale.* Examination of the eigenvalue scree plots revealed that a one or a two-factor solution would be appropriate. Further examination revealed that a one-factor solution provided the strongest conceptual clarity without compromising psychometric properties. Factor loadings, eigenvalues, and percentages of variance accounted for by the factor are presented in Table 3. Means and standard deviations by gender for the scale are presented in Table 2. A t-test was computed to compare the mean scores on the scale across gender. No significant gender differences were found.

### **Reliability**

*Forgiveness Scale.* Cronbach's alphas for the Absence of Negative and Presence of Positive subscales of the Forgiveness Scale were .86 and .85 respectively. Cronbach's alpha for the entire scale was .87. Test-retest reliability ( $N = 287$ ), computed with an average of 15.2 days between administrations (range = 9 to 30,  $SD = 4.28$ ), was .76 for both the Absence of Negative and the Presence of Positive subscales and .80 for the entire scale.

*Forgiveness Likelihood Scale.* Cronbach's alpha for the Forgiveness Likelihood Scale was .85. Test-retest reliability ( $N = 287$ ), computed with an average of 15.2 days between administrations (range = 9 to 30,  $SD = 4.28$ ), was .81.

### **Correlations With Other Forgiveness Measures**

*Forgiveness Scale.* Correlations were computed between the Forgiveness Scale and the Enright Forgiveness Inventory. As indicated in Table 4, the Forgiveness Scale subscales were significantly correlated with the Enright Forgiveness Inventory (Absence of Negative,  $r = .52$ ,  $p < .001$ ; Presence of Positive,  $r = .75$ ,  $p < .001$ ) and a global forgiveness item from the Enright Forgiveness Inventory (Absence of Negative,  $r = .60$ ,  $p < .001$ ; Presence of Positive,  $r = .53$ ,  $p < .001$ ).

*Forgiveness Likelihood Scale.* Correlations were computed between the Forgiveness Likelihood Scale and the Enright Forgiveness Inventory. As indicated in Table 4,

**TABLE 5**  
**Correlations Between Forgiveness Scales and Other Measures**

	Forgiveness Scale (AN)	Forgiveness Scale (PP)	Forgiveness Likelihood Scale
Religiousness	.16**	.29***	.22***
State Anger	-.41***	-.13*	-.07
Trait Anger	-.34***	-.21***	-.31***
Avoidance of Hope Threats	.35***	.11*	.02
Existential Well-Being	.40***	.21***	.07
Religious Well-Being	.20***	.30***	.23***
Social Desirability	.16**	.22***	.17**

Note: \* $p < .05$  \*\* $p < .01$  \*\*\* $p < .001$ .

the Forgiveness Likelihood Scale was significantly correlated with the Enright Forgiveness Inventory ( $r = .25, p < .001$ ) and a global forgiveness item from the Enright Forgiveness Inventory ( $r = .23, p < .001$ ).

### ***Correlations with Related Constructs***

In order to further assess validity, the forgiveness scales were correlated with measures that have been shown in previous studies to be significantly related to forgiveness.

**Forgiveness Scale.** As shown in Table 5, the subscales of the Forgiveness Scale were significantly related to several other constructs. Specifically, the Absence of Negative subscale was significantly correlated in the expected direction with measures of religiousness (Hoge Intrinsic Religious Motivation Scale— $r = .16, p < .01$ ), anger (State Anger— $r = -.41, p < .001$ ; Trait Anger— $r = -.34, p < .001$ ), hope (Avoidance of Hope Threats— $r = .35, p < .001$ ), spiritual well-being (Existential Well-Being— $r = .40, p < .001$ ; Religious Well-Being— $r = .20, p < .001$ ), and social desirability ( $r = .16, p < .01$ ). Similarly, the Presence of Positive subscale was significantly correlated in the expected direction with measures of religiousness (Hoge Intrinsic Religious Motivation Scale— $r = .29, p < .001$ ), anger (State anger— $r = -.13, p < .05$ ; Trait anger— $r = -.21, p < .001$ ), hope (Avoidance of Hope Threats— $r = .11, p < .05$ ), spiritual well-being (Existential Well-Being— $r = .21, p < .001$ ; Religious Well-Being— $r = .30, p < .001$ ), and social desirability ( $r = .22, p < .001$ ).

**Forgiveness Likelihood Scale.** As shown in Table 5, the Forgiveness Likelihood Scale was significantly related in the expected direction to religiousness ( $r = .22, p < .001$ ), trait anger ( $r = -.31, p < .001$ ), religious well-being ( $r = .23, p < .001$ ), and social desirability ( $r = .17, p < .01$ ). The Forgiveness Likelihood Scale was not significantly related to state anger, hope, or existential well-being.

## DISCUSSION

Before discussion of the results, several limitations of the study need to be addressed. The findings of the present study are based upon college students, the majority of whom are Caucasian and female. Additional research is needed to examine the psychometric properties of the scales using participants with different demographic characteristics. In addition, this study relied exclusively on self-report measures to assess the validity of the scales. Additional support for the validity of the scales could be obtained by examining the relationship between self-reported forgiveness scales and observed behavior. In spite of these limitations, the present study makes several important contributions to the literature.

A factor analysis computed on the Forgiveness Scale revealed two subscales that may be useful to future researchers. One subscale measures the absence of "negative" thoughts, feelings, and behaviors toward the wrongdoer (Absence of Negative), and one subscale measures the presence of "positive" thoughts, feelings, and behaviors toward the wrongdoer (Presence of Positive). As noted earlier, there has been a debate as to whether forgiveness necessarily involves positive responses toward an offender. The two subscales of the Forgiveness Scale enable researchers to examine whether there are differential associations between mental health and these aspects of forgiveness. Thus, researchers could examine whether positive responses toward an offender contributes to mental health above and beyond the absence of negative responses. Researchers could also examine under what conditions these different aspects of forgiveness are beneficial or deleterious to mental health.

Both subscales of the Forgiveness Scale have adequate internal consistency and test-retest reliability. Additionally, both subscales were significantly related to the Enright Forgiveness Inventory and a single-item forgiveness measure (from the EFI). Furthermore, both subscales were significantly related to other measures that have been previously shown to be related to forgiveness such as religiousness (Gorsuch & Hao, 1993; Poloma & Gallup, 1991; Rokeach, 1973; Shoemaker & Bolt, 1977), anger (Luskin & Thoresen, 1997, as cited in Thoresen, Luskin, & Harris, 1998), hope (Al-Mabuk et al., 1995; Freedman & Enright, 1996), and spiritual well-being (Rye, 1998). The Forgiveness Scale was also significantly related to a measure of social desirability. It is not surprising that individuals with higher forgiveness scores are also more likely to portray themselves in a favorable light. In this study, a comparable correlation was found between the Enright Forgiveness Inventory and social desirability ( $r = .15$ ,  $p < .01$ ). However, it should be noted that in an earlier study, Subkoviak et al. (1995) found no significant correlation between the Enright Forgiveness Inventory and social desirability.

The factor analysis on the Forgiveness Likelihood Scale revealed a single factor. The Forgiveness Likelihood Scale was significantly related to the Enright Forgiveness Inventory and a single item measure of forgiveness. However, convergent validity for this scale needs to be assessed in future studies by examining its association with other measures of tendency to forgive across situations (e.g., Willingness to Forgive Scale). As expected, the Forgiveness Likelihood Scale was inversely correlated with trait

anger. In other words, the more likely individuals were to forgive across situations, the less likely they were to harbor anger across situations. The fact that the Forgiveness Likelihood Scale was not significantly correlated with state anger provides further evidence that the scale is functioning as intended. In other words, the scale is a measure of a trait rather than a state. In addition, the Forgiveness Likelihood Scale was significantly correlated with religiousness and religious well-being. These findings are not surprising because many religious traditions encourage forgiveness (see Rye et al., 2000). Perhaps individuals' sense of religious well-being is enhanced when their willingness to forgive across situations is consonant with their religious beliefs. Not surprisingly, the Forgiveness Likelihood Scale was also significantly correlated with social desirability. Individuals who are likely to report a willingness to forgive across a variety of situations are also more likely to present themselves in a positive light in a variety of situations.

As McCullough, Hoyt, and Rachal (2000) pointed out, forgiveness measures are still needed that go beyond self-report, that measure dyadic responses to forgiveness, and that measure the experience of being forgiven from the perspective of the wrongdoer. Clearly, there is much work to be done with respect to measurement of forgiveness. However, the Forgiveness Scale and the Forgiveness Likelihood Scale appear to have adequate psychometric properties and may be useful assessment instruments for researchers who wish to examine forgiveness from the perspective of those who were wronged.

## NOTES

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The authors thank Sarah Danko, Anne Hovancsek, Carla Kmett, Jennifer Martin, and Colleen Ryan for their assistance. We kindly request that researchers who use the forgiveness scales evaluated in this study provide us with a summary of their psychometric data for the scales. The idea for creating the Forgiveness Likelihood Scale was based upon the Willingness to Forgive Scale (Hebl & Enright, 1993).

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# APPENDIX

## THE FORGIVENESS SCALE

Think of how you have responded to the person who has wronged or mistreated you. Indicate the degree to which you agree or disagree with the following statements.

	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. I can't stop thinking about how I was wronged by this person.	5	4	3	2	1
2. I wish for good things to happen to the person who wronged me.	5	4	3	2	1
3. I spend time thinking about ways to get back at the person who wronged me.	5	4	3	2	1
4. I feel resentful toward the person who wronged me.	5	4	3	2	1
5. I avoid certain people and/or places because they remind me of the person who wronged me.	5	4	3	2	1
6. I pray for the person who wronged me.	5	4	3	2	1
7. If I encountered the person who wronged me I would feel at peace.	5	4	3	2	1
8. This person's wrongful actions have kept me from enjoying life.	5	4	3	2	1
9. I have been able to let go of my anger toward the person who wronged me.	5	4	3	2	1
10. I become depressed when I think of how I was mistreated by this person.	5	4	3	2	1
11. I think that many of the emotional wounds related to this person's wrongful actions have healed.	5	4	3	2	1
12. I feel hatred whenever I think about the person who wronged me.	5	4	3	2	1
13. I have compassion for the person who wronged me.	5	4	3	2	1



	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
14. I think my life is ruined because of this person's wrongful actions.	5	4	3	2	1
15. I hope the person who wronged me is treated fairly by others in the future.	5	4	3	2	1

**Reverse code:** 1,3,4,5,8,10,12,14  
**Absence of Negative subscale items:** 1,3,4,5,8,9,10,11,12,14  
**Presence of Positive subscale items:** 2,6,7,13,15

FORGIVENESS LIKELIHOOD SCALE

Imagine the scenarios below happened to you. Based on the information provided, consider the likelihood that you would choose to forgive the person. Then, circle the response that is most true for you.

1. You share something embarrassing about yourself to a friend who promises to keep the information confidential. However, the friend breaks his/her promise and proceeds to tell several people. What is the likelihood that you would choose to forgive your friend?

Extremely Likely 5	Fairly Likely 4	Somewhat Likely 3	Slightly Likely 2	Not at all Likely 1
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2. One of your friends starts a nasty rumor about you that is not true. As a result, people begin treating you worse than they have in the past. What is the likelihood that you would choose to forgive your friend?

Extremely Likely 5	Fairly Likely 4	Somewhat Likely 3	Slightly Likely 2	Not at all Likely 1
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3. Your significant other has just broken up with you, leaving you hurt and confused. You learn that the reason for the break up is that your significant other started dating a good friend of yours. What is the likelihood that you would choose to forgive your significant other?

Extremely Likely 5	Fairly Likely 4	Somewhat Likely 3	Slightly Likely 2	Not at all Likely 1
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4. A family member humiliates you in front of others by sharing a story about you that you did not want anyone to know. What is the likelihood that you would choose to forgive the family member?

Extremely Likely 5	Fairly Likely 4	Somewhat Likely 3	Slightly Likely 2	Not at all Likely 1
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5. Your significant other has a “one night stand” and becomes sexually involved with someone else. What is the likelihood that you would choose to forgive your significant other?

Extremely Likely 5	Fairly Likely 4	Somewhat Likely 3	Slightly Likely 2	Not at all Likely 1
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6. Your friend has been talking about you behind your back. When you confront this person, he/she denies it, even though you know that he/she is lying. What is the likelihood that you would choose to forgive your friend?

Extremely Likely 5	Fairly Likely 4	Somewhat Likely 3	Slightly Likely 2	Not at all Likely 1
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7. A friend borrows your most valued possession, and then loses it. The friend refuses to replace it. What is the likelihood that you would choose to forgive your friend?

Extremely Likely 5	Fairly Likely 4	Somewhat Likely 3	Slightly Likely 2	Not at all Likely 1
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8. You tell an acquaintance about a job that you hope to be hired for. Without telling you, the acquaintance applies and gets the job for him/herself. What is the likelihood that you would choose to forgive your acquaintance?

Extremely Likely 5	Fairly Likely 4	Somewhat Likely 3	Slightly Likely 2	Not at all Likely 1
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9. A stranger breaks into your house and steals a substantial sum of money from you. What is the likelihood that you would choose to forgive the stranger?

Extremely Likely 5	Fairly Likely 4	Somewhat Likely 3	Slightly Likely 2	Not at all Likely 1
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10. You accept someone's offer to attend a formal dance. However, this person breaks their commitment to take you and goes to the event with someone who they find more attractive. What is the likelihood that you would choose to forgive this person?

Extremely Likely 5	Fairly Likely 4	Somewhat Likely 3	Slightly Likely 2	Not at all Likely 1
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