

Dispositional Forgiveness of Self, Others, and Situations

Laura Yamhure Thompson, C. R. Snyder,
Lesa Hoffman, Scott T. Michael, Heather N.
Rasmussen, Laura S. Billings, Laura Heinze,
Jason E. Neufeld, Hal S. Shorey, Jessica C. Roberts,
Danae E. Roberts

The University of Kansas, Lawrence

ABSTRACT Six studies regarding forgiveness are presented. The Heartland Forgiveness Scale (HFS), a self-report measure of dispositional forgiveness (with subscales to assess forgiveness of self, others, and situations) was developed and demonstrated good psychometric properties. Forgiveness correlated positively with cognitive flexibility, positive affect, and distraction; it correlated negatively with rumination, vengeance, and hostility. Forgiveness predicted four components of psychological well-being (anger, anxiety, depression, and satisfaction with life); forgiveness of situations accounted for unique variance in these components of psychological well-being. Forgiveness and hostility demonstrated equivalent, inverse associations with relationship duration, and forgiveness accounted for unique variance in relationship satisfaction, even when controlling for trust. Forgiveness level correlated positively with decreased negativity in statements written about transgressions in the present versus the past tense.

This research was supported by a grant from the John Templeton Foundation, the Fetzer Institute, and other donors. Correspondence regarding this article should be addressed to Laura Yamhure Thompson. E-mail: laura_thompson@hms.harvard.edu

Journal of Personality 73:2, April 2005

© Blackwell Publishing 2005

DOI: 10.1111/j.1467-6494.2005.00311.x

DISPOSITIONAL FORGIVENESS OF SELF, OTHERS, AND SITUATION

During the last decade, the empirical exploration of forgiveness has flourished (e.g., Freedman & Enright, 1996; Girard & Mullet, 1997; McCullough, Pargament, & Thoresen, 2000a; McCullough et al., 1998). As research has expanded, many self-report measures have been developed to assess forgiveness. Several of these measures assess nondispositional forgiveness such as the (a) forgiveness of another person for a specific transgression (e.g., McCullough et al., 1998; Subkoviak et al., 1995), (b) forgiveness of a specific person for one or more transgressions (e.g., Hargrave & Sells, 1997), or (c) perception of forgiveness within one's family (e.g., Pollard, Anderson, Anderson, & Jennings, 1998). Other measures assess dispositional forgiveness (e.g., Berry, Worthington, Parrott, O'Connor, & Wade, 2001; Hebl & Enright, 1993; Mauger et al., 1992; Mullet, Houdbine, Laumonier, & Girard, 1998; Tangney, Fee, Reinsmith, Boone, & Lee, 1999). Studies indicate that people's scores on measures of dispositional forgiveness tend to be related to their scores on measures of mental health and well-being, whereas scores on measures of forgiveness of specific transgressions tend not to be significantly related to mental health and well-being (see McCullough & Witvliet, 2002). Thus, measures of dispositional forgiveness are especially useful for studying psychological correlates of forgiveness.

The majority of self-report instruments used to measure dispositional forgiveness assess an individual's tendency to forgive other people. There appear to be only two dispositional measures that assess forgiveness of *self* in addition to measuring forgiveness of *others*: the Forgiveness of Self and Forgiveness of Others scales (Mauger et al., 1992), and the Multidimensional Forgiveness Inventory (Tangney et al., 1999). It may be important, however, for those interested in dispositional forgiveness to assess multiple aspects of forgiveness, rather than focusing exclusively on forgiveness of others. Using their forgiveness scales, Mauger et al. found that, relative to forgiveness of others, forgiveness of self was more strongly related to aspects of mental health such as depression, anxiety, and anger. Enright and the Human Development Study Group (1996) highlighted the importance of examining multiple aspects of forgiveness by suggesting that forgiveness of others, receiving forgiveness, and forgiveness of

self should be considered in the therapeutic context; they refer to this as the *forgiveness triad*.

Some have highlighted the multifaceted nature of forgiveness by exploring the process of seeking forgiveness (e.g., Couch, Jones, & Moore, 1999; DiBlasio & Proctor, 1993; Enright, 1996; Sandage, Worthington, Hight, & Berry, 2000). The research presented here is focused on the process of granting forgiveness, with forgiveness being conceptualized as a multidimensional construct composed of forgiveness of self, others, and situations beyond anyone's control (e.g., an illness or natural disaster). When this research was conducted, there were no measures to assess forgiveness of situations. Therefore, a new measure of dispositional forgiveness of self, others, and situations was developed: the Heartland Forgiveness Scale (HFS). Because forgiveness of situations is a novel concept to many people, it, and the current authors' conceptualization of forgiveness, will be discussed in more detail.

Definitions and Theories of Granting Forgiveness

To measure and study a construct, one must first conceptualize it. There has been much debate regarding how forgiveness should be conceptualized (e.g., Enright & Coyle, 1998; McCullough, Pargament, & Thoresen, 2000b). Most agree, however, that forgiveness is an adaptive trait or behavior (e.g., Droll, 1985; Freedman & Enright, 1996; Malcom & Greenberg, 2000; Mauger et al., 1992; McCullough, 2000; McCullough & Worthington, 1995). There is empirical support for the assertion that forgiveness is an adaptive method of coping (e.g., Rasmussen & Lopez, 2000), and that it is related to psychological well-being (e.g., Mauger et al., 1992; Subkoviak et al., 1995; Witvliet, 2001). Conversely, unforgiveness has been positively correlated with indicators of stress and psychopathology (Berry & Worthington, 2001; Maltby, Macaskill, & Day, 2001; Mauger et al., 1992; Witvliet, 2001).

Although researchers generally have regarded forgiveness as a human strength, some have suggested that forgiving may make the forgiver vulnerable to revictimization (Katz, Street, & Arias, 1997) and victim blaming (Bass & Davis, 1994) in abusive relationships. These conflicting views stem, in part, from differences in how forgiveness is defined. For example, Enright (1996) has suggested that several authors who have discouraged readers from forgiving their

abusive parents have done so primarily because those authors have equated forgiveness with reconciliation, pardoning, excusing, or pseudoforgiveness (i.e., pseudoforgiveness has been defined as “an outward expression of forgiveness, but an inward harboring of resentment and revenge” [Enright & Zell, 1989, p. 58]).

In the *American Heritage Dictionary* (1985), “forgive” is defined as “to excuse for a fault or offense; pardon” and “to renounce anger or resentment against” (p. 525). Most social science researchers include the renunciation of anger and resentment as a main tenet in their forgiveness conceptualizations (e.g., Enright, 2001; Enright, Eastin, Golden, Sarinopoulos, & Freedman, 1992; McCullough, 2000; Worthington, Sandage, & Berry, 2000). Several researchers have proposed that the forgiver also must develop feelings of benevolence, or even *agape*, for the transgressor (e.g., Enright et al., 1992; McCullough, 2000; Worthington et al., 2000). Others, including the current authors, propose that the development of positive feelings or love for the transgressor is not an essential component of forgiveness (e.g., Tangney et al., 1999).

The dictionary (1985) also lists “excuse” and “condone” as synonyms of forgive, stating, “these [three] verbs mean to pass over an offense and to free the offender from the consequences of it.” This conflation of forgiving with condoning in such lay definitions of forgiveness may be central to the controversy about the adaptiveness of forgiveness. Researchers generally do not equate forgiving with condoning or excusing (e.g., Enright et al., 1992; Enright & The Human Development Study Group, 1994; Worthington, 2000). Similarly, they differentiate forgiving from pardoning, which might imply foregoing legal justice. Most researchers agree that forgiveness does not necessitate freeing the transgressor from the consequences of his or her actions. As Worthington (2000) notes, forgiveness and the pursuit of justice can coexist. Furthermore, most researchers agree with Worthington and Drinkard’s (2000) assertion that “Forgiveness of an interpersonal offense or injury does not necessarily imply that reconciliation will occur, nor does reconciliation between parties imply that forgiveness will occur. . . forgiveness is *intrapersonal*, whereas reconciliation is *interpersonal*” ([emphasis added] e.g., Enright and the Human Development Study Group, 1994; Freedman, 1998; McCullough & Worthington, 1994; Worthington & Drinkard, 2000). Nonetheless, there is at least one exception to this agreement among researchers that forgiveness is intrapersonal

and distinct from reconciliation. Hargrave and Sells (1997), who have focused on “dyadic forgiveness,” or forgiveness within an ongoing relationship, have included both the overt expression of forgiveness and prudent reconciliation in their conceptualization of forgiveness.

Despite the general agreement among forgiveness researchers that forgiveness should not be equated with the acts of pardoning, excusing, condoning, or reconciling, many people frequently confuse these constructs with forgiveness. In fact, works targeted at clinicians have focused on differentiating forgiveness from those constructs (e.g., Enright et al, 1992; Freedman, 1998; McCullough & Worthington, 1994). This confusion about what is and is not part of forgiveness probably stems from two main issues: (a) There are many differences in the way forgiveness is defined by lay people, researchers, clinicians, etc., and (b) the essential components of forgiveness involve intrapersonal processes that cannot be directly observed.

Now that some of the broad issues about defining forgiveness have been reviewed, the current authors’ proposed conceptualization of forgiveness will be summarized. Because the opportunity for forgiveness arises only after a transgression has occurred, a conceptualization of transgressions will be presented as a preface to the definition of forgiveness.

Transgressions

Transgressions are events that people perceive as violating their expectations and assumptions about how they, other people, or the world “ought” to be. When people experience transgressions, they typically develop negative thoughts (e.g., “This has ruined my life”), feelings (e.g., anger), or behaviors (e.g., seeking revenge) related to the transgressor, transgression, or associated outcomes that reflect how they are responding (cognitively, affectively, or behaviorally) to the transgression. Thus, the word *responses* refers to the constellation of thoughts, emotions, or behaviors that people manifest regarding transgressors, transgressions, and outcomes associated with transgressions. Responses also include cognitions, emotions, or behaviors that arise when people are reminded of transgressions.

Because transgressions are events that force people to grapple with information that is dissonant with their assumptions about themselves, others, or the world, transgressions can cause profound

distress and dissonance that may be very difficult to resolve (Janoff-Bulman, 1992; Janoff-Bulman & Frantz, 1997). When people are distressed by the dissonance caused by the transgression and their responses to it, they are motivated to resolve that dissonance (i.e., to cope). Appraisals of the event and available coping resources and strategies affect the manner in which people strive to resolve the dissonance and distress. Forgiveness can be conceptualized as a method of responding to transgressions whereby people transform their negative responses and resolve the dissonance and distress that accompany such negative life events.

Forgiveness

The current authors define forgiveness as *the framing of a perceived transgression such that one's responses to the transgressor, transgression, and sequelae of the transgression are transformed from negative to neutral or positive. The source of a transgression, and therefore the object of forgiveness, may be oneself, another person or persons, or a situation that one views as being beyond anyone's control (e.g., an illness, "fate," or a natural disaster).*

When people forgive, they acknowledge that a transgression has occurred and then do the cognitive, emotional, and/or behavioral work necessary to reframe the transgression such that their responses to the transgression are no longer negative. This does not mean that when people forgive, they condone, pardon, or excuse the transgressor or transgression. Rather, forgiveness is a dialectical process through which people synthesize their prior assumptions and the reality of the transgression into a new understanding of the transgression, transgressor, transgression sequelae, and, potentially, of themselves, other people, or the world. Other authors have described this reframing process as the construction of a "new narrative" about the transgression, transgressor, and the forgiver (e.g., Thoresen, 2001) whereby "the implications of the original situation are cast in a new light" (Rowe et al., 1989, p. 242) and "often, the forgiving person is able to see the offender in a more complex way" (Malcolm & Greenberg, 2000, p. 181).

Although responses have been defined in terms of transgression-related thoughts, emotions, or behaviors, with regard to behaviors, the valence of the thoughts, feelings, or motivations underlying those behaviors is significant. Given that the process of forgiveness is

intrapersonal, certain transgression-relevant interpersonal behaviors such as reconciliation or the pursuit of legal justice cannot be uniformly judged as forgiving or unforgiving. The thoughts, feelings, and motivations underlying these behaviors determine whether or not they are forgiving. For example, a person might pursue legal justice for a transgression with underlying thoughts and motivations of exacting revenge upon the transgressor. These vengeful thoughts and motivations, and therefore the resulting justice-seeking behaviors, would be considered unforgiving. Another person, however, might pursue legal justice with the motivation of preventing the transgressor from committing the same transgression in the future. These neutral or empathetic thoughts and motivations, and, therefore, the resulting justice-seeking behaviors, would be considered forgiving. This component of the current authors' conceptualization of forgiveness is similar to the motivation-based definition proposed by McCullough et al. (1998).

As the forgiver reframes the transgression, his or her responses to the transgression also change. The concept of responses has two components, both of which may change: valence and strength. Valence refers to whether the thoughts, feelings, or behaviors are negative, neutral, or positive; strength refers to the intensity and intrusiveness of the thoughts, feelings, or behaviors, and it can vary as a result of factors such as the perceived harm caused by the transgression. One who forgives may transform the negative responses caused by the transgression by (a) changing the valence from negative to either neutral or positive, or (b) changing both the valence and strength of the responses. The process of changing the valence and/or strength of responses is similar to the process of "reality negotiation" (Higgins & Leibowitz, 2002; Snyder, Higgins, & Stucky, 1983) in which people change the valence and linkage to negative events to render such events more congruent with their positive self-image.

A change in the valence of the responses (from negative to neutral or positive) is both necessary and sufficient to meet the proposed criteria for forgiveness. In cases involving the forgiveness of another person, the forgiver may develop benevolent and positive feelings for the person forgiven (i.e., a transformation of the valence of the responses from negative to positive). Only the shift to neutral responses, however, is necessary to meet the proposed criteria of forgiveness. As noted earlier, this theoretical perspective differs from that held by

others who argue that compassion and empathy for the transgressor are necessary components of forgiveness. Furthermore, when one forgives another person, the forgiver may choose to reconcile with the other person. Reconciliation, however, is not included in the proposed definition of forgiveness.

Changing the strength of the responses is neither necessary nor sufficient to meet the proposed criteria for forgiveness, but it can foster forgiveness. When people weaken negatively valenced responses, they no longer perceive themselves to be as strongly connected to the transgressor and/or transgression as they did previously. Weakening responses involves the attenuation of the intrusiveness or intensity of negative transgression-related thoughts or feelings. Thus, weakening of responses may be involved when people report that “time” has helped them to forgive.

As described earlier, the current authors’ conceptualization of forgiveness is similar to that of other researchers in that it focuses on the reframing of a transgression and the attenuation or transformation of transgression-related negative thoughts, feelings, or behaviors. The inclusion of “situations” as a potential source of transgressions (and target of forgiveness), however, appears to be unique. Situations that violate a person’s positive assumptions and lead to negative responses to those situations, meet the aforementioned criteria for transgressions. For example, a catastrophic illness might violate a person’s assumptions of invulnerability or meaningfulness (e.g., “I’m healthy” and “bad things don’t happen to good people for no reason”), and lead to negative thoughts, feelings, or behaviors about the illness and related sequelae (e.g., feelings of anger or sadness and the thoughts “this has ruined my life—I don’t deserve this”). Therefore, people can forgive such situations by transforming their responses from negative to neutral or positive.

Whereas most researchers do not mention forgiveness of situations, Enright and Zell (1989) have explicitly stated that people forgive only other people, not situations such as natural disasters or illnesses. In contrast, the concept of forgiveness of situations such as physical illnesses has been addressed without labeling this type of forgiveness forgiveness of “situations.”

The work on forgiving God, although different, is also relevant here. Exline, Yali, and Lobel (1999) found that, even after accounting for difficulty forgiving self and others, difficulty forgiving God accounted for unique variance in anxious and depressed mood

among college students. In instances in which one person might blame God (and, potentially, forgive God), another person might blame “the world,” “fate,” “life,” and/or the specific situation and would therefore have the opportunity to forgive the situation. One might posit that a person may forgive God because God can be thought of as having committed the transgression willingly, and one might therefore argue that a person cannot forgive a situation because situations are not seen as having intentionality. Nonetheless, people frequently blame and forgive other people, even when they do not perceive them as having committed a transgression intentionally. Also, a person may have several targets to forgive for the same transgression. In the case of illness, people might forgive fate or the illness itself, as well as parents for passing on the genetic predisposition for the illness and themselves for engaging in behaviors that hastened the onset. Thus, forgiveness of situations is a component of dispositional forgiveness, which is related to, but distinct from, forgiveness of self and others. As the research on forgiving God indicates, assessing only forgiveness of self and others may neglect the contribution of additional aspects of forgiveness.

The Present Studies

The first part of the manuscript presents three studies involved in the development and validation of the HFS. Study 1 was conducted with a pilot version of the HFS, and data reduction analyses were used to select the items that would compose the HFS. Studies 2 and 3a were then conducted to examine some of the psychometric properties of the HFS, including its internal consistency reliability, test-retest reliability, and convergent validity. The second part of the manuscript presents four additional studies in which the HFS was used to examine theoretical questions about forgiveness. Study 3b explored the relationship between forgiveness and aspects of psychological well-being, and Study 4 examined the relationship between forgiveness and the duration of and satisfaction in ongoing romantic relationships. Studies 5 and 6 tested specific aspects of the proposed theory of forgiveness. The hypotheses to be examined are presented next.

Psychometric Properties of the HFS

According to the proposed theory of forgiveness and the manner in which the pilot HFS items were generated, it was expected that a

factor analysis of those items would yield three factors: Forgiveness of Self, Forgiveness of Others, and Forgiveness of Situations. Also, it was predicted that confirmatory factor analyses performed on HFS data would support the theoretical view of the general construct of forgiveness (as measured by the HFS) as being composed of the three separate, yet related, constructs of forgiveness of self, others, and situations.

It was predicted that the HFS would exhibit adequate convergent validity as a measure of dispositional forgiveness by (a) being significantly positively correlated with other measures of forgiveness and (b) sharing more variance with measures of dispositional forgiveness than with measures of nondispositional forgiveness. The HFS's convergent validity was predicted to be supported by the HFS (a) correlating positively with measures of constructs that logically would be positively related to forgiveness (i.e., cognitive flexibility, positive affect, and distraction) and (b) correlating negatively with measures of constructs that logically would be negatively related to forgiveness (i.e., rumination, negative affect, vengeance, and hostile thinking).

The HFS was expected to correlate positively with a measure of cognitive flexibility because studies have shown forgiveness to be positively related to both empathy and perspective taking (Konstam, Chernoff, & Deveney, 2001; McCullough, Worthington, & Rachal, 1997), and taking another's perspective and developing empathy for another person require some cognitive flexibility. The HFS was expected to correlate positively with a measure of positive affect because forgiveness involves the transformation of transgression-related negative thoughts and feelings into neutral or positive thoughts or feelings. Conversely, forgiveness was expected to correlate negatively with a measure of negative affect. Similarly, because distraction involves focusing mental energy away from negative mental activities and behaviors, the HFS was expected to correlate positively with a measure of distraction.

The HFS was expected to correlate negatively with measures of rumination because rumination (e.g., repetitious focusing on negative aspects of one's life) has been found to foster aggression in response to perceived insults (Collins & Bell, 1997) and to prolong psychological distress after interpersonal stressors (Greenberg, 1995). Also, people who are more forgiving have been found to ruminate less (Berry et al., 2001), and people who are taught to ruminate less

have been shown to become more forgiving (McCullough et al., 1998). The HFS was expected to correlate negatively with a measure of vengeance because forgiveness is, in some regards, the inverse of vengeance. The HFS was expected to correlate negatively with a measure of hostile thinking because forgiveness has demonstrated a negative relationship with anger (Maltby et al., 2001; Mauger et al., 2001; Tangney et al., 1999).

Despite the fact that forgiveness is often socially desirable, the two constructs should be distinct. Thus, it was predicted that the HFS would demonstrate discriminant validity by not correlating significantly with scores on a measure of social desirability.

Forgiveness as a Predictor of Psychological Well-Being

As stated earlier, several studies have demonstrated a positive relationship between forgiveness of self or others and indicators of psychological well-being such as low depression, low anxiety (e.g., Hebl & Enright, 1993; Mauger et al., 1992), and low trait anger (Maltby et al., 2001). Therefore, the relationship between psychological well-being factors and forgiveness of self and forgiveness of others was examined. It was predicted that the HFS's Forgiveness of Self and Forgiveness of Other subscales would be negatively correlated with measures of depression, anxiety, and anger and positively correlated with a measure of satisfaction with life. Furthermore, a distinct component of a person's total dispositional forgiveness not assessed by other forgiveness measures, forgiveness of situations, was predicted to be a significant predictor of measures of psychological well-being, even after accounting for the contributions of forgiveness of self and others in the regression model.

Forgiveness as a Predictor of Relationship Satisfaction and Duration

Research indicates that people are more likely to forgive another person if their relationship with that person is close, committed, and satisfying (see McCullough, 2000). Also, forgiveness has been shown to be predictive of the quality of intimate relationships (Berry & Worthington, 2001) and has been positively correlated with a measure of relationship satisfaction and commitment (McCullough et al., 1998). Therefore, it was predicted that scores on the HFS would correlate positively with scores on a measure of relationship

satisfaction. Moreover, it was predicted that HFS scores would be predictive of two aspects of ongoing romantic relationships: relationship duration and relationship satisfaction.

Forgiveness as a Predictor of Forgiveness-Related Behaviors

Several theorists have posited that people are motivated to attend to and process self-referential information that supports their existing theories of self or world (e.g., Beck, 1976; Snyder & Higgins, 1997; Swann, 1983). Thus, it was predicted that, when given the choice of listening to forgiving or unforgiving statements on an audiotape, people would elect to listen to statements that were congruent with their level of forgiveness, such that people's HFS scores would be positively correlated with the amount of time they would spend listening to forgiving (versus unforgiving) messages. Due to the valence-of-responses and strength-of-responses components of forgiveness, it also was hypothesized that people's HFS scores would be related to the content of the narratives written about their own experiences with transgressions, such that forgiveness level would be (a) positively correlated with the frequency of statements that are neutrally and positively valenced, (b) negatively correlated with the frequency of statements that are negatively valenced, (c) positively correlated with the frequency of statements that indicate strong positive responses, and (d) negatively correlated with the frequency of statements that indicate strong negative responses.

PSYCHOMETRIC PROPERTIES OF THE HFS: STUDIES 1, 2, AND 3A

Study 1

Study 1 was conducted with a pilot version of the HFS, and data reduction analyses were used to select the items that would compose the final HFS.

Method

Participants. Participants were students at a large, public, midwestern university ($N = 499$) who participated in partial fulfillment of a psychology course requirement. Table 1 provides a summary of the demographic information for the participants in all the current studies.

Table 1
 Sample Characteristics for Studies 1-6

	Study 1	Study 2	Study 3	Study 4	Study 5	Study 6
Sample Size	499	1111	504	123	55	230
Mean Age	–	19.0	19.1	44.5	–	19.0
(SD) Age	–	(1.6)	(1.7)	(14.8)	–	(1.2)
% Men	44.3	52.0	40.9	48.8	50.9	48.1
% Women	54.7	47.9	57.9	51.2	49.1	51.9
% Caucasian	–	85.5	85.7	95.9	–	84.5
% African American	–	3.3	3.0	.8	–	5.2
% Asian American	–	4.1	3.8	0	–	3.9
% Hispanic American	–	2.2	1.4	.8	–	1.7
% Native American	–	.4	.6	1.6	–	0
% Other	–	3.3	4.0	.8	–	3.4

– This information was not collected.

Measure. The Pilot HFS consisted of 90 items that were generated to tap the current authors’ definition of forgiveness. There were 30 items to assess each of three facets of forgiveness: forgiveness of self, others, and situations. Half of the items were positively worded, forgiving statements, and half were negatively worded, unforgiving statements. To avoid eliciting people’s personal definitions of forgiveness, the term “forgive” was not used in any item. Respondents used a 7-point scale to indicate the degree to which the items described how they *typically* responded to transgressions (1 = Almost Always False of Me, 3 = Sometimes False of Me, 5 = Sometimes True of Me, and 7 = Almost Always True of Me).

Procedure. Groups of 20 to 30 participants completed the Pilot HFS in classrooms.

Results and Discussion

Exploratory factor analysis (principal components extraction with varimax rotation) was first used to reduce the number of items. Six substantively interpretable factors capturing approximately 50% of the variance were extracted constituting forgiveness (positively worded items) and unforgiveness (negatively worded items) of self, others, and situations. After examining both the item content and

the factor loading magnitudes, three items from each factor were selected, such that there were six items each for self, other, and situation, and equal numbers of positively and negatively worded items for the final HFS (see Appendix A). These analyses suggested that although the factors of forgiveness of self, others, and situation were clearly differentiable, there was also a nontrivial amount of valence-specific variance in item responses.

Study 2

Study 2 was conducted to examine the factor structure of the HFS in a new sample via confirmatory factor analysis after changing the third and fifth verbal anchors of the measure.

Method

Participants. Study 2 participants ($N = 1111$) were students at a large, public, midwestern university who participated in partial fulfillment of a psychology course requirement (see Table 1 for additional sample information). Complete responses were obtained from 1103 persons.

Measures. Participants were administered the HFS, an 18-item, self-report measure of dispositional forgiveness (see Appendix A). It consists of three, six-item subscales that measure forgiveness of self (items 1 to 6), forgiveness of others (items 7 to 12), and forgiveness of situations (items 13 to 18). Respondents indicate the extent to which each item is true or false of them using a 7-point scale with four verbal anchors: 1 = Almost Always False of Me, 3 = More Often False of Me, 5 = More Often True of Me, and 7 = Almost Always True of Me. The HFS total scale and subscale scores are calculated by summing the items on each scale, with the nine negatively worded items (2, 4, 6, 7, 9, 11, 13, 15, and 17) being reverse-scored.

Procedure. Large groups of participants (approximately 500 per group) completed the HFS and other researchers' self-report questionnaires in auditorium-style classrooms.

Results and Discussion

Descriptive statistics, internal consistency estimates, and correlations between the HFS subscales are displayed in Table 2. The HFS

Table 2
HFS Descriptive Statistics, Internal Reliabilities, and Subscale Intercorrelations for Studies 2 (N = 1111), 3 (N = 504), and 4 (N = 123)

	Mean Score	Standard Deviation	Minimum Score	Maximum Score	Cronbach's Alpha
HFS Self					
Study 2	30.99	6.17	8	42	.75
Study 3	31.25	5.67	6	42	.76
Study 4	31.89	5.75	12	42	.72
HFS Other					
Study 2	30.41	6.37	6	42	.78
Study 3	30.01	6.00	11	42	.79
Study 4	30.14	6.62	12	42	.81
HFS Situation					
Study 2	30.25	6.57	9	42	.79
Study 3	30.34	5.82	10	42	.77
Study 4	32.11	6.54	16	42	.82
HFS Total					
Study 2	91.68	15.28	43	126	.86
Study 3	91.60	14.05	45	126	.87
Study 4	94.14	15.24	48	126	.87
Observed Correlations Among HFS Subscales					
	Self and Other	Self and Situation	Other and Situation		
Study 2	.31*	.60*	.45*		
Study 3	.32*	.60*	.49*		
Study 4	.35*	.55*	.51*		

* $p < .001$.

demonstrated satisfactory internal consistency as measured by Cronbach's alpha.

Complete responses obtained in Study 2 were subjected to confirmatory factor analyses using *Mplus* 2.14 (Muthén & Muthén, 2003). An initial model specified correlated factors of self, other, and situation. Each factor was measured by its six items, without regard to the valence of the item wording. This model did not have adequate fit, $\chi^2(132) = 1642$, $p < .0001$, Comparative Fit Index (CFI) = .769, Root Mean Square Error of Approximation (RMSEA) = .102, RMSEA 90% Confidence Interval (CI) = .097–.106.

An alternative structure was proposed in order to address the systematic variance due to wording valence while maintaining the distinction forgiveness of self, others, and situations. This structure, displayed in Figure 1, specifies six 3-item, first-order factors for the positively and negatively worded factors of self, other, and situation. The positively and negatively worded first-order factors were then specified as indicators of their corresponding second-order, correlated factors of self, others, and situation. In order to account for variance related to the valence of the item wording, second-order factors for positive and negative valence were indicated by the positively and negatively worded first-order factors, respectively. These valence factors were left uncorrelated given our theoretical prediction that all of the variance that was systematic across the positively and negatively worded items would be subsumed in the construct-related factors of self, other, and situation. The model was identified by fixing the factor loading for the first item of each first-order factor to 1, and fixing the variance of each second-order factor to 1. Preliminary inspection revealed that the parsimony of the model could be improved without compromising model fit by constraining to equality the forgiveness-related factor loadings and residual variances for the positively worded first-order factors, the forgiveness-related factor loadings and residual variances for the negatively worded first-order factors, and all of the wording valence-related factor loadings of the first-order factors.

This alternative structure also had excellent fit, $\chi^2(133) = 412$, $p < .0001$, CFI = .956, RMSEA = .044, RMSEA CI = .040–.049. As seen in Figure 1, the loadings for the substantive factors of self, other, and situation were larger than those for the wording-valence factors, suggesting that the factors of self, other, and situation are primary, and the wording valence factors are secondary. The forgiveness factors were significantly correlated (self and other, $r = .31$, self and situation $r = .78$, other and situation $r = .54$). These results support the theoretical view that forgiveness (as measured by the HFS) is composed of three separate, yet related, constructs of forgiveness of self, others, and situations.

It has been proposed that forgiveness and unforgiveness should be considered separate domains, rather than the opposite of one another (Worthington & Wade, 1999). Under this assumption, it would have been inappropriate to combine the positively and negatively worded items for each of the subscales. This assumption was tested

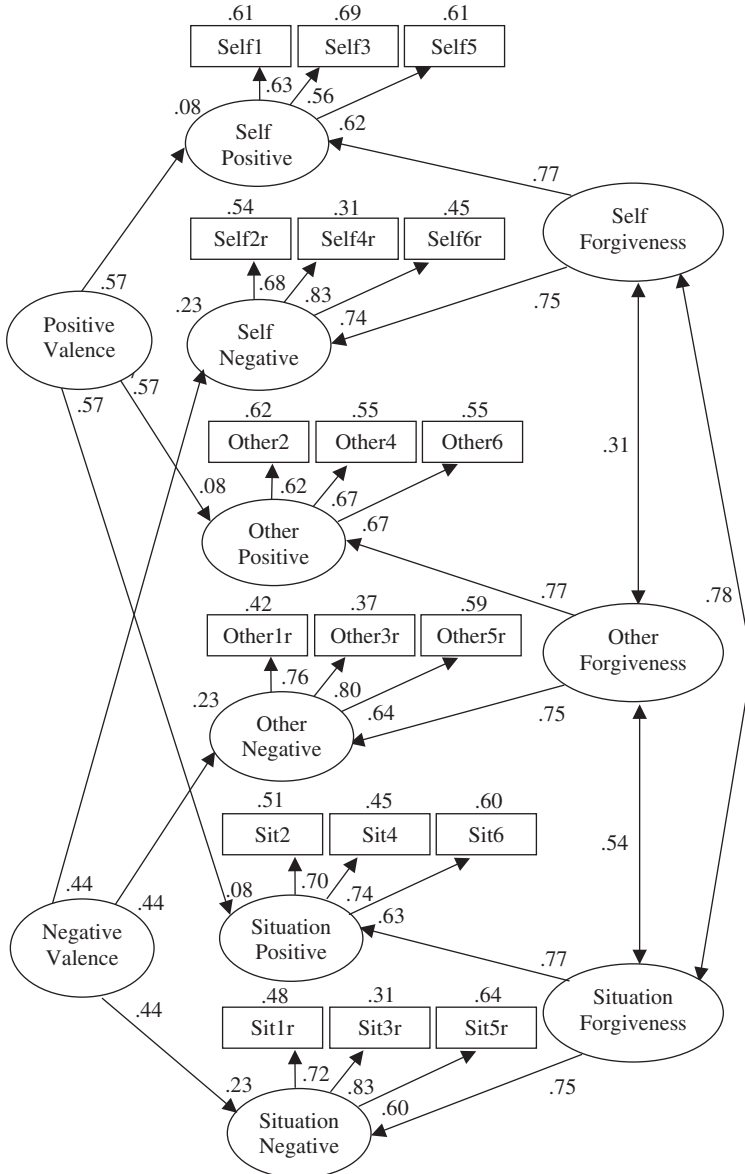


Figure 1

Factor structure of the Heartland Forgiveness Scale (HFS). The observed items are indicated in rectangles, and the unobserved factors are indicated by ovals. Item numbers that contain an r indicate reverse scoring. Values above the items are the residual variances, values next to unidirectional paths indicate standardized factor loadings, and values next to bidirectional paths indicate correlations.

by specifying a model in which the positively worded first-order factors of self, other, and situation were indicators of a second order-factor of forgiveness, and the negatively worded first-order factors of self, other, and situation were indicators of a second-order factor of unforgiveness. Forgiveness and unforgiveness were thus estimated as separate, yet correlated, factors. The factor loadings and residual variances for self, other, and situation were each constrained to equality across the forgiveness and unforgiveness factors. Uncorrelated second-order factors of self, other, and situation were also specified as measured by the first-order factors of self, and other, and situation to account for systematic variance due to the manner in which forgiveness and unforgiveness was measured (i.e., forgiveness type as a method rather than a construct); these factor loadings were all constrained equal. This model had acceptable fit, $\chi^2(133) = 548$, $p < .0001$, CFI = .936, RMSEA = .053, RMSEA CI = .049 – .058.

Because these models are nonnested, they were compared by examining the difference in their Akaike Information Criteria (AIC). The HFS model AIC value of 67322 was smaller than the Forgiveness and Unforgiveness model AIC value of 67449, suggesting that the HFS model exhibits better fit. Thus, these data support the notion that forgiveness and unforgiveness are complementary pieces of the same construct, and that additional systematic variability in item responses may be accounted for by wording factors for positive and negative valence.

Study 3a

Study 3a was conducted to examine convergent and discriminant validity, internal consistency, and test-retest reliability of the HFS.

Method

Participants. Participants were students at a large, public, mid-western university ($N = 504$) who participated in partial fulfillment of a psychology course requirement (see Table 1 for sample information).

Measures. Four measures of dispositional forgiveness were administered. Mauger et al.'s (1992) Forgiveness of Self and Forgiveness of Others scales each consist of 15 true/false items designed to measure

the forgiveness of self and others, respectively. The Multidimensional Forgiveness Inventory (Tangney et al., 1999) assesses an individual's propensity to forgive others, forgive themselves, and to ask for forgiveness from others in 16 scenarios, as rated on a 5-point scale ranging from *not at all* to *very likely*. The Propensity to Forgive Self and Propensity to Forgive Other subscales were used here. The Willingness to Forgive scale (Hebl & Enright, 1993) presents 15 hypothetical scenarios in which participants must choose 1 of 10 responses to convey how they would respond initially, how they would respond ultimately, and how they would prefer to respond. An individual's willingness to forgive is the number of times in which "forgive" is selected as an ultimate or preferred response.

Three measures of nondispositional forgiveness were also administered. The Enright Forgiveness Inventory (Subkoviak et al., 1995) assesses one's forgiveness of a specific transgression committed by another person. Responses to 60 items on a 6-point scale (1 = Strongly Disagree, 6 = Strongly Agree) reflect the ways in which they feel, behave, and think with regard to the transgressor, and the sum of six subscales yields a forgiveness score. The Transgression-Related Interpersonal Motivations Inventory (McCullough et al., 1998) is a 12-item measure of transgression-specific forgiveness. Participants indicate via a 5-point scale (1 = Strongly Disagree, 5 = Strongly Agree) their motivation to avoid personal and psychological contact with the transgressor and to seek revenge or see harm come to the transgressor. The Interpersonal Relationship Resolution Scale forgiveness subscale (Hargrave & Sells, 1997) is a 22-item measure of forgiveness of a particular person who has caused the respondent to "hurt." Participants indicate whether the item is generally true or false of them.

Three measures were administered to assess constructs that were predicted to correlate positively with forgiveness (as measured by the HFS): cognitive flexibility (the Cognitive Flexibility Scale; Martin & Rubin, 1995), distraction as a response to feeling down (the Distraction scale of the Response Styles Questionnaire; Nolen-Hoeksema & Morrow, 1991), and positive affect (the Positive Affect scale of the Positive and Negative Affect Schedule; Watson, Clark, & Tellegen, 1988). Four measures were administered to assess constructs that were predicted to correlate negatively with forgiveness: negative affect (the Negative Affect scale of the Positive and Negative Affect Schedule; Watson, Clark, & Tellegen, 1988), rumination

as a response to feeling down (the Rumination scale of the Response Styles Questionnaire; Nolen-Hoeksema & Morrow, 1991), vengeance (the Vengeance Scale; Stuckless & Goranson, 1992), and hostility (the Hostile Automatic Thoughts Scale; Snyder, Crowson, Houston, Kurylo, & Poirier, 1997). The Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960) also was administered, and a nonsignificant correlation was predicted. Several measures of psychological well-being were administered; these will be presented in Study 3b.

Procedure. There were two phases to Study 3. In both phases, participants completed packets of self-report questionnaires in groups of 20 to 30 people in a classroom setting. In the first phase, approximately half of the participants ($n = 276$) completed a packet that consisted of the HFS, three nondispositional measures of forgiveness (Interpersonal Relationship Resolution Scale, Enright Forgiveness Inventory, and Transgression-Related Interpersonal Motivations Inventory), the Cognitive Flexibility Scale, and the Hostile Automatic Thoughts Scale. The remaining participants ($n = 227$) completed a packet that consisted of the HFS, three measures of dispositional forgiveness (Mauger et al.'s Forgiveness of Self and Forgiveness of Others scales and the Multidimensional Forgiveness Inventory), the Marlow-Crowne Social Desirability Scale, and four measures of psychological well-being (to be presented in Study 3b). The second group of participants returned 3 weeks later (response rate = 85%; $n = 193$) and completed the HFS, the Relationship Assessment Scale, and the Response Style Questionnaire.

Results and Discussion

Table 2 provides the descriptive statistics, internal consistency estimates, and correlations among the subscales. The Cronbach's alphas for HFS were again acceptable. The correlations between the HFS total, Self, Other, and Situation subscales administered across a 3-week interval were .83, .72, .73, and .77, respectively, indicating acceptable test-retest reliability.

To examine the convergent validity of the HFS, correlation coefficients were calculated between the HFS and each of the other measures. Due to the large number of correlation coefficients estimated, an alpha level of $p < .001$ was used to establish significance.

Initial analyses revealed no significant differences in HFS scores between men and women. Thus, all analyses were conducted with these groups combined.

Table 3 provides the correlations examined in Study 3a. The HFS was significantly correlated with three measures of dispositional forgiveness: Mauger et al.'s Forgiveness of Self and Forgiveness of Others scales and the Multidimensional Forgiveness Inventory. Hotelling's *t*-test was used to compare the magnitude of the dependent correlations for the corresponding subscales (see Cohen & Cohen, 1983). Mauger et al.'s Forgiveness of Self scale and the Multidimensional Forgiveness Inventory Self subscale were each correlated with HFS Self more strongly than HFS Other, $t(273) = 7.6, p < .001$, $t(273) = 7.6, p < .001$, respectively; their Other subscales were each correlated with HFS Other more strongly than HFS Self, $t(273) = 5.1, p < .001$, $t(273) = 3.9, p < .001$, respectively. The HFS was not correlated with the Willingness to Forgive scale. Among the nondispositional measures of forgiveness, HFS Other was significantly correlated with the Enright Forgiveness Inventory. HFS Other and the HFS total were each correlated with the Transgression-Related Interpersonal Motivations Inventory. The HFS was not correlated with the Interpersonal Relationship Resolution Scale, however.

A Fisher's z' transformation was used to examine whether correlations between the HFS and the other dispositional forgiveness measures were larger than those between the HFS and the nondispositional forgiveness measures (see Cohen & Cohen, 1983). Because the correlation between the HFS and the Transgression-Related Interpersonal Motivations Inventory was the largest of the nondispositional forgiveness measures, this served as the benchmark to which correlations between the HFS and the dispositional forgiveness measures could be compared. Relative to the Transgression-Related Interpersonal Motivations Inventory, the HFS was more strongly correlated with Mauger et al.'s Forgiveness of Self and Forgiveness of Others scales ($r = .60$ vs. $r = -.25$, $z' = 5.2, p < .001$) and the Multidimensional Forgiveness Inventory ($r = .47$ vs. $r = -.25$, $z' = 2.8, p = .003$), but not the Willingness to Forgive scale ($r = .20$ vs. $r = -.25$, $z' = .59, p = .28$). Thus, the HFS displayed stronger relationships to the dispositional forgiveness measures than to the nondispositional forgiveness measures, except for the Willingness to Forgive scale.

Table 3
Correlations of the HFS and Its Subscales With Other Forgiveness Measures in Study 3

Measure	HFS Self	HFS Other	HFS Situation	HFS Total
Dispositional measures of forgiveness				
Mauger et al.'s Forgiveness of Self (FS) & Forgiveness of Others (FO)	.54 ^{b,*}	.44 ^{b,*}	.51 ^{b,*}	.62 ^{b,*}
Mauger et al.—FS	.61 ^{b,*}	.19 ^{b,*}	.45 ^{b,*}	.51 ^{b,*}
Mauger et al.—FO	.23 ^{b,*}	.53 ^{b,*}	.36 ^{b,*}	.47 ^{b,*}
Multidimensional Forgiveness Inventory (MFI)	.36 ^{b,*}	.34 ^{b,*}	.42 ^{b,*}	.47 ^{b,*}
MFI—Self	.33 ^{b,*}	.05 ^b	.35 ^{b,*}	.30 ^{b,*}
MFI—Other	.24 ^{b,*}	.47 ^{b,*}	.30 ^{b,*}	.42 ^{b,*}
Willingness To Forgive (WTF)	.09 ^c	.20 ^c	.18 ^c	.20 ^c
Nondispositional measures of forgiveness				
Interpersonal Relationship Resolution Scale	.15 ^a	.15 ^a	.13 ^a	.17 ^a
Transgression-Related Interpersonal Motivations Inventory	-.01 ^a	-.38 ^{a,*}	-.22 ^a	-.25 ^{a,*}
Enright Forgiveness Inventory	.08 ^a	.23 ^{a,*}	.17 ^a	.19 ^a

^aStudy 3 ($n = 227$), ^b($n = 276$), ^c($n = 259$). * $p < .001$.

It should be noted that two other dispositional measures have come to our attention since the completion of this group of studies: the Transgression Narrative Test of Forgiveness (Berry et al., 2001) and a measure of "Forgivingness" (Mullet et al., 1998). Both of these measures assess forgiveness of others, but neither assesses forgiveness of self or situations. Also, McCullough, Bellah, Kilpatrick, and Johnson (2001) have examined dispositional forgiveness using repeated administrations of the Transgression-Related Interpersonal Motivations Inventory, a transgression-specific measure of forgiveness.

For the nonforgiveness measures (see Table 4), significant positive correlations were observed, as expected, between the HFS and the Cognitive Flexibility Scale, the Distraction scale of the Response Styles Questionnaire, and the Positive Affect scale. Significant negative correlations were also observed as expected between the HFS and the Rumination scale of the Response Styles Questionnaire, the Negative Affect scale, the Vengeance Scale, and the Hostile Automatic Thoughts Scale. Unexpectedly, the HFS was significantly positively correlated with the Marlowe-Crowne Social Desirability Scale, suggesting that participants' scores on the HFS may be affected by their desire to endorse socially desirable behaviors. Recent works have indicated, however, that a correlation between a measure of social desirability and a self-report measure such as the HFS does not necessarily jeopardize the construct validity of the measure (see Diener, Sandvik, Pavot, & Gallagher, 1991; McCrae & Costa, 1983).

**RELATIONSHIPS BETWEEN FORGIVENESS AND
PSYCHOLOGICAL WELL-BEING, RELATIONSHIP SATISFACTION
AND DURATION, AND FORGIVENESS-RELATED BEHAVIORS:
STUDIES 3B, 4, 5, AND 6**

Study 3b

Study 3b investigated the extent to which forgiveness of self, others, and situations was predictive of four measures of psychological well-being.

Method

Please refer to Study 3a for a description of the participants and procedure.

Table 4
Correlations of HFS and Its Subscales With Measures of Relevant Constructs for Study 3

Measure	HFS Self	HFS Other	HFS Situation	HFS Total
Measures predicted to correlate positively with the HFS				
Cognitive Flexibility Scale	.45 ^{a,*}	.31 ^{a,*}	.50 ^{a,*}	.51 ^{a,*}
Positive Affect Negative Affect Schedule—Positive Affect	.35 ^{b,*}	.23 ^{b,*}	.35 ^{b,*}	.39 ^{b,*}
Response Styles Questionnaire—Distraction	.27 ^{c,*}	.25 ^{c,*}	.26 ^{c,*}	.32 ^{c,*}
Measures predicted to correlate negatively with the HFS				
Response Styles Questionnaire—Rumination	-.28 ^{c,*}	-.25 ^{c,*}	-.31 ^{c,*}	-.34 ^{c,*}
Positive Affect Negative Affect Schedule—Negative Affect	-.44 ^{b,*}	-.33 ^{b,*}	-.39 ^{b,*}	-.48 ^{b,*}
Vengeance Scale	-.10 ^a	-.50 ^{a,*}	-.30 ^{a,*}	-.36 ^{a,*}
Hostile Automatic Thoughts	-.10 ^a	-.42 ^{a,*}	-.32 ^{a,*}	-.35 ^{a,*}
Measures predicted not to correlate with the HFS				
Marlowe-Crowne Social Desirability Scale	.27 ^{b,*}	.34 ^{b,*}	.30 ^{b,*}	.38 ^{b,*}

^aStudy 3a ($n = 227$), ^b($n = 276$), ^c($n = 192$), * $p < .001$.

Measures. The HFS and four measures of psychological well-being were administered. The Trait Anger Scale (Spielberger, Jacobs, Russell, & Crane, 1983) is a 15-item measure of dispositional anger assessed by responses on a 4-point scale to statements reflecting anger-prone thoughts and behaviors. The State-Trait Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970) is a 20-item measure of anxiety where the extent to which the respondents experience a variety of anxiety-based symptoms is rated on a 4-point scale. The Center for Epidemiologic Studies Depression Scale (Radloff, 1977) is a 20-item measure of depressive symptoms that have occurred within the past week rated on a 4-point scale. The Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) consists of five statements regarding general feelings of satisfaction with life rated on a 7-point scale.

Results and Discussion

A series of hierarchical regression analyses examined forgiveness of self, others, and situations as predictors of the four measures of psychological well-being. The Marlowe-Crowne Social Desirability Scale was also included as a covariate. Bivariate correlations among the predictors are given in Table 4. As shown in Table 5, each of the predictors had a significant bivariate relationship with each of the psychological well-being measures. Table 5 also displays the semipartial correlations for all the predictors in the models to be presented.

HFS Self and HFS Situation both contributed significantly to the prediction of the Center for Epidemiologic Studies Depression Scale, $F(2, 249) = 36.45$, $MSE = 69.22$, $p < .001$, $R^2 = .23$, the State-Trait Anxiety Inventory, $F(2, 260) = 41.78$, $MSE = 103.46$, $p < .001$, $R^2 = .24$, and the Satisfaction with Life Scale, $F(2, 267) = 32.84$, $MSE = 31.64$, $p < .001$, $R^2 = .20$. HFS Other and HFS Situation both contributed significantly to the prediction of the Trait Anger Scale, $F(2, 268) = 60.93$, $MSE = 33.69$, $p < .001$, $R^2 = .31$. Although including the Marlowe-Crowne Social Desirability Scale did result in a significant R^2 change to each model, the contribution of the forgiveness measures in predicting psychological well-being remained significant in each model. This suggests that although correlated with social desirability, the ability of forgiveness (as measured by the HFS) to uniquely predict individual differences in psychological well-being is not compromised by its relationship with social desirability.

Table 5

Bivariate Correlations Between Forgiveness Predictor Variables and Psychological Well-Being Criterion Variables, Social Desirability Covariate Used in Study 3b Regressions ($N = 276$)

Predictors	Center for Epidemiologic Studies Depression Scale $M = 22.97$ $SD = 7.01$	Trait Anger Scale $M = 29.74$ $SD = 9.35$	State-Trait Anxiety Inventory $M = 36.09$ $SD = 11.66$	Satisfaction With Life Scale $M = 24.64$ $SD = 6.24$
Bivariate Correlations				
HFS Self	-.44**	-.32**	-.42**	.39**
HFS Other	-.27**	-.51**	-.26**	.31**
HFS Situation	-.40**	-.43**	-.45**	.39**
Marlowe-Crowne Social Desirability Scale	-.31**	-.52**	-.28**	.34**
Semipartial Correlations in Forgiveness Models				
HFS Self	-.26**	—	-.20**	.20**
HFS Other	—	-.33**	—	—
HFS Situation	-.18*	-.24**	-.26**	.21**
Semipartial Correlations in Forgiveness and Social Desirability Models				
HFS Self	-.24**	—	-.18*	.17*
HFS Other	—	-.24**	—	—
HFS Situation	-.15*	-.19**	-.23**	.17*
Marlowe-Crowne Social Desirability Scale	-.17*	-.33**	-.13*	.21**

* $p < .05$. ** $p < .001$.

Note. The notation—indicates variables that were not included in the regression models; semi-partial correlations are reported with only variables with values listed held constant.

In summary, high dispositional forgiveness appears to be predictive of low depression, low anger, low anxiety, and high satisfaction with life (and vice versa). Furthermore, forgiveness of self accounts for unique variance in depression, anxiety, and satisfaction with life, but not in anger. Forgiveness of others, however, accounts for unique variance in anger. And forgiveness of situations augments the prediction of all four of these aspects of psychological well-being, above and beyond prediction by self and other forgiveness. Thus, forgiveness of self and situations appear to be more strongly related to more aspects of psychological well-being than forgiveness of others. This is consistent with Mauger et al.'s finding that, relative to forgiveness of others, forgiveness of self was more strongly related to aspects of mental health such as depression, anxiety, and anger. Similarly, using the HFS to assess forgiveness, Heinze and Snyder (2001) found that among people who have experienced traumas such as physical or sexual abuse in childhood, forgiveness of self and situation (but not forgiveness of others) were significantly negatively correlated with symptoms of posttraumatic stress disorder. This is consistent with the current authors' proposition that forgiveness is a coping process whereby people resolve the distress and dissonance created by events that violate their assumptions, much in the way Janoff-Bulman and colleagues have described peoples' coping with trauma (e.g., Janoff-Bulman, 1992; Janoff-Bulman & Frantz, 1997).

The positive relationships found between forgiveness and distraction and satisfaction with life and the negative relationship between forgiveness and rumination dovetail well with Rasmussen and Lopez's (2000) finding that forgiveness (as measured by the HFS) is significantly positively correlated with the coping strategies of acceptance, positive reinterpretation, and active coping and that it is significantly negatively correlated with the coping strategies of denial and behavioral disengagement. Taken together, these results indicate that forgiveness may be a method of coping that enables people to turn their attention away from adverse life experiences and toward more satisfying aspects of their lives.

Study 4

Study 4 examined the utility of the HFS in predicting duration and satisfaction in ongoing, romantic relationships, as well as the 9-month test-retest reliability of the HFS.

Method

Participants. Participants ($N = 123$) were recruited via random selection using the telephone book of a large midwestern city. When called, people who indicated that they were currently in a romantic relationship were solicited for participation in a two-part study. Participants were paid \$10 for each part of the study completed. Of the 123 participants, 82% were married, 2% were engaged, and 16% were dating exclusively. Other sample demographic information is presented in Table 1. Approximately 47% ($n = 57$) of participants completed the second part of the study (related to test-retest reliability) 9 months later.

Measures. Participants completed the HFS, the Hostile Automatic Thoughts Scale (described in Study 3a), and the Hope Scale (Snyder et al., 1991). The Hope Scale is a 12-item measure with two 4-item subscales: pathways (sense of being able to generate routes to envisioned goals) and agency (motivation to use the pathways envisioned to desired goals). Participants also completed the Relationship Assessment Scale (Hendrick, 1988), a seven-item generic measure of relationship satisfaction, and the Dyadic Trust Scale (Larzelere & Huston, 1980), an eight-item measure of an individual's belief in the honesty and benevolence of a relationship partner. Relationship duration was measured by asking participants to report the number of months or years that they had been romantically involved with their current partner.

Procedure. People who agreed to participate were mailed the packet of questionnaires and a postage-paid return envelope. The same packet, envelope, and instructions were mailed again 9 months later.

Results and Discussion

The second administration ($n = 57$) was conducted solely for the purpose of assessing test-retest reliability of the HFS across a 9-month interval. Pearson correlations were estimated as .78, .69, .69, and .68 for the HFS total, Self, Other, and Situation subscales, respectively.

The data from the first administration ($n = 121$ complete cases) were used for the analyses of relationship satisfaction and duration; descriptive statistics for the HFS are given in Table 2. The mean

reported relationship duration was 16.21 years ($SD = 13.89$, range = .17 to 59 years). The overall mean for the Relationship Assessment Scale was 28.8 ($SD = 5.4$, range = 10 to 35). The item mean of 4.11 is similar to the mean item values reported from samples of nonclinical married couples (mean item $\cong 4.23$; Contreras, Hendrick, & Hendrick, 1996) and dating couples (mean item = 4.34; Hendrick, 1988). Other studies have found lower mean scores among couples seeking therapy (estimated as $\cong 3.44$; Hendrick, Dicke, & Hendrick, 1998). Thus, Study 4 participants reported average relationship satisfaction for nonclinical samples.

The utility of the HFS in predicting both relationship duration and satisfaction after statistically controlling for hope, hostility, and trust was examined. Prior to analysis, the six predictor variables (HFS Self, HFS Other, HFS Situation, Hope Scale, Dyadic Trust Scale, and Hostile Automatic Thoughts) and two criterion variables (Relationship Assessment Scale and relationship duration) were examined for deviations from normality. Relationship duration was square-root transformed to reduce positive skewness, and relationship satisfaction was inverted and log-transformed to reduce negative skewness.

Four variables had significant bivariate correlations with relationship duration ($p < .05$, $df = 119$): HFS Self ($r = .21$), HFS Other ($r = .28$), HFS Situation ($r = .24$), and the Hostile Automatic Thoughts Scale ($r = -.28$). A series of Hotelling's t -tests revealed that the magnitude of these correlations were statistically equivalent ($p > .05$). Hierarchical regression was then used to examine the extent to which forgiveness could add incremental validity to the prediction of relationship duration over and above the contributions of hostile thoughts, hope, and trust. Although the initial block of predictors resulted in a significant reduction in the variance in relationship duration (adjusted $R^2 = .07$), the Hostile Automatic Thoughts Scale was the only significant predictor among those included in the first block, and the R^2 change when the three forgiveness subscales were added to the model was not significant. Given the equivalency of the correlations between relationship duration and the HFS subscales and the Hostile Automatic Thoughts Scale, however, it appears that neither forgiveness nor hostility is a better predictor of relationship duration.

Four variables had significant bivariate correlations with relationship satisfaction ($p < .001$, $df = 119$): HFS Self ($r = .33$), HFS

Other ($r = .36$), HFS Situation ($r = .36$), and Dyadic Trust ($r = .65$). Hierarchical regression was used to examine the extent to which forgiveness could add incremental validity to the prediction of relationship satisfaction over and above the contributions of hostile thoughts, hope, and trust. The initial block of predictors resulted in a significant reduction in the variance in relationship satisfaction (adjusted $R^2 = .44$), although the Dyadic Trust Scale was the only significant predictor among those included in the first block. The R^2 change when the three forgiveness subscales were added to the model was significant (adjusted $R^2 = .49$); however, HFS Other was the only forgiveness subscale whose beta weight was individually significant. In order to examine the extent to which collinearity between HFS Self and HFS Situation was responsible for their lack of independent prediction when in the same regression model, we estimated separate hierarchical regression models for each HFS subscale. Each HFS subscale resulted in a significant improvement to the model when added individually to trust, hope, and hostile thoughts: HFS Self adjusted $R^2 = .45$, HFS Other adjusted $R^2 = .49$, HFS Situation adjusted $R^2 = .46$. Although the model including HFS Other accounted for numerically more variance than those including HFS Self and HFS Situation, nonnested model comparisons revealed them to be statistically equivalent ($p > .05$).

In summary, forgiveness (HFS total) and hostile thinking demonstrated equal, although inverse, associations with relationship duration, and forgiveness accounted for unique variance in relationship satisfaction, even when controlling for trust. Thus, these factors may play a role in the maintenance of romantic relationships. Of course, the causal directions of the links between forgiveness and relationship duration and satisfaction are unknown. It could be that people high in forgiveness tend to stay in relationships and are more satisfied with those relationships or, alternatively, that people who are satisfied with and stay in their relationships tend to have higher levels of dispositional forgiveness. These findings are consistent with research about the links among forgiveness, relationship quality, commitment, and closeness (Berry & Worthington, 2001; Finkel, Rusbult, Kumashiro, & Hannon, 2002; McCullough et al., 1998; McCullough, 2000).

Study 5

Study 5 examined the utility of the HFS as a predictor of people's listening behavior when given the choice of listening to forgiving or

unforgiving statements on an audiotape. The relationship between HFS scores and the number of forgiving and unforgiving messages recalled after the listening task also was examined.

Method

Participants. Participants were 55 college students (28 men, 27 women) who participated in partial fulfillment of a psychology course requirement.

Measures. Participants completed the HFS, the Hope Scale, and the Positive and Negative Affect scales (described in Study 3a). Participants also completed the Beck Depression Inventory (Beck & Steer, 1987), a 21-item self-report measure that assesses the respondent's depressive symptoms. A questionnaire developed for this study instructed participants to record as many statements from the audiotapes as they could remember.

Apparatus. A dichotomous listening apparatus (Crowson & Cromwell, 1995) was used to play two 30-minute audiotapes recorded by a male speaker. One tape contained a repeated sequence of 10 statements each for forgiveness of self (e.g., "I don't have to keep punishing myself after I've done something I think is wrong."), of others ("When I see you, I don't feel upset anymore about what you did."), and of situations ("When something bad happens, I can stop dwelling on it and move on."). The second tape contained a repeated sequence of 10 statements each for unforgiveness of self, others, and situations. Unforgiving statements were "mirror images" of the forgiving statements (e.g., "I must keep punishing myself after I've done something I think is wrong.").

Procedure. Participants were seated at a console with a toggle switch and headphones; they were told that they could listen to either tape as long as they wished and that they could switch the toggle as frequently as they desired. The tapes were begun simultaneously, and each listening session lasted for 10 minutes. Participants were then asked to complete the packet of self-report measures.

Results and Discussion

Participants spent an average of 7 and 3 minutes ($SD = 2.34$) listening to forgiving and unforgiving statements, respectively. Because

these two variables are perfectly dependent (i.e., sum to 10 minutes), only time listening to forgiving statements was used in subsequent analyses. In the recall task, reported statements that were syntactically and/or semantically equivalent to the audiotape statements were considered correct. The total number of statements correctly recalled was tallied separately for forgiving statements ($M = 3.42$, $SD = 1.72$) and unforgiving statements ($M = 1.82$, $SD = 1.78$). Because participants could list as many statements as they wanted, the number of forgiving or unforgiving statements reported was not necessarily equal.

Table 6 provides the bivariate correlations among time listening to forgiving statements, the number of forgiving statements recalled, the number of unforgiving statements recalled, the HFS total, the Hope Scale, the Beck Depression Inventory, and the Positive and Negative Affect scales. Multiple regression revealed that the relationship between the HFS and time listening to forgiving statements remained significant after statistically controlling for the effects of the four psychological variables: the Hope Scale, the Beck Depression Inventory, and the Positive and Negative Affect scales (semi-partial $r = .24$, $p = .043$; $R^2 = .35$). Similarly, multiple regression revealed that the relationship between the HFS and the number of forgiving statements recalled remained significant after statistically controlling for the effects of the four psychological variables (semi-partial $r = .38$, $p = .004$; $R^2 = .26$). Although both the HFS and Positive Affect had significant bivariate relationships with the number of unforgiving statements recalled, when the HFS and the four psychological variables were entered into a regression model, no variable significantly accounted for unique variance, suggesting that the predicted variance in the number of unforgiving statements recalled between the HFS and Positive Affect was largely shared.

An additional series of hierarchical regressions examined the extent to which listening time functioned as a mediator of the relationship between the HFS score and the number of statements recalled. The percent of unique variance accounted for by the HFS in the number of forgiving statements recalled dropped from 17.39% (single-predictor model) to 4.41% (two-predictor model; $R^2 = .27$, HFS $p = .08$), which was a significant decrease ($p = .03$). The percent of unique variance in the number of unforgiving statements recalled accounted for by the HFS dropped from 17.22% (single-predictor model) to 3.53% (two-predictor model; $R^2 = .30$, HFS $p = .11$),

Table 6
Bivariate Correlations For Study 5

Measure	1	2	3	4	5	6	7
1 Time Listening to Forgiving Statements							
2 Total Forgiving Statements Recalled	.48**						
3 Total Unforgiving Statements Recalled	-.51**	-.12					
4 HFS Total	.49**	.42*	-.42*				
5 Beck Depression Inventory	-.31*	-.13	.29*	-.66**			
6 Hope Scale	.17	.10	-.22	.57**	-.48**		
7 Positive Affect Negative Affect Schedule— Positive Affect	.50**	.31*	-.40*	.46**	-.25	.26	
8 Positive Affect Negative Affect Schedule— Negative Affect	-.06	-.14	.01	-.42*	.54**	-.33*	-.05

* $p < .05$. ** $p < .001$.

which was also a significant decrease ($p = .02$). Thus, it appears that participants preferred to listen longer to statements that were congruent with their dispositional forgiveness level, and it was the additional listening time that in turn facilitated recall. These findings are congruent with theories that suggest that people are motivated to attend to and process self-referential information that supports their existing theories of self or the world (e.g., Beck, 1976; Snyder & Higgins, 1997; Swann, 1983).

Study 6

Study 6 examined the utility of the HFS as a predictor of the content of narratives that people write about transgression experiences. The valence-of-responses component of the proposed theory of forgiveness was evaluated by examining the extent to which people high in forgiveness tend to write more neutrally and positively valenced transgression-related statements and fewer negatively valenced ones (relative to people lower in forgiveness). The strength-of-responses component of the proposed theory was evaluated by examining the extent to which people high in forgiveness tend to write more statements that indicate *strong* positive responses (relative to people lower in forgiveness), and the extent to which people low in forgiveness tend to write more statements that indicate *strong* negative responses (relative to people higher in forgiveness).

Method

Participants. Participants ($N = 230$) were students at a large, public, midwestern university who participated in partial fulfillment of a psychology course requirement. See Table 1 for sample information.

Measures. Participants completed the HFS and wrote a total of three narratives in which they described how they currently thought, felt, and talked about transgressions of self, others, and situations. Instructions for the “self” narrative directed respondents to “Think of a specific time when YOU harmed, disappointed, or hurt yourself or someone else. That is, think of a time when you did, said, or thought something that violated your beliefs about how you should think or behave.” Instructions for the “other” narrative directed respondents to “Think of a specific time when ANOTHER PERSON (or persons) harmed, disappointed, or hurt you. That is, think of a

time when someone else did, said, or thought something that violated your beliefs about how they should think or behave.” Instructions for the “situation” narrative directed respondents to “Think of a specific time when a CIRCUMSTANCE BEYOND ANYONE’S CONTROL harmed, disappointed, or hurt you. (Examples of such situations include being diagnosed with a serious illness or having an accident that was nobody’s fault.) That is, think of a time when a life circumstance beyond anyone’s control violated your beliefs about the way things should be.”

Procedure. Groups of 5 to 30 participants completed the HFS and the narrative questionnaire in a classroom setting.

Results and Discussion

Qualitative coding of the narratives. Raters trained to an interrater reliability of .95 (as calculated by dividing the number of code agreements by the total number of assigned codes; Suen & Ary, 1989) coded the content of participants’ narratives. Although the instructions for the narratives asked participants to report how they *currently* were feeling, many participants reported statements reflecting both past and current thoughts and feelings within a single narrative. Statements referring to feelings or thoughts in the past were coded separately from those in the present, future, or “reflective present” tense (e.g., “I should have. . .”). To rate narrative content related to the valence and strength of responses, raters used five codes representing strong or weak negative responses, strong or weak positive responses, or neutral responses.

The valence-of-responses codes were based on the list of positive and negative emotions in the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988), as well as other words reflective of positive or negative thoughts or feelings (e.g., lonely). Statements about thoughts, feelings, or behaviors that were judged to reflect negative affect words (e.g., hostile, afraid, ashamed) were coded as negative. Statements about thoughts, feelings, or behaviors that were judged to reflect no affect or tolerance were coded as neutral (“I guess that it happened for a reason”). Statements about thoughts, feelings, or behaviors that were judged to reflect positive affect words (e.g., inspired, strong, proud) were coded as positive. Statements such as “It was a blessing in disguise” were coded as

positive. The strength-of-responses codes were based on the reported intensity of the respondent's emotions, actions, or sense of connectedness to the transgression. For example, "It was unpleasant, but I'm over it" was coded as weak, whereas "I still feel very cheated and alone. . . . I can't stand to be near him" was coded as strong.

Descriptive statistics and bivariate correlations. This study originally was designed to enable examination of the narratives for self, other, and situation forgiveness, separately. Unfortunately, there were too few coded responses within each of these categories to facilitate a meaningful analysis (i.e., a mean of 2 statements per person for each of the self, other, and situation narratives). To increase the reliability of the analysis, the three types of narratives were combined. Statements referring to past thoughts or feelings were analyzed separately from those referring to current thoughts or feelings.

The frequencies of occurrence of each of the valence and strength codes for past statements were converted to percentages by dividing by the total number of past codes assigned and then multiplying by 100: past positive or neutral valence ($M = 3.05\%$, $SD = 9.62$), past positive valence ($M = 1.79\%$, $SD = 7.81$), past neutral valence ($M = 1.27\%$, $SD = 5.83$), past negative valence ($M = 96.95\%$, $SD = 9.62$), past *strong* positive valence ($M = 0.76\%$, $SD = 5.93$), and past *strong* negative valence ($M = 50.58\%$, $SD = 33.99$). Percentages of positively and neutrally valenced statements were combined because the change from negative to neutral or positive valence is necessary and sufficient for forgiveness. The percentage of past negative statements that reflected a past strong attachment ($M = 52.15\%$, $SD = 34.83$) also was calculated. Forgiveness level as measured by overall HFS was not significantly related to any of the past statement percentages. This is not surprising given that, regardless of forgiveness level, participants' past statements were overwhelmingly negative in valence (97%).

The frequencies of occurrence of each of the valence and strength codes for current statements were converted to percentages by dividing by the total number of current codes assigned and then multiplying by 100: current positive or neutral valence ($M = 48.18\%$, $SD = 35.65$), current positive valence ($M = 17.71\%$, $SD = 24.09$), current neutral valence ($M = 30.47\%$, $SD = 31.74$), current negative valence ($M = 51.82\%$, $SD = 35.64$), current *strong* positive valence ($M = 2.70\%$, $SD = 8.74$), and current *strong* negative valence

($M = 14.14\%$, $SD = 24.29$). The total HFS was significantly correlated with the percentage of positively or neutrally valenced current statements ($r = .28$, $p < .001$), positively valenced current statements ($r = .27$, $p < .001$), and negatively valenced current statements ($r = -.28$, $p < .001$). These correlations remained significant after including only statements indicating current strong positive responses ($r = .17$, $p = .01$) and current strong negative responses ($r = -.34$, $p < .001$). The percentage of current negative statements with strong attachment ($M = 22.45\%$, $SD = 30.27$) also was calculated, and it was significantly correlated with the overall HFS ($r = -.33$, $p < .001$).

Many participants wrote statements in both the past and present tenses; this enabled examination of the relationship between forgiveness level and the difference between the percentages of negative statements in the past versus present tenses. That is, it enabled examination of participants' retrospective reports of changes in their responses to the transgressions over time. The magnitude of the difference in percentage of past negative statements and current negative statements ($n = 185$, $M = 52.88\%$, $SD = 39.03$) was significantly correlated with the overall HFS ($r = .25$, $p < .001$), such that participants with higher forgiveness levels had significantly fewer statements coded as negative in the present versus the past than did participants lower in forgiveness. The magnitude of the difference between the percentage of past versus current *strong* negative statements ($n = 177$, $M = 30.82\%$, $SD = 44.44$) also was significantly correlated with the overall HFS ($r = .19$, $p = .02$).

In summary, when writing in the past tense, more forgiving people did not describe their responses to transgressions as being more positive than less forgiving people, nor did more forgiving people initially seem to have less intense negative responses than less forgiving people. These results indicate that more versus less forgiving people are not immediately less negative or more forgiving in their responses to transgressions. When writing in the present tense, however, more versus less forgiving people did describe more positively or neutrally valenced responses, more strong positive responses, fewer negatively valenced responses, and fewer strong negative responses. Moreover, when compared with less forgiving people, more forgiving people demonstrated a significantly greater decrease in the quantity and intensity of their negative responses from the past to the present.

CONCLUSIONS AND FUTURE DIRECTIONS

Due to the relatively short history of the empirical exploration of forgiveness within the social sciences, McCullough, Hoyt, and Rachal (2000), have suggested that the relationship of forgiveness to other constructs, or the “nomological net,” needs to be explored. In the studies presented here, the relationships between forgiveness and aspects of psychological well-being, relationship satisfaction and duration, and forgiveness-related behaviors have been examined using a new measure of dispositional forgiveness of self, others, and situations: the HFS. Thus, the current research has expanded the nomological net of forgiveness. The current authors’ conceptualization of forgiveness overlaps in many ways with those suggested by other researchers. However, it differs in one salient way: it includes the construct of forgiveness of situations as part of forgiveness. (For a more detailed review of many conceptualizations and measures of forgiveness, see Thompson and Snyder (2003). The current studies indicate that the HFS makes an incremental contribution to the existing measures of forgiveness, especially by virtue of its Situation subscale.

Researchers and clinicians interested in forgiveness need to have access to reliable and valid measures of forgiveness. It is therefore relevant that in the current studies, the HFS demonstrated desirable psychometric properties such as convergent validity, adequate internal consistency reliability, and strong test-retest reliability (even over long periods of time). In addition, the HFS had a clear and consistent factor structure that supported the assertion that the HFS assesses forgiveness of self, others, and situations, and also the overarching construct of the disposition to grant forgiveness.

Given the importance of intrapersonal processes in forgiveness, much of the research regarding forgiveness, including the current studies, has relied on the use of self-report measures. There are, however, limitations and methodological concerns raised by the exclusive reliance on these measures. Thus, it is significant that in Studies 5 and 6, scores on the HFS were significantly correlated with relevant behaviors. Some researchers have used other modes of assessment to study forgiveness (e.g., Malcolm & Greenberg, 2000; Trainer, 1981; Wu & Axelrod, 1995). More research using self-report measures in conjunction with other modes of assessment would

further develop the current understanding and measurement of the multifaceted construct of forgiveness.

The current studies not only demonstrate the desirable psychometric properties of the HFS, they also support the theory and definition of forgiveness upon which the HFS is based. Study 6 results lend support to the proposition that forgiveness is a process that requires time and that forgiveness involves changes in the valence and strength of people's responses to transgressions such that, over time, forgiving people report greater decreases in the quantity and intensity of their negative responses to transgressions and greater increases in the quantity of their positive responses to transgressions. These results should be considered with the caveat that these data are retrospective and cross-sectional. Thus, the change process can only be inferred, and the process of forgiveness as involving changes in valence and strength of responses would benefit from examination using prospective data. Nonetheless, these findings suggest that forgiving people are able to reframe transgressions and construct a "new narrative" such that they are no longer beset by negative thoughts, feelings, or behaviors about the transgression, transgressor, and associated outcomes.

The finding that forgiveness alone accounted for 25% to 49% of the variance in measures of psychological well-being (i.e., depression, anger, anxiety, and satisfaction with life) suggests that the processes involved in forgiveness may be important in the maintenance of psychological health. Furthermore, the current studies and others' research indicate that forgiveness of self (Heinze & Snyder, 2001; Mauger et al., 1992) and situations (Heinze & Snyder, 2001) may be crucial domains for the relationship between forgiveness and psychological well-being. Thus, key information might be overlooked by focusing exclusively on forgiveness of others, and the HFS (with its three subscales) may offer incremental utility when compared to other forgiveness measures that only assess people's dispositional forgiveness of others or forgiveness of self and others.

Consistent with the findings regarding the relationship between forgiveness and mental health, it also appears that overall dispositional forgiveness may be an important factor in the maintenance of the "health" of intimate relationships such that people who are forgiving tend to have longer, more satisfying romantic relationships than people who are comparatively lower in forgiveness. As is the case in predicting psychological well-being from forgiveness,

forgiveness of self and situations, not only forgiveness of others, are important domains for the link between forgiveness and relationship health. Of course, due to the correlational nature of these findings, the temporal relationships between forgiveness and psychological well-being, relationship satisfaction, and relationship duration are unknown.

Some authors have suggested (e.g., Emmons, 2000) that forgiveness will be understood better as it is mapped onto a broader “personological” framework. Kashdan and Fincham (2002) have begun some of this work by examining the relationship between the HFS and the Big Five Personality Inventory. They found that the HFS was significantly related to two subscales of the Big Five (i.e., positively correlated with Openness to Experience and negatively correlated with Neuroticism), but was not significantly correlated with the remaining three subscales. Moreover, Kashdan and Fincham found that the Big Five factors accounted for 43% of the variance in the HFS; therefore, a large portion of variance in forgiveness remained unexplained by these main dimensions of personality. Thus, dispositional forgiveness, as measured by the HFS, contributes to the current understanding of an important individual difference.

REFERENCES

- The American heritage dictionary* (2nd college ed.). (1985). Boston: Houghton Mifflin Company.
- Bass, E., & Davis, L. (1994). *The courage to heal*. New York: Harper Perennial.
- Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. New York: International Universities Press.
- Beck, A. T., & Steer, R. A. (1987). *The Beck depression inventory*. San Antonio, TX: Psychological Corporation.
- 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*, 447–455.
- Berry, J. W., Worthington, E. L. Jr., Parrott, L., III, O'Connor, L. E., & Wade, N. G. (2001). Dispositional forgiveness: Development and construct validity of the Transgression Narrative Test of Forgiveness (TNTF). *Personality and Social Psychology Bulletin*, *27*, 1277–1290.
- Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Collins, K., & Bell, R. (1997). Personality and aggression: The dissipation-rumination scale. *Personality and Individual Differences*, *22*, 751–755.

- Contreras, R., Hendrick, S. S., & Hendrick, C. (1996). Perspectives on marital love and satisfaction in Mexican American and Anglo couples. *Journal of Counseling and Development*, **74**, 408–415.
- Couch, L. L., Jones, W. H., & Moore, D. S. (1999). Buffering the effects of betrayal: The role of apology, forgiveness, and commitment. In J. M. Adams & W. H. Jones (Eds.), *Handbook of interpersonal commitment and relationship stability. Perspectives on individual differences* (pp. 451–469). New York: Plenum Publishers.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, **24**, 349–354.
- Crowson, J. J., & Cromwell, R. L. (1995). Depressed and normal individuals differ both in selection and in perceived tonal quality of positive-negative messages. *Journal of Abnormal Psychology*, **104**, 305–311.
- DiBlasio, F. A., & Proctor, J. H. (1993). Therapists and the clinical use of forgiveness. *American Journal of Family Therapy*, **21**, 175–184.
- Diener, E., Sandvik, E., Pavot, W., & Gallagher, D. (1991). Response artifacts in the measurement of subjective well-being. *Social Indicators Research*, **24**, 36–56.
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, **49**, 71–75.
- Droll, D. M. (1985). Forgiveness: Theory and research. *Dissertation Abstracts International*, **45** (8), 2732B.
- Emmons, R. A. (2000). Personality and forgiveness. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp. 156–175). New York: Guilford Press.
- Enright, R. D. (2001). *Forgiveness is a choice: A step-by-step process for resolving anger and restoring hope*. Washington, DC: American Psychological Association.
- Enright, R. D., & Coyle, C. T. (1998). Researching the process model of forgiveness within psychological interventions. In E. L. Worthington, Jr. (Ed.), *Dimensions of forgiveness: Psychological research and theological perspectives* (pp. 139–161). Randor, PA: Templeton Foundation Press.
- Enright, R. D., Eastin, D. L., Golden, S., Sarinopoulos, I., & Freeman, S. (1992). Interpersonal forgiveness within the helping professions: An attempt to resolve differences of opinion. *Counseling and Values*, **36**, 84–103.
- Enright, R. D., Freedman, S., & Rique, J. (1998). The psychology of interpersonal forgiveness. In R. D. Enright & J. North (Eds.), *Exploring forgiveness* (pp. 46–62). Madison: University of Wisconsin Press.
- Enright, R. D., & The Human Development Study Group. (1994). Piaget on the moral development of forgiveness: Identity or reciprocity? *Human Development*, **37**, 63–80.
- Enright, R. D., & The Human Development Study Group. (1996). Counseling within the forgiveness triad: On forgiving, receiving forgiveness, and self-forgiveness. *Counseling and Values*, **40**, 107–126.
- Enright, R. D., & Zell, R. L. (1989). Problems encountered when we forgive another. *Journal of Psychology and Christianity*, **8**, 52–60.
- Exline, J. J., Yali, A. M., & Lobel, M. (1999). When God disappoints: Difficulty forgiving God and its role in negative emotion. *Journal of Health Psychology*, **4**, 365–379.

- Finkel, E. J., Rusbult, C. E., Kumashiro, M., & Hannon, P. A. (2002). Dealing with betrayal in close relationships: Does commitment promote forgiveness? *Journal of Personality and Social Psychology*, **82**, 956–974.
- Freedman, S. R. (1998). Forgiveness and reconciliation: The importance of understanding how they differ. *Counseling and Values*, **42**, 200–216.
- Freedman, S. R., & Enright, R. D. (1996). Forgiveness as an intervention goal with incest survivors. *Journal of Consulting and Clinical Psychology*, **64**, 510–517.
- Girard, M., & Mullet, E. (1997). Forgiveness in adolescents, young, middle-aged, and older adults. *Journal of Adult Development*, **4**, 209–220.
- Greenberg, M. A. (1995). Cognitive processing of traumas: the role of intrusive thoughts and reappraisals. *Journal of Applied Social Psychology*, **25**, 1262–1296.
- Hargrave, T. D., & Sells, J. N. (1997). The development of a forgiveness scale. *Journal of Marital and Family Therapy*, **23**, 41–63.
- Hebl, J. H., & Enright, R. D. (1993). Forgiveness as a psychotherapeutic goal with elderly females. *Psychotherapy*, **30**, 658–667.
- Heinze, L., & Snyder, C. R. (2001, August). *Forgiveness components as mediators of hostility and PTSD in child abuse*. Paper presented at the American Psychological Association, San Francisco.
- Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family*, **50**, 93–98.
- Hendrick, S. S., Dicke, A., & Hendrick, C. (1998). The relationship assessment scale. *Journal of Social and Personal Relationships*, **15** (1), 137–142.
- Higgins, R.L., & Leibowitz, R. Q. (2002). Reality negotiation. In C. R. Snyder & S. Lopez (Eds.), *Handbook of positive psychology* (pp. 351–365). New York: Oxford University Press.
- Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. New York: Free Press.
- Janoff-Bulman, R., & Frantz, C. M. (1997). The impact of trauma on meaning: From meaningless world to meaningful life. In M. Power & C. R. Brewin (Eds.), *The transformation of meaning in psychological therapies* (pp. 91–106). New York: Wiley.
- Kashdan, T. B., & Fincham, F. D. (2002). *Elaborating the nomological network of forgiveness*. Unpublished manuscript, University at Buffalo, State University of New York.
- Katz, J., Street, A., & Arias, I. (1997). Individual differences in self-appraisals and responses to dating violence scenarios. *Violence and Victims*, **12** (3), 265–276.
- Konstam, V., Chernoff, M., & Deveney, S. (2001). Toward forgiveness: The role of shame, guilt, anger, and empathy. *Counseling and Values*, **46**, 26–39.
- Larzelere, R. E., & Huston, T. L. (1980). The dyadic trust scale: Toward understanding interpersonal trust in close relationships. *Journal of Marriage and the Family*, **42**, 595–604.
- Loehlin, J. C. (1998). *Latent variable models: An introduction to factor, path, and structural analysis* (3rd ed.). Mahwah, NJ: Erlbaum.
- Malcolm, W. M., & Greenberg, L. S. (2000). Forgiveness as a process of change in individual psychotherapy. In M. E. McCullough, K. I. Pargament, & C. E.

- Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp. 179–202). New York: Guilford.
- Maltby, J., Macaskill, A., & Day, L. (2001). Failure to forgive self and others: A replication and extension of the relationship between forgiveness, personality, social desirability and general health. *Personality and Individual Differences*, *30*, 881–885.
- Martin, M. M., & Rubin, R. B. (1995). A new measure of cognitive flexibility. *Psychological Reports*, *76*, 623–626.
- Mauger, P. A., Perry, J. E., Freeman, T., Grove, D. C., McBride, A. G., & McKinney, K. E. (1992). The measurement of forgiveness: Preliminary research. *Journal of Psychology and Christianity*, *11*, 170–180.
- McCrae, R. R., & Costa, P. T., Jr. (1983). Social desirability scales: More substance than style. *Journal of Consulting and Clinical Psychology*, *51*, 882–888.
- McCullough, M. E. (2000). Forgiveness as human strength: Theory, measurement, and links to well-being. *Journal of Social and Clinical Psychology*, *19*, 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*, 601–610.
- McCullough, M. E., Hoyt, W. T., & Rachal, K. C. (2000). What we know (and need to know) about assessing forgiveness constructs. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp. 65–88). New York: Guilford.
- McCullough, M. E., Pargament, K. I., & Thoresen, C. E. (Eds.). (2000a). *Forgiveness: Theory, research, and practice*. New York: Guilford.
- McCullough, M. E., Pargament, K. I., & Thoresen, C. E. (Eds.). (2000b). The psychology of forgiveness: History, conceptual issues, and overview. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp. 1–14). New York: Guilford.
- 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*, 1586–1603.
- McCullough, M. E., Sandage, S. J., & Worthington, E. L., Jr. (1997). *To forgive is human: How to put your past in the past*. Downers Grove, IL: InterVarsity Press.
- McCullough, M. E., & Witvliet, V. O. (2002). The psychology of forgiveness, In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of Positive Psychology* (pp. 446–458). London: Oxford University Press.
- McCullough, M. E., & Worthington, E. L., Jr. (1994). Encouraging clients to forgive people who have hurt them: Review, critique, and research prospectus. *Journal of Psychology and Theology*, *22*, 3–20.
- McCullough, M. E., & Worthington, E. L., Jr. (1995). Promoting forgiveness: A comparison of two brief psychoeducational group interventions with a waiting-list control. *Counseling and Values*, *40*, 55–68.
- McCullough, M. E., Worthington, E. L., Jr., & Rachal, K. C. (1997). Interpersonal forgiveness in close relationships. *Journal of Personality and Social Psychology*, *73*, 321–336.

- Mullet, E., Houdbine, A., Laumonier, S., & Girard, M. (1998). "Forgiveness": Factor structure in a sample of young, middle-aged, and elderly adults. *European Psychologist, 3*, 289–297.
- Múthen, L. K., & Múthen, B. O. (2003). *Mplus user's guide* (version 2.14). Los Angeles, CA: Múthen & Múthen.
- Nolen-Hoeksema, S., & Morrow, J. (1991). A prospective study of depression and distress following a natural disaster: The 1989 Loma Prieta earthquake. *Journal of Personality and Social Psychology, 61*, 105–121.
- Pollard, M. W., Anderson, R. A., Anderson, W. T., & Jennings, G. (1998). The development of a family forgiveness scale. *Journal of Family Therapy, 20*, 95–109.
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385–401.
- Rasmussen, H. N., & Lopez, S. J. (2000, August). *Forgiveness and adaptive coping*. Poster session presented at the annual meeting of the American Psychological Association, Washington, DC.
- Rowe, J. O., Halling, S., Davies, E., Leifer, M., Powers, D., & van Bronkhorst, J. (1989). The psychology of forgiving another: A dialogal research approach. In R. S. Valle & S. Halling (Eds.), *Existential-phenomenological perspectives in psychology: Exploring the breadth of human experience* (pp. 233–244). New York: Plenum.
- Sandage, S. J., Worthington, E. L., Jr., Hight, T. L., & Berry, J. W. (2000). Seeking forgiveness: Theoretical context and an initial empirical study. *Journal of Psychology and Theology, 28*, 21–35.
- Snyder, C. R., Crowson, J. J., Jr., Houston, B. K., Kurylo, M., & Poirier, J. (1997). Assessing hostile automatic thoughts: Development and validation of the HAT Scale. *Cognitive Therapy and Research, 21*, 477–492.
- Snyder, C. R., Harris, C., Anderson, J., Holleran, S., Irving, L., Sigmon, S., Yoshinobu, L., Gibb, J., Langelle, C., & Harney, P. (1991). The will and the ways: Development and validation of an individual-differences measure of hope. *Journal of Personality and Social Psychology, 60*, 570–585.
- Snyder, C. R., & Higgins, R. L. (1997). Reality negotiation: Governing one's self and being governed by others. *General Psychology Review, 4*, 336–350.
- Snyder, C. R., Higgins, R. L., & Stucky, R. (1983). *Excuses: Masquerades in search of grace*. New York: Wiley-Interscience.
- Spielberger, C. D., Gorsuch, R. L., & Lushene, R. E. (1970). *Manual for the state-trait anxiety inventory (Self-evaluation questionnaire)*. Palo Alto, CA: Consulting Psychologists Press.
- Spielberger, C. D., Jacobs, G., Russell, S., & Crane, R. S. (1983). Assessment of anger: The state-trait anger scale. In J. N. Butcher & C. D. Spielberger (Eds.) *Advances in personality assessment* (Vol. 2, pp. 161–189). Hillside, NJ: Lawrence Erlbaum.
- Stuckless, N., & Goranson, R. (1992). The vengeance scale: Development of a measure of attitudes toward revenge. *Journal of Social Behavior and Personality, 7*, 25–42.
- Subkoviak, M. J., Enright, R. D., Wu, C. R., Gassin, E. A., Freedman, S., & Olson, L. M., et al. (1995). Measuring interpersonal forgiveness in late adolescence and middle adulthood. *Journal of Adolescence, 18*, 641–655.

- Suen, H. K., & Ary, D. (1989). *Analyzing quantitative behavioral observation data*. Hillsdale, NJ: Erlbaum.
- Swann, W. B., Jr. (1983). Self-verification: Bringing social reality into harmony with the self. In J. Suls & A. G. Greenwald (Eds.), *Psychological perspectives on the self* (Vol. 2, pp. 33–66). Hillsdale, NJ: Erlbaum.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics* (3rd ed.). New York: Harper Collins Publishers.
- Tangney, J., Fee, R., Reinsmith, C., Boone, A. L., & Lee, N. (1999, August). *Assessing individual differences in the propensity to forgive*. Paper presented at the annual meeting of the American Psychological Association, Boston.
- Thompson, L. Y., & Snyder, C. R. (2003). Measuring forgiveness. In S. J. Lopez & C. R. Snyder (Eds.), *Positive psychological assessment: A handbook of models and measures* (pp. 301–312). Washington, DC: American Psychological Association.
- Thoresen, C. E. (2001, August). Forgiveness interventions: What is known and what needs knowing. In C. E. Thoresen (Chair), *Forgiveness and health—The Stanford forgiveness project symposium*. Symposium conducted at the annual convention of the American Psychological Association, San Francisco.
- Trainer, M. F. (1981). *Forgiveness: Intrinsic, role-expected, expedient, in the context of divorce*. Unpublished Dissertation, Boston University, Boston.
- Wade, S. H. (1990). *The development of a scale to measure forgiveness*. *Dissertation Abstracts International*, **50** (11), 5338B.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, **54**, 1063–1070.
- Witvliet, C. V. O. (2001). Forgiveness and health: Review and reflections on a matter of faith, feelings, and physiology. *Journal of Psychology and Theology*, **29**, 212–224.
- Worthington, E. L., Jr. (2000). Is there a place for forgiveness in the justice system? *Fordham Urban Law Journal*, **XXVII**, 1721–1734.
- Worthington, E. L., Jr., & Drinkard, D. T. (2000). Promoting reconciliation through psychoeducational and therapeutic interventions. *Journal of Marriage and Family Therapy*, **26**, 93–101.
- Worthington, E. L., Jr., & Wade, N. G. (1999). The psychology of unforgiveness and forgiveness and implications for clinical practice. *Journal of Social and Clinical Psychology*, **18**, 385–418.
- Worthington, E. L., Jr., Sandage, S. J., & Berry, J. W. (2000). Group interventions to promote forgiveness. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp. 228–253). New York: Guilford.
- Wu, J., & Axelrod, R. (1995). How to cope with noise in the iterated Prisoner's dilemma. *Journal of Conflict Resolution*, **39** (1), 183–189.

Appendix A: Heartland Forgiveness Scale (HFS)

Directions: In the course of our lives negative things may occur because of our own actions, the actions of others, or circumstances beyond our control. For some time after these events, we may have negative thoughts or feelings about ourselves, others, or the situation. Think about how you **typically** respond to such negative events. Next to each of the following items write the number (from the 7-point scale below) that best describes how you **typically** respond to the type of negative situation described. There are no right or wrong answers. Please be as open as possible in your answers.

1	2	3	4	5	6	7
Almost Always False of Me		More Often False of Me		More Often True of Me		Almost Always True of Me

- 1. Although I feel bad at first when I mess up, over time I can give myself some slack.
- 2. I hold grudges against myself for negative things I've done.
- 3. Learning from bad things that I've done helps me get over them.
- 4. It is really hard for me to accept myself once I've messed up.
- 5. With time I am understanding of myself for mistakes I've made.
- 6. I don't stop criticizing myself for negative things I've felt, thought, said, or done.
- 7. I continue to punish a person who has done something that I think is wrong.
- 8. With time I am understanding of others for the mistakes they've made.
- 9. I continue to be hard on others who have hurt me.
- 10. Although others have hurt me in the past, I have eventually been able to see them as good people.
- 11. If others mistreat me, I continue to think badly of them.
- 12. When someone disappoints me, I can eventually move past it.
- 13. When things go wrong for reasons that can't be controlled, I get stuck in negative thoughts about it.

- ___ 14. With time I can be understanding of bad circumstances in my life.
- ___ 15. If I am disappointed by uncontrollable circumstances in my life, I continue to think negatively about them.
- ___ 16. I eventually make peace with bad situations in my life.
- ___ 17. It's really hard for me to accept negative situations that aren't anybody's fault.
- ___ 18. Eventually I let go of negative thoughts about bad circumstances that are beyond anyone's control.

Scoring Instructions:

To calculate the scores for the HFS total and its three subscales, first reverse score items 2, 4, 6, 7, 9, 11, 13, 15, and 17. Then, sum the values for the items that compose each subscale (with appropriate items being reverse scored): HFS total (items 1–18), HFS Self subscale (items 1–6), HFS Other subscale (items 7–12), HFS Situation subscale (items 13–18).

